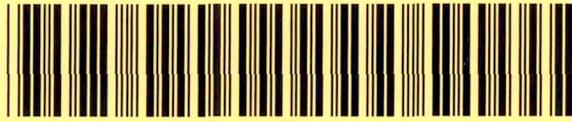


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Site Name PERTH ROAD PCE SITE

DocumentType Progress/Monitoring Rpt (PRGMON)

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DocDate 2/24/2010

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Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY

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Division of Waste Management

FEB 25 2010

UST Section
 Mooresville Regional Office

**Active Remediation
Monitoring Report
Former Skippers Marina
1156 Perth Road
Troutman, North Carolina**

DENR Incident Number 22425

H&H Job No. KID.005

February 24, 2010



2923 South Tryon Street
Suite 100
Charlotte, NC 28203
704-586-0007

3334 Hillsborough Street
Raleigh, NC 27607
919-847-4241

Title Page

Site Information:

Former Skippers Marina
1156 Perth Road
Troutman, North Carolina
Groundwater Incident No. 22425
Lat. N 35° 18' 54" Long. W 77° 47' 41"

Risk Classification:

High (water supply wells located within 1,000 ft of source area)

Land Use:

Subject property is commercial and used to fabricate docks and boat lifts. Surrounding properties are residential and site is bordered by Lake Norman.

Property Owner:

Marlan Properties Inc.
1156 Perth Road
Troutman, North Carolina, 28166
(704) 528-7400

UST Operator:

Mr. John Kindley
114 Morlake Drive, Suite 102
Mooresville, North Carolina 28117
(704) 799-9202

Consultant:

Hart & Hickman, PC
2923 South Tryon Street, Suite 100
Charlotte, NC 28203
(704) 586-0007

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FEB 25 2010

UST Section
Mooresville Regional Office

Release Information:

Date of Release Discovery = January 2001
Quantity of Release = Unknown
Source of Release = UST and/or Associated Piping
Material Released = Unleaded Gasoline

Laboratory: Prism Laboratories, Inc., NC Certification No. 402.

I, Matt Bramblett, a Principal and Licensed Engineer for Hart & Hickman, PC, do hereby certify that the information contained in this report is correct and accurate to the best of my knowledge.

Hart & Hickman, PC is licensed to practice geology and engineering in North Carolina. The certification numbers are C-245 and C-1269, respectively.

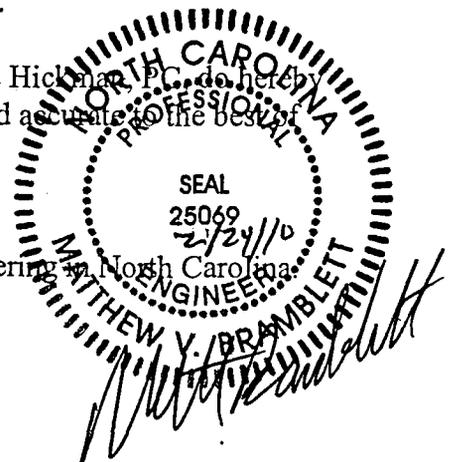


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Active Remediation Monitoring Report

Former Skippers Marina Troutman, North Carolina

1.0 Introduction

On behalf of Mr. John Kindley, Hart & Hickman, P.C. (H&H) has prepared this Active Remediation Monitoring Report for the former Skippers Marina located at 1156 Perth Road in Troutman, Iredell County, North Carolina. A site location map and a site plan are included as Figures 1 and 2, respectively. The property is currently occupied by Lancaster Custom Dock and Lift Systems, Inc. The North Carolina Department of Environment and Natural Resources (DENR) incident number for the site is 22425, and DENR has assigned the site a high-risk classification due to the presence of nearby water supply wells. This report documents the results of groundwater and water supply well sampling performed by H&H in January 2010 and operation and maintenance (O&M) activities for the period of December 2009 through February 2010.

2.0 Site History

A 5,000-gallon kerosene underground storage tank (UST), four gasoline UST's ranging in size from 5,000 to 10,000 gallons, and associated piping/dispensers were removed in January 2001. An initial assessment was conducted and 269 cubic yards of petroleum-impacted soil were removed from the former UST area. No free product was encountered during UST removal.

A Corrective Action Plan (CAP) was submitted to DENR by others in July 2002 which recommended soil and groundwater remediation using an air sparge/soil vapor extraction (AS/SVE) system. Due to Trust Fund prioritization, the remediation system installation was delayed.

DENR issued a letter to Mr. John Kindley dated August 20, 2008 requesting site remediation. In response to the DENR letter, H&H provided a letter dated October 6, 2008 modifying the proposed AS/SVE system layout by taking into consideration recent groundwater analytical results. The proposed AS/SVE system was designed and bid specifications were issued December 15, 2008. Trust Fund pre-approval for the proposed AS/SVE system was obtained.

The AS/SVE system was installed during March and April 2009 with SVE system start-up on April 27, 2009. The AS system start-up occurred on May 4, 2009. The remediation system is comprised of ten SVE wells; seven AS wells; and associated piping, remediation system building and equipment. The SVE system utilizes a Rotron regenerative blower while the sparge air is supplied by a Gardner Denver Endurair air compressor.

3.0 Summary of Potential Receptor Information

3.1 Water Supply Wells

H&H conducted an updated water supply well survey in July 2009 for the area within a 1,500-foot radius of the source area at the request of DENR. The survey was conducted by performing area reconnaissance and checking for municipal water connections. The results of the survey indicate that municipal water is not provided to the site and is not available to properties within a 1,500-foot radius of the site.

A total of 13 water supply wells were located within 1,000 ft of the source area. An additional 32 potential water supply wells were observed on properties located between approximately 1,000 and 1,500 ft of the source area with one previously identified supply well no longer in use. The on-site supply well WSW-12 is in use, but it is not used for drinking water according to the site owner and occupant Mr. Mark Lancaster. H&H sampled WSW-12 for volatile organic compounds (VOCs) using Standard Method 6200B. H&H identified low concentrations of tetrachloroethene (PCE) in WSW-12 during the January 2010 sampling event (0.75 $\mu\text{g/l}$). The Federal drinking water standard for PCE is 5 $\mu\text{g/l}$, and the groundwater standard is 0.7 $\mu\text{g/l}$. PCE is not a gasoline constituent or a petroleum-related compound and no other compounds were detected in the water supply well. The source of the PCE is unknown, but it is not related to the former Skipper's Marina UST system.

The water supply well owner information and well location map are included in Figure 3 and Appendix A. Water supply well analytical results are provided in Appendix B.

3.2 Surface Water

The nearest surface water body is Lake Norman which is located approximately 100 ft to the south of the source area (Figure 2). There are monitoring wells without detectable impacts between the lake and the petroleum groundwater plume. In addition, active remediation should prevent groundwater impacts from significantly affecting Lake Norman.

4.0 Groundwater Sampling

4.1 Water Levels

On January 25, 2010, H&H gauged water levels in the site monitoring wells (Table 1). No free product was detected in any of the site monitoring wells. The estimated water table elevations in January 2010 are depicted in Figure 4. The estimated water table surface based on January 2010 groundwater elevations indicate the groundwater flow direction in the vicinity of the former UST source area is to the east.

4.2 Monitoring Well and Water Supply Well Analytical Data

Site monitoring wells MW-1, MW-2, MW-3, MW-5B, MW-6B, MW-7 through MW-13, MW-15B, and TW-1 were sampled on January 25, 2009. TW-1 is a deeper Type III monitoring well. Prior to sampling, dissolved oxygen readings were obtained, and then the monitor wells were purged until pH, temperature, and conductivity stabilized. Groundwater samples were then collected using dedicated polyethylene bailers, poured in laboratory supplied containers, marked with identifying labels, and placed in an iced cooler for shipment under chain-of-custody to a certified laboratory for analysis. Groundwater samples were analyzed for volatile organic compounds (VOCs) by Standard Method 6200B (Table 2).

Petroleum-related impacts were detected above groundwater standards in monitoring wells MW-1, MW-2, MW-5B, MW-8 and MW-11. The highest concentrations were detected in monitoring well MW-5B, which is located just downgradient of the source area. Benzene was detected in MW-5B at a concentration of 3,700 µg/l.

Isoconcentration maps of BTEX, benzene, xylenes and methyl tert butyl ether (MTBE) in shallow groundwater wells are included as Figures 5 through 8, respectively. The plume maps

indicate that impacted groundwater is generally limited to the area within the subject site property boundaries. However, 81 µg/l of MTBE was detected in off-site well MW-8 compared to the groundwater standard of 20 µg/l, and 1.1 µg/l of Benzene and 14 µg/l of 1,2-dichloroethane were detected in off-site well MW-11 compared to the groundwater standards of 1.0 µg/l and 0.4 µg/l respectively. Groundwater sampling results are summarized in Table 2, and historical groundwater sampling results obtained by others are provided in Appendix C.

In January 2010, PCE, a non-target compound, was not detected in any of the on or off-site monitoring wells. Trace levels of PCE were detected in monitoring wells in the past.

Sampling results indicate that deeper groundwater is not impacted at the site. No impacts were detected in a groundwater sample collected from deeper well TW-1.

Site monitoring wells were also gauged for dissolved oxygen and other geochemical parameters during the January 25, 2010 sampling event. The geochemical results are provided in Table 3. Dissolved oxygen levels outside the source area ranged from 8.60 mg/l (MW-8) to 0.41 mg/l (MW-15B). Monitoring wells located within the remediation area ranged from 8.48 mg/l (MW-1) to 0.32 mg/l (MW-5B).

4.3 Groundwater Concentration Trends

Comparing January 2010 groundwater sampling results to the April 2009 baseline sampling results, target compound concentrations have decreased in the area of treatment since start-up of the remediation system. Since system start-up, MW-1 total BTEX has decreased from 8,180 µg/l to 2,330 µg/l, and MW-3 total BTEX has decreased from 42.1 µg/l to Below Detection Limits (BDL). MW-5B total BTEX concentrations have decreased slightly from 5,698 µg/l to 5,373 µg/l. Following an initial spike in MTBE concentrations in MW-8 after system start-up (1,300 µg/l), MTBE levels have decreased to 81 µg/l during the January 2010 sampling event.

5.0 Remediation System Installation and Startup

The SVE/AS remediation system was installed during March and April 2009 with system start-up on April 27, 2009. The remediation system layout is provided in Figure 9. The SVE system consists of ten four-inch diameter SVE wells (SVE-1 through SVE-10). SVE-1 was previously installed to a depth of 8 ft with a 6 ft section of well screen. The other SVE wells were installed to a depth of 9 ft with a 5 ft section of 0.010 slot screen. The SVE wells are divided into two "fields" to increase overall system effectiveness. Four SVE wells are tied into one field and are installed in the former tank basin, while six SVE wells are installed as a separate field. The vacuum to each of the two fields can be independently controlled, and air flow from each field is independently measured. The SVE system utilizes a Rotron 5.0 hp regenerative blower (Model EN 707) rated at 240 cubic feet per minute (cfm) of air at a vacuum of 30 inches of water.

The air sparge system consists of seven two-inch diameter air sparge wells (AS-1 through AS-7). AS-1 was previously installed to a depth of 25 ft with a 3 ft section of well screen. The other AS wells were installed to a depth of 30 ft with a 5 ft section of 0.010 well screen. The air sparge system utilizes a Gardner Denver 7.5 hp (Endurair) rotary screw compressor rated at 29 cfm at 100 pounds per square inch (psi). The AS wells are being run continuously, but they can be cycled for preset lengths of time in the future if desired.

Both systems are designed to operate continuously unless the SVE system shuts down. If this takes place, the AS system will automatically cease operation until the SVE system is automatically or manually restarted.

H&H monitors the performance of the SVE/AS system by conducting monthly O&M visits. The SVE system operation status, number of hours of operation, inlet vacuum, air flow, and air discharge organic vapor analyzer readings are recorded (Table 4). In addition, the AS system operation status, number of hours of operation, compressor pressure, air flow to each well, and

air pressure to each well are recorded (Table 5). An O&M log sheet is completed during each site visit and kept in a bound folder.

An air sample was collected from the SVE system off-gas on January 28, 2010 to help gauge the system effectiveness (Appendix B). SVE System off-gas concentrations and mass removal rates are presented in Tables 6 and 7. Estimated total petroleum hydrocarbons removed by the system during the reporting period is 146 lbs, and the cumulative removed to date since system start-up on April 27, 2009 is 1,003 lbs. Based on the data and information collected during O&M visits, the AS/SVE remedial system appears to be operating as designed.

6.0 Conclusions and Recommendations

The former Skippers Marina facility site is a high risk site due to the existence of an on-site water supply and additional water supply wells within 1,000 ft of the source area. DENR issued a letter to Mr. John Kindley dated August 20, 2008 requesting site remediation. In response to the DENR letter, H&H provided a letter dated October 6, 2008 modifying the originally proposed AS/SVE system layout by taking into consideration recent groundwater results. The proposed AS/SVE system was designed and bid specifications were issued December 15, 2008. Trust Fund pre-approval for the proposed AS/SVE system was obtained.

The AS/SVE system was installed during March and April 2009 with SVE system start-up on April 27, 2009. The AS system start-up occurred on May 4, 2009. The remediation system is comprised of ten SVE wells, seven AS wells, associated piping, remediation system building, and equipment. Approximately 146 pounds of petroleum hydrocarbons were removed during the most recent quarter (December – February) of system operation.

Site monitoring wells were sampled on January 25, 2010. Petroleum impacted groundwater extends from the former UST basin primarily to the east. No petroleum-related impacts were detected in the on-site water supply well. Petroleum-related impacts were detected above groundwater standards in five monitoring wells. The highest concentrations were detected in monitoring well MW-5B, which is located just downgradient of the source area. Benzene was detected in MW-5B at a concentration of 3,700 µg/l. Most petroleum-related constituents in the remediation system treatment area decreased between April 2009 and January 2010.

Based on the results of the recent system performance sample and groundwater sampling event, H&H recommends continued operation of the AS/SVE remediation system. Additionally, H&H recommends quarterly groundwater sampling of monitor wells and the on-site water supply well for the first year of system operation and semi-annually thereafter. With Trust Fund pre-approval, the

next quarterly groundwater and remediation system off-gas sampling event will be conducted in April 2010 with an Active Remediation Monitoring Report to be submitted in May 2010.

Table 1
Monitoring Well Summary
Former Skippers Marina
Troutman, North Carolina
H&H Job No. K1D-005

Monitoring Well Identification	Well TOC Elevation (ft)	Total Depth (ft)	Well Diameter (in)	Screen Length (ft)	November 19, 2008		April 3, 2009		July 27, 2009		October 26, 2009		January 25, 2010	
					TOC Water Table Depth (ft)	Water Table Elevation (ft)	TOC Water Table Depth (ft)	Water Table Elevation (ft)	TOC Water Table Depth (ft)	Water Table Elevation (ft)	TOC Water Table Depth (ft)	Water Table Elevation (ft)	TOC Water Table Depth (ft)	Water Table Elevation (ft)
MW-1	100.00	18.0	2.0	15	9.13	90.87	8.41	91.59	9.42	90.58	9.39	90.61	8.77	91.23
MW-2	101.83	20.0	2.0	15	10.93	90.90	10.22	91.61	10.74	91.09	11.09	90.74	10.36	91.47
MW-3	98.32	18.0	2.0	15	7.46	90.86	6.69	91.63	7.65	90.67	7.81	90.51	7.11	91.21
MW-5B	98.88	16.0	2.0	10	8.02	90.86	7.26	91.62	8.23	90.65	8.32	90.56	7.74	91.14
MW-6B	92.64	11.5	2.0	10	1.88	90.76	0.92	91.72	1.86	90.78	1.24	91.40	0.87	91.77
MW-7	98.80	15.0	2.0	10	7.93	90.87	7.11	91.69	7.97	90.83	8.19	90.61	7.46	91.34
MW-8	99.15	18.0	2.0	15	8.35	90.80	7.59	91.56	8.53	90.62	8.71	90.44	8.07	91.08
MW-9	98.65	18.0	2.0	15	7.82	90.83	7.01	91.64	8.02	90.63	8.22	90.43	7.38	91.27
MW-10	99.94	20.0	2.0	15	9.13	90.81	8.35	91.59	9.10	90.84	9.31	90.63	8.47	91.47
MW-11	104.94	20.0	2.0	15	14.21	90.73	13.45	91.49	14.40	90.54	14.62	90.32	14.31	90.63
MW-12	101.38	18.0	2.0	15	10.68	90.70	9.86	91.52	10.92	90.46	11.06	90.32	10.57	90.81
MW-13	94.28	12.0	2.0	10	3.59	90.69	2.67	91.61	3.75	90.53	3.99	90.29	2.98	91.30
MW-14	103.40	15.5	2.0	10	12.69	90.71	11.84	91.56	12.82	90.58	13.12	90.28	12.74	90.66
MW-15B	100.98	20.0	2.0	15	10.06	90.92	9.31	91.67	9.80	91.18	10.19	90.79	9.58	91.40
TW-1	99.84	43.0	2.0	5	not gauged	not gauged	8.21	91.63	9.09	90.75	9.22	90.62	8.53	91.31

Notes:

5/21/08 - MW-5B was installed as a replacement for MW-5; MW-6B was installed as a replacement for MW-4 and MW-6; MW-15B was installed as a replacement for MW-15

DNE = Did Not Exist

TOC = Top of casing

TOC based on arbitrary benchmark of MW-1 at 100-feet

TOC elevations revised by H&H using surveying techniques on July 27, 2009

Table 3
Ground Water Geochemical Results
Former Skippers Marina
Troutman, North Carolina
H&H Job No. KID-005

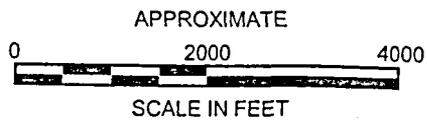
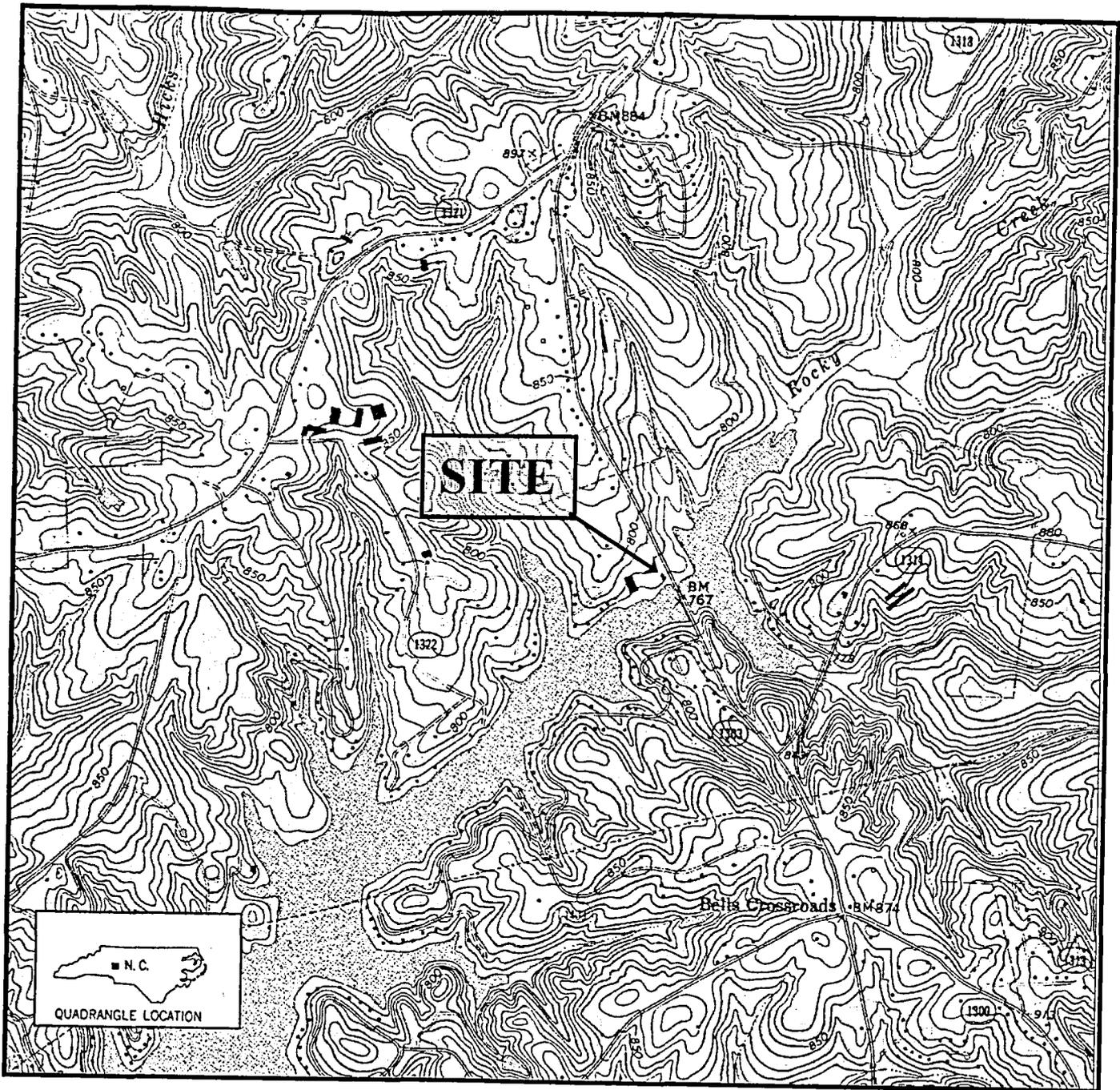
Well ID	Sample Date	Dissolved Oxygen (mg/l)	ORP (mV)	pH (standard units)	Temperature (°C)	Specific Conductivity (umhos/cm)
MW-1	4/3/2009	NA	NA	6.19	18.1	295.0
	7/27/2009	NA	-16	6.46	22.3	132.5
	10/26/2009	8.12	-31	6.41	23.2	136.1
	1/25/2010	8.48	113	6.41	18.19	NA
MW-2	4/3/2009	NA	NA	4.06	NA	NA
	7/27/2009	NA	321	5.06	21.1	76.15
	10/26/2009	1.07	285	5.10	21.8	70.01
	1/25/2010	0.32	200	4.57	18.57	NA
MW-3	4/3/2009	NA	NA	6.09	18.1	173.0
	7/27/2009	NA	7	6.05	22.3	114.9
	10/26/2009	0.90	209	5.76	24.0	96.75
	1/25/2010	7.28	232	5.62	10.2	NA
MW-5B	4/3/2009	NA	NA	6.49	16.9	382.0
	7/27/2009	NA	-80	6.44	21.8	436.9
	10/26/2009	0.08	-76	6.38	22.4	439.0
	1/25/2010	0.32	-3	6.51	16.95	NA
MW-6B	4/3/2009	NA	NA	5.10	NA	200.0
	7/27/2009	NA	300	5.78	28.3	130.3
	10/26/2009	0.97	245	5.66	22.5	129.4
	1/25/2010	6.42	207	5.37	10.16	NA
MW-7	4/3/2009	NA	NA	4.92	NA	155.0
	7/27/2009	NA	306	4.86	22.3	129.7
	10/26/2009	0.17	275	4.90	23.7	191.5
	1/25/2010	2.58	206	4.62	18.19	NA
MW-8	4/3/2009	NA	NA	5.37	16.33	136.0
	7/27/2009	NA	179	5.68	18.5	174.8
	10/26/2009	0.61	104	5.60	19.3	200.6
	1/25/2010	8.60	172	5.71	16.25	NA
MW-9	4/3/2009	NA	NA	5.44	15.33	173.0
	7/27/2009	NA	85	5.92	18.1	154.3
	10/26/2009	0.46	45	5.79	19.3	160.8
	1/25/2010	7.95	166	5.87	14.29	NA
MW-10	4/3/2009	NA	NA	4.38	16.56	111.0
	7/27/2009	NA	374	4.67	19.1	101.1
	10/26/2009	0.69	292	4.78	19.5	124.0
	1/25/2010	0.77	188	4.37	15.89	NA
MW-11	4/3/2009	NA	NA	4.52	14.33	34.00
	7/27/2009	NA	344	5.01	15.1	42.91
	10/26/2009	1.47	261	5.09	15.9	55.10
	1/25/2010	1.20	182	4.55	14.1	NA
MW-12	4/3/2009	NA	NA	4.72	14.0	67.00
	7/27/2009	NA	224	5.09	15.6	76.09
	10/26/2009	0.65	205	5.05	16.5	88.37
	1/25/2010	0.78	169	4.77	14.33	NA
MW-13	4/3/2009	NA	NA	5.10	12.78	210.0
	7/27/2009	NA	60	5.50	19.4	138.1
	10/26/2009	1.17	67	5.47	18.2	229.5
	1/25/2010	0.46	100	5.21	12.07	NA
MW-15B	4/3/2009	NA	NA	5.29	16.9	354.0
	7/27/2009	NA	297	5.26	19.7	458.1
	10/26/2009	0.74	261	5.09	21.1	516.4
	1/25/2010	0.41	203	5.08	16.4	NA
TW-1	4/3/2009	NA	NA	5.45	19.2	58.00
	7/27/2009	NA	210	6.37	20.2	66.66
	10/26/2009	3.93	49	6.22	19.5	71.43
	1/25/2010	5.88	120	6.02	17.72	NA

Notes:

NA = Not Analyzed

On April 3, 2009 equipment malfunctions prevented reading ORP and Specific Conductivity

On January 25, 2010 equipment malfunctions prevented accurate Specific Conductivity readings



U.S.G.S. QUADRANGLE MAP

TROUTMAN, NC 1993

QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

TITLE		SITE LOCATION MAP	
PROJECT		FORMER SKIPPERS MARINA TROUTMAN, NORTH CAROLINA	
		2923 South Tryon Street-Suite 10C Charlotte, North Carolina 28203 A PROFESSIONAL CORPORATION 704-586-0007 (p) 704-586-0373 (f)	
DATE:	02/22/10	REVISION NO:	0
JOB NO:	KID-005	FIGURE:	1

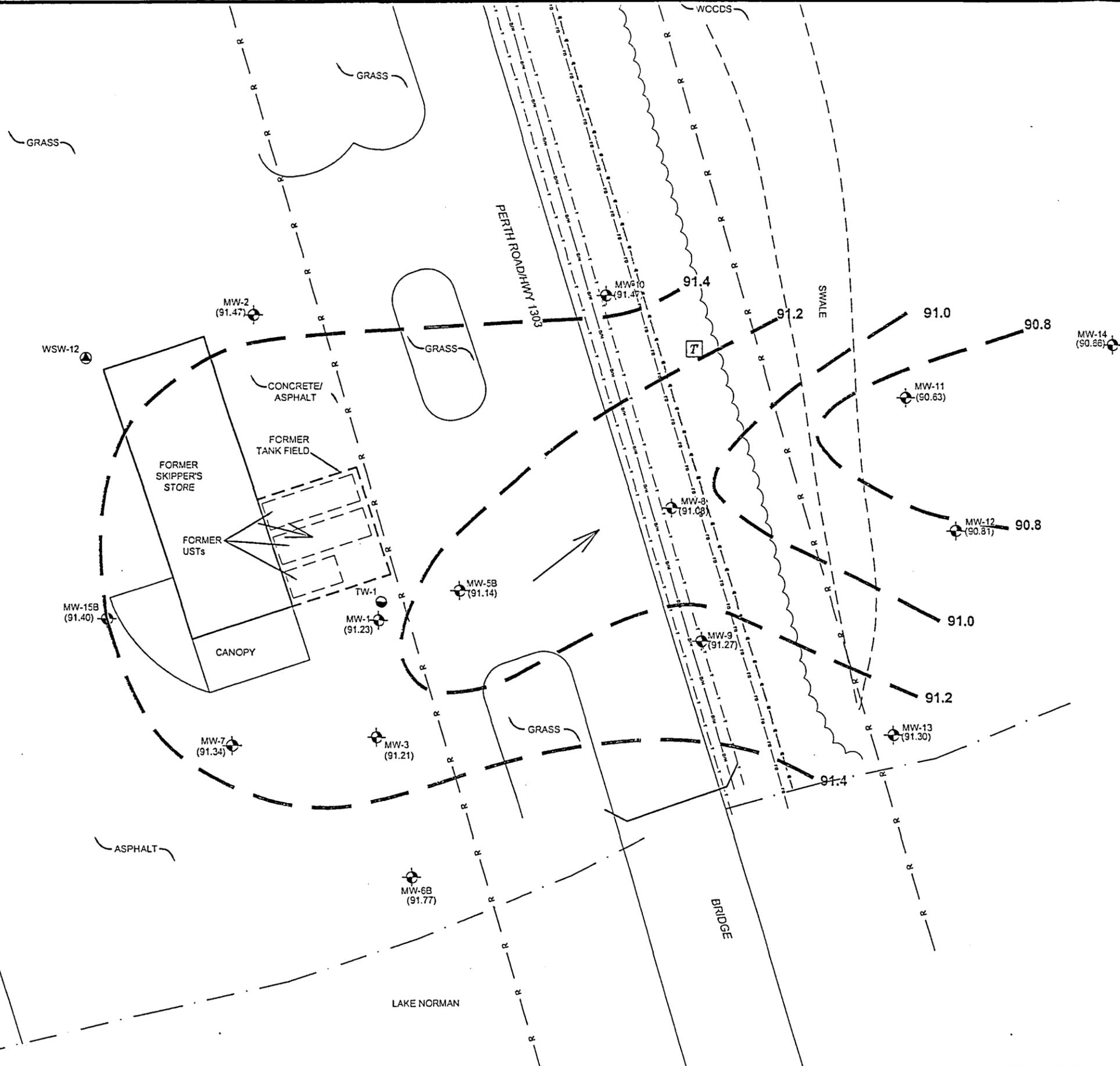
WATER SUPPLY WELL SURVEY
 FORMER SKIPPER'S MARINA
 TROUTMAN, NORTH CAROLINA
 H&H JOB # KID - 005

WELL #	PARCEL NUMBER	DISTANCE FROM SOURCE AREA (ft)	WELL DEPTH	ACTIVE/INACTIVE
WSW - 1	4730-60-8292	~700	Unknown	Active
WSW - 2	4730-63-7131	~900	Unknown	Active
WSW - 3	4730-62-7800	~850	Unknown	Active
WSW - 4	4730-62-4886	~1,100	Unknown	Active
WSW - 5	4730-62-3682	~1,150	Unknown	Active
WSW - 6	4730-62-4408	~1,125	Unknown	Active
WSW - 7	4730-62-3197	~1,250	Unknown	Active
WSW - 8	4730-62-6368	~950	Unknown	Active
WSW - 9	4730-62-7443	~850	Unknown	Active
WSW - 10	4730-62-8540	~800	Unknown	Active
WSW - 11	4730-62-9699	~550	Unknown	Active
WSW - 12	4730-72-5706	~50	Unknown	Active
WSW - 13	4730-72-7067	~650	Unknown	Active
WSW - 14	4730-71-5929	~850	Unknown	Active
WSW - 15	4730-71-3932	~850	Unknown	Active
WSW - 16	4370-71-2904	~900	Unknown	Active
WSW - 17	4730-71-1902	~1,020	Unknown	Inactive
WSW - 18	4730-71-0873	~1,075	Unknown	Active
WSW - 19	4730-71-1735	~1,150	Unknown	Active
WSW - 20	4730-71-1666	~1,230	Unknown	Active

WELL #	PARCEL NUMBER	DISTANCE FROM SOURCE AREA (ft)	WELL DEPTH	ACTIVE/INACTIVE
WSW - 21	4730-71-1496	~1,350	Unknown	Active
WSW - 22	4730-71-2377	~1,340	Unknown	Active
WSW - 23	4730-71-6471	~1,390	Unknown	Active
WSW - 24	4730-71-5489	~1,360	Unknown	Active
WSW - 25	4730-71-7533	~1,200	Unknown	Active
WSW - 26	4730-71-6725	~1,500	Unknown	Active
WSW - 27	4730-71-9473	~1,390	Unknown	Active
WSW - 28	4730-71-9525	~1,340	Unknown	Active
WSW - 29	4730-71-8676	~1,180	Unknown	Active
WSW - 30	4730-71-7891	~1,050	Unknown	Active
WSW - 31	4730-71-9804	~1,020	Unknown	Active
WSW - 32	4730-71-0817	~1,080	Unknown	Active
WSW - 33	4730-81-0733	~1,170	Unknown	Active
WSW - 34	4730-81-0683	~1,300	Unknown	Active
WSW - 35	4730-81-1534	~1,410	Unknown	Active
WSW - 36	4730-82-9206	~1,400	Unknown	Active
WSW - 37	4730-82-7349	~1,200	Unknown	Active
WSW - 38	4730-82-6627	~1,020	Unknown	Active
WSW - 39	4730-82-5787	~1,080	Unknown	Active
WSW - 40	4730-82-5846	~1,040	Unknown	Active

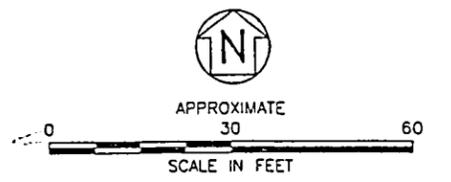
WELL #	PARCEL NUMBER	DISTANCE FROM SOURCE AREA (ft)	WELL DEPTH	ACTIVE/INACTIVE
WSW - 41	4730-82-7987	~1,260	Unknown	Active
WSW - 42	4730-82-7349	~1,300	Unknown	Active
WSW - 43	4730-71-1902	~1,100	281	Active
WSW - 44	4730-72-2809	~275	230	Active
WSW - 45	4730-63-9919	~1,400	Unknown	Active

Note: WSWs are keyed to Fig



- LEGEND**
- TYPE II MONITORING WELL
 - TYPE III MONITORING WELL
 - WATER SUPPLY WELL
 - TELEPHONE BOX
 - DITCH
 - SHORELINE
 - ELECTRIC LINE (OVERHEAD)
 - FIBER OPTIC LINE (UNDERGROUND)
 - TELEPHONE LINE (UNDERGROUND)
 - PERTH ROAD RIGHT OF WAY LINE
 - (90.5) POTENTIOMETRIC ELEVATION (R)
 - ESTIMATED GROUND WATER ELEVATION CONTOUR (FT)
 - ESTIMATED GROUND WATER FLOW DIRECTION

NOTE:
ELEVATIONS REFERENCE ARBITRARY DATUM



SHALLOW GROUNDWATER POTENTIOMETRIC MAP (JANUARY 2010)	
FORMER SKIPPER'S MARINA TROUTMAN, NORTH CAROLINA	
2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007(p) 704-586-0373(f) License # C-1269	
DATE: 2-22-10	REVISION NO. 0
JOB NO: KID-005	FIGURE NO. 4

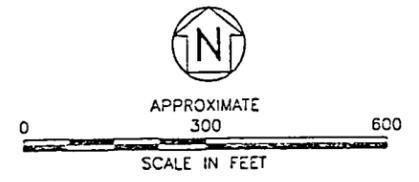
Master Project/Kidney - Skipper's Marina/KID-005 3rd quarter (Dec-Feb) Figures/2010/02/21/Map_KID-005.dwg

3:\AA\Master Projects\Kinlley - Skipper Marina\KID-005 3rd quarter (Doc File)\Figures\20100308_Fig 2 Site Map_KID-005.dwg, Fig 3 WSW, 2/22/2010 4:59:01 PM



- LEGEND**
- PROPERTY BOUNDARY
 - - - EDGE OF WATER
 - ⊙ WATER SUPPLY WELL

BASED ON 2001 RECEPTOR SURVEY BY OTHERS AND JULY 2009 UPDATE PERFORMED BY H&H



TITLE WATER SUPPLY WELL LOCATION MAP	
PROJECT FORMER SKIPPER'S MARINA TROUTMAN, NORTH CAROLINA	
 Hart & Hickman <small>A PROFESSIONAL CORPORATION</small>	
<small>2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-585-0007(p) 704-586-0373(f) License # C-1269</small>	
DATE: 2-22-10	REVISION NO. 0
JOB NO: KID-005	FIGURE NO. 3