



April 5, 2017

Herbie Hub, LLC  
c/o Intracoastal Realty  
Attn.: Mr. Jeff Hovis  
1900 Eastwood Road  
Wilmington, North Carolina 28403

Re.: Limited Phase II Environmental Site Assessment Findings  
4<sup>th</sup> Street Tracts  
Wilmington, New Hanover County, North Carolina

Mr. Hovis,

The following documents are attached for your reference:

Figure 1 Site Map With Monitoring Well And Soil Boring/Sampling Locations

Boring Logs, As-Built Well Details, and NC Well Construction Record  
Laboratory Report

Completion of the Phase I ESA found one Area Of Concern. The site formerly operated as a theater. Review of historical records found a furnace room on the western end of the former theater building. The fuel source for firing the furnace is unknown. Due to the unknown fuel type, it was recommended that limited soil and groundwater exploration be conducted to determine if a heating oil UST or AST was utilized (refer to Figure 1). Work was conducted as follows:

1. Areas immediately adjacent to the former furnace room were screened for magnetic metals utilizing a Schonstedt magnetometer. Metallic debris was found, but no large, magnetic anomaly was identified. No evidence of a buried, steel fuel tank was found.
2. A series of 12 exploratory soil borings were drilled adjacent to the former furnace room. Soil samples were collected down to approximately 10 feet deep and checked for the presence of petroleum vapors. No evidence of petroleum vapors was found. Samples were collected from 12 - 14 feet deep from two of the borings, S-1 and S-2. These samples were prepared for laboratory analysis for TPH Diesel Range Organics (DRO) and Gasoline Range Organics (GRO). Sample S-1 revealed 22.3 ppm of DRO, within the State's 100 ppm action limit. No evidence of any other impact to the soil was found.

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3. One monitoring well was installed adjacent to the former furnace room. Soil samples from the monitoring well's boring were also screened for the presence of petroleum vapors. No evidence of petroleum vapors was identified. A groundwater sample was collected and analyzed for petroleum constituents. No evidence of a groundwater impact was found.

Copies of the laboratory report, boring logs, and NC Well Construction Record are attached.

In summary, a limited magnetic survey and soil and groundwater investigations were conducted near and adjacent to the former furnace room identified in the Phase I ESA. No evidence of non-compliant soil impacts, or any evidence of groundwater impacts were found. No further investigation is recommended.

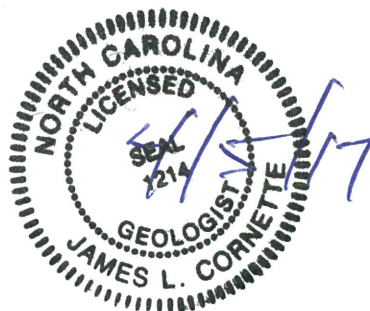
If you have any questions, please do not hesitate to call.

Sincerely,



James L. Cornette, P.G.  
Project Manager

encs.







## LEGEND

- Approximate Property Boundary
- AOC1 = Historical Furnace Room (Unknown Fuel Supply)
- Soil Boring/Sampling Location
- ⊙ Temporary Monitoring Well Location

Adapted from New Hanover County GIS and Google Earth Image 10/26/2016, accessed 3/1/17.



## BORING LOG

HERBIE HUB, LLC PROPERTY  
812 4<sup>TH</sup> STREET N  
WILMINGTON, NORTH CAROLINA 28401

TW-1

Drilled by: Applied Resource Management  
Logged by: J. Zuncich  
Date: 3/22/17

<i>Depth (ft.)</i>	<i>Description</i>	<i>Water Content</i>
2 - 4	Medium to dark gray, very fine to fine sand with debris, concrete, and brick. No hydrocarbon odor.	Low
5 - 7	Tan brown very fine to fine sands. No hydrocarbon odor.	Low
10 - 12	Medium brown, fine to medium grained sand. No hydrocarbon odor.	Low
15 - 17	Light brown, gray fine to medium grained sand, No hydrocarbon odor.	Medium
20 - 22	Light brown, gray fine to medium grained sand, No hydrocarbon odor.	Medium

## BORING LOG

HERBIE HUB, LLC PROPERTY  
812 4<sup>TH</sup> STREET N  
WILMINGTON, NORTH CAROLINA 28401

S-1

Drilled by: Applied Resource Management  
Logged by: J. Zuncich  
Date: 3/22/17

<i>Depth (ft.)</i>	<i>Description</i>	<i>Water Content</i>
2 - 4	Medium to dark gray, very fine to fine sand with debris, concrete, and brick. No hydrocarbon odor.	Low
5 - 8	Tan brown very fine to fine sands changing to orange clayey sand from 7' to 8'. No hydrocarbon odor.	Low
10 - 12	Medium brown, fine to medium grained sand. No hydrocarbon odor.	Low

## BORING LOG

HERBIE HUB, LLC PROPERTY  
812 4<sup>TH</sup> STREET N  
WILMINGTON, NORTH CAROLINA 28401

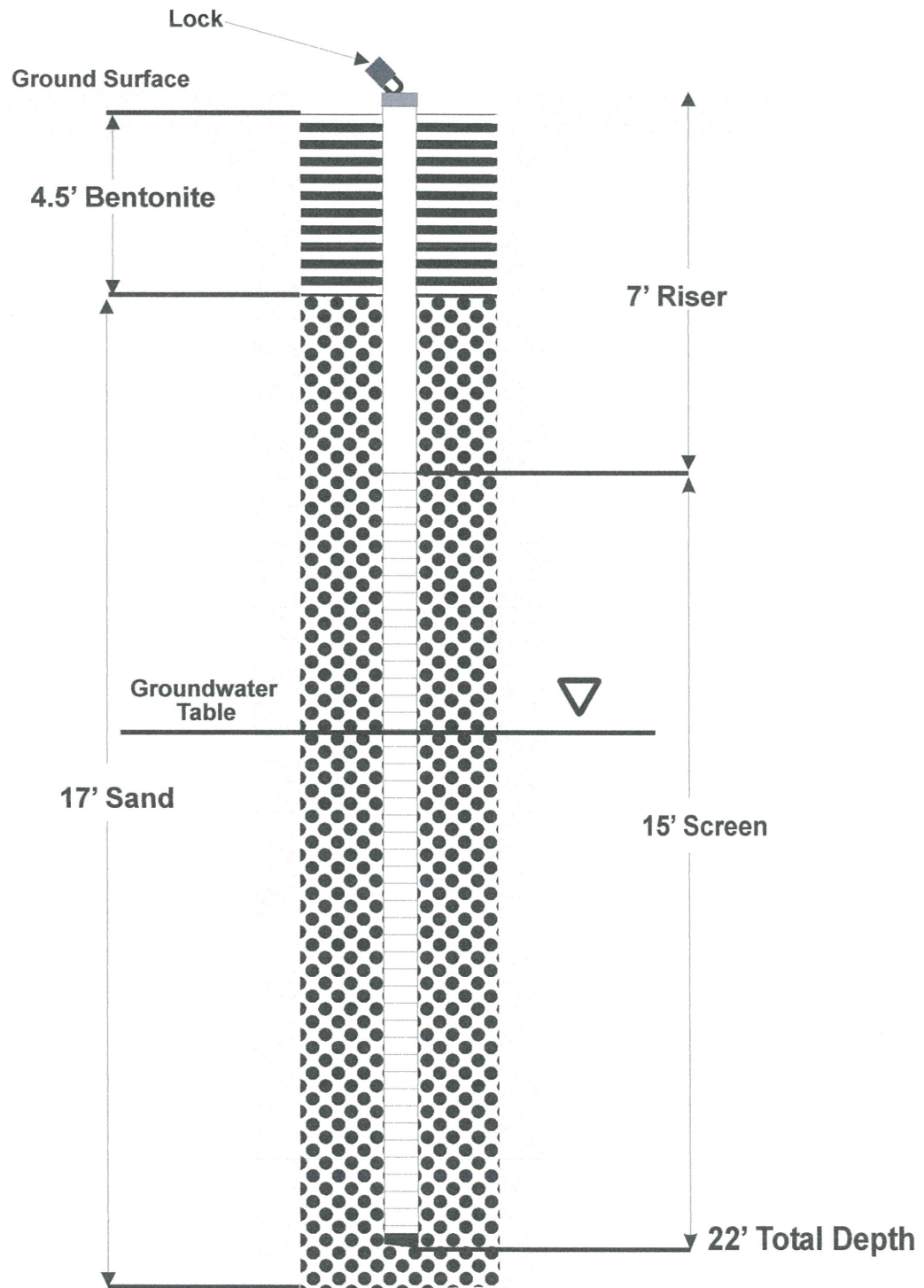
S-2

Drilled by: Applied Resource Management  
Logged by: J. Zuncich  
Date: 3/22/17

<i>Depth (ft.)</i>	<i>Description</i>	<i>Water Content</i>
2 - 4	Medium to dark gray sand with debris, brick and concrete. No hydrocarbon odor.	Low
5 - 7	White to beige fine sand. No hydrocarbon odor.	Low
10 - 12	Orange, fine to medium grained sand. No hydrocarbon odor.	Low
12 - 14	Brown/gray fine to medium grained sand. No hydrocarbon odor.	High



# TW-1



**WELL CONSTRUCTION RECORD (GW-1)****1. Well Contractor Information:****Donald Cummings**

Well Contractor Name

**2412-A**

NC Well Contractor Certification Number

**Applied Resource Management, P.C.**

Company Name

**N/A****2. Well Construction Permit #:**

List all applicable well construction permits (i.e. UIC, County, State, Variance, etc.)

**3. Well Use (check well use):****Water Supply Well:**

- ☐ Agricultural
 ☐ Municipal/Public  
☐ Geothermal (Heating/Cooling Supply)
 ☐ Residential Water Supply (single)  
☐ Industrial/Commercial
 ☐ Residential Water Supply (shared)  
☐ Irrigation

**Non-Water Supply Well:**

- ☒ Monitoring
 ☐ Recovery

**Injection Well:**

- ☐ Aquifer Recharge
 ☐ Groundwater Remediation  
☐ Aquifer Storage and Recovery
 ☐ Salinity Barrier  
☐ Aquifer Test
 ☐ Stormwater Drainage  
☐ Experimental Technology
 ☐ Subsidence Control  
☐ Geothermal (Closed Loop)
 ☐ Tracer  
☐ Geothermal (Heating/Cooling Return)
 ☐ Other (explain under #21 Remarks)

**4. Date Well(s) Completed:** 3/22/17 **Well ID#** TW-1
**5a. Well Location:****Herbie Hub, LLC****N/A**

Facility/Owner Name

Facility ID# (if applicable)

**812 4th Street N, Wilmington, NC 28401**

Physical Address, City, and Zip

**New Hanover****R04813-002-009-000**

County

Parcel Identification No. (PIN)

**5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees:**  
(if well field, one lat/long is sufficient)
**34 14 42.31** N **77 56 42.84** W

**6. Is(are) the well(s):** ☒ Permanent or ☐ Temporary

**7. Is this a repair to an existing well:** ☐ Yes or ☒ No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

**8. For Geoprobe/DPT or Closed-Loop Geothermal Wells** having the same construction, only 1 GW-1 is needed. Indicate TOTAL NUMBER of wells drilled: 1
**9. Total well depth below land surface:** 22 (ft.)  
 For multiple wells list all depths if different (example- 3@200' and 2@100')

**10. Static water level below top of casing:** 15.03 (ft.)  
 If water level is above casing, use "+"

**11. Borehole diameter:** 9" (in.)

**12. Well construction method:** Auger  
 (i.e. auger, rotary, cable, direct push, etc.)
**FOR WATER SUPPLY WELLS ONLY:**
**13a. Yield (gpm)** N/A **Method of test:** N/A
**13b. Disinfection type:** N/A **Amount:** N/A

For Internal Use Only:

**14. WATER ZONES**

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

**15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)**

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0	7	2	SCH40	PVC

**16. INNER CASING OR TUBING (geothermal closed-loop)**

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		
ft.	ft.	in.		

**17. SCREEN**

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
7	22	2	.010	SCH40	PVC
ft.	ft.	in.			

**18. GROUT**

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.5	5	Bentonite	Poured
ft.	ft.		
ft.	ft.		

**19. SAND/GRAVEL PACK (if applicable)**

FROM	TO	MATERIAL	EMPLACEMENT METHOD
5	22	Coarse	Poured
ft.	ft.		

**20. DRILLING LOG (attach additional sheets if necessary)**

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
ft.	ft.	See Attached
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

**21. REMARKS****22. Certification:**

Signature of Certified Well Contractor Donald Cummings Date 4/5/17

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

**23. Site diagram or additional well details:**

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

**SUBMITTAL INSTRUCTIONS**
**24a. For All Wells:** Submit this form within 30 days of completion of well construction to the following:

 Division of Water Resources, Information Processing Unit,  
 1617 Mail Service Center, Raleigh, NC 27699-1617

**24b. For Injection Wells:** In addition to sending the form to the address in 24a above, also submit one copy of this form within 30 days of completion of well construction to the following:

 Division of Water Resources, Underground Injection Control Program,  
 1636 Mail Service Center, Raleigh, NC 27699-1636

**24c. For Water Supply & Injection Wells:** In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.