

PHASE II ENVIRONMENTAL SITE ASSESSMENT

FOR THE

WETSIG YACHTS FACILITY

WILMINGTON, NORTH CAROLINA

CES PROJECT NO. 02106

PREPARED FOR

BRANCH BANKING AND TRUST COMPANY, INC.

WILMINGTON, NORTH CAROLINA

DECEMBER 2, 2002

PREPARED BY

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1.0 EXECUTIVE SUMMARY:

The subject facility is located at 4022 Market Street in Wilmington, North Carolina, in New Hanover County. Access to the property is gained along “Wetsig Road”, which exits to the east off of Market Street. There are currently two primary operations on the property, including Wetsig Yachts, a luxury yacht manufacturing operation, and Marine Mechanix, a small boat motor repair facility. A total of six free standing buildings and two small storage sheds are constructed on the property which is a triangular-shaped tract of approximately 2.5 acres. It is bordered on each side by railroad tracks, and is generally cleared land. **Figure 1** is a vicinity map, **Figure 2** is a recent (1998) aerial photograph denoting each of the current buildings as “A” through “F”, respectively, and **Figure 3** is a site map depicting soil boring and monitoring well locations.

A *Phase I Environmental Site Assessment (Phase I Report)*, dated August 21, 2002, was prepared in accordance with American Society for Testing and Materials Standard E1527-00, by Clark Environmental Services, P.C. (CES). This followed a report prepared by CES, entitled *Interim Report and Recommendations for Phase I-II Investigations*, dated July 16, 2002. The assessment work at the site was conducted on behalf of Branch Banking and Trust Company, Inc. (Wilmington, North Carolina), lienholder, pursuant to addressing due diligence requirements. Site access was authorized by the property owner, Mr. Paul Wetsig of Wetsig Yachts (Wilmington, North Carolina).

In summary, the facility has a long history of fertilizer manufacturing operations, dating back to at least 1900, through the early 1980s. Subsequently, a garden center and a number of mechanical repair facilities and boat building facilities have operated on site. The three most significant findings identified in the *Phase I Report*, which were considered to be recognized environmental conditions warranting further inquiry, include: 1) the potential impacts of a long-term fertilizer manufacturing operation; 2) the prior use of a reported diesel underground storage tank (UST) at the fertilizer plant and the potential historical leakage of fuel; and, 3) the observation of “oil-stained soils” in the area of the Marine Mechanix boat motor repair operation. It was recommended in the *Phase I Report* that a Phase II intrusive investigation be performed to address the potential for environmental contamination associated with these concerns. The current report summarizes the findings of the Phase II investigation.

The Phase II investigation consisted of the conduct and sampling of 16 soil borings and the installation, sampling and surveying of five monitoring wells. A number of listed hazardous constituents were present (**Table 1**), although relatively few were detected at levels in excess of the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Waste Management (DWM), Superfund Section, Human Health Based Soil Remediation Goals for Unrestricted Land Use (Soil RGs). It is notable that mercury was detected at 13 borehole locations; however, none of the detected concentrations exceeded the Soil RG. The soil analyses revealed relatively minor exceedences of the arsenic Soil RG at three boreholes, and of the chromium NCDENR, Division of Water Quality (DWQ) Soil to Groundwater Cleanup Level at three boreholes. The asbestos mineral “chrysotile” was detected at five borehole locations and an exceedence of the high boiling point petroleum hydrocarbon DWM, UST Section action level was found at one borehole.

The laboratory analyses of groundwater samples taken from the five monitoring wells detected the presence of several target constituents. Arsenic was initially detected at a concentration which exceeded the Groundwater Standard at MW1, MW2 and MW3, as defined in Title 15A of the North Carolina Administrative Code, Chapter 2, Subchapter 2L (2L Standard). It is noteworthy that the detection of metals in groundwater can be influenced (falsely positive) by the presence of fine sediment in the water column. The initial groundwater samples which detected arsenic at MW1 (11.1 $\mu\text{g/L}$), MW2 (13.4 $\mu\text{g/L}$), and MW3 (78.6 $\mu\text{g/L}$) were not filtered prior to analyses; thus, these three monitoring wells were subsequently re-sampled and field filtered. The resulting analyses revealed no detection of arsenic at MW1 and MW2, but arsenic remained detectable at MW3, in both the unfiltered (34.4 $\mu\text{g/L}$) and filtered (37.9 $\mu\text{g/L}$) samples, which are slightly in excess of the 2L Standard.

It is recommended that these findings be transmitted to: NCDENR, DWQ, Groundwater Section; NCDENR, DWM, Superfund Section, Inactive Hazardous Sites Branch; and, NCDENR, DWM, UST Section, to comply with the owner’s reporting responsibilities and to seek a determination with respect to additional regulatory requirements.

2.0 OBJECTIVE:

The purpose of this Phase II environmental site assessment is four-fold: 1) to perform detection-oriented, exploratory soil borings to look for visible evidence of potential contamination; 2) to confirm suspected impacts through laboratory analyses of soil samples at the property; 3) to perform detection-oriented groundwater sampling in areas deemed most likely to be impacted (on the basis of field observations and soil sampling results); and, 4) to facilitate the disclosure of results and the generation of recommendations for further actions.

It is noteworthy that the current Phase II study draws upon information previously generated and provided to the client in prior reports. This information was disclosed by sources available during the performance of a preliminary study and a Phase I investigation.

3.0 SITE BACKGROUND/OPERATING HISTORY:

The history of usage at the site has been confirmed utilizing a variety of sources and each source of information was generally discussed, separately, in the previously prepared *Phase I Report*. A brief description of each existing building is herein enclosed for reference in **Appendix I** and the numeration for each building corresponds to **Figure 2**.

4.0 SUBSURFACE INVESTIGATION (PHASE II):

Available information did not reveal that any prior subsurface investigations have been performed at the subject site. Therefore, the current investigation attempted to provide overall screening of the site and to address the most obvious potential disposal areas. The subsurface investigation incorporated a systematic methodology which established initial sampling stations that were considered the likely locations of significant historical activities. The deductions were based on historical Sanborne maps, aerial photographs, visible evidence and interview anecdotes. It was speculated that borings installed at these sampling stations may encounter “human disturbed horizons”, and it was hypothesized that the target horizons may contain regulated substances resulting from the human-induced deposition of materials. Following this practice, surficial groundwater monitoring wells would be installed to preliminarily characterize groundwater quality.

4.1 SOIL INVESTIGATION METHODS:

Borings were advanced using a hand auger or auger drill rig, continuously logged and screened for soil characteristics, and observed for evidence of visible impact. Soil samples were collected at target depths based on field observations of the composition and texture of the soil column. In several potential disposal areas, more than one borehole was installed in an effort to ensure a representative examination of the respective area. In those situations, each borehole was individually logged and the soil sample representing that target area was comprised by evenly combining the cuttings taken from the suspect depth of each boring, and placing sufficient sample material into the laboratory-prepared soil jars (i.e., composite samples).

The soil samples were analyzed by various laboratory methods, as described below, based on the most likely suspect contaminants for each area. The target compounds generally include Federally listed hazardous constituents. **Table 1** provides a summary of the laboratory results for each soil sample, as compared to applicable regulatory levels. **Appendix II** contains boring logs for all of the soil investigation boreholes and **Appendix III** contains laboratory results and chain of custody forms for the soil samples.

4.2 SOIL INVESTIGATION FINDINGS:

The following describes the rationale for sampling each location and the findings associated with the laboratory analyses:

SB1 Former Nitrates of Soda Building: The area was examined and two very shallow borings were installed to encompass the area deemed to be the general position of the former building. A composite sample of this area was analyzed for eight RCRA metals plus copper, nickel, asbestos, and nitrates. The soils were sampled at depths of 0-2 feet.

Results: The laboratory results detected the presence of six target metals. A trace of nitrate (1 mg/kg) was also detected. No analytes were of sufficient concentration to exceed a published NCDENR action level or goal.

SB2-SB6 Warehouse Perimeter - South side along loading platform: The area was pre-examined and multiple sampling stations were deemed necessary to encompass each target area along the length of the former loading platform. CES personnel advanced the borings and samples for each area were analyzed for eight RCRA metals plus copper, nickel, and asbestos. The soils were sampled at various depths as follows: SB2, 1-2 feet; SB3, 1.5-3.5 feet; SB4, 2-3 feet; SB5, 1-3 feet; and SB6, 1-2 feet. Soil cuttings from borehole SB3 were characterized by a peculiar organic odor and, therefore, this borehole was also sampled for herbicides and pesticides.

Results: The laboratory results for each of the samples revealed low concentration detections of the various target metals; however, arsenic concentrations in one sample, SB2 (5.51 mg/kg) exceeded the Soil RG (4.6 mg/kg). The results for SB3 did not reveal herbicides or pesticides. It is noteworthy that the SB2 and SB3 soil samples did contain chrysotile, a commonly occurring asbestos mineral, frequently found in cement building materials.

SB7-SB8 Warehouse Perimeter - North side: The area was examined and two separate stations were sampled in order to encompass this side of the building. CES personnel advanced the borings, and samples for each area were analyzed for eight RCRA metals plus copper, nickel, and asbestos. The soils were sampled at various depths: SB7, 1-3 feet and SB8, 1-2 feet.

Results: The laboratory results for each of the samples revealed detections of the various target metals. No analytes were of sufficient concentration to exceed a published NCDENR action level or goal. It is noted that the SB7 and SB8 soils contained the asbestos mineral chrysotile.

SB9 Tractor Building: The area around the former loading ramp to the tractor building was examined and two soil borings were advanced to target the area. The composite sample was analyzed for eight RCRA metals plus copper, nickel, and asbestos. The soils were sampled at depths of 0-2 feet.

Results: The laboratory results revealed detections of several target metals. No analytes were of sufficient concentration to exceed a published NCDENR action level or goal. No herbicides or pesticides were detected

SB10 Former Fuel Oil Tank - Boiler Building: The area was probed to search for evidence of petroleum and possible UST locations. CES personnel advanced several borings and procured one composite sample from this area which was analyzed for total petroleum hydrocarbons (TPH). The soils were sampled at a depth of 4-5 feet.

Results: The laboratory results revealed high boiling point diesel range TPH at a level (13 mg/kg) which exceeds the NCDENR, DWM, UST Section regulatory Action Level (10 mg/kg).

SB11 Open storage perimeter - West side: The area was examined and a total of two borings were advanced. A composite sample was analyzed for eight RCRA metals plus copper, nickel, and asbestos. The soil was sampled at a depth of 1.3 feet. Soil cuttings were characterized by a peculiar organic odor and, therefore, the soil was also sampled for herbicides and pesticides.

Results: The laboratory results revealed detections of several target metals. No analytes were of sufficient concentration to exceed a published NCDENR action level or goal. No herbicides or pesticides were detected.

SB12 Marine Mechanix Building: This current business operation was investigated at several exterior areas. One boring was installed and sampled in the immediate vicinity of the primary work area. The soil sample was analyzed for TPH at a depth of 0-2 feet.

Results: The laboratory results revealed diesel range TPH; however, the detection (28 mg/kg) does not exceed the NCDENR, DWQ, Groundwater Section regulatory Action Level (40 mg/kg). The SB12 sample also contained the asbestos mineral chrysotile.

SB13-SB16 Inert Landfill Area: The area consists of a hummocky ground surface, reportedly overlying multiple buried piles of concrete and brick debris. A total of four sampling stations were probed and three were sampled at various depths; SB13 (4-6 ft), SB14 (3-6 ft), and SB15 (0-3 ft). SB16 was not sampled. The samples were analyzed for eight RCRA metals plus copper, nickel and asbestos.

Results: The laboratory results for each of the samples revealed detections of numerous target metals. Arsenic results for SB13 (6.48 mg/kg) and SB15 (5.4 mg/kg) revealed slight excesses of the Soil RG (4.6 mg/kg). The results for chromium at SB13 (28.4 mg/kg), SB14 (27.6 mg/kg) and SB15 (32.8 mg/kg) exceeded the NCDENR, DWQ Soil to Groundwater Cleanup Level of 27 mg/kg.

4.3 GROUNDWATER INVESTIGATION METHODS:

Upon review of the soil sampling results, and in conjunction with field observations, a total of five shallow monitoring wells were installed at selected locations in order to characterize groundwater quality at the site. The wells were installed with a rotary drill rig, using decontaminated hollow stem augers, and were logged and surveyed. **Appendix IV** contains boring logs, as-built well details, and well construction records for the five wells and **Appendix V** contains sampling records, groundwater laboratory results, and chain of custody forms.

The depth to groundwater and field characteristics were measured, and then each well was purged and sampled utilizing a new dedicated bailer. The groundwater samples were then placed in laboratory-prepared jars, stored on ice and taken to a North Carolina certified analytical laboratory.

4.4 GROUNDWATER INVESTIGATION FINDINGS:

The following discusses laboratory methods utilized with respect to individual well locations:

MW1 Former Heating Oil Tank Boiler Building - The groundwater was sampled and analyzed for volatile organics using EPA Method 6210D plus acetone; and EPA Method 625 (610 list) - Polynuclear Aromatic Hydrocarbons (PAHs), plus eight RCRA metals and nitrate.

MW2 North Side of Main Building - The groundwater was sampled and analyzed according to EPA Method 6210D, eight RCRA metals and nitrate.

MW3 South Side Building - The groundwater was sampled and analyzed using EPA Method 6210D, eight RCRA metals and nitrate. In addition, samples were analyzed via EPA Method 8270 - semi-volatile acid extractables.

MW4 Marine Mechanix Shop - The groundwater was sampled and analyzed using EPA Method 6210D, eight RCRA metals and nitrate.

MW5 Debris Piles and Fertilizer Pile - The groundwater was sampled and analyzed using EPA Method 6210D, EPA Method 8270, eight RCRA metals and nitrate.

Table 2 summarizes the findings for each of the groundwater samples. Arsenic was initially detected at MW1 (11.1 $\mu\text{g/L}$), MW2 (13.4 $\mu\text{g/L}$) and MW3 (78.6 $\mu\text{g/L}$), which exceeds the 2L Standard for arsenic (10 $\mu\text{g/L}$). It is noted that the detection of metals in groundwater can be influenced (i.e., false positive) by the presence of fine sediment in the water column. Because the initial groundwater samples were not filtered prior to analyses, the three monitoring wells with apparent arsenic exceedences were resampled utilizing field filters to eliminate turbidity. The resulting analyses did not detect arsenic at MW1 or MW2; however, arsenic was again detected at MW3, at concentrations of 34.4 $\mu\text{g/L}$ and 37.9 $\mu\text{g/L}$ in the unfiltered and filtered samples, respectively, which exceeds the groundwater standard of 10 $\mu\text{g/L}$.

The pH levels measured in the field at MW4 and MW5 slightly exceeded the regulatory standard range of 6.5 - 8.5; however, it is important to note that this field measurement is not a certified laboratory result, and, in itself, should not be interpreted to represent a contravention of 2L Standards.

Figure 4 displays potentiometric contours which indicate a southwest groundwater flow direction. A downward component of aquifer flow is also likely, since the site is situated in a recharge area for the surficial aquifer.

5.0 DISCUSSION:

5.1 PRIOR USAGE CONCERNS:

It is documented that a fertilizer plant operated at the site from at least 1903 until 1980. The findings of the current Phase II investigation seem to support the prior owner's contention that the site historically, as well as more currently, operated as a mixing and bagging plant, rather than one which produces fertilizer from raw materials. This is based on the historical Sanborne Map depictions included in the prior *Phase I Report* which did not label the types of features (such as acid chambers and other chemical processing equipment) which are known to be common to phosphate-concentrating plants of the historical era. Also, the observation and description of subsurface material from many boreholes found no obvious evidence of ores, slags or other manufacturing byproducts.

5.2 DETECTED CONSTITUENTS IN SOILS:

A number of regulated contaminants were detected in soils, including a variety of listed hazardous constituents. Arsenic, barium, cadmium, chromium, copper, lead and mercury were detected in soils across the site. Three arsenic detections exceed the NCDENR, DWM, Superfund Section, Human Health Based Soil RGs for Unrestricted Land Use, and three chromium detections exceed the NCDENR, DWQ, Soil to Groundwater Cleanup Level. Evidence of minor petroleum impact was also detected (which is further discussed below, in Section 5.4).

It is important to note that the scope of this investigation did not include the measurement of off-site background levels of the detected constituents. Such measurements may provide a basis for determining what concentrations of substances might be attributable to historical operations versus those which are ambient or indigenous to the region or locality. The site-wide detections of arsenic and mercury prevent ready attribution to a particular activity or area.

The widespread detection of chrysotile, an asbestos mineral commonly added to cement building products, may reflect the deterioration and widespread distribution of construction debris found at the site.

5.3 DETECTED CONSTITUENTS IN GROUNDWATER:

Initial groundwater analyses detected arsenic at MW1, MW2 and MW3, at levels above groundwater standards. In order to evaluate the possible effects of turbidity (i.e., falsely elevating arsenic concentrations to imply arsenic as a solute), the three wells were resampled for verification after field filtering, along with raw sampling, for comparison. The previously detected arsenic concentration at MW1 and MW2 were not redetected in the unfiltered or filtered samples. At MW3, arsenic (originally detected at 78.6 $\mu\text{g/L}$) was again detected in both the unfiltered (34.4 $\mu\text{g/L}$) and filtered (37.9 $\mu\text{g/L}$) samples, at levels in excess of the 2L Standard (10 $\mu\text{g/L}$).

The origin or significance of the arsenic 2L Standard violation at MW3 is not specifically speculated upon within this report.

5.4 PETROLEUM CONCERNS:

A small (reportedly) diesel UST positioned adjacent to the former boiler building was reportedly removed from the property in the mid 1980s. The current property owner has indicated that no petroleum odors were detected at the time of the removal. No obvious odors were detected during the subsurface investigation; however, minor

concentrations of high boiling point (diesel range) TPH were detected by laboratory analyses of the soils in this area. The detected concentration (13 mg/kg) slightly exceeds the guideline set by the NCDENR, DWM, UST Section (10 mg/kg).

It is believed likely that this concentration is a vestige of historical UST operations.

During site reconnaissance, localized oil stained soils and stressed vegetation were observed, particularly in the areas of boat motor repair and parts storage. A soil sample was retrieved in this area (SB12) and a high boiling point range TPH concentration of 28 mg/L was revealed. The NCDENR DWQ Action level for this range is 40 mg/L. With the exception of low level methyl tert butyl ether (MTBE), no petroleum constituents were detected in the groundwater sample taken at MW4, which was positioned in the vicinity of SB12.

It is considered likely that petroleum waste handling practices at the Marine Mechanix operation resulted in the detection.

6.0 CONCLUSIONS:

This investigation revealed the presence of listed hazardous constituents in soils and groundwater.

The metals which were detected in soils appear to have a generally site-wide distribution, and the concentrations for two of these metals, arsenic and chromium, respectively, exceed NCDENR, DWM, Superfund Section Human Health Based Soil Remediation Goals for Unrestricted Land Use (arsenic), and NCDENR, DWQ, Soil to Groundwater Cleanup Levels (chromium). Also, chrysotile asbestos was detected in soils at relatively low levels. Because the distribution of metals in soils is site-wide, it is not possible to establish the relative significance of this finding with respect to background concentrations.

Arsenic was identified at one well (MW3) as an apparently verified solute in groundwater, at a concentration which exceeds the 2L Standard.

It is recommended that the information contained in this report be transmitted to the individuals assigned to the specific NCDENR agencies listed below. Each should be solicited to provide Division or Section specific guidance with respect to additional requirements, including investigations and remediation. The disposition of regulatory matters at such facilities is based upon a number of variables which are considered on both an individual program basis level, as well as collectively by NCDENR.

It is also possible that future usages of this property might be institutionally restricted to offset potentially expensive investigation and remediation requirements, if so ordered. Such an approach may be possible under the North Carolina Brownfields Property Re-Use Act of

1997 (managed by the North Carolina Brownfields Program), whereas a prospective developer mitigates short- and long-term contaminant exposure potentials in exchange for liability protections (covenant not-to-sue) which are provided by the State.

It is recommended that copies of this report be submitted to the attention of:

Dr. Charles Stehman, P.G., Environmental Regional Supervisor I, North Carolina Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section, 127 Cardinal Drive Extension, Wilmington, North Carolina 28405; telephone (910) 395-3900.

Ms. Charlotte Jesneck, Head, North Carolina Department of Environment and Natural Resources, Division of Waste Management, Superfund Section, Inactive Hazardous Sites Branch, 401 Oberlin Road, Suite 150, Raleigh, North Carolina 27605; telephone (919) 733-2801, extension 284.

Mr. David Holsinger, Regional Supervisor, North Carolina Department of Environment and Natural Resources, Division of Waste Management, Underground Storage Tank Section, 127 Cardinal Drive Extension, Wilmington, North Carolina 28405; telephone (910) 395-3900.

7.0 **LIMITATIONS:**

This environmental assessment is based on a review of available data and visual site reconnaissance. Subsurface environmental conditions were not addressed in detail. It is possible that this investigation may have failed to reveal the presence of hydrocarbons or hazardous waste contamination in excess of regulatory action levels on site, other than those areas indicated in this report, where such contamination may exist. Although Clark Environmental Services, P.C. (CES) has used appropriate and mutually agreed upon procedures and technologies for this investigation, CES cannot guarantee that such contamination does not exist. A complete chain of title history was not provided for the purposes of this investigation, but this is not believed to have detracted from the validity of results or conclusions of the study. CES and its employees, agents or subcontractors are not responsible for any false or misleading information obtained from the sources or individuals interviewed in connection with this investigation and are not responsible for any concealed conditions on the study site.

TABLES

TABLE 1
SUMMARY OF SOIL SAMPLING RESULTS
WETSIG YACHTS, WILMINGTON, NORTH CAROLINA
CES PROJECT NO. 02106

ANALYTICAL METHOD	3550		5030		CONTAMINANTS OF CONCERN										8151	8081	IC.3000	
	TOTAL PETROLEUM HYDROCARBONS (HIGH BOILING POINT)	TOTAL PETROLEUM HYDROCARBONS (LOW BOILING POINT)	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	HERBICIDES, µg/kg	PESTICIDES, µg/kg				ASBESTOS, PERCENT
SAMPLING INFORMATION AND REGULATORY PROGRAM REFERENCE	DATE	SAMPLE DEPTH (ft BGS)	NS	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NC DWM ACTION LEVELS			NS	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NC DWQ ACTION LEVELS			NS	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NC DWQ SOIL TO GROUNDWATER CLEANUP LEVELS			NS	NS	NS	848	NS	27	NS	270	NS	NS	NS	NS	NS	NS	NS	NS
NC DWM SOIL RGs			NS	NS	NS	4.6	NS	7.8	15600	620	400	4.6	320	78	VAR.	NS	NS	NS
FEDERAL LISTED HAZARDOUS CONSTITUENT (Y/N)			N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
SB1	09/09/02	0-2	NT	NT	BQL	62.5	2.82	6.64	32.1	58.1	0.0456	BOL	BOL	BOL	BOL	NT	NT	ND
SB2	09/09/02	1-2	NT	NT	5.51	32.9	1.19	23.5	8.01	26	0.0391	BOL	BOL	BOL	BOL	NT	NT	CHRY
SB3	09/09/02	1.5-3.5	NT	NT	2.76	18.3	BOL	23.1	7.44	14.9	0.314	BOL	BOL	BOL	BOL	BOL	BOL	CHRY
SB4	09/09/02	2-3	NT	NT	2.02	16.1	1.64	22.5	5.77	8.88	0.139	BOL	BOL	BOL	BOL	NT	NT	ND
SB5	09/09/02	1-3	NT	NT	3.06	15.3	BOL	20.5	3.73	7.46	0.0359	BOL	BOL	BOL	BOL	NT	NT	ND
SB6	09/09/02	1-2	NT	NT	3.55	24.5	BOL	11.3	6.58	12.2	0.0716	BOL	BOL	BOL	BOL	NT	NT	ND
SB7	09/11/02	1-3	NT	NT	3.22	37.8	BOL	15.5	9.5	19	0.204	BOL	BOL	BOL	BOL	NT	NT	CHRY
SB8	09/11/02	1-2	NT	NT	1.77	29.1	1.27	18.1	15.9	30.3	0.108	BOL	BOL	BOL	BOL	NT	NT	CHRY
SB9	09/11/02	0.5-2	NT	NT	1.46	BQL	BQL	8.38	2.12	4	0.0242	BOL	BOL	BOL	BOL	NT	NT	ND
SB10	09/11/02	4-5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SB11	09/11/02	1-3	NT	NT	1.81	BQL	BQL	11	1.48	4.93	BOL	BOL	BOL	BOL	BOL	BOL	BOL	CHRY
SB12	09/11/02	0-2	NT	NT	1.13	BQL	2.77	5	17.1	14.4	BOL	BOL	BOL	BOL	BOL	BOL	BOL	CHRY
SB13	09/26/02	4-6	NT	NT	6.48	31.5	BOL	20.4	85.3	20	0.183	BOL	BOL	BOL	BOL	NT	NT	ND
SB14	09/26/02	3-6	NT	NT	3.89	26.9	BOL	27.6	8.33	18.9	0.0484	BOL	BOL	BOL	BOL	NT	NT	ND
SB15	09/26/02	0-3	NT	NT	5.4	27.7	1.22	32.8	16.3	10.8	0.207	BOL	BOL	BOL	BOL	NT	NT	ND
MV5	09/26/02	0-2	NT	NT	BQL	BQL	BQL	8.25	2.1	5.1	0.024	BOL	BOL	BOL	BOL	NT	NT	ND

Notes:
1. NS: represents no available action level, clean-up level, screening level or level listed in a referenced document.
2. NT: represents not tested.
3. ft BGS: represents feet below ground surface.
4. CHRY: represents presence of asbestos mineral chrysotile.
5. Results reported in milligrams per kilogram (mg/kg), unless specified micrograms per kilogram (µg/kg).
6. Bold result represents concentrations in excess of action levels, soil to groundwater cleanup level, or soil remediation goals.
7. Shaded result represents Federally listed hazardous constituent which also exceeds cited regulatory levels.
8. NC DWM Action Levels: NCDENR Division of Waste Management, Underground Storage Tank (UST) Section Guidelines for Assessment and Remediation of Soil and Groundwater - July 2001.
9. NC DWQ Action Levels and NC DWQ Soil to Groundwater Cleanup Levels, taken from the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Quality (DWQ) Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater - July 2000.
10. NC DWM Soil RGs: NCDENR, DWM Superfund Section Inactive Hazardous Sites Branch, Guidelines for Assessment and Cleanup, Soil Remediation Goals - August 1998.
11. Listed hazardous constituent (Y/N): represents that the constituent is/is not contained in Appendix VIII of 40 CFR, Part 261.

**TABLE 2
SUMMARY OF GROUNDWATER SAMPLING RESULTS
WETSIG YACHTS, WILMINGTON, NORTH CAROLINA
CES PROJECT NO. 02106**

ANALYTICAL METHOD		CONTAMINANTS OF CONCERN																		
CONTAMINANT OF CONCERN ->		6210D					610					6010B								
WELL ID	DATE COLLECTED	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	MTBE	DIPE	NAPHTHALENE	TRICHLOROFLUOROMETHANE	NAPHTHALENE	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	SELENIUM	SILVER	MERCURY	NITRATE (mg/L)	FIELD PH
2L STANDARD		1	1,000	29	530	200	70	21	2,100	21	10	2,000	5	50	15	50	18	1.1	10	6.5-8.5
MW1-unf	10/02/02	<1	<1	<1	<3	89	<1	<1	<1	<10	11.1	<100	<10	<10	<10	<10	<10	<0.3	2.72	8.20
MW1-unf	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW1-f	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW2-unf	10/02/02	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	0.5	NT	13.4	<100	<10	<10	<10	<10	<10	<0.3	6.18	7.40
MW2-unf	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW2-f	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW3-unf	10/02/02	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	NT	78.8	<100	<10	14.5	<10	<10	<10	<0.3	0.73	8.20
MW3-unf	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	34.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW3-f	11/01/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	37.9	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW4-unf	10/02/02	<0.5	<0.5	<0.5	<1.5	2	<0.5	<0.5	<0.5	<10	<10	<100	<10	<10	<10	<10	<10	<0.3	1.70	9.18
MW5-unf	10/02/02	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	NT	<10	<100	<10	<10	<10	<10	<10	<0.3	0.22	9.50

- Notes:
1. Results reported in micrograms per liter (µg/L) unless otherwise noted
 2. MTBE represents methyl-tert-butyl-ether
 3. DIPE represents diisopropyl ether
 4. 2L Standards include interim groundwater standards
 5. NT represents not tested/not analyzed
 6. < represents below laboratory detection limit
 7. Bold represents an exceedance of 2L standard
 8. pH - value measured in field using hand held meter
 9. Unfff represents unfiltered and filtered samples



FIGURES

WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106

WILMINGTON



SCALE: 1" = 0.62mi

1.0 FT RADIUS

0.5 FT RADIUS

PROJECT LOCATION

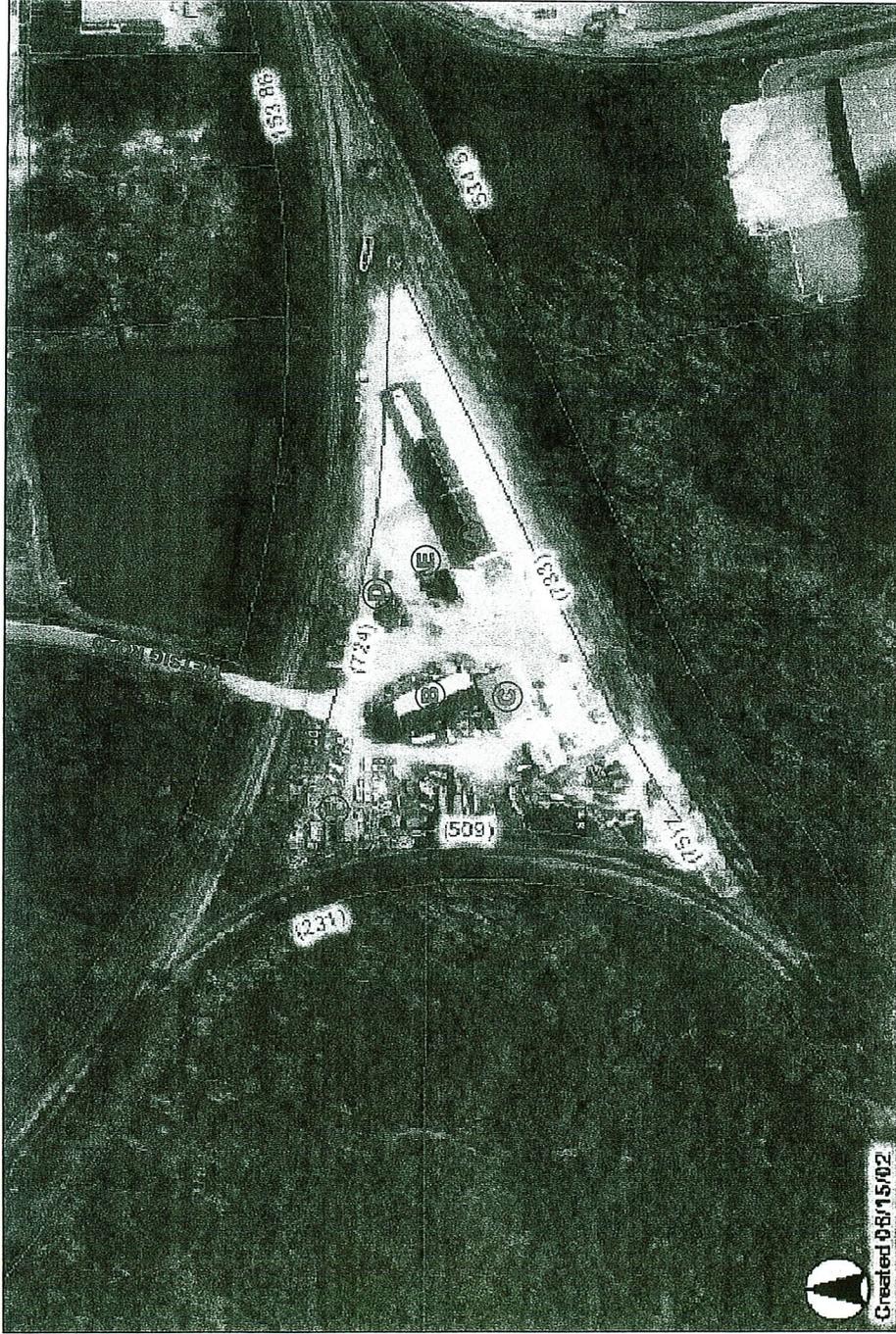
2840

For Greater Detail
See MAP #4

VICINITY MAP
FIGURE 1

WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106



LEGEND

- (A) = WETSIG YACHTS
- (B) = TRACTOR BUILDING
- (C) = RIGGING BUILDING
- (D) = BOILER BUILDING
- (E) = POWER BUILDING
- (F) = MARINE MECHANIX

SITE MAP
UTILIZING RECENT (1998)
AERIAL PHOTOGRAPH AND
TAX MAP DELINEATIONS

FIGURE 2



CLARK ENVIRONMENTAL SERVICES, P.C.

APPENDICES



APPENDIX I

BUILDING DESCRIPTIONS AND PRIOR USAGE

BUILDING DESCRIPTIONS AND PRIOR USAGE

Building A: Wetsig Yachts, constructed 1998, approximate dimensions 75 x 200 feet; currently houses large boat construction operation; generally overlays footprint of prior fertilizer works building of the early 1900's era; open steel frame warehouse building with sheet metal and fiberglass exterior, sheet metal roof, concrete floor; most areas have three story roof line; excellent condition; current concrete floor poured over prior fertilizer plant floor.

Building B: Tractor building, constructed circa 1900, approximate dimensions 40 x 108 feet; currently houses boat motor repair shop and storage of miscellaneous tools, equipment, etc; initially was used for tractor repair, hay and cotton storage; wood frame building with sheet metal or wooden exterior, wooden and sheet metal roof, wood walls and no interior plumbing, mostly concrete floor except one small section of "oil dirt" floor, old wood stove flues in roof line; one-story except for small loft area; poor condition.

Building C: Rigging Building, constructed 1995, approximate dimensions 43 x 60 feet; currently used to rig and to finish work on new boats; generally overlays the footprint of two 1940s small office buildings; open concrete block warehouse building, metal roof, concrete floor, no interior plumbing; two story roof line; excellent condition.

Building D: Boiler building, constructed circa 1940s, approximate dimensions 18 x 30 feet; currently empty; previously housed diesel fueled boiler which was removed circa 1983; center part is concrete block, small wood frame additions on each side, wood and tin roof, concrete floor in one addition has deteriorated concrete "glaze"; one story roof line; poor condition.

Building E: Power building (shed), was a portion of 1950-1970 north side addition to the main building, approximate dimensions 10 x 20 feet; currently houses various circuit breaker panels which distribute electricity throughout the site; concrete and wood exterior, deteriorated concrete/dirt floor, very poor condition.

Building F: Marine Mechanix building, was installed at site circa 1980s, approximate dimensions 24 x 24 feet; currently houses office for boat engine repair shop, wood frame, wood floor, set up on concrete blocks; fair condition (not entered for Phase I). In association with Marine Mechanix, there are two sheds: Shed 1 is a 12 x 12 feet, wood frame shed; and Shed 2 is a 10 x 20 feet, corrugated aluminum shed.

APPENDIX II
SOIL BORING LOGS

CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB1A
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft. BGS)	TO (ft. BGS)			ODOR	READING (ppm)
0.0	0.25	Grass, roots (old petroleum floor) medium brown (10YR/4-2) very fine SAND with small brick pieces	-	HC odor	-
0.25	0.5	Medium brown (10 YR 4/2) very fine SAND, pieces of tree trunk	-	-	-
0.5	1.0	Medium brown (10 YR 5/4) silty very fine to fine SAND	-	-	-
1.0	1.5	Black to gray black (10 YR 2/2) peaty fine SAND	-	-	-
1.5	2.0	Black to gray black (10 VR/2/2) peaty fine SAND	-	-	-
2.0	2.5	Grades from black peaty zone to orangish brown (10 VR 2/2) fine SAND	-	-	-
2.5	3.0	Light tan and orangish gray (5 YR 5/2) sandy SILT/silty SAND	-	-	-
3.0	3.5	Tan and orange (10 YR 6/2) slick silty CLAY	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) HC denotes hydrocarbon
4) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB1B
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Yellow, white, tan fine SAND, sampled 0-2 ft.	-	Moderate HC odor	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) HC denotes hydrocarbon
4) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB2
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Bright yellow orange (10 YR 6/6) fine silty SAND	-	-	-
0.5	1.0	Orange brown to yellowish orange (10 YR 6/6) fine silty SAND	-	-	-
1.0	1.5	Small pieces of brick and white (10YR/6/6) sandy zones orange brown (10 YR 6/6) silty SAND grades to darker orange brown (10 YR 4/2) , sampled from 1 to 2'	-	-	-
1.5	2.0	Orange brown (10 YR/6/6) silty SAND grades to a dark gray brown silty SAND with small (1/16-1/4 inch) pieces of brick and white sandy zones	-	-	-
2.0	3.5	Pinkish tan and tannish (5 YR 5/2) mottled gray and white (10 YR 6/2) zones of very silty fine SAND	-	-	-
3.5	4.0	Yellowish brown with small pieces of brick, orangish yellow (10 YR 5/4) mottles	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) HC denotes hydrocarbon
4) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB3A
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Orangish brown (10 YR 6/6) fine SAND with roots and tan mottles	-	-	-
0.5	1.0	Tan and orangish brown fine SAND	-	-	-
1.5	2.5	Dark brown and yellowish black (10 YR 2/2) silty fine SAND with pieces of brick and white/gray grains and gravel, small pieces of old red brick	-	Odor	-
2.5	3.5	Light yellowish tan and brown (10 YR 5/4) fine SAND with whitish grains	-	Odor	-
3.5	4.5	Light yellowish brownish tan (10 YR 6/2) very fine silty SAND			

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB3B
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.5	Orangish brown (10 YR 6/6) very fine SAND	-	-	-
1.5	2.5	Wood fragments, dark brown (10 YR 6/6) fine silty SAND, sampled 1.5-3.5'	-	-	-
2.5	3.5	Light yellowish tan (10 YR 6/2) very silty SAND with white fine grains	-	-	-
3.5	5.0	Orangish brown (10 YR 6/2) silty fine SAND			

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB3C
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.5	Orangish brown (10 YR 6/6) very fine SAND	-	-	-
1.5	2.5	Wood fragments, dark brown (10 YR 6/6) fine silty SAND, sampled 1.5-3.5'	-	-	-
2.5	3.5	Light yellowish tan (10 YR 6/2) very silty SAND with white fine grains	-	-	-
3.5	5.0	Orangish brown (10 YR 6/2) silty fine SAND			

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB4A
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass, roots, yellowish orange (10 YR 5/4) fine SAND	-	-	-
1.0	2.0	Pinkish gray tan (5 YR 7/2) woody fragments, fibrous	-	-	-
2.0	2.5	Pale pinkish brown (5 YR 5/2) woody fragments	-	peculiar odor	-
2.5	3.0	Yellowish orange and light brown (10 YR 5/4) very fine silty SAND with white very fine sandy grains	-	-	-
3.0	4.0	Pinkish orange (10 YR 7/4) very fine silty SAND locally whitish zones	-	-	-
4.0	4.5	Gray brown and yellowish tan (10 YR 5/4) fine silty SAND	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB4B
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
1.0	2.0	Yellowish orangish brown (10 YR 6/6) slightly silty fine SAND, whitish grains and small brick pieces	-	-	-
2.0	3.0	Medium brown (10 YR 4/2) silty fine SAND with a few small brick pieces and white grains scattered, sampled	-	-	-
3.0	4.0	Yellowish brown (10 YR 6/6) silty fine SAND	-	wood odor	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB5
DATE: 09/09/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft. BGS)	TO (ft. BGS)			ODOR	READING (ppm)
0.0	0.5	Grass, yellow brown (10 YR 6/6) SAND, old weathered brick	-	-	-
0.5	1.0	Mixed black and yellow and tan (10 YR 4/2) mottled silty CLAY with small pieces of red brick (old)	-	-	-
1.0	2.0	Medium yellowish brown (10 YR 6/6) fine silty SAND with small pieces of old brick (1/16-1/4"), sampled 1-3'	-	-	-
2.0	3.0	Medium yellow brown (10 YR 6/6) very silty fine SAND mottled with orange and tan, few 1/4" brick pieces	-	-	-
3.0	4.0	Whitish tan and mottled orange (10 YR 6/2) silty very fine SAND, damp	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: SB6
 DATE: 09/09/02
 LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Grass and thick weeds, yellow tan SAND with small white shell fragments	-	-	-
1.0	2.0	Medium yellow brown to medium brown silty very fine SAND with small (1/16-1/4") pieces of shell and old red brick, sampled	-	-	-
2.0	3.0	Yellowish brown to light brown very silty very fine SAND	-	-	-
3.0	4.0	Yellowish dark tan very silty very fine SAND, moist	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB7A
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass, light yellow tan fine SAND	-	-	-
1.0	1.5	Mixed SAND, small pieces of brick, gravel, poorly sorted fine to coarse SAND	-	-	-
1.5	2.0	Red old brick pieces, bright reddish orange	-	-	-
2.0	3.0	Red old brick pieces, medium reddish orange	-	-	-
3.0	3.5	Black very fine sandy peaty SILT with few small brick pieces	-	-	-
3.5	4.0	Light grayish brown very fine sandy SILT	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB7B
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass, roots, tannish orange and brownish yellow mixed silty fine SAND with pieces of white and black mixed grains	-	-	-
1.0	2.0	Black brownish black with small pieces of brick, silty very fine SAND, few traces light gray SAND, sampled	-	-	-
2.0	3.0	Mixed light gray and gray black very silty fine SAND, sampled	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB8A
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Gravel, brick pieces and brown fine to medium SAND	-	-	-
1.0	2.0	Black and white mottled very fine silty SAND and small pieces of brick, sampled	-	-	-
2.0	3.0	Tannish brown very silty very fine SAND, black streaks	-	-	-
3.0	4.0	Dark brownish black with small pieces of brick	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB8B
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Mixed yellow tan and dark brownish black silty SAND, small pieces of brick and concrete blocks	-	-	-
1.0	2.0	Grayish black, small pieces of brick, silty very fine SAND, sampled	-	-	-
2.0	3.0	Grayish tan orange silty fine SAND, wet	-	-	-
3.0	4.0	Light tannish brown very silty very fine SAND	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB9A
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Grass and gravel, light brownish tan and light gray fine SAND	-	-	-
0.5	1.0	Light tannish orange with darker tan orange mottles silty fine SAND	-	-	-
1.0	2.0	Orangish brown very silty very fine SAND, few darker orange brown mottles	-	-	-
2.0	3.0	Orangish tannish brown SAND with few black root fragments, traces of very small gravel	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB9B
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Brownish tan very fine SAND with black root fragments	-	-	-
0.5	1.0	Light brownish tan very silty very fine SAND	-	-	-
1.0	2.0	Light orangish brown very silty fine SAND, slightly damp, sampled from 0.5-2.0'	-	-	-
2.0	3.0	Orangish brown very silty very fine SAND, damp	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: SB10
 DATE: 09/11/02
 LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass, brownish black silty very fine SAND and roots	-	-	-
1.0	2.0	Light tannish brown silty very fine SAND with some dark brown mottles, slightly damp	-	-	-
2.0	3.0	Orangish brown and brownish orange very fine sandy SILT, slightly moist	-	-	-
3.0	4.0	Orangish brown and brownish orange very fine sandy SILT, slightly moist	-	-	-
4.0	5.0	Yellowish orange brown very silty very fine SAND, damp, sampled	-	-	-
5.0	7.0	Whitish tan with few light orange mottles slightly silty fine SAND, wet	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB11A
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Grass, tannish brown very fine silty SAND, slightly damp	-	-	-
0.5	1.0	Light tannish brown very fine silty SAND, slightly damp	-	-	-
1.0	2.0	Brownish orange very fine silty SAND, slightly damp	-	-	-
2.0	3.0	Brownish orange very fine silty SAND	-	-	-
3.0	4.0	Slightly tannish brownish orange very fine silty SAND	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB11B
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Mottled orange tan very fine silty SAND	-	Odor	-
1.0	2.0	Orangish brown very silty fine SAND, few small pieces of brick, few tan mottles, sampled 1-3'	-	Odor	-
2.0	3.0	Orangish brown silty very fine SAND with few gray mottles	-	Odor	-
3.0	4.0	Orange brown silty very fine SAND	-	Odor	-
4.0	5.0	Yellowish brown silty fine SAND	-	Odor	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB12
DATE: 09/11/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	0.5	Light tannish brown, poorly sorted fine to medium grained SAND with gravel, sampled 0-2'	-	Slight	-
0.5	1.0	Mottled dark brown and tannish brown very fine SAND, very silty becomes medium dark brown grains with oily feel	-	-	-
1.0	1.5	Gray brown very silty fine SAND	-	Slight	-
1.5	2.0	Tannish gray brown with metal small pieces of gravel	-	Slight	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB13
DATE: 09/26/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Weeds, vines, yellowish brown silty fine SAND grades to blackish brown SAND	-	-	-
1.0	3.0	Hit concrete and brick but augered on through, very silty black peaty SAND	-	-	-
3.0	4.0	Black peaty SAND with small pebbles and pieces of gravel (orange small pieces of brick)	-	-	-
4.0	6.0	Auger hit debris at 5' and moved through, black silty peaty SAND and pieces of concrete, old brick and gravel pieces, sampled	-	-	-
6.0	8.0	Black peaty fine silty SAND with small pieces of brick and old concrete	-	-	-
8.0	10.0	Auger refusal at ~9', cuttings appear to be gravel or wet concrete	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB14
DATE: 09/26/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Weeds, vines, black silty fine SAND	-	-	-
1.0	2.0	Black silty fine SAND, found piece of old wire	-	-	-
2.0	3.0	Auger refusal on big piece of concrete, moved over and found bricks	-	-	-
3.0	4.0	Very mottled up smoke gray, black tan silty SAND, sampled	-	-	-
4.0	6.0	Auger grinding against buried concrete	-	-	-
3.0	6.0	Mixed small pieces of wood, brick, concrete, black and brown silty SAND, grades to yellow tan silty fine SAND, sampled	-	-	-
6.0	8.0	Orange and yellow tan silty fine SAND	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: SB15
DATE: 09/26/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	3.0	Medium to dark brown sandy SILT with abundant coarse grains of gravel, brick, glass, sampled	-	-	-
3.0	4.0	Medium to dark brown sandy SILT with abundant coarse grains of gravel, brick, glass	-	-	-
4.0	6.0	Hit concrete 4-5'	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: SB16
 DATE: 09/26/02
 LOGGED BY: J. Shadrui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass, vines, black brown fine silty SAND	-	-	-
1.0	2.0	Black and tan silty fine SAND mottled with orange	-	-	-
2.0	4.0	Black and tan silty fine SAND mottled with orange	-	-	-
4.0	6.0	Yellowish tan silty fine SAND	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



APPENDIX III

SOIL LABORATORY RESULTS AND CHAIN OF CUSTODY

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B1
 Client Project ID: 02106
 Lab Sample ID: 52315
 Lab Project ID: G211-1459
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 88.21

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	1.13	1	MG/KG	6010B	9/16/02
Barium	62.5	11.3	1	MG/KG	6010B	9/16/02
Cadmium	2.82	1.13	1	MG/KG	6010B	9/16/02
Chromium	6.64	1.13	1	MG/KG	6010B	9/16/02
Copper	32.1	1.13	1	MG/KG	6010B	9/16/02
Lead	58.1	1.13	1	MG/KG	6010B	9/16/02
Mercury	0.0456	0.0218	1	MG/KG	7471	9/16/02
Nickel	BQL	4.53	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.13	1	MG/KG	6010B	9/18/02
Silver	BQL	1.13	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Inorganics
by IC 300.0**

Client Sample ID: B1
 Client Project ID: 02106
 Lab Sample ID: 52315
 Lab Project ID: G211-1459
 Matrix: Soil

Date Collected: 9/9/02
 Date Received: 9/11/02
 Analyzed By: PSW
 %Solids: 88.2

Compound	Result (MG/KG)	Quantitation Limit	Method	Dilution Factor	Date Analyzed
Nitrate	1	0.3	300.0	1.0	9/16/02

Comments:

Quantitation Limits are fully calculated using dilution factors and % solids.
 BQL = Undetected or below quantitation limit.

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B2
 Client Project ID: 02106
 Lab Sample ID: 52316
 Lab Project ID: G211-1459
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 87.32

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	5.51	1.08	1	MG/KG	6010B	9/16/02
Barium	32.9	10.8	1	MG/KG	6010B	9/16/02
Cadmium	1.19	1.08	1	MG/KG	6010B	9/16/02
Chromium	23.5	1.08	1	MG/KG	6010B	9/16/02
Copper	8.01	1.08	1	MG/KG	6010B	9/16/02
Lead	26.0	1.08	1	MG/KG	6010B	9/16/02
Mercury	0.0391	0.0222	1	MG/KG	7471	9/16/02
Nickel	BQL	4.32	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.08	1	MG/KG	6010B	9/18/02
Silver	BQL	1.08	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B3
 Client Project ID: 02106
 Lab Sample ID: 52317
 Lab Project ID: G211-1459
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 86.24

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	2.76	0.983	1	MG/KG	6010B	9/16/02
Barium	18.3	9.83	1	MG/KG	6010B	9/16/02
Cadmium	BQL	0.983	1	MG/KG	6010B	9/16/02
Chromium	23.1	0.983	1	MG/KG	6010B	9/16/02
Copper	7.44	0.983	1	MG/KG	6010B	9/16/02
Lead	14.9	0.983	1	MG/KG	6010B	9/16/02
Mercury	0.314	0.0213	1	MG/KG	7471	9/16/02
Nickel	BQL	3.93	1	MG/KG	6010B	9/16/02
Selenium	BQL	0.983	1	MG/KG	6010B	9/16/02
Silver	BQL	0.983	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Pesticides
by EPA 8081**

Client Sample ID: B3
 Client Project ID: 02106
 Lab Sample ID: 52317
 Lab Project ID: G211-1459
 Matrix: Soil

%SOLIDS: 86.2

Date Analyzed: 9/19/02
 Analyzed By: CLP
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)	
alpha-BHC	18	BQL	
beta-BHC	18	BQL	
delta-BHC	18	BQL	
gamma-BHC (Lindane)	18	BQL	
Heptachlor	18	BQL	
Aldrin	18	BQL	
Heptachlor epoxide	18	BQL	
Endosulfan I	18	BQL	
Dieldrin	18	BQL	
4,4'-DDE	18	BQL	
Endrin	18	BQL	
DDD	18	BQL	
Endosulfan II	18	BQL	
4,4'-DDT	18	BQL	
Methoxychlor	18	BQL	
Toxaphene	37	BQL	
Chlordane	37	BQL	
Endrin aldehyde	18	BQL	
Endosulfan sulfate	18	BQL	
Endrin ketone	18	BQL	
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	66	66

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Herbicides
by EPA 8151

Client Sample ID:	B3	Date Analyzed:	9/19/02
Client Project ID:	02106	Analyzed By:	CLP
Lab Sample ID:	52317	Date Collected:	9/9/02
Lab Project ID:	G211-1459	Date Received:	9/11/02
Matrix:	Soil	Dilution:	1.0
	%SOLIDS		86.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2,4-D	36	BQL
2,4,5-TP(Silvex)	36	BQL
2,4,5-T	36	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DCAA	4.0	3.4	85

Comments:

BQL = Below Quantitation Limit

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B4
 Client Project ID: 02106
 Lab Sample ID: 52318
 Lab Project ID: G211-1459
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 89.20

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	2.02	1.08	1	MG/KG	6010B	9/16/02
Barium	16.1	10.8	1	MG/KG	6010B	9/16/02
Cadmium	1.64	1.08	1	MG/KG	6010B	9/16/02
Chromium	22.5	1.08	1	MG/KG	6010B	9/16/02
Copper	5.77	1.08	1	MG/KG	6010B	9/16/02
Lead	8.88	1.08	1	MG/KG	6010B	9/16/02
Mercury	0.139	0.0220	1	MG/KG	7471	9/16/02
Nickel	BQL	4.31	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.08	1	MG/KG	6010B	9/18/02
Silver	BQL	1.08	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B5
 Client Project ID: 02106
 Lab Sample ID: 52319
 Lab Project ID: G211-1459
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 84.81

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	3.06	1.16	1	MG/KG	6010B	9/16/02
Barium	15.3	11.6	1	MG/KG	6010B	9/16/02
Cadmium	BQL	1.16	1	MG/KG	6010B	9/16/02
Chromium	20.5	1.16	1	MG/KG	6010B	9/16/02
Copper	3.73	1.16	1	MG/KG	6010B	9/16/02
Lead	7.46	1.16	1	MG/KG	6010B	9/16/02
Mercury	0.0358	0.0227	1	MG/KG	7471	9/16/02
Nickel	BQL	4.62	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.16	1	MG/KG	6010B	9/16/02
Silver	BQL	1.16	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B6
 Client Project ID: 02106
 Lab Sample ID: 52320
 Lab Project ID: G211-1459
 Batch ID: 2408 2417

Analyzed By: RML
 Date Collected: 9/9/02
 Date Received: 9/11/02
 Matrix: Soil
 Solids 85.13

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	3.55	1.11	1	MG/KG	6010B	9/16/02
Barium	24.5	11.1	1	MG/KG	6010B	9/16/02
Cadmium	BQL	1.11	1	MG/KG	6010B	9/16/02
Chromium	11.3	1.11	1	MG/KG	6010B	9/16/02
Copper	6.58	1.11	1	MG/KG	6010B	9/16/02
Lead	12.2	1.11	1	MG/KG	6010B	9/16/02
Mercury	0.0716	0.0224	1	MG/KG	7471	9/16/02
Nickel	BQL	4.43	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.11	1	MG/KG	6010B	9/18/02
Silver	BQL	1.11	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B7
 Client Project ID: 02106
 Lab Sample ID: 52513
 Lab Project ID: G211-1463
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Matrix: Soil
 Solids 88.42

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	3.22	1.07	1	MG/KG	6010B	9/16/02
Barium	37.8	10.7	1	MG/KG	6010B	9/16/02
Cadmium	BQL	1.07	1	MG/KG	6010B	9/16/02
Chromium	15.5	1.07	1	MG/KG	6010B	9/16/02
Copper	9.50	1.07	1	MG/KG	6010B	9/16/02
Lead	19.0	1.07	1	MG/KG	6010B	9/16/02
Mercury	0.204	0.0208	1	MG/KG	7471	9/16/02
Nickel	BQL	4.27	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.07	1	MG/KG	6010B	9/18/02
Silver	BQL	1.07	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B8
 Client Project ID: 02106
 Lab Sample ID: 52514
 Lab Project ID: G211-1463
 Batch ID: 2406 2417

Analyzed By: RML
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Matrix: Soil
 Solids 84.39

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	1.77	1.10	1	MG/KG	6010B	9/16/02
Barium	29.1	11.0	1	MG/KG	6010B	9/16/02
Cadmium	1.27	1.10	1	MG/KG	6010B	9/16/02
Chromium	18.1	1.10	1	MG/KG	6010B	9/16/02
Copper	15.9	1.10	1	MG/KG	6010B	9/16/02
Lead	30.3	1.10	1	MG/KG	6010B	9/16/02
Mercury	0.108	0.0215	1	MG/KG	7471	9/16/02
Nickel	BQL	4.39	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.10	1	MG/KG	6010B	9/18/02
Silver	BQL	1.10	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B9
 Client Project ID: 02106
 Lab Sample ID: 52515
 Lab Project ID: G211-1463
 Batch ID: 2416 2417

Analyzed By: RML
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Matrix: Soil
 Solids 87.73

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	1.46	1.00	1	MG/KG	6010B	9/16/02
Barium	BQL	10.0	1	MG/KG	6010B	9/16/02
Cadmium	BQL	1.00	1	MG/KG	6010B	9/16/02
Chromium	8.38	1.00	1	MG/KG	6010B	9/16/02
Copper	2.12	1.00	1	MG/KG	6010B	9/16/02
Lead	4.00	1.00	1	MG/KG	6010B	9/16/02
Mercury	0.0242	0.0202	1	MG/KG	7471	9/16/02
Nickel	BQL	4.00	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.00	1	MG/KG	6010B	9/16/02
Silver	BQL	1.00	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Total Petroleum
Hydrocarbons
by GC 8015B

Client Sample ID: B10	Date Collected: 9/11/02
Client Project ID: 02106	Date Received: 9/12/02
Lab Sample ID: 52516	Analyzed By: BMS
Lab Project ID: G211-1463	%Solids: 86.4
Matrix: Soil	

Compound	Result (MG/KG)	Quantitation Limit	Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.9	5030/8015B	1.0	9/14/02
Diesel Range Organics	13	7.2	3550/8015B	1.0	9/16/02

Comments:

Quantitation Limits are fully calculated using dilution factors and % solids.
BQL = Undetected or below quantitation limit.

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B11
 Client Project ID: 02106
 Lab Sample ID: 52517
 Lab Project ID: G211-1463
 Batch ID: 2416 2417

Analyzed By: RML
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Matrix: Soil
 Solids 86.22

Metals.	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	1.81	1.05	1	MG/KG	6010B	9/16/02
Barium	BQL	10.5	1	MG/KG	6010B	9/16/02
Cadmium	BQL	1.05	1	MG/KG	6010B	9/16/02
Chromium	11.0	1.05	1	MG/KG	6010B	9/16/02
Copper	1.48	1.05	1	MG/KG	6010B	9/16/02
Lead	4.93	1.05	1	MG/KG	6010B	9/16/02
Mercury	BQL	0.0227	1	MG/KG	7471	9/16/02
Nickel	BQL	4.22	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.05	1	MG/KG	6010B	9/18/02
Silver	BQL	1.05	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

**Results for Pesticides
by EPA 8081**

Client Sample ID: B11
 Client Project ID: 02106
 Lab Sample ID: 52517
 Lab Project ID: G211-1463
 Matrix: Soil

%SOLIDS: 86.2

Date Analyzed: 9/16/02
 Analyzed By: CLP
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
alpha-BHC	7.2	BQL
beta-BHC	7.2	BQL
delta-BHC	7.2	BQL
gamma-BHC (Lindane)	7.2	BQL
Heptachlor	7.2	BQL
Aldrin	7.2	BQL
Heptachlor epoxide	7.2	BQL
Endosulfan I	7.2	BQL
Dieldrin	7.2	BQL
4,4'-DDE	7.2	BQL
Endrin	7.2	BQL
DDD	7.2	BQL
Endosulfan II	7.2	BQL
4,4'-DDT	7.2	BQL
Methoxychlor	7.2	BQL
Toxaphene	36	BQL
Chlordane	36	BQL
Endrin aldehyde	7.2	BQL
Endosulfan sulfate	7.2	BQL
Endrin ketone	7.2	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	87	87

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**Results for Herbicides
by EPA 8151**

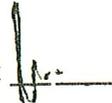
Client Sample ID:	B11	Date Analyzed:	9/19/02
Client Project ID:	02106	Analyzed By:	CLP
Lab Sample ID:	52517	Date Collected:	9/11/02
Lab Project ID:	G211-1463	Date Received:	9/12/02
Matrix:	Soil	Dilution:	1.0
	%SOLIDS		86.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2,4-D	36	BQL
2,4,5-TP(Silvex)	36	BQL
2,4,5-T	36	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DCAA	4.0	3.4	85

Comments:

BQL = Below Quantitation Limit

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B12
 Client Project ID: 02106
 Lab Sample ID: 52518
 Lab Project ID: G211-1463
 Batch ID: 2418 2417

Analyzed By: RML
 Date Collected: 9/11/02
 Date Received: 9/12/02
 Matrix: Soil
 Solids 87.53

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	1.13	1.08	1	MG/KG	6010B	9/16/02
Barium	BQL	10.8	1	MG/KG	6010B	9/16/02
Cadmium	2.77	1.08	1	MG/KG	6010B	9/16/02
Chromium	5.00	1.08	1	MG/KG	6010B	9/16/02
Copper	17.1	1.08	1	MG/KG	6010B	9/16/02
Lead	14.4	1.08	1	MG/KG	6010B	9/16/02
Mercury	BQL	0.0208	1	MG/KG	7471	9/19/02
Nickel	BQL	4.31	1	MG/KG	6010B	9/16/02
Selenium	BQL	1.08	1	MG/KG	6010B	9/18/02
Silver	BQL	1.08	1	MG/KG	6010B	9/16/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

Results for Total Petroleum Hydrocarbons by GC 8015B

Client Sample ID: B12
Client Project ID: 02106
Lab Sample ID: 52518
Lab Project ID: G211-1463
Matrix: Soil

Date Collected: 9/11/02
Date Received: 9/12/02
Analyzed By: BMS
%Solids: 87.5

Table with 6 columns: Compound, Result (MG/KG), Quantitation Limit, Method, Dilution Factor, Date Analyzed. Rows include Gasoline Range Organics and Diesel Range Organics.

Comments:

Quantitation Limits are fully calculated using dilution factors and % solids.
BQL = Undetected or below quantitation limit.

Handwritten signature

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: B 13
 Client Project ID: Wetsig Property
 Lab Sample ID: 53536
 Lab Project ID: G211-1469
 Batch ID: 2416 2437

Analyzed By: PSW
 Date Collected: 9/26/02
 Date Received: 9/27/02
 Matrix: Soil
 Solids 82.23

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	6.48	1.11	1	MG/KG	6010B	10/7/02
Barium	31.5	11.1	1	MG/KG	6010B	10/7/02
Cadmium	BQL	1.11	1	MG/KG	6010B	10/7/02
Chromium	28.4	1.11	1	MG/KG	6010B	10/7/02
Copper	85.3	1.11	1	MG/KG	6010B	10/7/02
Lead	20.0	1.11	1	MG/KG	6010B	10/7/02
Mercury	0.183	0.0234	1	MG/KG	7471	10/4/02
Nickel	BQL	4.42	1	MG/KG	6010B	10/7/02
Selenium	BQL	1.11	1	MG/KG	6010B	10/7/02
Silver	BQL	1.11	1	MG/KG	6010B	10/7/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

Results for Metals

Client Sample ID: B 14
 Client Project ID: Wetsig Property
 Lab Sample ID: 53537
 Lab Project ID: G211-1469
 Batch ID: 2416 2437

Analyzed By: PSW
 Date Collected: 9/26/02
 Date Received: 9/27/02
 Matrix: Soil
 Solids 82.15

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	3.89	1.11	1	MG/KG	6010B	10/7/02
Barium	26.9	11.1	1	MG/KG	6010B	10/7/02
Cadmium	BQL	1.11	1	MG/KG	6010B	10/7/02
Chromium	27.6	1.11	1	MG/KG	6010B	10/7/02
Copper	8.33	1.11	1	MG/KG	6010B	10/7/02
Lead	18.9	1.11	1	MG/KG	6010B	10/7/02
Mercury	0.0494	0.0228	1	MG/KG	7471	10/4/02
Nickel	BQL	4.43	1	MG/KG	6010B	10/7/02
Selenium	BQL	1.11	1	MG/KG	6010B	10/7/02
Silver	BQL	1.11	1	MG/KG	6010B	10/7/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.
Results for Metals

Client Sample ID: B 15
 Client Project ID: Wetsig Property
 Lab Sample ID: 53538
 Lab Project ID: G211-1469
 Batch ID: 2416 2437

Analyzed By: PSW
 Date Collected: 9/26/02
 Date Received: 9/27/02
 Matrix: Soil
 Solids 83.74

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	5.40	0.995	1	MG/KG	6010B	10/7/02
Barium	27.7	9.95	1	MG/KG	6010B	10/7/02
Cadmium	1.22	0.995	1	MG/KG	6010B	10/7/02
Chromium	32.8	0.995	1	MG/KG	6010B	10/7/02
Copper	16.3	0.995	1	MG/KG	6010B	10/7/02
Lead	10.8	0.995	1	MG/KG	6010B	10/7/02
Mercury	0.207	0.0225	1	MG/KG	7471	10/4/02
Nickel	BQL	3.98	1	MG/KG	6010B	10/7/02
Selenium	BQL	0.995	1	MG/KG	6010B	10/7/02
Silver	BQL	0.995	1	MG/KG	6010B	10/7/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW-5	Analyzed By: PSW
Client Project ID: Wetsig Property	Date Collected: 9/26/02
Lab Sample ID: 53539	Date Received: 9/27/02
Lab Project ID: G211-1469	Matrix: Soil
Batch ID: 2416 2437	Solids 83.71

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	1.11	1	MG/KG	6010B	10/7/02
Barium	BQL	11.1	1	MG/KG	6010B	10/7/02
Cadmium	BQL	1.11	1	MG/KG	6010B	10/7/02
Chromium	8.25	1.11	1	MG/KG	6010B	10/7/02
Copper	2.10	1.11	1	MG/KG	6010B	10/7/02
Lead	5.10	1.11	1	MG/KG	6010B	10/7/02
Mercury	0.0240	0.0232	1	MG/KG	7471	10/4/02
Nickel	BQL	4.42	1	MG/KG	6010B	10/7/02
Selenium	BQL	1.11	1	MG/KG	6010B	10/7/02
Silver	BQL	1.11	1	MG/KG	6010B	10/7/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: (919) 481-1413 Fax: (919) 481-1442

LABORATORY REPORT

ASBESTOS BULK ANALYSIS

Client: **Paradigm Analytical Laboratories, Inc.**
 2627 Northchase Parkway SE
 Wilmington, NC 28405

CEI Lab Code: A02-5921
 Received: 09-12-02
 Analyzed: 09-13-02
 Reported: 09-13-02
 Analyst: Sara Harriscn

Project: G211-1459

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS
52315 B1	A73803	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND
52316 B2	A73804	<u>SOIL</u> Heterogeneous, Brown, CHRY + % DEBR + % CELL + %	CHRY + %
52317 B3	A73805	<u>SOIL</u> Heterogeneous, Brown, CHRY + % DEBR + % CELL + %	CHRY + %
52318 B4	A73806	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND
52319 B5	A73807	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND
52320 B6	A73808	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: (919) 481-1413 Fax: (919) 481-1442

LABORATORY REPORT

ASBESTOS BULK ANALYSIS

Client: **Paradigm Analytical Laboratories, Inc.**
 2627 Northchase Parkway SE
 Wilmington, NC 28405

CEI Lab Code: A02-5943
 Received: 09-13-02
 Analyzed: 09-18-02
 Reported: 09-18-02
 Analyst: Sara Harrison

Project: G211-1463

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS
52513 B7	A74054	<u>SOIL</u> Heterogeneous, Brown, CHRY + % DEBR + % CELL + %	CHRY + %
52514 B8	A74055	<u>SOIL</u> Heterogeneous, Brown, CHRY + % DEBR + % CELL + %	CHRY + %
52515 B9	A74056	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND
52517 B10	A74057	<u>SOIL</u> Heterogeneous, Brown, DEBR + % CELL + %	ND
52518 B12	A74058	<u>SOIL</u> Heterogeneous, Brown, CHRY + % DEBR + % CELL + %	CHRY + %

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: (919) 481-1413 Fax: (919) 481-1442

LABORATORY REPORT

ASBESTOS BULK ANALYSIS

Client: **Paradigm Analytical Laboratories, Inc.**
 2627 Northchase Parkway SE
 Wilmington, NC 28405

CEI Lab Code: A02-6390
 Received: 10-01-02
 Analyzed: 10-08-02
 Reported: 10-08-02
 Analyst: Scott Minyard

Project: G211-1469

CLIENT ID	CEI LAB ID	SAMPLE DESCRIPTION	% ASBESTOS		
53536 B13	A79795	<u>SOIL</u>	ND		
		Heterogeneous, Brown, Fibrous, Loosely Bound			
		SOIL	+ %	CELL	+ %
		DEBR	+ %		
53537 B14	A79796	<u>SOIL</u>	ND		
Heterogeneous, Brown, Fibrous, Loosely Bound					
SOIL	+ %	CELL	+ %		
DEBR	+ %	ORGN	+ %		
SILI	+ %				
53538 B15	A79797	<u>SOIL</u>	ND		
		Heterogeneous, Brown, Fibrous, Loosely Bound			
		SOIL	+ %	CELL	+ %
		DEBR	+ %	ORGN	+ %
53539 MW5	A79798	<u>SOIL</u>	ND		
Heterogeneous, Tan, Fibrous, Loosely Bound					
SOIL	+ %	CELL	+ %		
DEBR	+ %	ORGN	+ %		
SILI	+ %				

The following definitions apply to the abbreviations used in the ASBESTOS BULK ANALYSIS REPORT:

CHRY = Chrysotile	CELL = Cellulose	DEBR = Debris
AMOS = Amosite	FBGL = Fibrous Glass	BIND = Binder
CROC = Crocidolite	ORGN = Organics	SILI = Silicates
TREM = Tremolite	SYNT = Synthetics	GRAV = Gravel
ANTH = Anthophyllite	WOLL = Wollastonite	MAST = Mastic
ACTN = Actinolite	CERWL = Ceramic Wool	PLAS = Plaster
ND = None Detected	NTREM = Non-Asbestiform Tremolite	PERL = Perlite
NANTH = Non-Asbestiform Anthophyllite		RUBR = Rubber

CLIENT: Paradigm Analytical Laboratories, Inc.

PROJECT: G211-1459
CEI LAB CODE: A02-5921

Stereoscopic microscopy and polarized light microscopy coupled with dispersion staining is the analytical technique used for sample identification. The percentage of each component is visually estimated by volume. These results pertain only to the samples analyzed. The samples were analyzed as submitted by the client and may not be representative of the larger material in question. Unless notified in writing to return samples, Carolina Environmental, Inc. will discard all bulk samples after 30 days.

Many vinyl floor tiles have been manufactured using greater than 1% asbestos. Often the asbestos was milled to a fiber size below the detection limit of polarized light microscopy. Therefore, a "None Detected" (ND) reading on vinyl floor tile does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles.

It is certified by the signature below that Carolina Environmental, Inc. is accredited by the National Voluntary Accreditation Program (NVLAP) for the analysis of asbestos in bulk materials. The accredited test method is EPA / 600 / M-82 / 020 for the analysis of asbestos in building materials. Procedures described in EPA / 600 / R-93 / 116 have been incorporated where applicable. The detection limit for the method is 0.1% (trace amount). Carolina Environmental, Inc.'s NVLAP accreditation number is #101768-0. This report is not to be used to claim product endorsement by NVLAP or any agency of the U. S. Government. This report and its contents are only valid when reproduced in full. Dust and soil analyses for asbestos using PLM are not covered under NVLAP accreditation.

ANALYST

SARA HARRISON

REVIEWED BY

Tianbao Bai
Tianbao Bai, Ph.D.
Laboratory Director

End of Report

The following definitions apply to the abbreviations used in the ASBESTOS BULK ANALYSIS REPORT:

CHRY = Chrysotile	CELL = Cellulose	DEBR = Debris
AMOS = Amosite	FBGL = Fibrous Glass	BIND = Binder
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ACTN = Actinolite	CERWL = Ceramic Wool	PLAS = Plaster
ND = None Detected	NTREM = Non-Asbestiform Tremolite	PERL = Perlite
NANTH = Non-Asbestiform Anthophyllite		RUBR = Rubber

CLIENT: Paradigm Analytical Laboratories, Inc.

PROJECT: G211-1463
CEI LAB CODE: A02-5943

Stereoscopic microscopy and polarized light microscopy coupled with dispersion staining is the analytical technique used for sample identification. The percentage of each component is visually estimated by volume. These results pertain only to the samples analyzed. The samples were analyzed as submitted by the client and may not be representative of the larger material in question. Unless notified in writing to return samples, Carolina Environmental, Inc. will discard all bulk samples after 30 days.

Many vinyl floor tiles have been manufactured using greater than 1% asbestos. Often the asbestos was milled to a fiber size below the detection limit of polarized light microscopy. Therefore, a "None Detected" (ND) reading on vinyl floor tile does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles.

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ANALYST

SARA HARRISON

REVIEWED BY

Tianbao Bai

Tianbao Bai, Ph.D.
Laboratory Director

End of Report

The following definitions apply to the abbreviations used in the ASBESTOS BULK ANALYSIS REPORT:

CHRY = Chrysotile	CELL = Cellulose	DEBR = Debris
AMOS = Amosite	FBGL = Fibrous Glass	BIND = Binder
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ANTH = Anthophyllite	WOLL = Wollastonite	MAST = Mastic
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ND = None Detected	NTREM = Non-Asbestiform Tremolite	PERL = Perlite
NANTH = Non-Asbestiform Anthophyllite		RUBR = Rubber

CLIENT: Paradigm Analytical Laboratories, Inc.

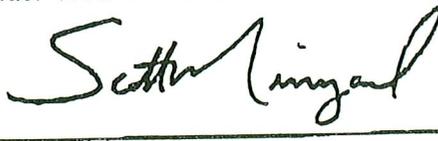
PROJECT: G211-1469
CEI LAB CODE: A02-6390

Stereoscopic microscopy and polarized light microscopy coupled with dispersion staining is the analytical technique used for sample identification. The percentage of each component is visually estimated by volume. These results pertain only to the samples analyzed. The samples were analyzed as submitted by the client and may not be representative of the larger material in question. Unless notified in writing to return samples, Carolina Environmental, Inc. will discard all bulk samples after 30 days.

Many vinyl floor tiles have been manufactured using greater than 1% asbestos. Often the asbestos was milled to a fiber size below the detection limit of polarized light microscopy. Therefore, a "None Detected" (ND) reading on vinyl floor tile does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles.

It is certified by the signature below that Carolina Environmental, Inc. is accredited by the National Voluntary Accreditation Program (NVLAP) for the analysis of asbestos in bulk materials. The accredited test method is EPA / 600 / M4-82 / 020 for the analysis of asbestos in building materials. Procedures described in EPA / 600 / R-93 / 116 have been incorporated where applicable. The detection limit for the method is 0.1% (trace amount). Carolina Environmental, Inc.'s NVLAP accreditation number is #101768-0. This report is not to be used to claim product endorsement by NVLAP or any agency of the U. S. Government. This report and its contents are only valid when reproduced in full. Dust and soil analyses for asbestos using PLM are not covered under NVLAP accreditation.

ANALYST



REVIEWED BY



Tianbao Bai, Ph.D.
Laboratory Director

End of Report

COC# 34664

Page 1 of 1

PARADIGM ANALYTICAL LABORATORIES, INC.
 527 Northchase Parkway SE, Wilmington, NC 28405
 Phone: (910)-350-1903 FAX: (910)-350-1557

Client: Clark-Environmental Services Project ID: 02-106 Date: 09/10/02
 Address: PO Box 16136 Contact: JoAnne Turnaround: Standard
 Address: Wilmington NC Phone: 910-602-3900 Job Number: Wetsig Yachts
 Fax: 910-602-3975 P.O. Number:

Report To: JoAnne

Invoice To:

Comments:
 Please specify any special reporting requirements

G211-1459

Sample ID	Date	Time	Matrix	Preservation						Analysis						Received By	Time	Date	Temperature	State Certification Requested
				Asbestos	PCBs	PAHs	Trace Metals	Organics	Other	Asbestos	PCBs	PAHs	Trace Metals	Organics	Other					
B1	09/09/02	11:00	Soil	X				X				X								
B2	09/09/02	12:00	Soil	X				X				X								
B3	09/09/02	1:30	Soil	X				X				X								
B4	09/09/02	2:30	Soil	X				X				X								
B5	09/09/02	3:00	Soil	X				X				X								
B6	09/09/02	3:30	Soil	X				X				X								

Relinquished By: [Signature] Date: 09/10/02 Time: 9:30
 Received By: [Signature] Date: 9/10/02 Time: 0930 Temperature: 21.0°
 State Certification Requested: NC ___ SC ___ Other ___

SEE REVERSE FOR
 TERMS AND CONDITIONS

Client: Clark Environmental Services, P.C. Project ID: Wetsig ~~Wet~~ Property Date: 9/27/02 Report To: CEJ - Joanne
 Address: PO Box 10136 Contact: Joanne or Patric Turnaround: Standard Job Number: _____ Invoice To: CEJ
 Address: Wilmington NC Phone: (910) 602-3400 P.O. Number: 92702008
 Note #: _____ Fax: (910) 602-3975

Sample ID	Date	Time	Matrix	Preservatives		Analyses				Comments: Please specify any special reporting requirements	
B13	9/26/02		Soil	X	ICF	Asbestos					G211-1469
B14						Copper	X				
B15						Nickel	X				
MWS						Metals plus	X				

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
<u>W.A.M. [Signature]</u>	<u>9/27/02</u>		<u>[Signature]</u>	<u>9/27/02</u>	<u>3:35</u>	<u>Freezer</u>	NC <input checked="" type="checkbox"/> SC <input type="checkbox"/> Other <input type="checkbox"/>

SEE REVERSE FOR TERMS AND CONDITIONS



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What is chrysotile?

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[Production and consumption](#)

[Photo-reportage on chrysotile -coming soon-](#)

A natural mineral fibre

Chrysotile is a fibrous mineral which does not burn or rot, is resistant to most chemicals, is flexible and possess high tensile strength. This unique combination of properties makes chrysotile an extremely useful material which has for many decades been established as a major component of lightweight reinforced cement products, friction materials, high temperature seals and gaskets and a host of other applications.



Chrysotile fibre
 (Click to enlarge, 45k)

Chrysotile has been known for over 2000 years, being used initially for cremation cloths, oil lamp wicks and other textiles. But it is only in the 19th Century that chrysotile was first mined commercially in the Urals (Russia), in Italy and in Canada.

From asbestos to chrysotile

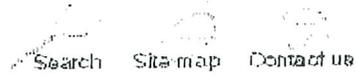
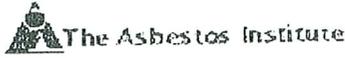
Current asbestos products are as different from the old ones as night and day. Today, only one type of asbestos is exported: **chrysotile**. In addition, the industry now only markets dense and non-friable materials in which the chrysotile fibre is encapsulated in a matrix of either cement or resin. These products include chrysotile-cement building materials, friction materials, gaskets and certain plastics.

The old products, principally low-density insulation materials, were very dusty and crumbled under hand pressure. Unlike today's products, they often contained amphibole fibres (crocidolite and amosite).

- ▷ [From asbestos to chrysotile](#) (Read the complete document)
- ▷ [What are the end-uses of chrysotile?](#) (Products section)
- ▷ [Where is chrysotile found?](#)
- ▷ [What is the world production / consumption of chrysotile?](#)

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[What is chrysotile?](#)

[From asbestos to chrysotile](#)

[Production and consumption](#)

[Photo-reportage on chrysotile -coming soon-](#)

Chrysotile and the other varieties of asbestos are found in practically every country in the world, but generally not in quantities or quality that allow commercial exploitation. Nevertheless, significant deposits of chrysotile and other asbestos type have been identified in more than 60 countries, many of them have been mined or are still in exploitation.

Main occurrence of chrysotile and other varieties of asbestos:



▷ [See the worldwide production / consumption](#)

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www.internetsupportgroup.com

DOMAIN NAME

DATE

REPLY DEADLINE

clarkenvironmental.NET & .BIZ

10/22/02

10/23/02

URGENT NOTICE OF DOMAIN EXTENSION

ATTN: BUSINESS OWNER OR MANAGER

TRACKING NUMBER: **1234939**

Clark Environmental Services,
5000 Blue Clay Road, Castle Hayne
NC, 28429

REGARDING:
INTELLECTUAL PROPERTY
NOTIFICATION PROCESS
7 (S) 031 016 5567 98 3

Please be advised that the above noted domain name has now become available for registration. Consequently the possibility of conflicting domain name registrations may occur.

IN ACCORDANCE WITH THE UNITED STATES LEGAL CODE

TITLE 15, Sec 1125. False description, and dilution of Trademarks and the Uniform Domain Name Dispute Resolution (UDRP)

Be advised: Protecting a domain name registrant or trademark owner from confusing and/or conflicting domain name registrations is **not the responsibility** of the domain and trademark registration processes. In the event of a registration of the above noted domain by a third party, the UDRP may be applied under the following conditions:

EVIDENCE OF REGISTRATION AND USE IN BAD FAITH – For the purposes of Paragraph 4(a)(iii), the following circumstances, in particular but without limitation, if found by the Panel to be present, shall be evidence of the registration and use of a domain name in bad faith:

- (i) Circumstances indicating that the domain name registered or acquired the domain name primarily for the purpose of selling, renting, or otherwise transferring the domain name registration to the complainant who is the owner of the trademark or service mark or a competitor of the complainant, for valuable consideration in excess of your documented out-of-pocket costs directly related to the domain name; or
- (ii) The domain name has been registered in order to prevent the owner of the trademark or service mark from reflecting the mark in a corresponding domain name, provided that you have engaged in pattern of such conduct; or
- (iii) the domain name has been registered primarily for the purpose of disrupting the business of a competitor; or
- (iv) by using the domain name, registrant has intentionally attempted to attract, for commercial gain, Internet users to their web site or other on-line location, by creating a likelihood of confusion with the complainant's mark as to the source, sponsorship, affiliation, or endorsement of your web site or location or of a product or service of a web site or location.

In addition to remedies provided for by the **UDRP**, Section 4a (1)(2)(3) & b (1) (2) (3) (4) existing registrants, trademark and service mark owners are provided by ISG with **a first right to use preference** on domain names that are identical with new TLD extensions, or domain names that are confusingly similar to their own.

SUBMIT TO US YOUR CONSENT OR OPPOSITION TO A THIRD PARTY DOMAIN NAME REGISTRATION AND EXPRESSLY ADVISE US OF YOUR INTENT TO EITHER CONSENT TO AN APPLICATION OR TO LICENSE THIS DOMAIN NAME PRIOR TO THE EXPIRATION OF THIS NOTICE.

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APPENDIX IV

BORING LOGS, WELL DETAILS AND WELL CONSTRUCTION RECORDS



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: MW1
 DATE: 09/25/02
 LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	1.0	Grass/roots dark brown fine organic SAND	-	-	-
1.0	1.5	Dark brown fine SAND with large gravel	-	-	-
1.5	3.0	Orangish tan very sandy SILT intermixed with dark grayish brown silt	-	Slight	-
3.0	4.0	Orangish tan very sandy SILT intermixed with dark grayish brown silt, damp	-	-	-
4.0	4.5	Orangish tan very sandy SILT	-	-	-
4.5	5.0	Light grayish-orange silty very fine SAND, damp	-	-	-
5.0	6.0	Light gray very fine silty SAND mottled with some of light orange and yellow color	-	-	-
6.0	7.0	Light gray very fine grained silty SAND mottled with orangish-yellow very fine silty SAND, very damp to wet	-	Slight	-
7.0	10.0	Direct push to 11.5'	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: MW2
DATE: 09/25/02
LOGGED BY: J. Shadrui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	2.0	Light/medium brown medium grained SAND grades to reddish brown silty fine SAND	-	-	-
2.0	4.0	Abundant trash (pieces of bricks, fiberglass concrete), mixed in with brown silty SAND grades to brownish black wet peaty silty fine SAND	-	-	-
4.0	5.0	Tannish brown clayey silty fine SAND, wet	-	-	-
5.0	6.0	Tannish gray clayey very fine sandy silty CLAY	-	-	-
6.0	7.0	Light tannish gray very fine sandy silt water is very clayey	-	-	-
7.0	8.0	Light tannish gray very fine sandy silt water is very clayey	-	-	-
8.0	10.0	Light tannish gray very sandy zone	-	-	-
10.0	12.0	Light tannish gray very silty very fine SAND, minor clay	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection

**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: MW3
 DATE: 09/25/02
 LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	2.0	Grass, roots, yellow fine SAND	-	-	-
2.0	4.0	Medium brown gray silty fine SAND with limestone gravel (gritty with small pieces of gravel)	-	-	-
4.0	5.0	Tannish gray brown very fine sandy SILT, trace CLAY, very powdery, dry	-	-	-
5.0	6.0	Fine to medium white tan with orange slightly silty SAND	-	-	-
6.0	8.0	Fine to medium white tan with orange slightly silty SAND	-	-	-
8.0	12.0	Fine to medium white tan silty SAND	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106

WELL NO: MW4
DATE: 09/26/02
LOGGED BY: J. Shadroui

DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	2.0	Orange brown slightly silty fine SAND (10 YR 4/2)	-	-	-
2.0	4.0	Dark blackish brown silty very fine SAND (10 YR 2/2)	-	-	-
4.0	6.0	Yellowish orange and light grayish brown silty fine SAND (10 YR 6/6)	-	-	-
6.0	8.0	Orange and tan mottled fine medium SAND, trace silt (10 YR 7/4)	-	-	-
8.0	10.0	Gray and tan silty very fine SAND (5 Y 7/2)	-	-	-
10.0	13.0	Bright orange silty fine SAND	-	-	-

- NOTE: 1) ppm represents parts per million
2) ft BGS represents feet below ground surface
3) PID denotes photoionization detection



**CLARK ENVIRONMENTAL SERVICES, P.C.
BORING LOG**

PROJECT NAME: Wetsig Yachts
 LOCATION: Wilmington, NC
 CES PROJECT NO: 02106

WELL NO: MW5/SB17
 DATE: 09/26/02
 LOGGED BY: J. Shadroui

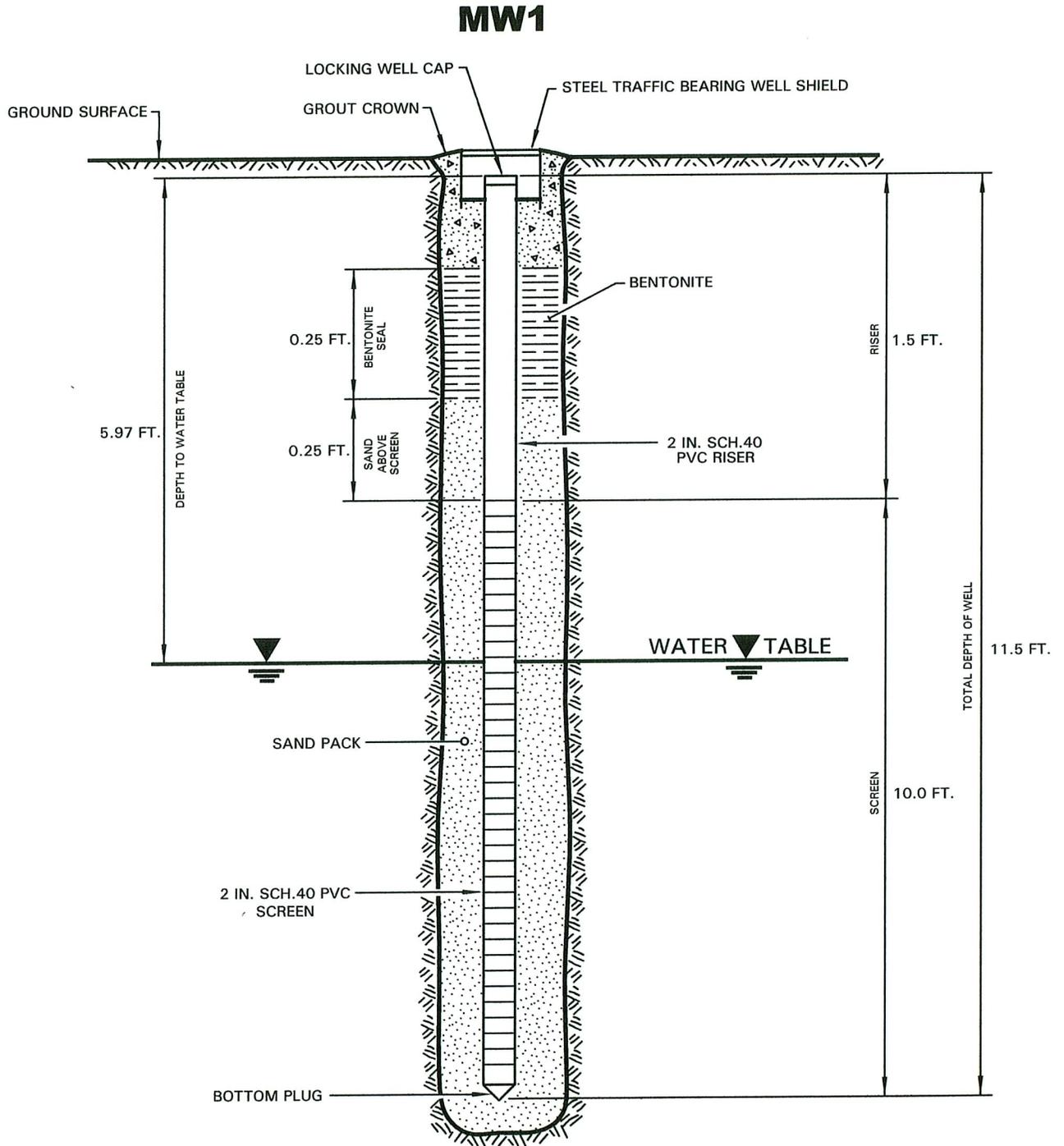
DEPTH		DESCRIPTION	BLOW COUNT	PID VAPOR SURVEY	
FROM (ft BGS)	TO (ft BGS)			ODOR	READING (ppm)
0.0	2.0	Grass, roots, vines next to fertilizer pile, yellow tan silty fine SAND, sampled	-	-	-
2.0	4.0	Orange brown silty very fine SAND	-	No	-
4.0	6.0	Tannish yellow silty fine SAND, mottled	-	-	-
6.0	8.0	Whitish tan silty fine SAND	-	-	-
8.0	10.0	Mottled tan and orange very fine silty SAND/sandy SILT	-	-	-
10.0	12.0	Orange to bright orange (with gray cast) silty SAND	-	-	-

- NOTE: 1) ppm represents parts per million
 2) ft BGS represents feet below ground surface
 3) PID denotes photoionization detection



WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106

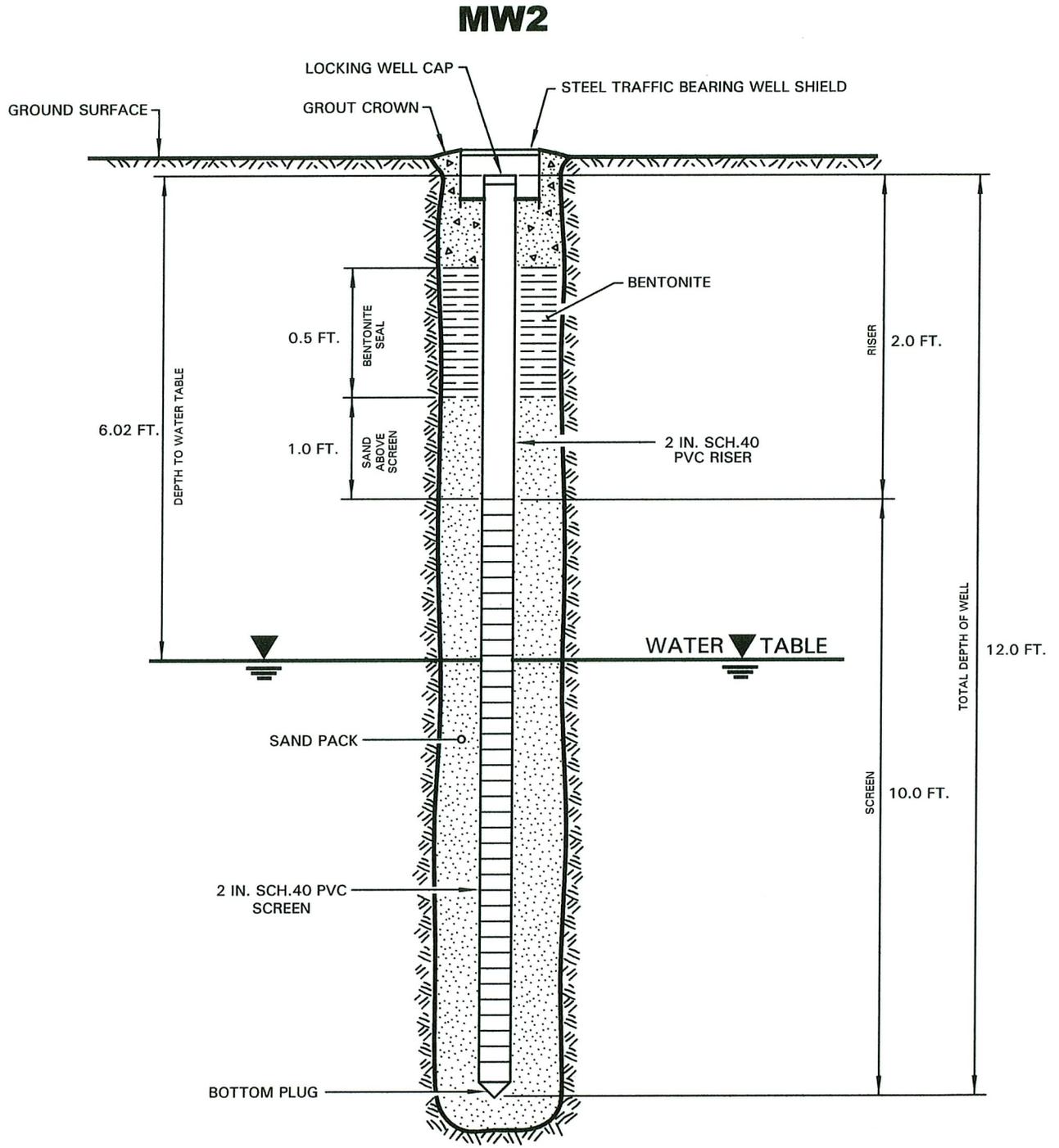


AS-BUILT MONITORING WELL DETAIL

NOT TO SCALE

WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106



AS-BUILT MONITORING WELL DETAIL

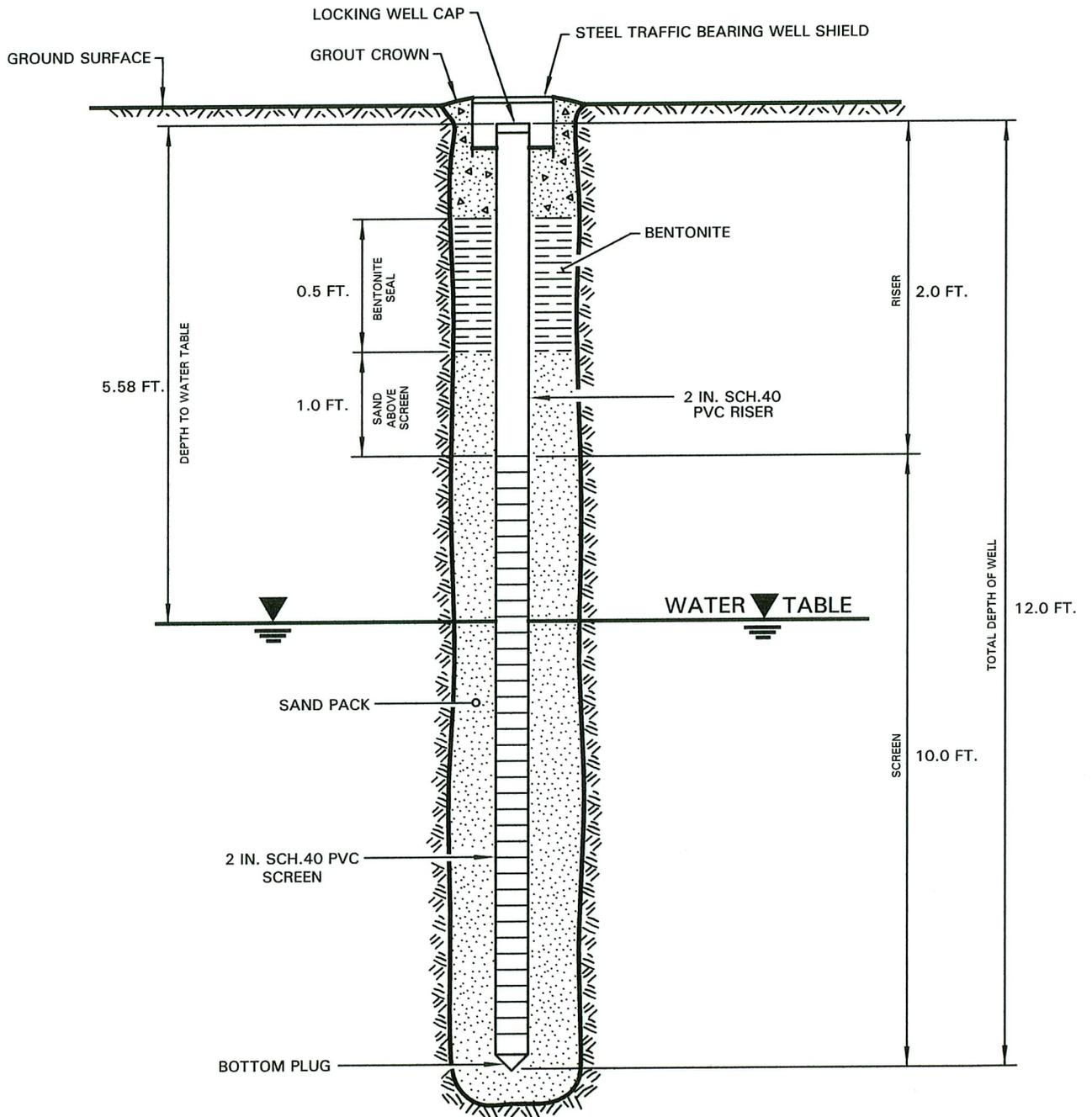
NOT TO SCALE



WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106

MW3



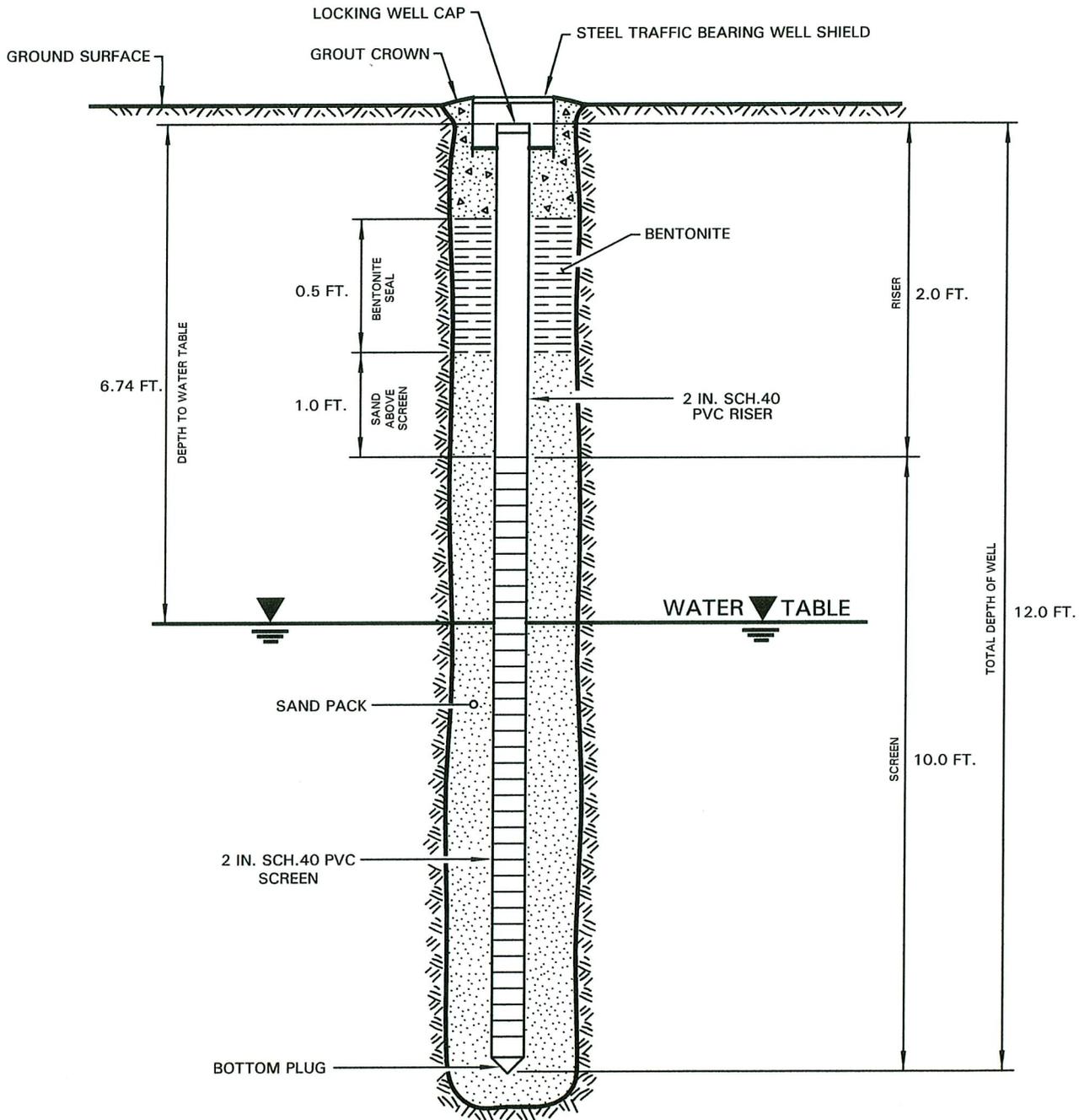
AS-BUILT MONITORING WELL DETAIL

NOT TO SCALE

WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106

MW4



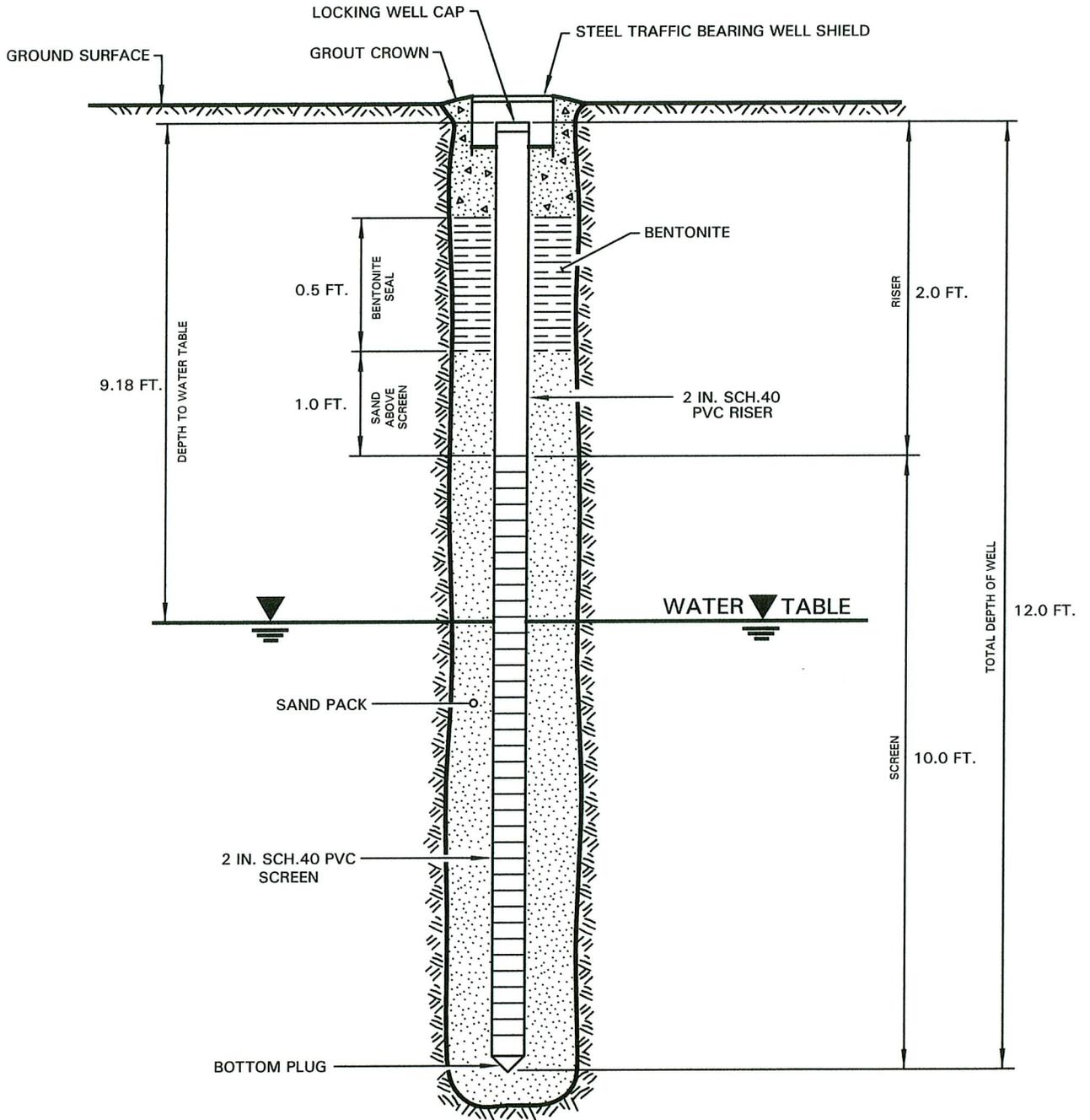
AS-BUILT MONITORING WELL DETAIL

NOT TO SCALE

WETSIG YACHTS

WILMINGTON, NC
CES PROJECT NO. 02106

MW5



AS-BUILT MONITORING WELL DETAIL

NOT TO SCALE

MW1

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources - Division of Water Quality - Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) JoAnne M Shadrovi CERTIFICATION # 2067

WELL CONTRACTOR COMPANY NAME Clark Environmental Services PC PHONE # (910) 602-3900

STATE WELL CONSTRUCTION PERMIT# NA ASSOCIATED WQ PERMIT# NA
(if applicable) (if applicable)

1. WELL USE (Check Applicable Box): Residential Municipal/Public Industrial Agricultural
Monitoring Recovery Heat Pump Water Injection Other If Other, List Use _____

2. WELL LOCATION:
Nearest Town: Wilmington County New Hanover
Wetsig Yachts 4022 Market St
(Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting
 Ridge Slope Valley Flat
(check appropriate box)
Latitude/longitude of well location
34° 14' 20" / 77° 53' 36"
(degrees/minutes/seconds)

3. OWNER: Wetsig Yachts
Address 4022 Market St
(Street or Route No.)
Wilmington NC
City or Town State Zip Code
(910)-762-9703
Area code- Phone number

Latitude/longitude source: GPS Topographic map
(check box)

DEPTH		DRILLING LOG
From	To	Formation Description
		see attached

4. DATE DRILLED 09/25/02

5. TOTAL DEPTH: 11.5 FT

6. DOES WELL REPLACE EXISTING WELL? YES NO

7. STATIC WATER LEVEL Below Top of Casing: 5.97 FT.
(Use "+" if Above Top of Casing)

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

9. YIELD (gpm): NA METHOD OF TEST _____

10. WATER ZONES (depth): surficial aquifer

LOCATION SKETCH

Show direction and distance in miles from at least two State Roads or County Roads. Include the road numbers and common road names.

11. DISINFECTION: Type NA Amount _____

CASING:		Depth	Diameter	Wall Thickness	Material
From	To	Ft.	in		
<u>0</u>	<u>1.5</u>		<u>2 in</u>	<u>sch 40</u>	<u>PVC</u>

GROUT:		Depth	Material	Method
From	To	Ft.		
<u>0</u>	<u>0.25</u>		<u>neat cement</u>	<u>in place</u>
<u>0.25</u>	<u>0.5</u>		<u>bentonite</u>	<u>in place</u>

see attached

SCREEN:		Depth	Diameter	Slot Size	Material
From	To	Ft.	in	in	
<u>1.5</u>	<u>11.5</u>		<u>2 in</u>	<u>0.01 in</u>	<u>PVC</u>

SAND/GRAVEL PACK:		Depth	Size	Material
From	To	Ft.		
<u>0.5</u>	<u>11.5</u>		<u>coarse</u>	<u>sand</u>

16. REMARKS: _____

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

JoAnne M Shadrovi SIGNATURE OF PERSON CONSTRUCTING THE WELL 09/25/02 DATE

MWZ

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources - Division of Water Quality - Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) JoAnne M Shadroni CERTIFICATION # 2067

WELL CONTRACTOR COMPANY NAME Clark Environmental Services PC PHONE # (910) 602-3900

STATE WELL CONSTRUCTION PERMIT# NA ASSOCIATED WQ PERMIT# NA
(if applicable) (if applicable)

1. WELL USE (Check Applicable Box): Residential Municipal/Public Industrial Agricultural
Monitoring Recovery Heat Pump Water Injection Other If Other, List Use _____

2. WELL LOCATION:

Nearest Town: Wilmington County New Hanover
Wetsig Yachts 4022 Market St
(Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting
 Ridge Slope Valley Flat
(check appropriate box)

Latitude/longitude of well location
34° 14' 20" / 77° 53' 36"
(degrees/minutes/seconds)

3. OWNER: Wetsig Yachts
Address 4022 Market St
(Street or Route No.)

Latitude/longitude source: GPS Topographic map
(check box)

Wilmington NC
City or Town State Zip Code
(910)-762-9703
Area code- Phone number

DEPTH DRILLING LOG
From To Formation Description

4. DATE DRILLED 09/26/02

5. TOTAL DEPTH: 12

6. DOES WELL REPLACE EXISTING WELL? YES NO

7. STATIC WATER LEVEL Below Top of Casing: 6.02 FT.
(Use "+" if Above Top of Casing)

8. TOP OF CASING IS 0 FT. Above Land Surface*

*Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C .0118.

9. YIELD (gpm): NA METHOD OF TEST _____

10. WATER ZONES (depth): Surface aquifer

DEPTH	DRILLING LOG	
From	To	Formation Description
		Sec attached

LOCATION SKETCH

Show direction and distance in miles from at least two State Roads or County Roads. Include the road numbers and common road names.

11. DISINFECTION: Type NA Amount _____

12. CASING: Wall Thickness
From 0 To 2 Ft. 2 in SC40 PVC
From _____ To _____ Ft. _____
From _____ To _____ Ft. _____

13. GROUT: Depth Material Method.
From 0 To 0.5 Ft. neat cement in place
From 0.5 To 1.0 Ft. bentonite in place

Sec attached

14. SCREEN: Depth Diameter Slot Size Material
From 2 To 12 Ft. 2 in. 0.01 in. PVC
From _____ To _____ Ft. _____ in. _____ in. _____

15. SAND/GRAVEL PACK:
Depth Size Material
From 1 To 12 Ft. Coarse sand
From _____ To _____ Ft. _____

16. REMARKS: _____

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

JoAnne M Shadroni
SIGNATURE OF PERSON CONSTRUCTING THE WELL

09/26/02
DATE

MW3

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources - Division of Water Quality - Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) Jo Anne Shadron CERTIFICATION # 2067

WELL CONTRACTOR COMPANY NAME Clark Environmental Services PC PHONE # (910) 602-3900

STATE WELL CONSTRUCTION PERMIT# NA ASSOCIATED WQ PERMIT# NA (if applicable) (if applicable)

1. WELL USE (Check Applicable Box): Residential [] Municipal/Public [] Industrial [] Agricultural [] Monitoring [x] Recovery [] Heat Pump Water Injection [] Other [] If Other, List Use _____

2. WELL LOCATION: Nearest Town: Wilmington County New Hanover Wetsiy Yachts 4022 Market St (Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting [] Ridge [] Slope [] Valley [x] Flat (check appropriate box) Latitude/longitude of well location 34°14'20" / 77°53'36" (degrees/minutes/seconds)

3. OWNER: Wetsiy Yachts Address 4022 Market St (Street or Route No.) Wilmington NC City or Town State Zip Code (910) 762-9703 Area code- Phone number

Latitude/longitude source: [] GPS [x] Topographic map (check box)

Table with columns: DEPTH (From, To), DRILLING LOG (Formation Description). Includes handwritten entry 'Sec attached'.

4. DATE DRILLED 9/26/02

5. TOTAL DEPTH: 12

6. DOES WELL REPLACE EXISTING WELL? YES [] NO [x]

7. STATIC WATER LEVEL Below Top of Casing: 5.58 FT. (Use "+" if Above Top of Casing)

8. TOP OF CASING IS 0 FT. Above Land Surface*

*Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C .0118.

9. YIELD (gpm): NA METHOD OF TEST _____

10. WATER ZONES (depth): Surficial aquifer

LOCATION SKETCH

Show direction and distance in miles from at least two State Roads or County Roads. Include the road numbers and common road names.

Sec attached

11. DISINFECTION: Type NA Amount _____

12. CASING: Wall Thickness Depth Diameter or Weigh/Ft. Material From 0 To 2 Ft. 2 in SCH40 PVC

13. GROUT: Depth Material Method From 0 To 0.5 Ft. neat cement in place From 0.5 To 1.0 Ft. bentonite in place

14. SCREEN: Depth Diameter Slot Size Material From 2 To 12 Ft. 2 in. 0.01 in. PVC

15. SAND/GRAVEL PACK: Depth Size Material From 1.0 To 12 Ft. coarse sand

16. REMARKS: _____

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

Signature of Jo Anne Shadron SIGNATURE OF PERSON CONSTRUCTING THE WELL

09/26/02 DATE

MW4

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources - Division of Water Quality - Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) JoAnne Shadravi CERTIFICATION # 2067

WELL CONTRACTOR COMPANY NAME Clark Environmental Services PC PHONE # (910) 602-3900

STATE WELL CONSTRUCTION PERMIT# NA ASSOCIATED WQ PERMIT# NA (if applicable) (if applicable)

1. WELL USE (Check Applicable Box): Residential [] Municipal/Public [] Industrial [] Agricultural [] Monitoring [x] Recovery [] Heat Pump Water Injection [] Other [] If Other, List Use _____

2. WELL LOCATION: Nearest Town: Wilmington County Newlinover Wetsy Yachts 4022 Market St (Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting [] Ridge [] Slope [] Valley [x] Flat (check appropriate box) Latitude/longitude of well location 34°14'20" / 77°53'36" (degrees/minutes/seconds)

3. OWNER: Wetsy Yachts Address 4022 Market St (Street or Route No.) Wilmington NC (City or Town) State Zip Code (910) 762-9703 Area code- Phone number

Latitude/longitude source: [] GPS [x] Topographic map (check box)

Table with columns: DEPTH (From, To), DRILLING LOG (Formation Description). Includes handwritten 'see attached' in the log column.

4. DATE DRILLED 9/26/02

5. TOTAL DEPTH: 12

6. DOES WELL REPLACE EXISTING WELL? YES [] NO [x]

7. STATIC WATER LEVEL Below Top of Casing: 6.74 FT. (Use "+" if Above Top of Casing)

8. TOP OF CASING IS 0 FT. Above Land Surface*

*Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C .0118.

9. YIELD (gpm): NA METHOD OF TEST _____

10. WATER ZONES (depth): Surface aquifer

LOCATION SKETCH

Show direction and distance in miles from at least two State Roads or County Roads. Include the road numbers and common road names.

see attached

11. DISINFECTION: Type NA Amount _____

Table for casing: Depth, Diameter, Wall Thickness, Material. Includes handwritten entries for PVC casing.

Table for grout: Depth, Material, Method. Includes handwritten entries for neat cement and bentonite.

Table for screen: Depth, Diameter, Slot Size, Material. Includes handwritten entries for PVC screen.

Table for sand/gravel pack: Depth, Size, Material. Includes handwritten entries for coarse sand.

16. REMARKS: _____

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

Signature of JoAnne Shadravi, SIGNATURE OF PERSON CONSTRUCTING THE WELL

09/26/02 DATE

APPENDIX V

**SAMPLING RECORDS, GROUNDWATER LABORATORY RESULTS AND CHAIN OF
CUSTODY FORMS**



**CLARK ENVIRONMENTAL SERVICES, P.C.
GROUNDWATER WELL SAMPLING RECORD**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106
PERSONNEL: M. Tate, F. Beecher

WELL NO. MW1
DATE: 10/02/02
TIME: 1445

A	WELL DIAMETER (INCHES)	2
B	GALLONS/FOOT	0.163
C	TOTAL WELL DEPTH (FEET)	11.5
D	DEPTH TO LIQUID (FEET)	5.97
E	TOTAL LIQUID FEET IN WELL (C-D)	5.53
F	NO. WELL VOLUMES DESIRED (SITE SPECIFIC, USUALLY 3)	3
G	TOTAL GALLONS TO PURGE (B x E x F)	2.70
H	PURGING METHOD (BAILER OR PUMP TYPE)	Bailer
I	BAILER VOLUME (MEASURED/CALCULATED)	0.24
J	NO. BAILS REQUIRED (G ÷ I, IF BAILED)	11.26
K	NO. BAILS TAKEN (COUNTED)	10
L	GALLONS PURGED (MEASURED/CALCULATED)	2.40

WATER QUALITY PARAMETERS

PARAMETER	INITIAL	1ST VOLUME	2ND VOLUME	3RD VOLUME
TIME (MILITARY)				1445
pH				8.2
SPECIFIC CONDUCTIVITY (mS)				308
WATER TEMPERATURE (°C)				24.3
DISSOLVED OXYGEN (AFTER PURGING)(mg/L)	1.97			
REDOX	NA			

PER FOOT WELL VOLUMES	
WELL DIAMETER (IN INCHES)	GALLONS PER FOOT
1.00	0.041
1.25	0.064
1.50	0.092
2.00	0.163
4.00	0.653
6.00	1.469

**CLARK ENVIRONMENTAL SERVICES, P.C.
GROUNDWATER WELL SAMPLING RECORD**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106
PERSONNEL: M. Tate, F. Beecher

WELL NO: MW2
DATE: 10/02/02
TIME: 1500

A	WELL DIAMETER (INCHES)	2
B	GALLONS/FOOT	0.163
C	TOTAL WELL DEPTH (FEET)	12
D	DEPTH TO LIQUID (FEET)	6.02
E	TOTAL LIQUID FEET IN WELL (C-D)	5.98
F	NO. WELL VOLUMES DESIRED (SITE SPECIFIC, USUALLY 3)	3
G	TOTAL GALLONS TO PURGE (B x E x F)	2.92
H	PURGING METHOD (BAILER OR PUMP TYPE)	Bailer
I	BAILER VOLUME (MEASURED/CALCULATED)	0.24
J	NO. BAILS REQUIRED (G ÷ I, IF BAILED)	12.1
K	NO. BAILS TAKEN (COUNTED)	12
L	GALLONS PURGED (MEASURED/CALCULATED)	2.88

WATER QUALITY PARAMETERS

PARAMETER	INITIAL	1ST VOLUME	2ND VOLUME	3RD VOLUME
TIME (MILITARY)				1500
pH				7.4
SPECIFIC CONDUCTIVITY (mS)				283
WATER TEMPERATURE (°C)				23.9
DISSOLVED OXYGEN (AFTER PURGING)(mg/L)	1.06			
REDOX	NA			

PER FOOT WELL VOLUMES	
WELL DIAMETER (IN INCHES)	GALLONS PER FOOT
1.00	0.041
1.25	0.064
1.50	0.092
2.00	0.163
4.00	0.653
6.00	1.469



**CLARK ENVIRONMENTAL SERVICES, P.C.
GROUNDWATER WELL SAMPLING RECORD**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106
PERSONNEL: M. Tate, F. Beecher

WELL NO: MW3
DATE: 10/02/02
TIME: 1445

A	WELL DIAMETER (INCHES)	2
B	GALLONS/FOOT	0.163
C	TOTAL WELL DEPTH (FEET)	12
D	DEPTH TO LIQUID (FEET)	5.58
E	TOTAL LIQUID FEET IN WELL (C-D)	6.42
F	NO. WELL VOLUMES DESIRED (SITE SPECIFIC, USUALLY 3)	3
G	TOTAL GALLONS TO PURGE (B x E x F)	3.14
H	PURGING METHOD (BAILER OR PUMP TYPE)	Bailer
I	BAILER VOLUME (MEASURED/CALCULATED)	0.24
J	NO. BAILS REQUIRED (G ÷ I, IF BAILED)	13.08
K	NO. BAILS TAKEN (COUNTED)	12
L	GALLONS PURGED (MEASURED/CALCULATED)	2.88

WATER QUALITY PARAMETERS

PARAMETER	INITIAL	1ST VOLUME	2ND VOLUME	3RD VOLUME
TIME (MILITARY)				1445
pH				8.2
SPECIFIC CONDUCTIVITY (mS)				343
WATER TEMPERATURE (°C)				25.2
DISSOLVED OXYGEN (AFTER PURGING)(mg/L)	1.26			
REDOX	NA			

PER FOOT WELL VOLUMES	
WELL DIAMETER (IN INCHES)	GALLONS PER FOOT
1.00	0.041
1.25	0.064
1.50	0.092
2.00	0.163
4.00	0.653
6.00	1.469



**CLARK ENVIRONMENTAL SERVICES, P.C.
GROUNDWATER WELL SAMPLING RECORD**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106
PERSONNEL: M. Tate, F. Beecher

WELL NO.: MW4
DATE: 10/02/02
TIME: 1415

A	WELL DIAMETER (INCHES)	2
B	GALLONS/FOOT	0.163
C	TOTAL WELL DEPTH (FEET)	12
D	DEPTH TO LIQUID (FEET)	6.74
E	TOTAL LIQUID FEET IN WELL (C-D)	5.26
F	NO. WELL VOLUMES DESIRED (SITE SPECIFIC, USUALLY 3)	3
G	TOTAL GALLONS TO PURGE (B x E x F)	2.57
H	PURGING METHOD (BAILER OR PUMP TYPE)	Bailer
I	BAILER VOLUME (MEASURED/CALCULATED)	0.24
J	NO. BAILS REQUIRED (G ÷ I, IF BAILED)	10.71
K	NO. BAILS TAKEN (COUNTED)	12
L	GALLONS PURGED (MEASURED/CALCULATED)	2.88

WATER QUALITY PARAMETERS

PARAMETER	INITIAL	1ST VOLUME	2ND VOLUME	3RD VOLUME
TIME (MILITARY)				1415
pH				9.1
SPECIFIC CONDUCTIVITY (mS)				252
WATER TEMPERATURE (°C)				24.5
DISSOLVED OXYGEN (AFTER PURGING)(mg/L)		2.07		
REDOX		NA		

PER FOOT WELL VOLUMES	
WELL DIAMETER (IN INCHES)	GALLONS PER FOOT
1.00	0.041
1.25	0.064
1.50	0.092
2.00	0.163
4.00	0.653
6.00	1.469



**CLARK ENVIRONMENTAL SERVICES, P.C.
GROUNDWATER WELL SAMPLING RECORD**

PROJECT NAME: Wetsig Yachts
LOCATION: Wilmington, NC
CES PROJECT NO: 02106
PERSONNEL: M. Tate, F. Beecher

WELL NO: MW5
DATE: 10/02/02
TIME: 1420

A	WELL DIAMETER (INCHES)	2
B	GALLONS/FOOT	0.163
C	TOTAL WELL DEPTH (FEET)	12
D	DEPTH TO LIQUID (FEET)	9.18
E	TOTAL LIQUID FEET IN WELL (C-D)	2.82
F	NO. WELL VOLUMES DESIRED (SITE SPECIFIC, USUALLY 3)	3
G	TOTAL GALLONS TO PURGE (B x E x F)	1.37
H	PURGING METHOD (BAILER OR PUMP TYPE)	Bailer
I	BAILER VOLUME (MEASURED/CALCULATED)	0.24
J	NO. BAILS REQUIRED (G ÷ I, IF BAILED)	5.74
K	NO. BAILS TAKEN (COUNTED)	8
L	GALLONS PURGED (MEASURED/CALCULATED)	1.92

WATER QUALITY PARAMETERS

PARAMETER	INITIAL	1ST VOLUME	2ND VOLUME	3RD VOLUME
TIME (MILITARY)				1420
pH				9.5
SPECIFIC CONDUCTIVITY (mS)				161
WATER TEMPERATURE (°C)				24.0
DISSOLVED OXYGEN (AFTER PURGING)(mg/L)			3.13	
REDOX			NA	

PER FOOT WELL VOLUMES	
WELL DIAMETER (IN INCHES)	GALLONS PER FOOT
1.00	0.041
1.25	0.064
1.50	0.092
2.00	0.163
4.00	0.653
6.00	1.469



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW1
 Client Project ID: Wetslg Yachts 02106
 Lab Sample ID: 53926
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/12/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 2.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acetone	50	BQL
Benzene	1	BQL
Bromobenzene	1	BQL
Bromochloromethane	1	BQL
Bromodichloromethane	1	BQL
Bromoform	1	BQL
Bromomethane	1	BQL
n-Butylbenzene	1	BQL
sec-Butylbenzene	1	BQL
tert-Butylbenzene	1	BQL
Carbon tetrachloride	1	BQL
Chlorobenzene	1	BQL
Chloroethane	1	BQL
Chloroform	1	BQL
Chloromethane	1	BQL
2-Chlorotoluene	1	BQL
4-Chlorotoluene	1	BQL
Dibromochloromethane	1	BQL
1,2-Dibromo-3-chloropropane	10	BQL
Dibromomethane	1	BQL
1,2-Dibromoethane (EDB)	1	BQL
1,2-Dichlorobenzene	1	BQL
1,3-Dichlorobenzene	1	BQL
1,4-Dichlorobenzene	1	BQL
1,1-Dichloroethane	1	BQL
1,1-Dichloroethene	1	BQL
1,2-Dichloroethane	1	BQL
cis-1,2-Dichloroethene	1	BQL
trans-1,2-dichloroethene	1	BQL
1,2-Dichloropropane	1	BQL
1,3-Dichloropropane	1	BQL
2,2-Dichloropropane	1	BQL
1,1-Dichloropropene	1	BQL
Dichlorodifluoromethane	10	BQL
Diisopropyl ether (DIPE)	1	BQL
Ethylbenzene	1	BQL
Hexachlorobutadiene	1	BQL
Isopropylbenzene	1	BQL
4-Isopropyltoluene	1	BQL
Methylene chloride	10	BQL

Reviewed by: 

Flags: BQL = Below Quantitation Limit

N.C. Certification #481 S.C. Certification #99029

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW1
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53926
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/12/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 2.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Methyl-tert-butyl ether (MTBE)	1	69
Naphthalene	1	BQL
n-Propyl benzene	1	BQL
Styrene	1	BQL
1,1,1,2-Tetrachloroethane	1	BQL
1,1,2,2-Tetrachloroethane	1	BQL
Tetrachloroethene	1	BQL
Toluene	1	BQL
1,2,3-Trichlorobenzene	1	BQL
1,2,4-Trichlorobenzene	1	BQL
Trichloroethene	1	BQL
1,1,1-Trichloroethane	1	BQL
1,1,2-Trichloroethane	1	BQL
Trichlorofluoromethane	1	BQL
1,2,3-Trichloropropane	1	BQL
1,2,4-Trimethylbenzene	1	BQL
1,3,5-Trimethylbenzene	1	BQL
Vinyl chloride	1	BQL
m-,p-Xylene	2	BQL
o-Xylene	1	BQL

Surrogate Spike Recoveries	Spike Added (ug/L)	Surrogate Result (ug/L)	%Rec
Compound			
Bromofluorobenzene	10.0	10.0	100
1,2-Dichloroethane-d4	10.0	10.0	100
Toluene-d8	10.0	10.0	100

Comments:

All results are corrected for dilution.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Polynuclear Aromatic Hydrocarbons

EPA 610 by GCMS 625

Client Sample ID: MW1
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53926
 Lab Project ID: G211-1473
 Matrix: Water

Date Collected: 10/2/2002
 Date Received: 10/3/2002
 Date Analyzed: 10/8/2002
 Analyzed By: MRC
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Chrysene	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
1-Methylnaphthalene	10	BQL
2-Methylnaphthalene	10	BQL
Naphthalene	10	BQL
Phenanthrene	10	BQL
Pyrene	10	BQL

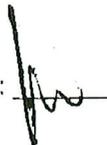
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.1	81
Nitrobenzene-d5	10	8.4	84
4-Terphenyl-d14	10	7.1	71

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW1
 Client Project ID: Wetsig Yachts 02108
 Lab Sample ID: 53928
 Lab Project ID: G211-1473
 Batch ID: 2441 2446

Analyzed By: PSW
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	0.0111	0.0100	1	MG/L	6010B	10/8/02
Barium	BQL	0.100	1	MG/L	6010B	10/8/02
Cadmium	BQL	0.0100	1	MG/L	6010B	10/8/02
Chromium	BQL	0.0100	1	MG/L	6010B	10/8/02
Lead	BQL	0.0100	1	MG/L	6010B	10/8/02
Mercury	BQL	0.0003	1	MG/L	7470	10/9/02
Selenium	BQL	0.0100	1	MG/L	6010B	10/8/02
Silver	BQL	0.0100	1	MG/L	6010B	10/8/02

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Inorganics

Client Sample ID: MW1
Client Project ID: Wetsig
Lab Sample ID: 54207
Lab Project ID: G211-1477

Analyzed By: EC
Date Collected: 10/8/02
Date Received: 10/9/02
Matrix: Water

Parameter	Result	Quantitation Limit	Units	Procedure	Date Analyzed
Nitrate	2.72	0.025	mg/l	353.3	10/10/02

Note :

BQL = Below Quantitation Limit

Analysis performed by Envirochem, Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW2
 Client Project ID: Wetslg Yachts 02106
 Lab Sample ID: 53927
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acetone	25	BQL
Benzene	0.5	BQL
Bromobenzene	0.5	BQL
Bromochloromethane	0.5	BQL
Bromodichloromethane	0.5	BQL
Bromoform	0.5	BQL
Bromomethane	0.5	BQL
n-Butylbenzene	0.5	BQL
sec-Butylbenzene	0.5	BQL
tert-Butylbenzene	0.5	BQL
Carbon tetrachloride	0.5	BQL
Chlorobenzene	0.5	BQL
Chloroethane	0.5	BQL
Chloroform	0.5	BQL
Chloromethane	0.5	BQL
2-Chlorotoluene	0.5	BQL
4-Chlorotoluene	0.5	BQL
Dibromochloromethane	0.5	BQL
1,2-Dibromo-3-chloropropane	5	BQL
Dibromomethane	0.5	BQL
1,2-Dibromoethane (EDB)	0.5	BQL
1,2-Dichlorobenzene	0.5	BQL
1,3-Dichlorobenzene	0.5	BQL
1,4-Dichlorobenzene	0.5	BQL
1,1-Dichloroethane	0.5	BQL
1,1-Dichloroethene	0.5	BQL
1,2-Dichloroethane	0.5	BQL
cis-1,2-Dichloroethene	0.5	BQL
trans-1,2-dichloroethene	0.5	BQL
1,2-Dichloropropane	0.5	BQL
1,3-Dichloropropane	0.5	BQL
2,2-Dichloropropane	0.5	BQL
1,1-Dichloropropene	0.5	BQL
Dichlorodifluoromethane	5	BQL
Diisopropyl ether (DIPE)	0.5	BQL
Ethylbenzene	0.5	BQL
Hexachlorobutadiene	0.5	BQL
Isopropylbenzene	0.5	BQL
4-Isopropyltoluene	0.5	BQL
Methylene chloride	5	BQL

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW2
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53927
 Lab Project ID: G211-1473
 Matrix: Water

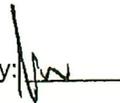
Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Methyl-tert-butyl ether (MTBE)	0.5	BQL
Naphthalene	0.5	BQL
n-Propyl benzene	0.5	BQL
Styrene	0.5	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL
Tetrachloroethene	0.5	BQL
Toluene	0.5	BQL
1,2,3-Trichlorobenzene	0.5	BQL
1,2,4-Trichlorobenzene	0.5	BQL
Trichloroethene	0.5	BQL
1,1,1-Trichloroethane	0.5	BQL
1,1,2-Trichloroethane	0.5	BQL
Trichlorofluoromethane	0.5	0.5
1,2,3-Trichloropropane	0.5	BQL
1,2,4-Trimethylbenzene	0.5	BQL
1,3,5-Trimethylbenzene	0.5	BQL
Vinyl chloride	0.5	BQL
m-,p-Xylene	1	BQL
o-Xylene	0.5	BQL

Surrogate Spike Recoveries	Spike Added (ug/L)	Surrogate Result (ug/L)	%Rec
Compound			
Bromofluorobenzene	10.0	10.3	103
1,2-Dichloroethane-d4	10.0	10.5	105
Toluene-d8	10.0	9.8	98

Comments:

All results are corrected for dilution.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW2
Client Project ID: Wetslg Yachts 02108
Lab Sample ID: 53927
Lab Project ID: G211-1473
Batch ID: 2441 2446

Analyzed By: PSW
Date Collected: 10/2/02
Date Received: 10/3/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	0.0134	0.0100	1	MG/L	6010B	10/8/02
Barium	BQL	0.100	1	MG/L	6010B	10/8/02
Cadmium	BQL	0.0100	1	MG/L	6010B	10/8/02
Chromium	BQL	0.0100	1	MG/L	6010B	10/8/02
Lead	BQL	0.0100	1	MG/L	6010B	10/8/02
Mercury	BQL	0.0003	1	MG/L	7470	10/9/02
Selenium	BQL	0.0100	1	MG/L	6010B	10/8/02
Silver	BQL	0.0100	1	MG/L	6010B	10/8/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Inorganics

Client Sample ID: MW2
Client Project ID: Wetsig
Lab Sample ID: 54208
Lab Project ID: G211-1477

Analyzed By: EC
Date Collected: 10/8/02
Date Received: 10/9/02
Matrix: Water

Parameter	Result	Quantitation Limit	Units	Procedure	Date Analyzed
Nitrate	6.18	0.025	mg/l	353.3	10/10/02

Note :

BQL = Below Quantitation Limit

Analysis performed by Envirochem, Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.

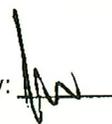
Results for Volatiles

by GCMS 6210D

Client Sample ID: MW3
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53928
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acetone	25	BQL
Benzene	0.5	BQL
Bromobenzene	0.5	BQL
Bromochloromethane	0.5	BQL
Bromodichloromethane	0.5	BQL
Bromoform	0.5	BQL
Bromomethane	0.5	BQL
n-Butylbenzene	0.5	BQL
sec-Butylbenzene	0.5	BQL
tert-Butylbenzene	0.5	BQL
Carbon tetrachloride	0.5	BQL
Chlorobenzene	0.5	BQL
Chloroethane	0.5	BQL
Chloroform	0.5	BQL
Chloromethane	0.5	BQL
2-Chlorotoluene	0.5	BQL
4-Chlorotoluene	0.5	BQL
Dibromochloromethane	0.5	BQL
1,2-Dibromo-3-chloropropane	5	BQL
Dibromomethane	0.5	BQL
1,2-Dibromoethane (EDB)	0.5	BQL
1,2-Dichlorobenzene	0.5	BQL
1,3-Dichlorobenzene	0.5	BQL
1,4-Dichlorobenzene	0.5	BQL
1,1-Dichloroethane	0.5	BQL
1,1-Dichloroethene	0.5	BQL
1,2-Dichloroethane	0.5	BQL
cis-1,2-Dichloroethene	0.5	BQL
trans-1,2-dichloroethene	0.5	BQL
1,2-Dichloropropane	0.5	BQL
1,3-Dichloropropane	0.5	BQL
2,2-Dichloropropane	0.5	BQL
1,1-Dichloropropene	0.5	BQL
Dichlorodifluoromethane	5	BQL
Diisopropyl ether (DIPE)	0.5	BQL
Ethylbenzene	0.5	BQL
Hexachlorobutadiene	0.5	BQL
Isopropylbenzene	0.5	BQL
4-Isopropyltoluene	0.5	BQL
Methylene chloride	5	BQL

Reviewed by: 

Flags: BQL = Below Quantitation Limit

N.C. Certification #481 S.C. Certification #99029

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW3
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53928
 Lab Project ID: G211-1473
 Matrix: Water

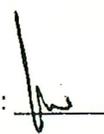
Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Methyl-tert-butyl ether (MTBE)	0.5	BQL
Naphthalene	0.5	BQL
n-Propyl benzene	0.5	BQL
Styrene	0.5	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL
Tetrachloroethene	0.5	BQL
Toluene	0.5	BQL
1,2,3-Trichlorobenzene	0.5	BQL
1,2,4-Trichlorobenzene	0.5	BQL
Trichloroethene	0.5	BQL
1,1,1-Trichloroethane	0.5	BQL
1,1,2-Trichloroethane	0.5	BQL
Trichlorofluoromethane	0.5	BQL
1,2,3-Trichloropropane	0.5	BQL
1,2,4-Trimethylbenzene	0.5	BQL
1,3,5-Trimethylbenzene	0.5	BQL
Vinyl chloride	0.5	BQL
m-,p-Xylene	1	BQL
o-Xylene	0.5	BQL

Surrogate Spike Recoveries	Spike Added (ug/L)	Surrogate Result (ug/L)	%Rec
Compound			
Bromofluorobenzene	10.0	10.1	101
1,2-Dichloroethane-d4	10.0	10.6	106
Toluene-d8	10.0	9.8	98

Comments:

All results are corrected for dilution.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatile Acid Extractables
by GCMS 8270

Client Sample ID: MW3
Client Project ID: Wetsig Yachts 02106
Lab Sample ID: 53928
Lab Project ID: G211-1473
Matrix: Water

Date Collected: 10/2/2002
Date Received: 10/3/2002
Date Analyzed: 10/7/2002
Analyzed By: MRC
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Benzoic Acid	20	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chlorophenol	10	BQL
2,4-Dichlorophenol	10	BQL
2,4-Dimethylphenol	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorophenol	50	BQL
Phenol	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

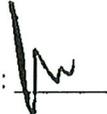
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorophenol	10	8.5	85
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	7.8	78

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW3
Client Project ID: Wetsig Yachts 02106
Lab Sample ID: 53928
Lab Project ID: G211-1473
Batch ID: 2441 2446

Analyzed By: PSW
Date Collected: 10/2/02
Date Received: 10/3/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	0.0786	0.0100	1	MG/L	6010B	10/8/02
Barium	BQL	0.100	1	MG/L	6010B	10/8/02
Cadmium	BQL	0.0100	1	MG/L	6010B	10/8/02
Chromium	0.0145	0.0100	1	MG/L	6010B	10/8/02
Lead	BQL	0.0100	1	MG/L	6010B	10/8/02
Mercury	BQL	0.0003	1	MG/L	7470	10/9/02
Selenium	BQL	0.0100	1	MG/L	6010B	10/8/02
Silver	BQL	0.0100	1	MG/L	6010B	10/8/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Inorganics

Client Sample ID: MW3
Client Project ID: Wetsig
Lab Sample ID: 54209
Lab Project ID: G211-1477

Analyzed By: EC
Date Collected: 10/8/02
Date Received: 10/9/02
Matrix: Water

Parameter	Result	Quantitation Limit	Units	Procedure	Date Analyzed
Nitrate	0.73	0.025	mg/l	353.3	10/10/02

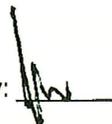
Note :
BQL = Below Quantitation Limit
Analysis performed by Envirochem, Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.
Results for Volatiles
by GCMS 6210D

Client Sample ID: MW4
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53929
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acetone	25	BQL
Benzene	0.5	BQL
Bromobenzene	0.5	BQL
Bromochloromethane	0.5	BQL
Bromodichloromethane	0.5	BQL
Bromoform	0.5	BQL
Bromomethane	0.5	BQL
n-Butylbenzene	0.5	BQL
sec-Butylbenzene	0.5	BQL
tert-Butylbenzene	0.5	BQL
Carbon tetrachloride	0.5	BQL
Chlorobenzene	0.5	BQL
Chloroethane	0.5	BQL
Chloroform	0.5	BQL
Chloromethane	0.5	BQL
2-Chlorotoluene	0.5	BQL
4-Chlorotoluene	0.5	BQL
Dibromochloromethane	0.5	BQL
1,2-Dibromo-3-chloropropane	5	BQL
Dibromomethane	0.5	BQL
1,2-Dibromoethane (EDB)	0.5	BQL
1,2-Dichlorobenzene	0.5	BQL
1,3-Dichlorobenzene	0.5	BQL
1,4-Dichlorobenzene	0.5	BQL
1,1-Dichloroethane	0.5	BQL
1,1-Dichloroethene	0.5	BQL
1,2-Dichloroethane	0.5	BQL
cis-1,2-Dichloroethene	0.5	BQL
trans-1,2-dichloroethene	0.5	BQL
1,2-Dichloropropane	0.5	BQL
1,3-Dichloropropane	0.5	BQL
2,2-Dichloropropane	0.5	BQL
1,1-Dichloropropene	0.5	BQL
Dichlorodifluoromethane	5	BQL
Diisopropyl ether (DIPE)	0.5	BQL
Ethylbenzene	0.5	BQL
Hexachlorobutadiene	0.5	BQL
Isopropylbenzene	0.5	BQL
4-Isopropyltoluene	0.5	BQL
Methylene chloride	5	BQL

Reviewed by: 

Flags: BQL = Below Quantitation Limit

Page 1

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW4
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53929
 Lab Project ID: G211-1473
 Matrix: Water

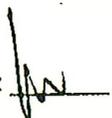
Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Methyl-tert-butyl ether (MTBE)	0.5	2
Naphthalene	0.5	BQL
n-Propyl benzene	0.5	BQL
Styrene	0.5	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL
Tetrachloroethene	0.5	BQL
Toluene	0.5	BQL
1,2,3-Trichlorobenzene	0.5	BQL
1,2,4-Trichlorobenzene	0.5	BQL
Trichloroethene	0.5	BQL
1,1,1-Trichloroethane	0.5	BQL
1,1,2-Trichloroethane	0.5	BQL
Trichlorofluoromethane	0.5	BQL
1,2,3-Trichloropropane	0.5	BQL
1,2,4-Trimethylbenzene	0.5	BQL
1,3,5-Trimethylbenzene	0.5	BQL
Vinyl chloride	0.5	BQL
m-,p-Xylene	1	BQL
o-Xylene	0.5	BQL

Surrogate Spike Recoveries	Spike Added (ug/L)	Surrogate Result (ug/L)	%Rec
Compound			
Bromofluorobenzene	10.0	9.9	99
1,2-Dichloroethane-d4	10.0	10.2	102
Toluene-d8	10.0	10.0	100

Comments:

All results are corrected for dilution.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Polynuclear Aromatic Hydrocarbons

EPA 610 by GCMS 625

Client Sample ID: MW4
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53929
 Lab Project ID: G211-1473
 Matrix: Water

Date Collected: 10/2/2002
 Date Received: 10/3/2002
 Date Analyzed: 10/8/2002
 Analyzed By: MRC
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Chrysene	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
1-Methylnaphthalene	10	BQL
2-Methylnaphthalene	10	BQL
Naphthalene	10	BQL
Phenanthrene	10	BQL
Pyrene	10	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.1	81
Nitrobenzene-d5	10	8.4	84
4-Terphenyl-d14	10	8.2	82

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW4
Client Project ID: Wetslg Yachts 02106
Lab Sample ID: 53929
Lab Project ID: G211-1473
Batch ID: 2441 2446

Analyzed By: PSW
Date Collected: 10/2/02
Date Received: 10/3/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	10/8/02
Barium	BQL	0.100	1	MG/L	6010B	10/8/02
Cadmium	BQL	0.0100	1	MG/L	6010B	10/8/02
Chromium	BQL	0.0100	1	MG/L	6010B	10/8/02
Lead	BQL	0.0100	1	MG/L	6010B	10/8/02
Mercury	BQL	0.0003	1	MG/L	7470	10/9/02
Selenium	BQL	0.0100	1	MG/L	6010B	10/8/02
Silver	BQL	0.0100	1	MG/L	6010B	10/8/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Results for Inorganics

Client Sample ID: MW4
Client Project ID: Wetsig
Lab Sample ID: 54210
Lab Project ID: G211-1477

Analyzed By: EC
Date Collected: 10/8/02
Date Received: 10/9/02
Matrix: Water

Parameter	Result	Quantitation Limit	Units	Procedure	Date Analyzed
Nitrate	1.7	0.025	mg/l	353.3	10/10/02

Note :

BQL = Below Quantitation Limit
Analysis performed by Envirochem, Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW5
 Client Project ID: Wetsig Yachts 02106
 Lab Sample ID: 53930
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acetone	25	BQL
Benzene	0.5	BQL
Bromobenzene	0.5	BQL
Bromochloromethane	0.5	BQL
Bromodichloromethane	0.5	BQL
Bromoform	0.5	BQL
Bromomethane	0.5	BQL
n-Butylbenzene	0.5	BQL
sec-Butylbenzene	0.5	BQL
tert-Butylbenzene	0.5	BQL
Carbon tetrachloride	0.5	BQL
Chlorobenzene	0.5	BQL
Chloroethane	0.5	BQL
Chloroform	0.5	BQL
Chloromethane	0.5	BQL
2-Chlorotoluene	0.5	BQL
4-Chlorotoluene	0.5	BQL
Dibromochloromethane	0.5	BQL
1,2-Dibromo-3-chloropropane	5	BQL
Dibromomethane	0.5	BQL
1,2-Dibromoethane (EDB)	0.5	BQL
1,2-Dichlorobenzene	0.5	BQL
1,3-Dichlorobenzene	0.5	BQL
1,4-Dichlorobenzene	0.5	BQL
1,1-Dichloroethane	0.5	BQL
1,1-Dichloroethene	0.5	BQL
1,2-Dichloroethane	0.5	BQL
cis-1,2-Dichloroethene	0.5	BQL
trans-1,2-dichloroethene	0.5	BQL
1,2-Dichloropropane	0.5	BQL
1,3-Dichloropropane	0.5	BQL
2,2-Dichloropropane	0.5	BQL
1,1-Dichloropropene	0.5	BQL
Dichlorodifluoromethane	5	BQL
Dilsopropyl ether (DIPE)	0.5	BQL
Ethylbenzene	0.5	BQL
Hexachlorobutadiene	0.5	BQL
Isopropylbenzene	0.5	BQL
4-Isopropyltoluene	0.5	BQL
Methylene chloride	5	BQL

Reviewed by: 

Flags: BQL = Below Quantitation Limit

N.C. Certification #481 S.C. Certification #99029

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles

by GCMS 6210D

Client Sample ID: MW5
 Client Project ID: Wetslg Yachts 02106
 Lab Sample ID: 53930
 Lab Project ID: G211-1473
 Matrix: Water

Date Analyzed: 10/11/02
 Analyzed By: EKR
 Date Collected: 10/2/02
 Date Received: 10/3/02
 Dilution: 1.0

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Methyl-tert-butyl ether (MTBE)	0.5	BQL
Naphthalene	0.5	BQL
n-Propyl benzene	0.5	BQL
Styrene	0.5	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL
Tetrachloroethene	0.5	BQL
Toluene	0.5	BQL
1,2,3-Trichlorobenzene	0.5	BQL
1,2,4-Trichlorobenzene	0.5	BQL
Trichloroethene	0.5	BQL
1,1,1-Trichloroethane	0.5	BQL
1,1,2-Trichloroethane	0.5	BQL
Trichlorofluoromethane	0.5	BQL
1,2,3-Trichloropropane	0.5	BQL
1,2,4-Trimethylbenzene	0.5	BQL
1,3,5-Trimethylbenzene	0.5	BQL
Vinyl chloride	0.5	BQL
m-,p-Xylene	1	BQL
o-Xylene	0.5	BQL

Surrogate Spike Recoveries	Spike Added (ug/L)	Surrogate Result (ug/L)	%Rec
Compound			
Bromofluorobenzene	10.0	10.2	102
1,2-Dichloroethane-d4	10.0	10.6	106
Toluene-d8	10.0	9.9	99

Comments:

All results are corrected for dilution.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatile Acid Extractables
by GCMS 8270

Client Sample ID: MW5
Client Project ID: Wetsig Yachts 02106
Lab Sample ID: 53930
Lab Project ID: G211-1473
Matrix: Water

Date Collected: 10/2/2002
Date Received: 10/3/2002
Date Analyzed: 10/7/2002
Analyzed By: MRC
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Benzoic Acid	20	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chlorophenol	10	BQL
2,4-Dichlorophenol	10	BQL
2,4-Dimethylphenol	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorophenol	50	BQL
Phenol	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

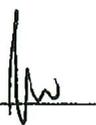
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorophenol	10	7.7	77
Phenol-d6	10	8.0	80
2,4,6-Tribromophenol	10	7.0	70

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW5
Client Project ID: Wetsig Yachts 02106
Lab Sample ID: 53930
Lab Project ID: G211-1473
Batch ID: 2441 2446

Analyzed By: PSW
Date Collected: 10/2/02
Date Received: 10/3/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	10/8/02
Barium	BQL	0.100	1	MG/L	6010B	10/8/02
Cadmium	BQL	0.0100	1	MG/L	6010B	10/8/02
Chromium	BQL	0.0100	1	MG/L	6010B	10/8/02
Lead	BQL	0.0100	1	MG/L	6010B	10/8/02
Mercury	BQL	0.0003	1	MG/L	7470	10/9/02
Selenium	BQL	0.0100	1	MG/L	6010B	10/8/02
Silver	BQL	0.0100	1	MG/L	6010B	10/8/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Inorganics

Client Sample ID: MW5
Client Project ID: Wetsig
Lab Sample ID: 54211
Lab Project ID: G211-1477

Analyzed By: EC
Date Collected: 10/8/02
Date Received: 10/9/02
Matrix: Water

Parameter	Result	Quantitation Limit	Units	Procedure	Date Analyzed
Nitrate	0.22	0.025	mg/l	353.3	10/10/02

Note :
BQL = Below Quantitation Limit
Analysis performed by Envirochem, Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.

2627 Northchase Parkway SE, Wilmington, NC 28405

Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 34938

Page 1 of 1

Client: Clark Env. Serv. Project ID: 02106 Date: 10.2.02 Report To: NC
 Address: Wetsig Yachts Turnaround: Standard
 Address: Contact: J. Shadrovi Job Number: 88106-036
 Quote #: Phone: 910-602-3900 P.O. Number: 88106-036 Invoice To:

Sample ID	Date	Time	Postings			Date	Time	Temperature	State Certification Requested
			HDO ₃	HCL	Ice				
MW1	10.2.02	9:45	6W						
MW2		3:00							
MW3		2:45							
MW4		2:15							
MW5		2:20							
8 RCRA Metals Lead + Acetone 628 Paks 8220 Acid only FB X FB X FB X FB X									
Relinquished By: <u>[Signature]</u> Date: <u>10/03/02</u> Time: <u>11:00am</u> Received By: <u>[Signature]</u> Date: <u>10/3/02</u> Time: <u>11:00</u> Temperature: <u>on ice</u> State Certification Requested: <u>NC</u> SC <u>Other</u>									

G211-1473

ORIGINAL

SEE REVERSE FOR TERMS AND CONDITIONS

PARADIGM ANALYTICAL LABORATORIES, INC.
 527 Northchase Parkway SE, Wilmington, NC 28405
 Phone: (910)-350-1903 FAX: (910)-350-1557

COC# 22675

Page 1 of 1

Chain-of Custody Record & Analytical Request

Client: Clark Environmental Project ID: Wetsig Date: 10/08/02 Report To: CES
 Address: PO Box 10136 Contact: Joanne Turnaround: Standard
 Address: Wilmington NC Phone: (910) 602 5700 Job Number: _____
 Note #: _____ Fax: 602 3975 P.O. Number: _____ Invoice To: CES

Comments:
 Please specify any special handling requirements

GA11-1477

Sample ID	Date	Time	Matrix	Preservative	Received By	Date	Time	Temperature
MW1	10/8/02	3:55p	H ₂ O	Ice	Nikolas	10/08/02	08:17	15°C
MW2		4:05p						
MW3		4:25p						
MW4		4:50p						
MW5		4:40p						

State Certification Requested: NC SC _____ Other _____
 SEE REVERSE FOR TERMS AND CONDITIONS

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW1 unfiltered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55790
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 10/31/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW1 filtered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55789
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 10/31/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

Results for Metals

Client Sample ID: MW2 unfiltered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55792
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 10/31/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Metals

Client Sample ID: MW2 filtered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55791
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 10/31/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

Results for Metals

Client Sample ID: MW3 unfiltered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55794
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 11/1/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	0.0344	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

Results for Metals

Client Sample ID: MW3 filtered
Client Project ID: 02106-Wetsig Yachts
Lab Sample ID: 55793
Lab Project ID: G211-1491
Batch ID: 2465

Analyzed By: PSW
Date Collected: 11/1/02
Date Received: 11/1/02
Matrix: Water

Metals	Result	Quantitation Limit	DF	Units	Method	Date Analyzed
Arsenic	0.0379	0.0100	1	MG/L	6010B	11/11/02

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

Samples Digested by 3030C

RADICM ANALYTICAL LABORATORIES, INC.

27 Northchase Parkway SE, Wilmington, NC 28405

one: (910)-350-1903 FAX: (910)-350-1557

Chain-of-Custody Record & Analytical Request

COCP#

Page 1 of 1

F-497

ent: Clark Env. Serv.

Project ID: D2106 - Wetzig Tracts

Date: 11.1.02

Report To: NC

dress: _____

Contact: J. Sivadroni

Turnaround: Standard

ress: _____

Phone: 910-602-3400

Job Number: _____

ole #: _____

Fax: _____

PO Number: 02106-030

Invoice To: _____

Comments:

Please specify any special reporting requirements

G211-1491

9103501557

Nov-12-02 02:25pm From-PARADIGM LABS

Sample ID	Date	Time	Matrix	Preservatives		Analyses				State Certification Requested															
				ICE	HNO ₃	6010 B Arsenic	3030C Prep																		
W1 Filtered	10.31.02	4:15	GW	✓	✓	✓	✓																		
W1 Unfiltered		4:10		✓	✓	✓	✓																		
W2 Filtered		4:35		✓	✓	✓	✓																		
W2 Unfiltered		4:30		✓	✓	✓	✓																		
W3 Filtered	11.1.02	8:45		✓	✓	✓	✓																		
W3 Unfiltered		8:40		✓	✓	✓	✓																		
<table border="1"> <tr> <th>Relinquished By</th> <th>Date</th> <th>Time</th> <th>Received By</th> <th>Date</th> <th>Time</th> <th>Temperature</th> </tr> <tr> <td><u>Paul Beeson</u></td> <td><u>11/1/02</u></td> <td><u>10:20</u></td> <td><u>Paul Beeson</u></td> <td><u>11/1/02</u></td> <td><u>10:20</u></td> <td><u>04°C</u></td> </tr> </table>												Relinquished By	Date	Time	Received By	Date	Time	Temperature	<u>Paul Beeson</u>	<u>11/1/02</u>	<u>10:20</u>	<u>Paul Beeson</u>	<u>11/1/02</u>	<u>10:20</u>	<u>04°C</u>
Relinquished By	Date	Time	Received By	Date	Time	Temperature																			
<u>Paul Beeson</u>	<u>11/1/02</u>	<u>10:20</u>	<u>Paul Beeson</u>	<u>11/1/02</u>	<u>10:20</u>	<u>04°C</u>																			

NC SC Other

SEE REVERSE FOR TERMS AND CONDITIONS