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June 16, 2005

Mr. Greg Smith
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment
A. T. Williams Oil Company (Wilco #137) Property (Parcel #6)
801 South Main Street
King, Forsyth County, North Carolina
NCDOT Project R-2201
WBS Element 34380.1.1
Earth Tech Project No. 85238

Dear Mr. Smith:

Earth Tech of North Carolina, Inc., (Earth Tech) has completed the Preliminary Site Assessment conducted at the above-referenced property. The work was performed in accordance with the Technical and Cost proposal dated April 7, 2005, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated April 12, 2005. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil and groundwater samples for laboratory analysis, and reviewing applicable North Carolina Department of Environment and Natural Resources (NCDENR) records. The purpose of this report is to document the field activities, present the laboratory analyses, and provide recommendations regarding the property.

Location and Description

The A. T. Williams Oil Company Property (Parcel #6) is located at 801 South Main Street in King, North Carolina. The property is situated on the south side of South Main Street at the southeastern quadrant of the intersection of South Main Street and US Highway 52 (Figure 1). Based on information supplied by the NCDOT and the site visit, Earth Tech understands that the site is an active gas station/convenience store (Wilco #137) where four underground storage tanks (USTs) are present. According to available reports, one 850-gallon waste oil UST was removed in November 1998. The active USTs include one 10,000-gallon diesel fuel, one 8,000-gallon gasoline, and two 6,000-gallon gasoline. The property consists of a single-story building with a canopied pump island on the north side of the building. The USTs are located on the east side of the building (Figure 2). Earth Tech was advised that the property was a total take and, as such, all the buildings, USTs, and pump islands will be affected.

Earth Tech reviewed the North Carolina Department of Environment and Natural Resources (NCDENR) Incident Management database and Incident Number 20919 was listed for this location. Information in the NCDENR files (Attachment A) indicates that soil contamination was detected in November 1998 when one waste oil UST was closed. No petroleum hydrocarbons were detected, but chromium was observed above the State action level. A Notice of Violation was issued on November 24, 1999, and a Phase II Limited Site Assessment (LSA) was conducted in September 1999. The LSA indicated that no petroleum hydrocarbon concentrations were detected in the soil; however, chromium was detected in a background sample and the conclusion was that the chromium detected during the UST closure was likely naturally occurring. Eight shallow and one deep groundwater monitoring wells were installed as part of the LSA. The analytical results for groundwater samples from these wells indicated that groundwater contamination was present in an area on the west side of the building and likely associated with the dispenser islands. Groundwater flow was reported to the south. Based on the LSA data, the site was classified as intermediate risk (streams within 500 feet of the site) and the land use as residential. In a groundwater monitoring report dated February 9, 2004, data suggest that the groundwater contamination is limited to on-site and is not moving. Because of the presence of reported contamination and existing USTs, the NCDOT requested a Preliminary Site Assessment to evaluate the soils within the property.

Earth Tech also reviewed the UST registration database to obtain UST ownership information. According to the database and the on-site UST Permit, the USTs on the property are operated under Facility Number 0-008044. The operator and owner of the tanks are listed as follows:

Owner	Operator
Wilco Hess LLC	Wilco #137
5446 University Parkway	801 South Main Street
Winston-Salem, North Carolina 27105-1366	King, North Carolina 27021-9010

It should be noted that the current UST owner/operator is not the responsible party for the groundwater contamination incident. The responsible party is reported as Exxon Company, USA, Post Office Box 30451, Charlotte, North Carolina.

Geophysical Survey

Prior to Earth Tech's mobilization to the site, Pyramid Environmental conducted a geophysical survey to evaluate if additional USTs, other than the ones in use, were present on the property. The geophysical survey consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, specifically USTs. A survey grid was laid out at the property with the X-axis oriented approximately perpendicular to South Main Street and the Y-axis oriented approximately parallel to South Main Street. The grid was located to cover all accessible portions of the property. The survey lines were spaced 3 meters (10 feet) apart. Magnetic data was collected continuously along each survey line with a

data logger. After collection, the data was reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted to further evaluate any anomalies.

Several anomalies were detected in the geophysical survey. However, these anomalies were generally attributed to buildings, known USTs, steel-reinforced concrete, pump islands, vehicles, and buried utility lines or conduits. The survey concluded that, with the exception of the known USTs, no metallic USTs were present on the property. A detailed report of findings and interpretations is presented in Attachment B.

Site Assessment Activities

On May 9, 2005, Earth Tech mobilized to the site to conduct a Geoprobe® direct push investigation to evaluate soil conditions within the proposed corridor. Continuous sampling using direct push technology (Probe Technology of Concord, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in 1.2-meter (4-foot) long acetate sleeves inside the direct push sampler. Each of these sleeves was divided in half for soil sample screening. Each 0.6-meter (2-foot) interval was placed in a resealable plastic bag and the bag was set aside for a sufficient amount of time to allow volatilization of organic compounds from the soil to the bag headspace. The probe of a flame ionization detector/photo ionization detector (FID/PID) was inserted into the bag and the reading was recorded. After terminating the sample hole, the soil sample from the depth interval with the highest FID/PID reading was submitted to Paradigm Analytical Laboratories, Inc., in Wilmington, North Carolina, using standard chain-of-custody procedures. The laboratory analyzed the soil samples for total petroleum hydrocarbons (TPH) using extraction methods 3550 (diesel fuel/fuel oil) and 5030 (gasoline).

Nine direct-push holes (AT-1 through AT-9) were advanced within the property at the site to a depth of 4.8 meters (16 feet) as shown in Figure 2 and Attachment C. The borings were located within the property to evaluate the UST and dispenser island areas, and selected geophysical anomalies (Attachment D). Borings AT-1 through AT-5 were located to evaluate the known UST area, borings AT-6 and AT-7 were located to assess soil conditions in front of the dispenser islands, boring AT-8 was located to provide the horizontal extent of potential contamination, and boring AT-9 was located to evaluate an area of a geophysical anomaly that had no obvious source. The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface was covered with about 0.15 meters (6 inches) of asphalt and gravel or concrete. Below the surface treatment to a depth of about 1.8 to 2.4 meters (6 to 8 feet) was a medium to reddish brown silty clay. Below this soil to a depth of 4.8 meters (16 feet) was a mottled medium brown, reddish brown, and black silt/clay saprolite. No groundwater was encountered in any of the borings. Based on field screening, soil samples were submitted for laboratory analysis, which are summarized in Table 1.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment E, no petroleum hydrocarbon compounds were detected in any of the nine soil samples collected from the site (Figure 3). According to the North Carolina Underground Storage Tank Section's Underground Storage Tank Closure Policy dated August 24, 1998, the action level for TPH analyses is 10 mg/kg for both gasoline and diesel fuel. However, that agency's "Guidelines for Assessment and Corrective Action," dated April 2001, does not allow for use of TPH analyses for confirmation of the extent of petroleum contamination or its cleanup. As a result, while TPH concentrations are no longer applicable in determining if soil contamination is present, this analysis is a legitimate screening tool. Based on the TPH action level for UST closures, the assumed action level for this report is 10 mg/kg. None of the soil samples collected from the site contained a TPH diesel fuel concentration above the 10 mg/kg assumed action level.

Conclusions and Recommendations

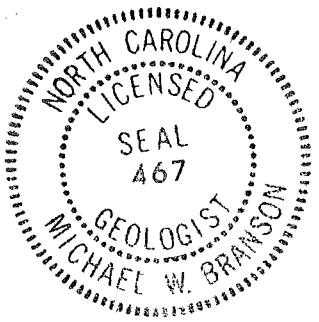
A Preliminary Site Assessment was conducted to evaluate the A. T. Williams Property (Parcel #6) located at 801 South Main Street in King, Forsyth County, North Carolina. A previous release from former USTs at the site resulted in a groundwater incident being assigned to the property. As of February 2004, the incident number was active, although no active remediation has been recommended or initiated. According to available information, the groundwater plume affects a small area of the property.

Nine soil borings were advanced to evaluate the soil conditions on the property. The laboratory reports of the soil samples from these borings suggest that no TPH concentrations are present above the assumed action levels.

Earth Tech appreciates the opportunity to work with the NCDOT on this project. While this site is an active groundwater incident site, no groundwater samples were collected and no soil contamination was detected. As such, the North Carolina Department of Environment and Natural Resources does not require that this information be forwarded for their review. If you have any questions, please contact me at (919)854-6238.

Sincerely,

Michael W. Branson, P.G.
Project Manager



Attachments

c: Project File

TABLE 1

FIELD SCREENING AND ANALYTICAL RESULTS
A. T. WILLIAMS PROPERTY (PARCEL #6)
KING, NORTH CAROLINA
NCDOT PROJECT NO. R-2201
WBS ELEMENT 34380.1.1
EARTH TECH PROJECT NO. 85328

LOCATION	DEPTH (m)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
AT-1	0 - 0.6	4.29			
	0.6 - 1.2	4.17			
	1.2 - 1.8	4.45			
	1.8 - 2.4	3.9			
	2.4 - 3.0	4.32			
	3.0 - 3.6	4.71	AT-1	DRO (BQL) GRO (BQL)	10 10
	3.6 - 4.2	3.59			
	4.2 - 4.8	4.19			
AT-2	0 - 0.6	3.92			
	0.6 - 1.2	4.27			
	1.2 - 1.8	6.29			
	1.8 - 2.4	6.72			
	2.4 - 3.0	8.2	AT-2	DRO (BQL) GRO (BQL)	10 10
	3.0 - 3.6	7.59			
	3.6 - 4.2	5.12			
	4.2 - 4.8	6.55			
AT-3	0 - 0.6	12.83	AT-3	DRO (BQL) GRO (BQL)	10 10
	0.6 - 1.2	9.37			
	1.2 - 1.8	8.73			
	1.8 - 2.4	5.13			
	2.4 - 3.0	5.28			
	3.0 - 3.6	5.37			
AT-4	0 - 0.6	3.6			
	0.6 - 1.2	3.86			
	1.2 - 1.8	7.11			
	1.8 - 2.4	10.12			
	2.4 - 3.0	11.6			
	3.0 - 3.6	12.6	AT-4	DRO (BQL) GRO (BQL)	10 10
	3.6 - 4.2	4.65			
	4.2 - 4.8	2.8			
AT-5	0 - 0.6	11.56			
	0.6 - 1.2	11.12			
	1.2 - 1.8	13.85	AT-5	DRO (BQL) GRO (BQL)	10 10
	1.8 - 2.4	7.22			
	2.4 - 3.0	10.89			
	3.0 - 3.6	9.12			
	3.6 - 4.2	9.19			
	4.2 - 4.8	7.78			
AT-6	0 - 0.6	20			
	0.6 - 1.2	21			
	1.2 - 1.8	30			
	1.8 - 2.4	51	AT-6	DRO (BQL) GRO (BQL)	10 10
	2.4 - 3.0	22			
	3.0 - 3.6	47			
	3.6 - 4.2	16.1			
	4.2 - 4.8	16.25			

TABLE 1 (continued)

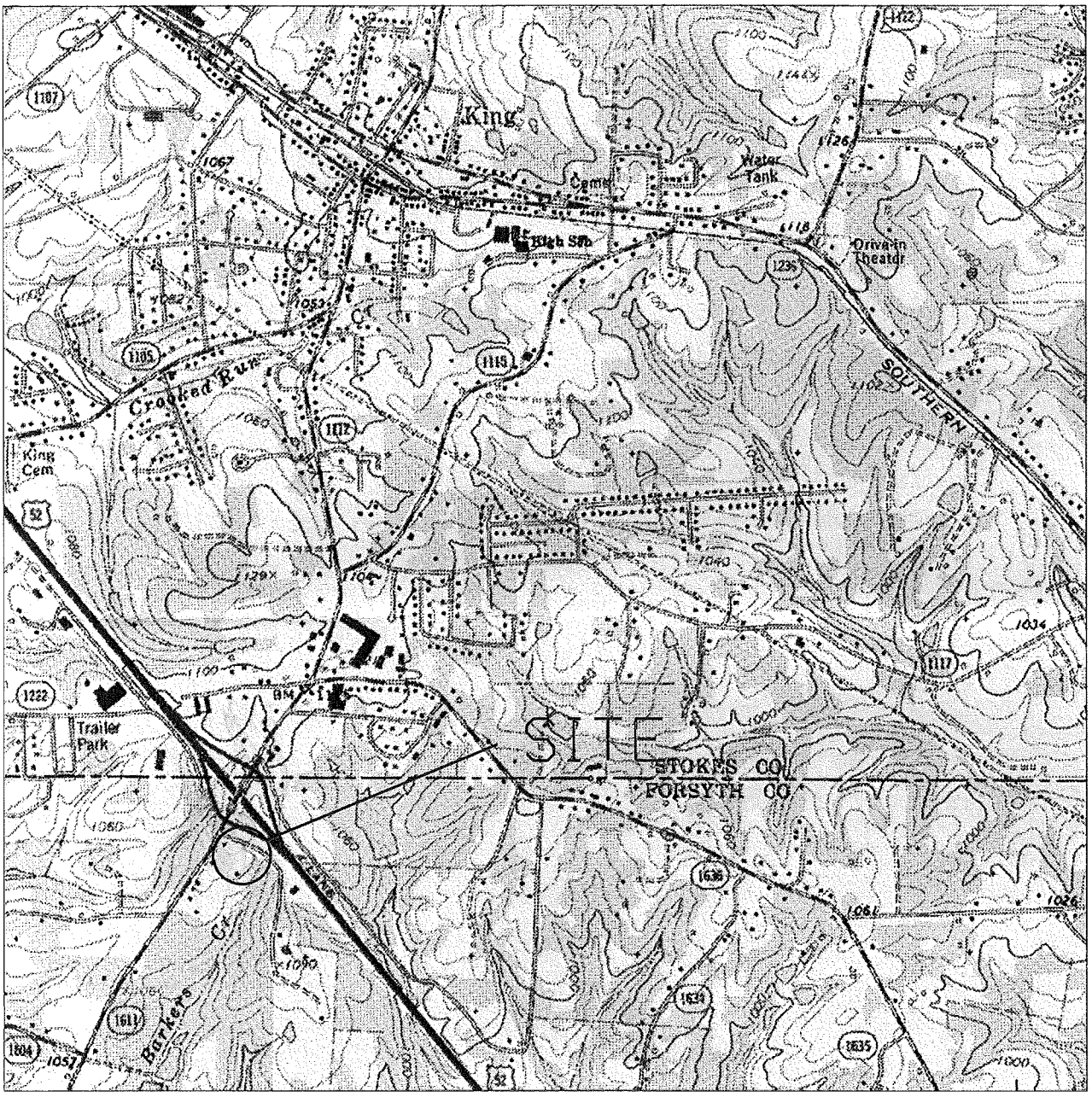
FIELD SCREENING AND ANALYTICAL RESULTS
A. T. WILLIAMS PROPERTY (PARCEL #6)
KING, NORTH CAROLINA
NCDOT PROJECT NO. R-2201
WBS ELEMENT 34380.1.1
EARTH TECH PROJECT NO. 85328

LOCATION	DEPTH (m)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
AT-7	0 - 0.6	18.2			
	0.6 - 1.2	21			
	1.2 - 1.8	9.41			
	1.8 - 2.4	6.86			
	2.4 - 3.0	9.61			
	3.0 - 3.6	12.3			
	3.6 - 4.2	11.5			
	4.2 - 4.8	22	AT-7	DRO (BQL) GRO (BQL)	10 10
AT-8	0 - 0.6	9.36			
	0.6 - 1.2	40	AT-8	DRO (BQL) GRO (BQL)	10 10
	1.2 - 1.8	7.11			
	1.8 - 2.4	7.75			
	2.4 - 3.0	7.23			
	3.0 - 3.6	8.21			
	3.6 - 4.2	7.48			
	4.2 - 4.8	9.56			
AT-9	0 - 1.2	7.92			
	1.2 - 1.8	9.14			
	1.8 - 2.4	6.86			
	2.4 - 3.0	7.91			
	3.0 - 3.6	8.63			
	3.6 - 4.2	7.32			
	4.2 - 4.8	11.61	AT-9	DRO (BQL) GRO (BQL)	10 10

DRO - Diesel range organics.
GRO - Gasoline range organics.

ppm - parts per million.
mg/kg - milligrams per kilogram.

FIGURES



SCALE 1:24,000

1/2 0 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

.5 0 KILOMETER

SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: KING, NC (REV 1983)

EARTH TECH

FIGURE 1
VICINITY MAP
A. T. WILLIAMS OIL COMPANY PROPERTY (PARCEL #6)
KING, NORTH CAROLINA

MAY 2005

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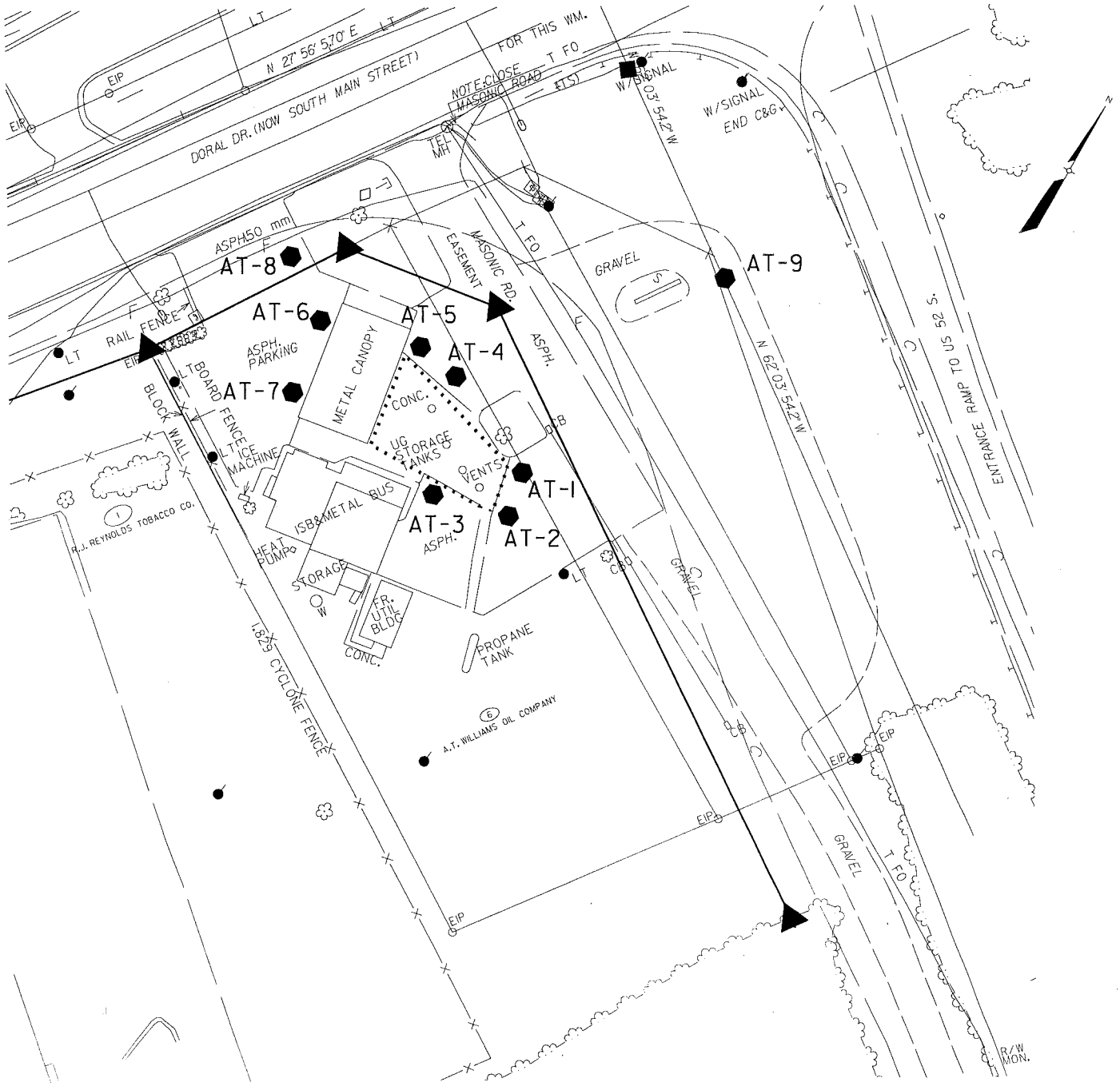

LEGEND

AT-1 ⬢ SOIL BORING LOCATION AND IDENTIFICATION

⬚ UST LOCATION

0 15 30

GRAPHIC SCALE (meters)

E A R T H T E C H

FIGURE 2

SITE MAP

A. T. WILLIAMS OIL CO. PROPERTY (PARCEL #6)

KING, NORTH CAROLINA

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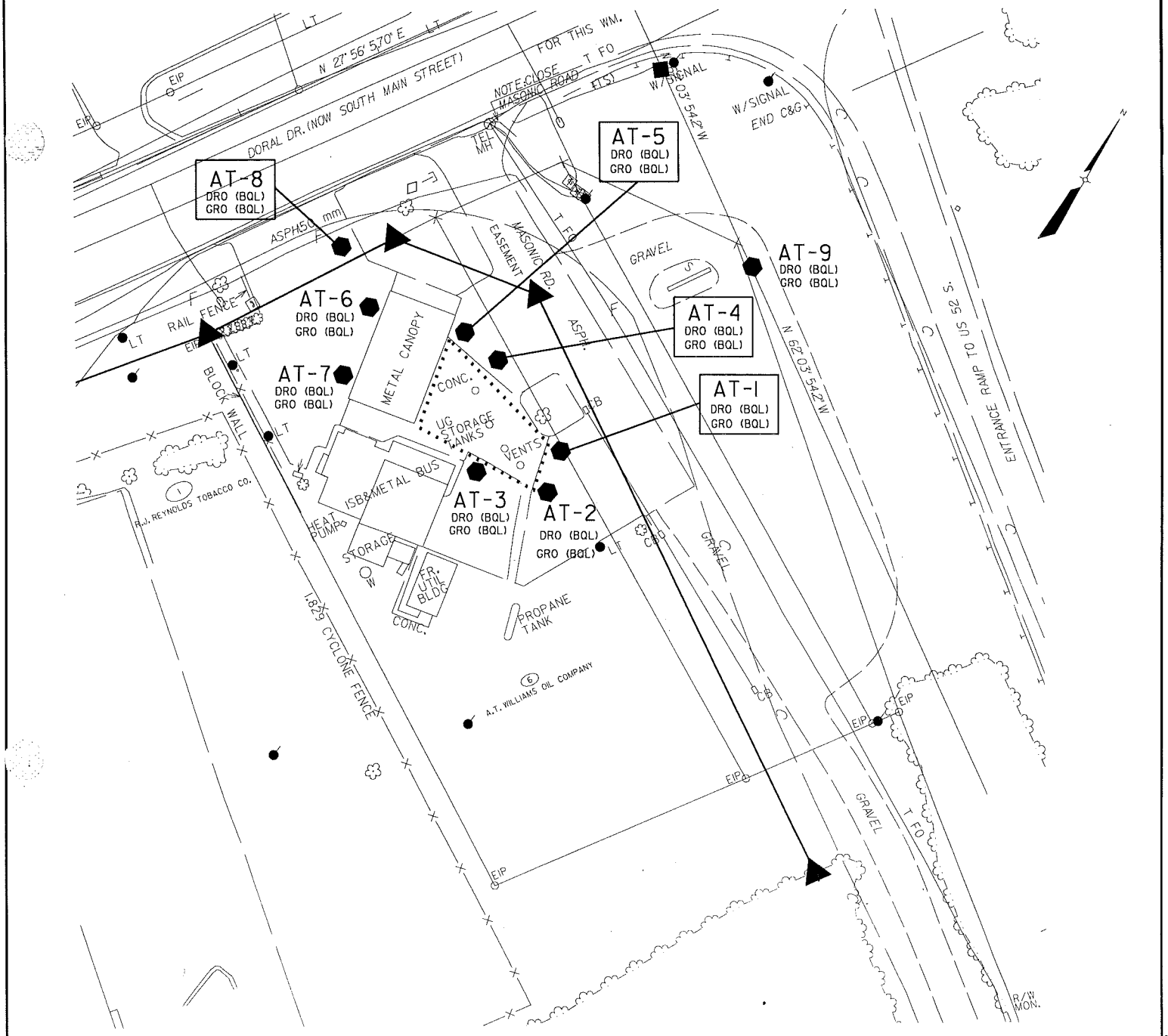

LEGEND

⬢	SOIL SAMPLE LOCATION
DRO (123)	TPH AS DIESEL FUEL IN MG/KG
GRO (123)	TPH AS GASOLINE IN MG/KG
BQL	BELOW QUANTITATION LIMIT

0 15 30

GRAPHIC SCALE (meters)

EARTH TECH

FIGURE 3
ANALYTICAL RESULTS MAP
A. T. WILLIAMS PROPERTY (PARCEL #6)
KING, NORTH CAROLINA

MAY 2005

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ATTACHMENT A

UST CLOSURE REPORT

EXXON RAS # 4-4951
(KING EXXON)
801 S. MAIN STREET (ROUTE 52 AND TOBACCOVILLE ROAD)
FORSYTH COUNTY
KING, NORTH CAROLINA 27021
Facility ID #0-008044

Prepared For:

Exxon Company, U.S.A.
2000 Trenton Ave. Rm #224
Richmond, Virginia 23234
-and-
North Carolina Department of Environment and Natural Resources
Winston-Salem Regional Office
585 Waughtown Street
Winston-Salem, North Carolina 27107

Prepared By:

Nightingale Geologic Consultants, P.C.
4736 Sharon Road, Suite W-124
Charlotte, North Carolina 28210
(704) 643-9700
-and-
Griffith Enterprises, Inc.
353 Jonestown Road., #312
Winston-Salem, North Carolina 27104
(336) 712-0290

January 1999

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GW/UST-12 UNDERGROUND STORAGE TANK CLOSURE REPORT

The closure report should contain, at a minimum, the following information. Any other information that is pertinent to the site should be included.

I. General Information

A. Ownership of UST(s)

1. Name of UST owner.
   Exxon Company, U.S.A.
2. Owner address and telephone number.
   P.O. Box 4386
   Houston, TX 77210-4386
   713-656-7710

B. Operator of UST(s)

1. Name of UST operator.
   King Exxon (Mr. Dennis Hartgrove, Dealer)
2. Operator address and telephone number.
   801 S. Main Street
   King, NC 27021
   336-983-3028

C. Facility Information

1. Facility name.
   Exxon RAS #4-4951 (King Exxon)
2. Facility ID #.
   0-008044
3. Facility address, telephone number, and county.
   801 S. Main Street
   King, Forsyth County, NC 27021
   336-983-3028

D. Contacts

1. Name, address, telephone number, and job title of primary contact person.

UST Closure Related Issues
Mr. John Bakoss
Exxon Company, U.S.A.
2000 Trenton Ave. Rm. #224
Richmond, VA 23234
804-743-5743

Environmental Issues
Mr. J. Frank Medlin
Exxon Company, U.S.A.
P.O. Box 30451
Charlotte, NC 28230-0451
704-643-9700

2. Name, address, and telephone number of closure contractor.
   Southern Pump and Tank Company
   4800 Graham Street
   Charlotte, NC 28269
   704-596-4373
3. Name, address, and telephone number of primary consultant.
   Griffith Enterprises, Inc.
   353 Jonestown Road, #312
   Winston-Salem, NC 27104
   336-712-0290
4. Name, address, and telephone number, and State certification number of laboratory.
   Specialized Assays Environmental Laboratory
   2960 Foster Creighton Dr.
   Nashville, TN 37204
   1-800-765-0980
   NC Certification Number: 387

E. UST Information:

Tank no.	Installation dates	Volume	Tank Dimensions	Last Contents	Previous Contents (if any)
1	**1/1979**	**approx. 850 gallons**	**6 ft. dia. (spherical)**	**used oil**	**unknown**

F. Site Characteristics
1. Describe any past releases at this site.
   The site is not an active environmental case, and there are no past releases on record.
2. Is the facility active or inactive at this time? If the facility is inactive, note the last time the USTs were in operation.
   The facility is active.
3. Describe surrounding property use (for example, residential, commercial, farming, etc.).
   The surrounding property is light commercial and residential, with some undeveloped areas.
4. Describe results of receptor survey (water wells, basements, etc., within 1500 feet of the facility). (To be performed if a release has occurred).
   A receptor survey was not performed.

II. Closure Procedures

A. Describe preparations for closure including the steps taken to notify authorities, permits obtained, and the steps taken to clean and purge the tanks.

On January 29, 1998, Exxon submitted the GW-UST-3 form to the NCDENR notifying them to the intent to close the used oil UST system at this site. The local fire marshall's office and the county health department were notified of the time and date of the UST removal. On November 16, 1998, approximately three 55-gallon drums of liquid were pumped from the UST by lowering a pipe into the tank. The UST was pressure washed after cutting a hole in the side. Approximately one 55-gallon drum was filled with liquid from the UST wash.

B. Note the amount of residual material pumped from the tank(s).

Approximately three 55-gallon drums.

C. Describe the storage, sampling, and disposal of the residual material.

The drums (4 total) were appropriately labeled and stored beside the Exxon building and were removed by Four Seasons Environmental. A manifest for the liquid is presented in Appendix D.

D. Excavation

1. Describe excavation procedures noting the condition of the soil encountered and the dimensions of the excavation in relation to the tanks, piping, and/or pumps.

On November 16, 1998, the overburden was removed from the surface of the UST. The UST was buried approximately 2 ft. below ground surface (bgs). The soil/backfill in the basin and around the UST was removed with a backhoe. The excavation area measured approximately 8 ft. by 9 ft. The UST measured approximately 6 ft. in diameter (spherical shape).

A vent pipe was observed to be connected to the used oil UST. The vent pipe was cut, and an air-tight seal was applied prior to the removal of the UST. The fill port was also sealed.

Soil and pea-sized gravel backfill were removed from the UST basin with the backhoe so the UST was exposed on the sides. No visible staining was observed in the material or soil from the UST basin.

A chain was connected to the top of the UST and the backhoe, and the tank was removed from the basin and set down on the

ground for inspection. The UST was observed to be in good condition.

The depth of the excavation was measured and was approximately 8 ft. bgs. The backhoe was used to obtain a sample into native soil beneath one end of the former UST. The backhoe penetrated approximately 2 ft. into the native soil.

Soil sample T-1 was screened in the field with a photo-ionization detector (PID) and did not indicated the presence of volatile vapors.

2. Note the depth of tank burial(s) (from land surface to top of tank).
   Approximately 2 ft. bgs.
3. Note volume of soil excavated.
   Approximately 21 cubic yards.
4. Describe soil type(s) encountered.
   Fine-grained red-brown silty clay; moist.
5. Describe type and source of backfill used.
   Brown silty clay fill was obtained from an independent contractor and delivered to the site.
6. Describe condition of UST system(s) (i.e., pitting, holes, etc.).
   The fiberglass UST was observed to be in good condition, with no observable holes are cracks.
7. Note if the excavation reached the groundwater table or bedrock surface.
   Neither groundwater or bedrock were encountered in the former UST basin.

NOTE: *Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume I for Sources other than Petroleum Underground Storage Tanks of Volume II for Petroleum Underground Storage Tanks" on limiting excavations. The State Trust Fund will not pay for excessive excavation. Potentially uncontaminated soil may be separated from potentially contaminated soil based on field screening readings; however, laboratory confirmation is required to document the presence or absence of contamination for disposal purposes.*

E. Contaminated Soil

1. Describe how it was determined to what extent to excavate the soil.
   Sufficient soil and gravel material was removed from the basin in order to remove the UST and obtain a soil sample from beneath the former tank. Soil was not over-excavated.
2. Describe method of temporary storage, sampling, and treatment/disposal of soil.
   Soil was stored temporally beside the Exxon store using 10 mil plastic and straw bales. Laboratory analytical results were non-detect; Exxon has not yet removed the soil from the site.

NOTE: *Suspected contaminated soil should segregated from soil that appears to be uncontaminated and should be treated as contaminated until proven otherwise. It*

should not be used as backfill. Any soil contaminated to levels above MDLs should not be placed back into the excavation.

III. Site Investigation

A. Provide information on field screening and physical observations, as well as methods used to calibrate field screening instrument(s).

Excavation, field screening, and sample collection were performed on November 16, 1998.

The backhoe was used to obtain a single soil sample, and was lowered approximately 2 ft. into native soil from the base of the UST excavation. The sample was split into two parts, one for field screening, and the other for laboratory analysis. The field screening of the soil sample was accomplished by using a PID to measure total volatiles in the headspace of each sample. The PID (PI-101 10.7 eV unit manufactured by HNU Systems) was calibrated approximately 24-hours prior to use. Observations made on the soil indicated some visual staining.

Field screening data is presented in Table 1.

B. Describe soil sampling points and sampling procedures used, including:

- Location of samples;
  One sample was obtained from native soil beneath the former UST; T-1. A sample was obtained from the soil stockpile.
- Type of samples (from excavation, stockpiled soil, etc.);
  The UST soil sample obtained from the UST basin was a grab sample. The stockpile sample was a composite sample.
- Sample collection procedures (grab, split spoon, hand auger, etc.);
  The excavation sample was obtained from the backhoe bucket. The backhoe bucket was lowered approximately 2 ft. into native soil to obtain the sample. A stainless steel sampling spoon was used to extract soil samples from the backhoe bucket, and place them into sampling containers. The sample from the soil pile was a composite sample. The sample was placed into a pre-chilled ice filled cooler, and sent via Fed Ex to the laboratory under chain of custody procedures.
- Depth of soil samples (below land surface);
  Sample T-1 was obtained from a depth of 9 ft. to 10 ft. bgs.
- Whether samples were taken from side or floor of an excavation;
  The sample was obtained from the floor of the excavation.
- Sample identification; and
  One sample was obtained from native soil beneath the former UST; T-1. The stockpile sample was obtained from the stockpiled soil.

- Sample analysis.

  Soil samples T-1 was analyzed for EPA Methods 8260, 8270, 8080 (pesticides) 3050 (Pb, Cr) and MADEP VPH/EPH. The soil stockpile was analyzed for EPA 9071 and TCLP (8 RCRA metals).

C. Describe groundwater or surface water sampling procedures used, including:
- Location of samples;

  Neither groundwater or surface water samples were obtained.
- Sample collection procedures (grab, bailer, etc.);

  Neither groundwater or surface water samples were obtained.
- Sample identification;

  Neither groundwater or surface water samples were obtained.
- Sample analyses.

  Neither groundwater or surface water samples were obtained.

NOTE: *Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater," Volume I or Volume II as appropriate for information about sampling requirements.*

D. Describe quality control measures, including:
- Sample handling procedures including sample preservation and transportation;

  Soil samples were handled with either stainless steel sampling equipment or latex gloves to minimize human contact. Stainless steel sampling equipment was decontaminated and a fresh pair of latex gloves was used after the handling of each sample. Groundwater samples were handled with latex gloves to prevent or minimize skin contact when filling laboratory containers. Analytical samples for transport to the laboratory were sealed in the appropriate sampling containers with lid seal. The samples were placed in a pre-chilled, ice-filled cooler, and shipped via Fed Ex to the laboratory for analysis.
- Decontamination procedures used;

  Distilled water and an alconox cleansing agent were used to clean stainless steel sampling devices.
- Time and date samples were collected and date submitted to lab;

  The soil samples were collected between 1400 hours and 1500 hours on November 16, 1998 during the UST closure.
- Samples collected for quality control purposes (e.g. duplicates, field blanks, trip blanks, etc.), including methods used to obtain these samples and analytical parameters; and

  A trip blank containing water, prepared at the laboratory, was utilized and sampled.
- How results of quality control samples may have affected your interpretation of soil, groundwater, or surface water sample results.

  The trip blank sample was analyzed at the laboratory and found to be non-detect.

E. Describe investigation results, including:

- Methods of analyses used (include U.S. EPA method number); and

  (Table 2)

- Analytical results for samples; discuss in relation to site specific cleanup level or action level, as appropriate.

  Analytical reports indicate soil samples T-1 and the stockpile sample did not contain detectable levels of hydrocarbons (Table 3). Sample T-1 was found to contain 91.7 mg/kg chromium. The NCDENR "Soil to Groundwater" standard for chromium is 27 mg/kg.

  Table 3 lists the soil sample laboratory results and "residential," "commercial," and "soil to groundwater" standards.

IV. Conclusions and Recommendations

Include probable sources of contamination, further investigation or remediation tasks, or whether "no further action" is required.

Chromium is found to be naturally occurring in Piedmont soil. A background chromium soil was obtained on January 28, 1999 at the site. The results of the laboratory analysis of this sample will be forwarded to the NCDENR, Winston-Salem Regional Office after it is received.

V. Signature and Seal of Professional Engineer or Licensed Geologist

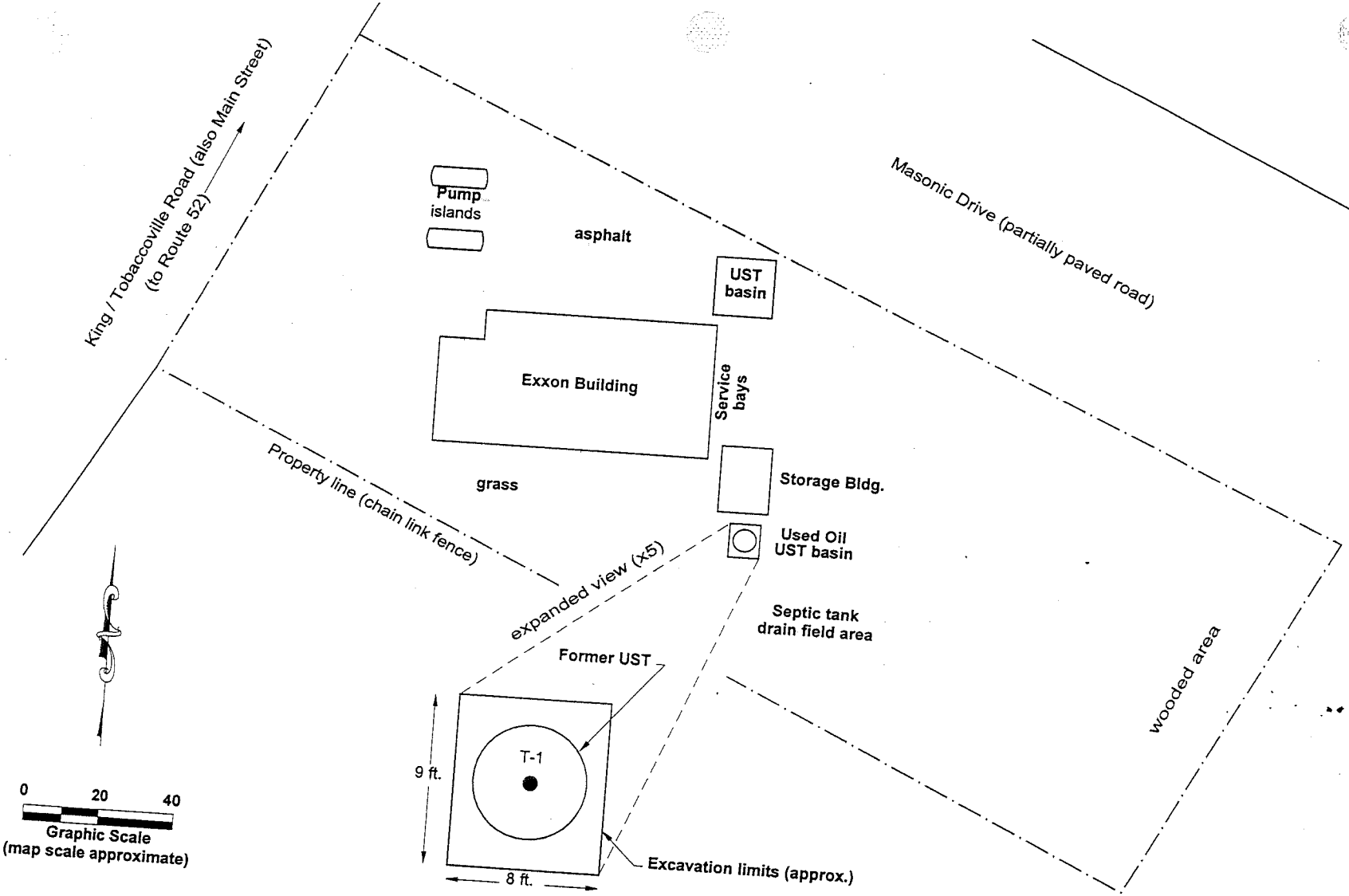
The geological and hydrogeological evaluations contained within this report were prepared in accordance with generally accepted scientific practices, and are based on my understanding of the site and data provided to me by others.

Elliot J. Nightingale 1/31/99

Elliot J. Nightingale, L.G. Date
Nightingale Geologic Consultants, P.C.
North Carolina Licensed Geologist No. 1165

NORTH CAROLINA LICENSED SEAL 1165 GEOLOGIST ELLIOT J. NIGHTINGALE

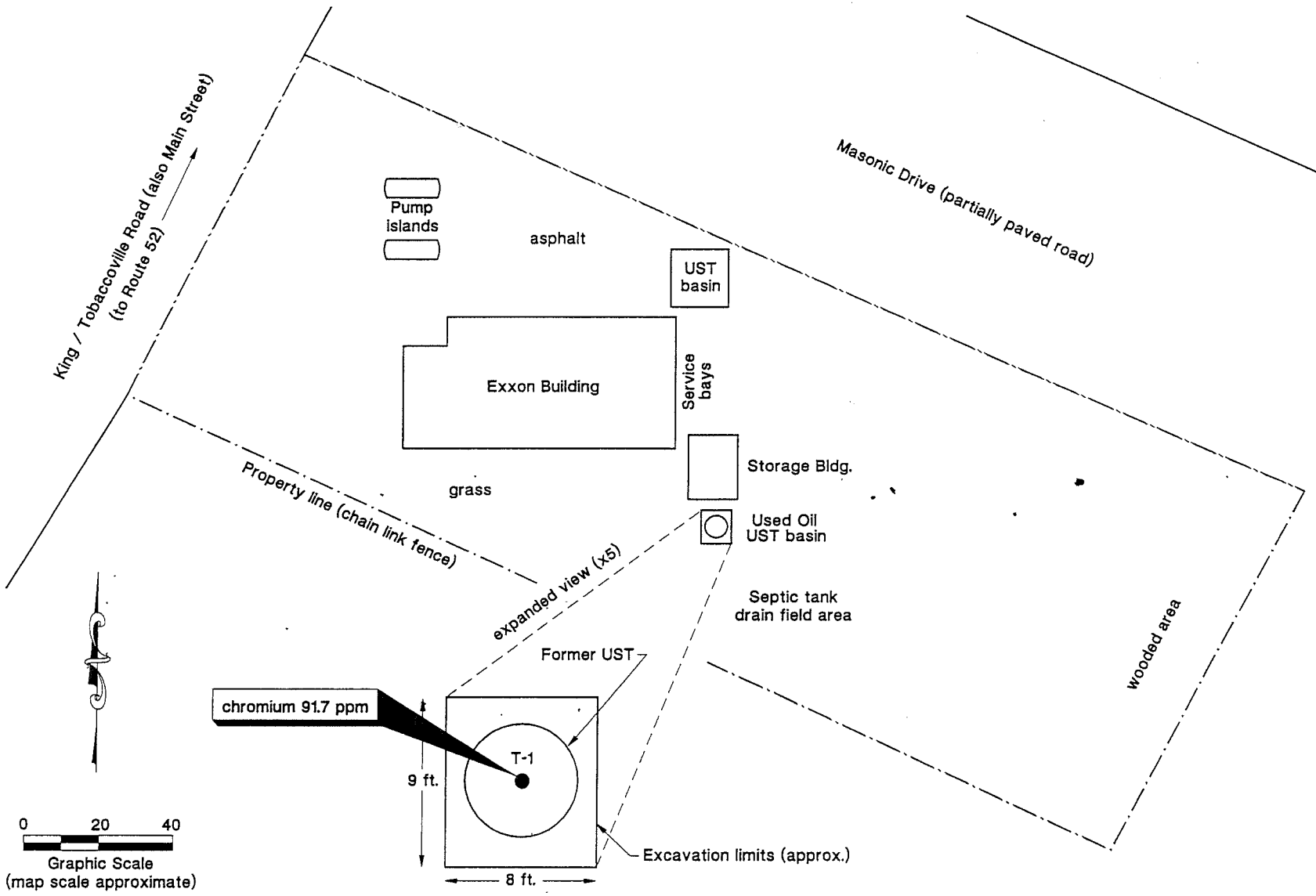
Note: *Required if a release or discharge of product from the tank(s) has occurred. If a release or discharge has not occurred, the signature or seal of a P.E. or L.G. is not required.*



Project Number	
Date 1/1999	Layers Used
Figure Identification No.	44951sm.dw2
Drawn EJN	Scale 1 in = 40 ft (approx.)

FIGURE 2
SITE CONFIGURATION MAP
EXXON RAS #4-4951, 801 S. MAIN STREET
KING, NORTH CAROLINA

Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina, U.S.A.



Project Number	
Date 1/1999	Layers Used
Figure Identification No.	44951sm.dw2
Drawn EJN	Scale 1 in = 40 ft (approx.)

FIGURE 3
SITE MAP WITH ANALYTICAL RESULTS FROM T-1
EXXON RAS #4-4951, 801 S. MAIN STREET
KING, NORTH CAROLINA

Nightingale Geologic Consultants, P.C.
Charlotte, North Carolina, U.S.A.

TABLE 1
FIELD SCREENING RESULTS

SAMPLE IDENTIFICATION	SAMPLING DEPTH (ft.)	SAMPLE LOCATION	SOIL SCREENING W/PID (ppm)
T-1	9 to 10	Used Oil Basin	ND
Stockpile	Composite	Stockpile	ND

TABLE 2
SAMPLE IDENTIFICATIONS, DEPTHS, AND ANALYSES

SAMPLE IDEN.	SAMPLING DEPTH (ft.)	SAMPLE LOCATION	SAMPLE ANALYSIS							
			EPA 8260	EPA 8270	EPA 3050 Pb, Cr	MADEP EPH	MADEP VPH	EPA 9071	TCLP-8	EPA 8080
T-1	9 to 10	UST Basin	x	x	x	x	x			x
Stockpile	NA	stockpile						x	x	

TABLE 3
SAMPLE IDENTIFICATIONS WITH RESULTS
AND DATES THAT SAMPLES WERE TAKEN

SAMPLE IDENTIFICATION	SAMPLING DATE	DETECTED CONSTITUIENT	CONCENTRATION IN PPM (mg/kg)			
			LABORATORY RESULT	RESIDENTIAL STANDARD	COMMERCIAL STANDARD	SOIL TO GW STD.
T-1	11/16/98	chromium	91.7	78	2000	27
		percent dry weight	72	--	--	--
Stockpile	11/16/98	none detected	--	--	--	--

non-detect results not included.

laboratory data sheets available in Appendix F

NCDENR

JAMES B. HUNT JR.
GOVERNOR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
WINSTON-SALEM REGIONAL OFFICE
DIVISION OF WASTE MANAGEMENT
UST SECTION

November 24, 1999

CERTIFIED MAIL Z 282 366 437
RETURN RECEIPT REQUESTED

Frank Medlin
Exxon Company USA
P.O. Box 30451
Charlotte, NC 28230-0451

RE: Notice of Violation of
15A NCAC 2L .0115
RISK-BASED ASSESSMENT AND
CORRECTIVE ACTION FOR
PETROLEUM UNDERGROUND
STORAGE TANKS
REGULATIONS

Exxon #44951
801 S. Main St., King
Forsyth County, N.C.
Incident #: Pending

Dear *Mr. Medlin:*

Information received by this office on ***May 19, 1999*** confirms a release or discharge from a petroleum underground storage tank (UST) system at the above referenced location. Records indicate that you are the ***owner and/or operator*** of this UST tank system. This letter is a standard notice explaining the violation(s) and associated corrective action(s) you must take as a result of the release or discharge in accordance with North Carolina statutes and rules. The UST Section of the Division of Waste Management (Division) administers the state's rules for USTs and the required response for petroleum releases. Those rules are located in Title 15A, Subchapter 2L and Title 15A, Subchapter 2N of the North Carolina Administrative Code (NCAC).

VIOLATION 1:
Failure to conduct the appropriate risk based corrective action requirements as specified in 15A NCAC 2L.0115(c).

REQUIRED CORRECTIVE ACTION for violation 1:
Please submit the required documentation to demonstrate compliance with the risk based corrective action requirements specified in 15A NCAC 2L.0115(c). The documentation must be received by this office within 30 days of the date of receipt of this notice.

Please take the corrective action(s) for the above violation(s) as necessary to bring the site into compliance. Corrective actions must be taken and reported to the Winston-Salem Regional Office within 30 days, unless otherwise noted in the above corrective actions, from the date of this notice to avoid recommendation of civil penalties for continuing violations. Please submit all information to the following address:

Winston-Salem Regional Office
Attn: Cindy Rintoul
585 Waughtown St., Winston-Salem, NC 27403
(336) 771-4600

Assessment of civil penalties may have already been recommended for violations described within this Notice of Violation. Your prompt attention to the items described herein is required. Failure to comply with the State's rules, in the manner and time specified, may result in the assessment of additional civil penalties and/or the use of other enforcement mechanisms available to the State. Each day that a violation continues may be considered a separate violation.

Please note that performing assessment and cleanup work that is not required under 15A NCAC 2L.0115 is not reimbursable from the Commercial or Noncommercial Leaking Petroleum Underground Storage Tank Cleanup Funds.

If you have any questions regarding the actions that must be taken or the rules mentioned in this letter, please contact ***Kelly Gage*** at ***(336) 771-4600***. If you have any questions regarding trust fund eligibility or reimbursement, please contact the UST Section at (919) 733-8486.

Sincerely,

Cindy Rintoul

Cindy Rintoul
UST Regional Supervisor

Enclosures: **(materials attached)**

cc: **Ruth Strauss – Central Office**
WSRO Files

Exxon Company, U.S.A.

Phase II Limited Site Assessment Report

Exxon Retail Location 4-4951

801 South Main Street

King, North Carolina

September 28, 1999

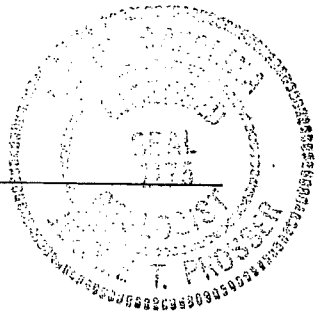
Facility I.D. #:	0-008044
Ground Water Incident #:	Pending
Priority Rank:	To be determined
RBCA Rank:	To be determined
Land Use Category:	To be determined
Suspected Source of Release:	Gasoline/Diesel UST system
Date of Release Discovery:	May 19, 1999
Estimated Quantity of Release:	Unknown
Cause of Release:	Unknown
Latitude of Release:	36° 15' 31"
Longitude of Release:	80° 21' 57"

Responsible Party:

Exxon Company, U.S.A.
P.O. Box 30451
Charlotte, North Carolina 28230-0451
(704) 529-4263

Property Owner:
(as of July 1999)

A.T. Williams Company
P.O. Box 7287
Winston-Salem, NC 27109
(336) 767-6280



Jerry Prosser, P.G.
Project Manager

Environmental Resources Management
7300 Carmel Executive Park
Suite 200
Charlotte, NC 28226
(704) 541-8345

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

1.0 *SITE INFORMATION*

Site name:	Exxon Retail Location 4-4951
Location:	801 South Main Street
Phone: (336) 983-3028	King, NC 27021
Ground water incident #:	Pending
Previous UST Owner:	Exxon Company, U.S.A.
	P.O. Box 30451
Phone: (704) 529-4263	Charlotte, NC 28230-0451
Property Owner:	Lee Moore Oil Company
(property acquired July 1999)	Drawer 9
Phone: (919) 775-2301	Sanford, NC 27331-0009
Facility Operator:	Mr. Dennis C. Hartgrove
	King Exxon
	801 South Main Street
Phone: (336) 983-3028	King, NC 27021
Consultant:	ERM-Southeast, Inc.
	Suite 200
	7300 Carmel Executive Park
Phone: (704) 541-8345	Charlotte, NC 28226

Release Information

Date discovered:	May 19, 1999
Estimated quantity released:	Unknown
Cause of releases:	Unknown
Suspected source of release:	Gasoline/diesel UST system

Site USTs:

EXXON 4-4951 FACILITY I.D. #0-008044

Tank Number	Installation Date	Closure Date	Size in Gallons	Tank Construction	Contents
1	4/16/81		10K	Fiberglass	Diesel
2	4/16/81		8K	Fiberglass	Gasoline
3	4/16/81		6K	Fiberglass	Gasoline
4	4/16/81		6K	Fiberglass	Gasoline
5	4/16/81	11/16/98	1K	Fiberglass	Used oil

Source: NCDENR UST database and Exxon internal records

Latitude and longitude of release: 36° 15′ 31″ 80° 21′ 57″

2.0 *SITE HISTORY*

Exxon Retail Location 4-4951, also known as King Exxon, is an active gasoline retail store and automotive service facility located at 801 South Main Street in King, North Carolina. A location map for the site is presented in Figure 1. The site facilities include one gasoline/diesel UST system. A site plan showing the facility layout is provided in Figure 2.

There are have been no documented petroleum hydrocarbon releases at the site prior to May 1999. The former used oil UST was closed by removal on November 16, 1998. Laboratory analysis of the UST closure confirmation soil samples indicated concentrations of chromium above the soil-to-ground water maximum soil contaminant concentration (MSCC). A background soil sample was collected from the site in January 1999 and analyzed for chromium to establish whether chromium occurs naturally in the site soils. Chromium was detected in the background sample at a concentration above the chromium MSCC of 27 milligrams/kilogram. The background soil analytical result and a request for no further action were submitted to NCDENR on February 11, 1999. NCDENR has not responded to Exxon's request for no further action with regard to the former used oil UST.

Exxon conducted a property transaction environmental site assessment of the property in April 1999. Laboratory analysis of ground water samples collected from the site indicated the presence of petroleum hydrocarbons and lead in ground water in concentrations that were above North Carolina ground water standards. The North Carolina Department of Environment and Natural Resources Division of Waste Management - UST Section (DWM) was notified of the release on May 19, 1999. An initial abatement and site check report was submitted to DWM on June 8, 1999.

3.0 *RISK CHARACTERIZATION*

Completed limited site assessment risk classification and land use forms for the site can be referenced in Appendix A.

4.0 RECEPTOR INFORMATION

Local land use and sensitive receptor information for the site were obtained from a sensitive receptor survey that was conducted by ERM in April 1999.

4.1 WATER SUPPLY WELLS

One water supply well was identified within an approximate 1,500-foot radius of the site. The well is located approximately 1,200 feet northeast of the site at a former Shell gasoline retail store and is currently used for potable water by the adjacent King Auto Parts store. The water supply well location is shown in Figure 3. Available information on the identified water supply well is summarized below.

Well Address	Distance to Exxon 4-4951	Well Status	Well Construction	Connected to City Water?
721 South Main Street	1,200 feet NE	In Service	295 ft. deep	No

4.2 PUBLIC WATER SUPPLIES

The surrounding area is served by the City of King or the Winston-Salem municipal water systems. Municipal water is available to all properties located within a 1,500-foot radius of the site.

4.3 SURFACE WATER

The nearest surface water body to the site is an unnamed creek located approximately 400 feet northwest of the site. A second unnamed creek is located approximately 500 feet southeast of the site. No other surface water bodies are located within a 1,500-foot radius of the site. Surface water bodies in the vicinity of the site are shown in Figure 1.

4.4 WELLHEAD PROTECTION AREAS

The site and surrounding area are not located within a wellhead protection area.

4.5 SUBSURFACE STRUCTURES

Underground utilities at, or adjacent to the site include a septic tank drainfield, water, natural gas, storm sewer, and telephone lines. Underground utilities at the site are shown in Figure 2. One basement has been identified within a 1,500-foot radius of the site. The basement is located in the Masonic Temple building located 900 feet southeast of the site. The location of the Masonic Temple is shown in Figure 3.

4.6 LAND USE

Land use in the vicinity of the site is composed of commercial, retail business, and industrial development. Adjacent properties are also used for a State highway, or are undeveloped. Land use in the vicinity of the site is shown in Figures 3 and 4.

4.7 PROPERTY OWNERS AND OCCUPANTS

Property owners and occupants that are located within or contiguous to the area containing petroleum affected soil and/or ground water are shown in Figure 4 and listed in Table 1.

5.0 SITE GEOLOGY AND HYDROGEOLOGY

The site is located in the Sauratown Mountains Anticlinorium geologically and in the Piedmont physiographic province of North Carolina. According to the Geologic Map of North Carolina (NCGS, 1985), the site is underlain by granitic gneiss.

Eight locations at the site were drilled and sampled using Geoprobe drilling equipment between March and August 1999. Soils at the site consist primarily of clayey silt saprolite based on soil boring logs for the site monitor wells. Competent bedrock was intersected in the DW-1 monitor well boring at a depth of 45.5 feet below the ground surface. Monitor well boring logs can be referenced in Appendix B.

The depth to ground water at the site ranges from approximately 21 to 28 feet below ground level. Ground water gauging and elevation data are presented in Table 2. Ground water elevation data indicate that ground water flows to the south-southwest as shown in Figure 6.

6.0 SAMPLING RESULTS

Standard procedures for the fieldwork completed as part of the limited site assessment are presented in Appendix C.

6.1 SOILS

Soil data were initially collected from the site in April 1999 as part of a property transaction environmental site assessment. Soil sample locations are shown in Figure 2. Soil quality data are summarized in Table 3. The property transaction soil quality data were presented in the June 8, 1999 20-day report that was submitted to NCDENR. Laboratory data sheets for these samples can be referenced in the 20-day report.

Maximum detected soil contaminant concentrations and applicable North Carolina maximum soil contaminant concentrations (MSCCs) are summarized in the following table.

Compound	Maximum Concentration (mg/kg)	Soil-to-Ground water MSCC (mg/kg)	Residential MSCC (mg/kg)	Industrial/ Commercial MSCC (mg/kg)
Chromium	91.7	27	78	2,000

MSCC = Maximum soil contaminant concentration

Laboratory analysis of a background soil sample collected from the site (SS-1) indicated a chromium concentration of 27.6 milligrams/kilogram. This result indicates that chromium is naturally occurring in the site soils, and that the chromium detected in the used oil UST closure confirmation soil sample is not indicative of a release from the UST.

6.2 *GROUND WATER*

Ground water quality data are available for the gasoline/diesel UST system release from eight saprolite aquifer monitor wells and one bedrock aquifer monitor well. Laboratory analytical results for ground water samples collected from the site are summarized in Table 4. Ground water laboratory data sheets for samples collected prior to June 1999 are available in the May 6, 1999 20-Day report. Laboratory data sheets for ground water samples that were collected in August 1999 can be referenced in Appendix D. Maximum on-site ground water contaminant concentrations are listed in the following table.

Compound	Maximum Concentration (ug/l)	T15A NCAC 2L Ground Water Standard (ug/l)	Gross Contamination level (ug/l)
VPH: C5-C8 Aliphatics	**15,100**	420	No GCL
C9-C12/C9-C18 Aliphatics	**7,600**	4,200	No GCL
C9-C10/C11-C22 Aromatics	**14,225**	210	No GCL
Benzene	**790**	1	5,000
Toluene	**7,100**	1,000	257,500
Ethylbenzene	**1,440**	29	29,000
Xylenes	**11,830**	87,500	87,500
MTBE	**255**	200	200,000
Isopropyl ether	**163**	70	70,000
Naphthalene	**700**	21	15,500
Ethylene Dibromide	**88.2**	0.0004	50
1,2-Dichloroethane	**1.8**	0.38	380
Lead	**227**	15	15,000

Results shown in bold exceed North Carolina ground water standards

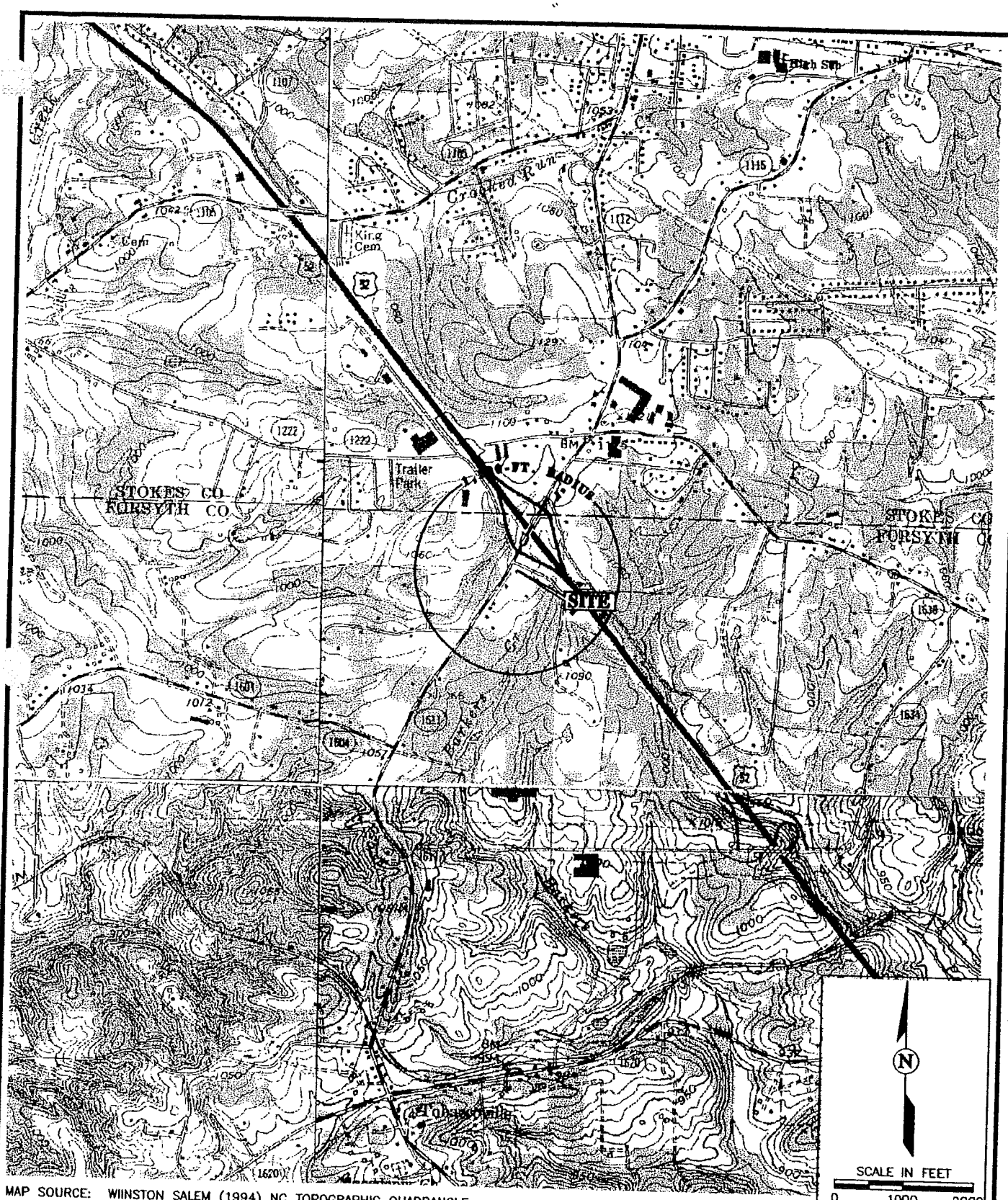
The area of affected ground water, as defined by the extent of benzene in ground water, is shown in Figure 7.

7.0 *CONCLUSIONS AND RECOMMENDATIONS*

The soil and ground water quality findings of this limited site assessment include the following:

- No water supply wells have been identified within a 1,000-foot radius of the release.
- Surface water is located within 500 feet of the release.
- The area immediately surrounding the site is composed of commercial/industrial development, or is undeveloped.
- The concentration of chromium in one used oil UST closure confirmation soil sample exceeds its soil-to-ground water MSCC, but is below the commercial/industrial MSCC. Chromium has been shown to occur naturally in the site soils.
- North Carolina ground water standards for 12 organic compounds and lead were exceeded in ground water samples collected from the site. The concentration of ethylene dibromide detected in one ground water samples exceeds risk based corrective action levels (GCLs). Surface water standards for benzene and toluene are exceeded in ground water by more than a factor of 10.

Ground water analytical data collected from nine on-site monitor wells indicate that the areal extent of affected ground water is approximately 3,000 ft^2 and does not have the potential to affect surface water quality in the two creeks that are located within 500 feet of the source area.

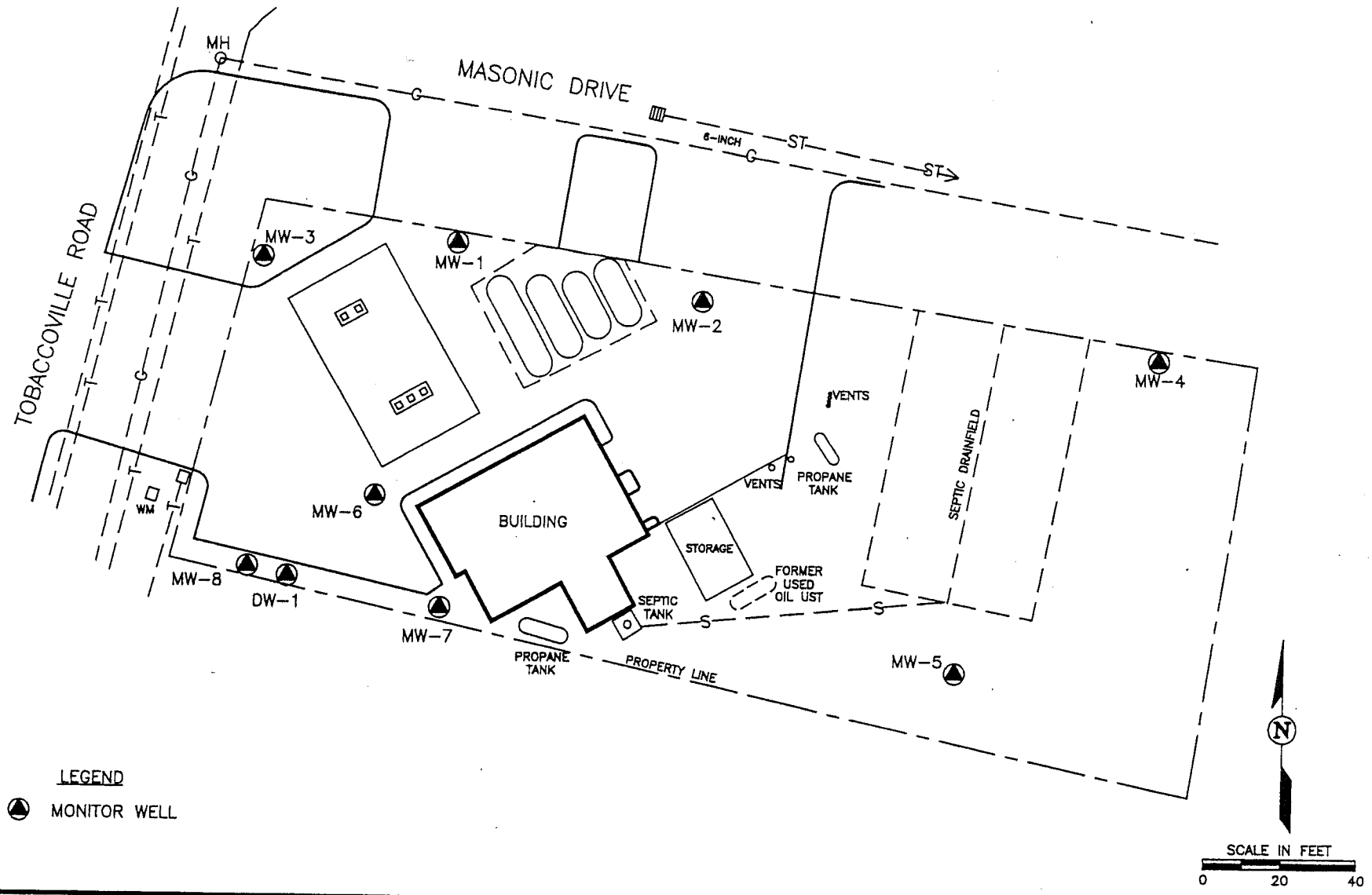


MAP SOURCE: WIINSTON SALEM (1994) NC TOPOGRAPHIC QUADRANGLE

CUH/AM CD#360808B3, B4, C3, C4

ERM Environmental Resources Management	**TOPOGRAPHIC LOCATION MAP** EXXON RETAIL LOCATION 4-4951 801 SOUTH MAIN STREET KING, NORTH CAROLINA	FIGURE **1**

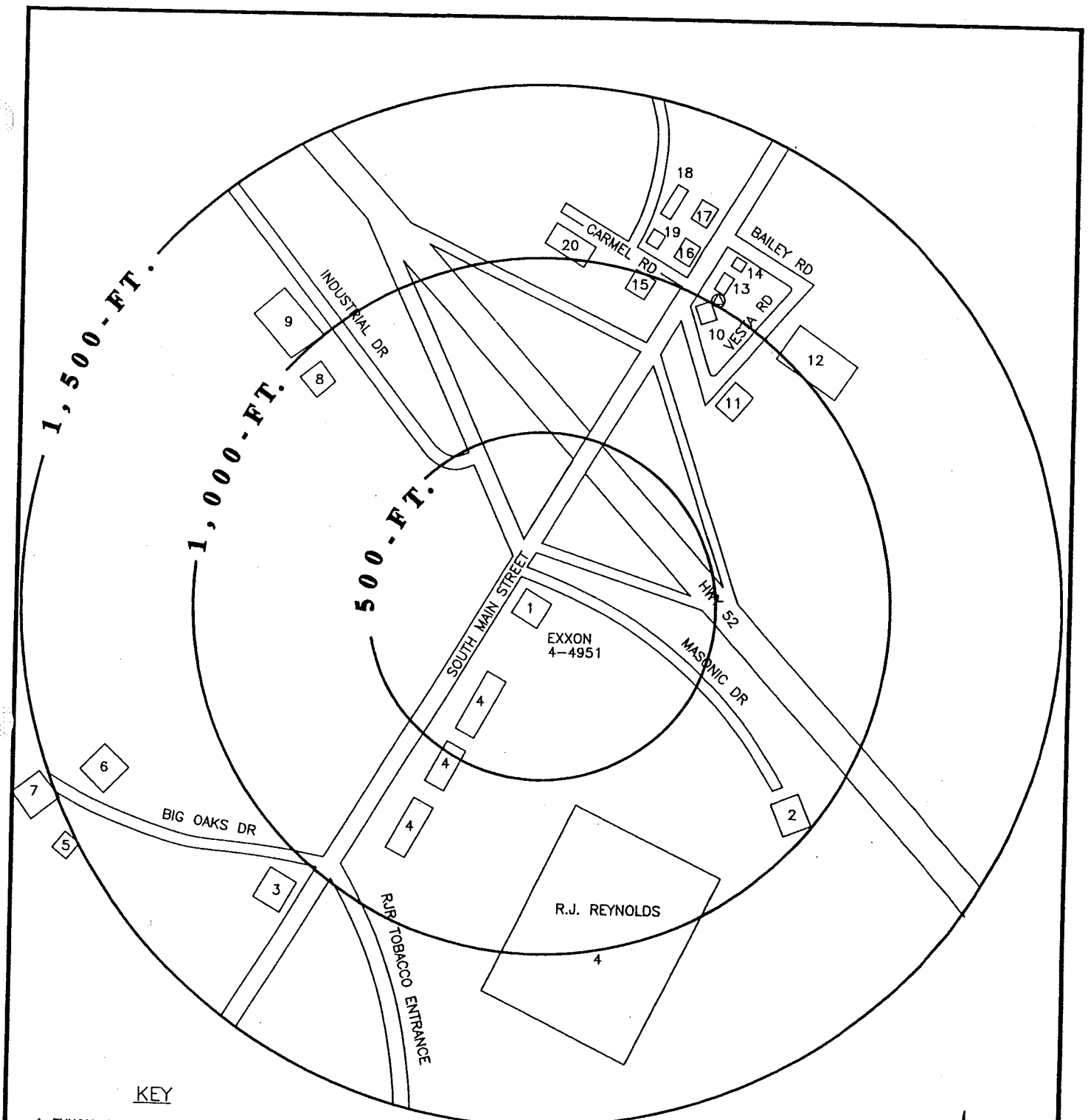
9483SI. .G 8/31/99 1=40 CUH/JP



Environmental Resources Management
ERM

SITE PLAN
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE
2



KEY

1 EXXON 4-4951
2 MASONIC TEMPLE
3 KCI CABLE
4 R.J. REYNOLDS
5 MILPAK
6 TRIM USA
7 CRES TOBACCO
8 S&C POOLS
9 PARKER CHEVROLET
10 FORMER SHELL STATION
11 PIZZA HUT
12 ECONO LODGE
13 KING AUTO PARTS
14 KING PHOTO CENTER
15 MC DONALDS
16 CHEVRON
17 WAFFLE HOUSE
18 CAR WASH
19 KING EXPRESS LUBE
20 WESTERN SIZZLER
⊘ WATER SUPPLY WELL

N

SCALE IN FEET
0 200 400

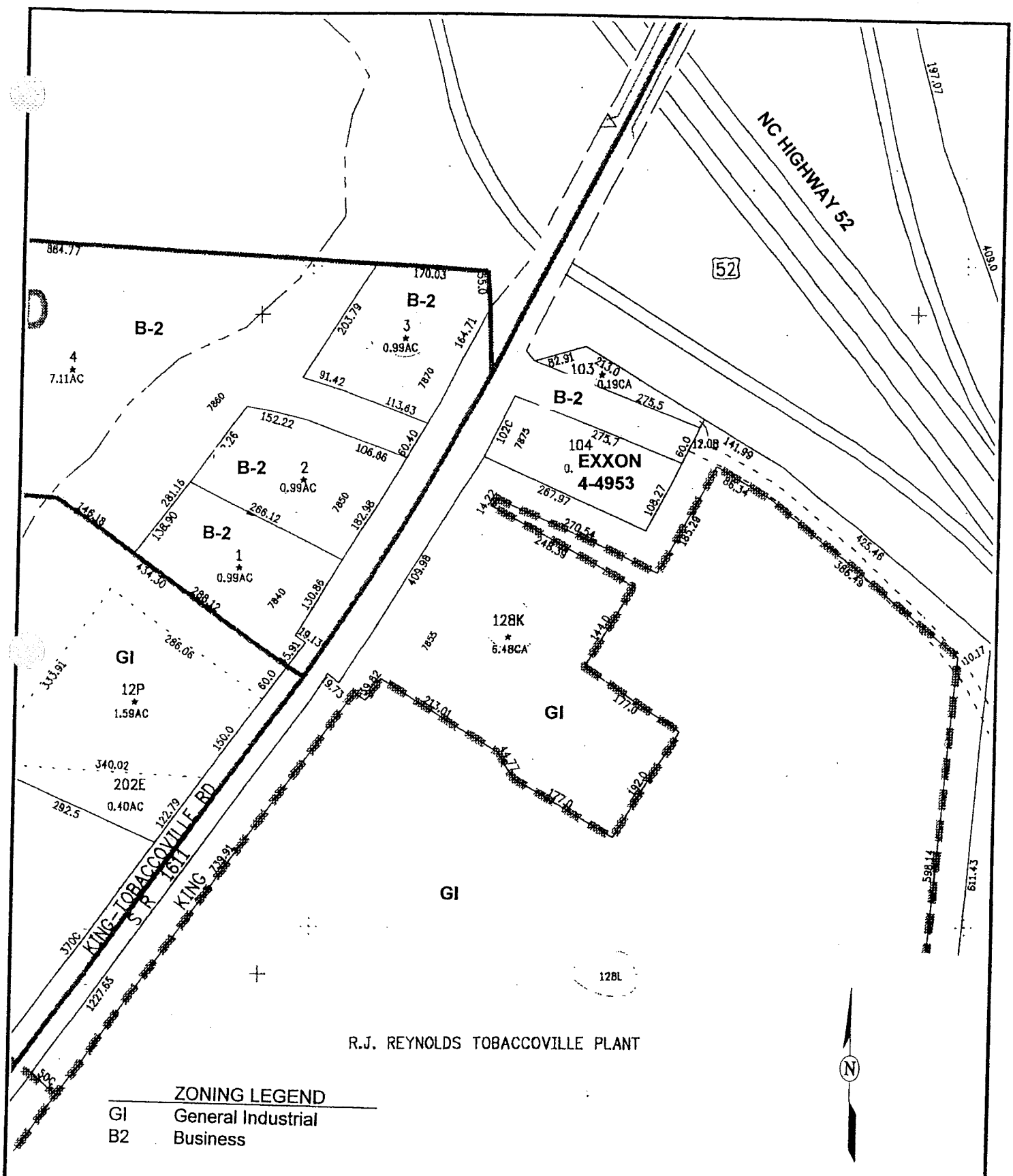
MAP SOURCE: CITY OF KING PLANNING DEPARTMENT, 3/17/99

ERM Environmental Resources Management

SITE VICINITY AND SENSITIVE RECEPTOR MAP
EXXON RETAIL LACATION 4-4951
801 SOUTH MAIN ST
KING, NORTH CAROLINA

FIGURE 3

9056SR.DWG 1=400 CUH/JP 20/99



ZONING LEGEND

GI	General Industrial
B2	Business

MAP SOURCE: FORSYTH COUNTY TAX RECORDS (8/99).

Scale: 1 inch = 200 feet

ERM Environmental Resources Management

ADJACENT PROPERY INFORMATION

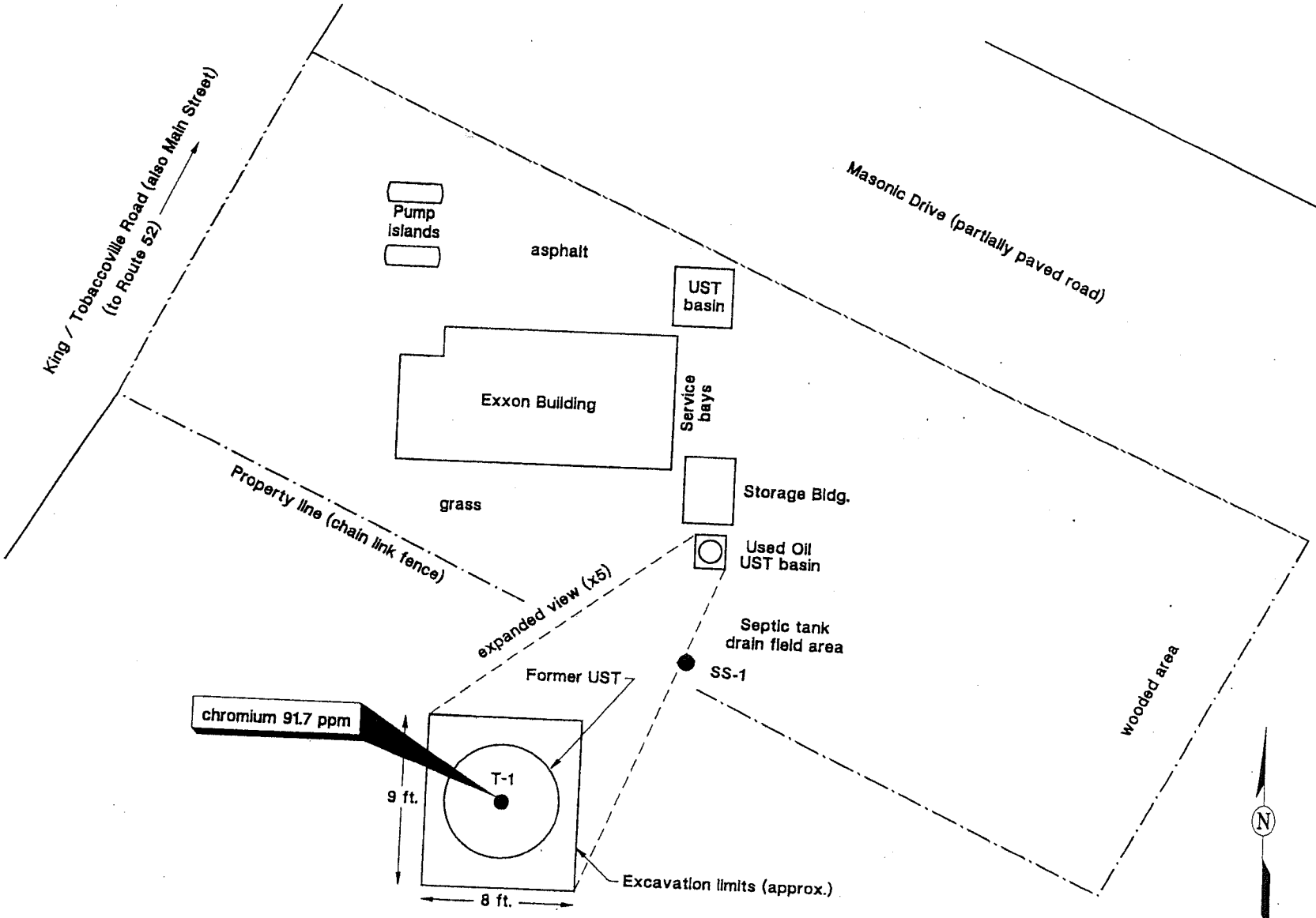
EXXON 4-4951

801 SOUTH MAIN STREET

KING, NORTH CAROLINA

FIGURE

4



Source: UST Closure Report, 1/99, Nightingale Geologic Consultants

Approx. Scale: 1 inch = 40 feet

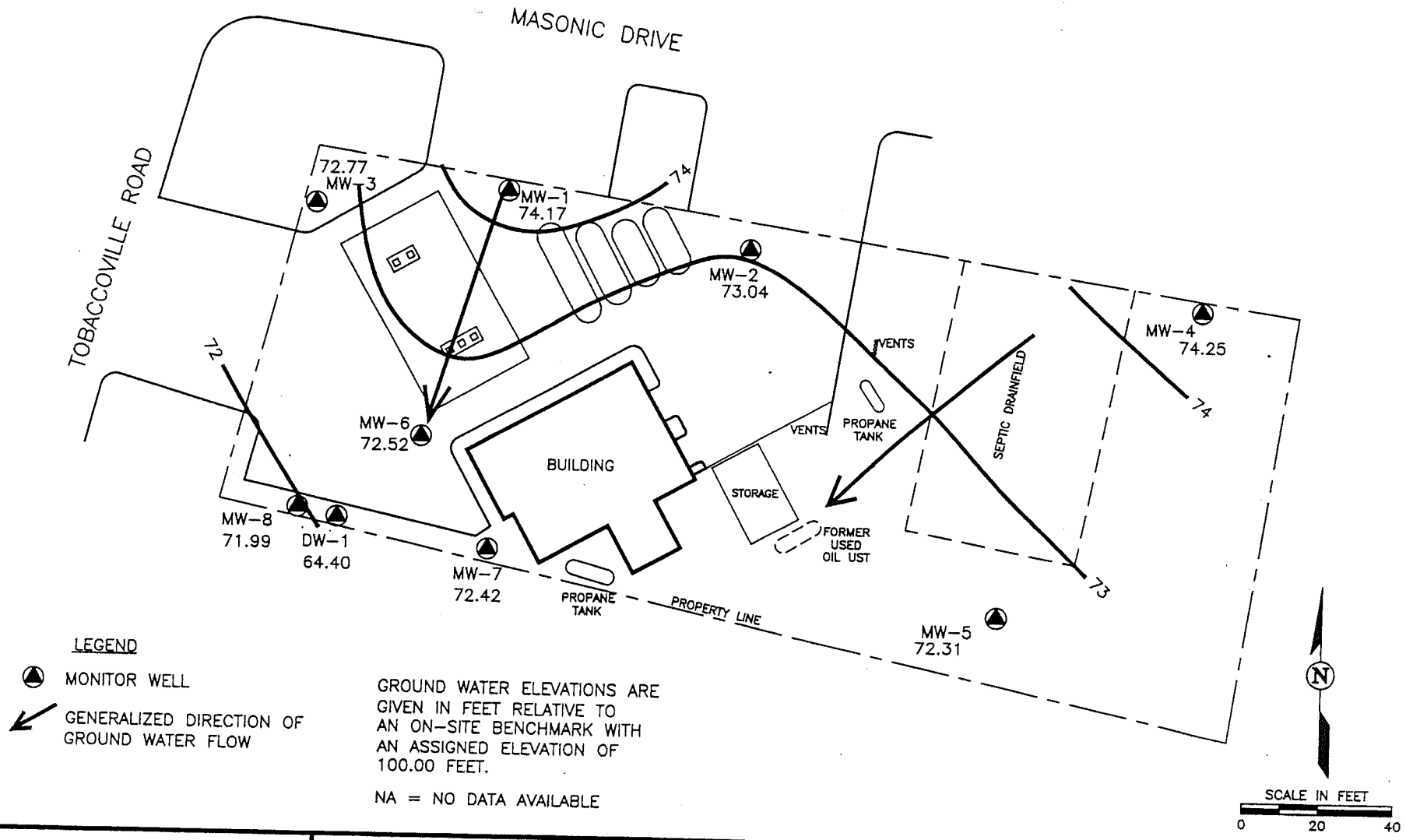
ERM Environmental Resources Management

USED OIL UST CLOSURE SOIL SAMPLE LOCATION MAP

EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE 5

9483GWE 8/31/99 1=40 CUH/JP



LEGEND

MONITOR WELL

GENERALIZED DIRECTION OF GROUND WATER FLOW

GROUND WATER ELEVATIONS ARE GIVEN IN FEET RELATIVE TO AN ON-SITE BENCHMARK WITH AN ASSIGNED ELEVATION OF 100.00 FEET.

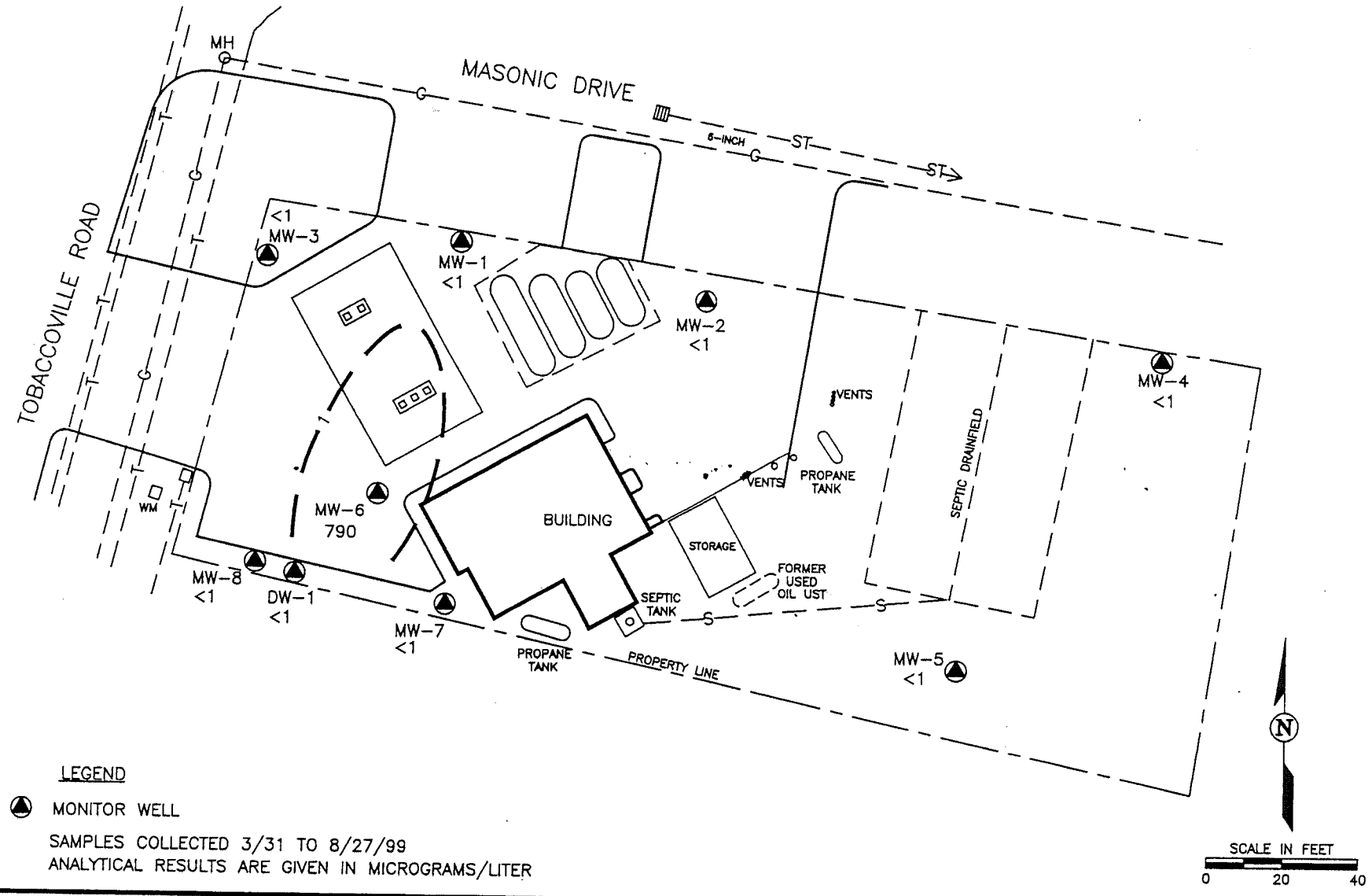
NA = NO DATA AVAILABLE

ERM Environmental Resources Management

GROUND WATER ELEVATION CONTOUR MAP-8/25/99

EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE 6



LEGEND

MONITOR WELL

SAMPLES COLLECTED 3/31 TO 8/27/99
ANALYTICAL RESULTS ARE GIVEN IN MICROGRAMS/LITER

ERM Environmental Resources Management

BENZENE ISOCONCENTRATION CONTOUR MAP
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE
7

TABLE 1
ADJACENT PROPERTY OWNERS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

Zoning	Tax Map ID	Property Owner		Property Occupant
B-2 Business	4727-103 4727-104	Williams A T Oil Company, Inc. P O Box 7287 Winston-Salem, NC 27109		King Exxon c/o Mr. Dennis G. Hartgrove 801 South Main Street King, NC 27021
General Industry	4727-128K 4727-128L	R J Reynolds Tobacco Co. 401 N. Main Street Winston-Salem, NC 27101-3818		Same as owner
B-2 Business	4728D-001 4728D-002 4728D-003 4728D-004	Fred L. and Kathleen B. Merritt P O Box 26 Carolina Beach, NC 28428-0026		Undeveloped
	NC DOT Right-of-way	NC Dept. of Transportation c/o Mr. Gregory A. Smith P.O. Box 25201 Raleigh, NC 27611		

SOURCE: Forsyth County tax records (8/99)

TABLE 2
WELL CONSTRUCTION AND GROUND WATER ELEVATION DATA
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

MONITOR WELL I.D.	DATE INSTALLED	SCREENED INTERVAL (feet BGL)	SANDPACK INTERVAL (feet BGL)	BENTONITE GROUT INTERVAL (feet BGL)	TOP OF CASING ELEVATION (feet*)	GAUGING DATE	DEPTH TO WATER (feet BTOC)	GROUND WATER ELEVATION (feet*)
MW-1	03/30/1999	21-36 1-inch Diam.	18-36	14-18	99.55	04/06/1999	25.09	74.46
						05/10/1999	24.91	74.64
					99.64	08/27/1999	25.47	74.17
MW-2	03/30/1999	21-36 1-inch Diam.	18-36	14-18	98.89	04/06/1999	24.53	74.36
						05/10/1999	24.32	74.57
					99.01	08/27/1999	25.97	73.04
MW-3	03/30/1999	23-38 1-inch Diam.	20-38	16-20	101.33	04/06/1999	28.20	73.13
						05/10/1999	27.99	73.34
					101.16	08/27/1999	28.39	72.77
MW-4	03/30/1999	19-34 1-inch Diam.	17-34	13-17	96.46	04/06/1999	21.39	75.07
						05/10/1999	21.22	75.24
					96.30	08/27/1999	22.05	74.25
MW-5	03/30/1999	21-36 1-inch Diam.	18-36	14-18	97.30	04/06/1999	24.59	72.71
						05/10/1999	24.26	73.04
					97.24	08/27/1999	24.93	72.31
MW-6	05/04/1999	19-34 1-inch Diam.	10-34	8-10	100.43	05/10/1999	28.56	71.87
					100.28	08/27/1999	27.76	72.52
MW-7	08/11/1999	20.5-35.5 1-inch Diam.	19-35.5	15-19	100.42	08/27/1999	28.00	72.42
MW-8	08/11/1999	20.5-35.5 1-inch Diam.	18-35.5	12-18	99.82	08/27/1999	27.83	71.99
DW-1	08/25/1999	52-62 6-inch steel casing to 48 feet 2-inch diam. screen	50-62	46-50	100.08	08/27/1999	35.68	64.40

* - Top of casing elevation is given in feet relative to an on-site benchmark with an assigned elevation of 100.00 feet

All wells were constructed of 1-inch PVC and 0.010-inch slot screen

BTOC = Below top of well casing

BGL = Below ground level

TABLE 3
SOIL SAMPLE FIELD SCREENING AND ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

Soil Boring I.D.	Date	Depth (feet BGL)	PID Field Screen-VOCs (ppm)	Mod. 8015 5030/3550		EPA 3051	
				Gasoline Range TPH (mg/kg)	Diesel Range TPH (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
MW-1	03/30/1999	5	<1	<5	<10	--	--
		10	<1				
		15	<1				
		20	<1				
		25	<1				
		30	<1				
MW-2	03/30/1999	5	<1	<5	<10	--	--
		10	<1				
		15	<1				
		20	1				
		25	1				
MW-3	03/30/1999	5	<1	<5	<10	--	--
		10	<1				
		15	<1				
		20	<1				
		25	<1				
		30	<1				
MW-4	03/30/1999	5	<1	<5	<10	--	--
		10	<1				
		15	<1				
		20	<1				
		25	<1				
		30	<1				
MW-5	03/30/1999	5	<1	<5	<10	--	--
		10	<1				
		15	<1				
		20	<1				
		25	<1				
		30	<1				
MW-6	05/04/1999	5	0.5	<5	<10	--	--
		10	0.4				
		15	0.8				
		20	0.5				
		25	3.5				
		30	33.5				
		35	20.5				
North Carolina General Action level				10	10		
Soil-to-Ground Water MSCC							
Residential MSCC						27	270
Industrial/Commercial MSCC						78	400
						2000	400

VOCs = Volatile organic compounds
PID = Photo-ionization detector
TPH = Total petroleum hydrocarbons
Analytical results shown in bold exceed applicable soil MSCCs
MSCC = Maximum soil contaminant concentration
All soil borings were advanced and sampled using Geoprobe equipment

ppm = Parts per million
mg/kg = Milligrams/kilogram
-- = Not analyzed
NA = Not available
GP = Geoprobe
BGL = Below ground level

TABLE 3 (continued)
USED OIL UST CLOSURE SOIL SAMPLE FIELD SCREENING AND ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

SAMPLE IDEN.	SAMPLING DEPTH (ft.)	SAMPLE LOCATION	SAMPLE ANALYSIS							
			EPA 8260	EPA 8270	EPA 3050 Pb, Cr	MADEP EPH	MADEP VPH	EPA 9071	TCLP-8	EPA 8080
T-1	9 to 10	UST Basin	x	x	x	x	x			x
Stockpile	NA	stockpile						x	x	

FIELD SCREENING RESULTS

SAMPLE IDENTIFICATION	SAMPLING DEPTH (ft.)	SAMPLE LOCATION	SOIL SCREENING W/PID (ppm)
T-1	9 to 10	Used Oil Basin	ND
Stockpile	Composite	Stockpile	ND

SAMPLE IDENTIFICATIONS WITH RESULTS AND DATES THAT SAMPLES WERE TAKEN

SAMPLE IDENTIFICATION	SAMPLING DATE	DETECTED CONSTITUIENT	CONCENTRATION IN PPM (mg/kg)			
			LABORATORY RESULT	RESIDENTIAL STANDARD	COMMERCIAL STANDARD	SOIL TO GW STD.
T-1	11/16/98	chromium	91.7	78	2000	27
		percent dry weight	72	--	--	--
Stockpile	11/16/98	none detected	--	--	--	--

Sample I.D	Date	Depth	Compound	Result (mg/kg)	MSCC (mg/kg)		
					Residential	Industrial	Soil-GW
SS-1	01/28/1999	8 ft.	Chromium	27.6	78	2000	27

Source: UST Closure Report, 1/99, Nightingale Geologic Consultants

TABLE 4
GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

Well	Date	MADEP VPH/EPH (ug/l)						BTEX+MTBE+IPE by EPA 602 (ug/l)							504.1	3030C
		C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C10 Aromatics	C11-C22 Aromatics	Total BTEX	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	IPE	EDB (ug/l)	Lead (ug/l)
MW-1	03/31/1999	<100	<100	<115	<115	<100	<287	ND	<1	<1	<1	<1	<1	<10	<0.02	11
MW-2	03/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02	9
MW-3	03/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02	11
MW-4	03/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02	11
MW-5	03/31/1999	<100	<100	<110	<110	<100	<275	2.2	<1	<1	<1	2.2	8.6	<10	<0.02	7
MW-6	05/10/1999	**16,300**	**7,990**	--	--	**8,860**	--	18,660	**970**	**6,500**	**1,240**	**9,950**	**285**	<500	**78.6**	**206**
	05/19/1999	--	--	<112	<112	--	<281	--	--	--	--	--	--	--	--	--
	08/27/1999	**15,100**	**7,600**	<105	216	**13,300**	**925**	21,160	**790**	**7,100**	**1,440**	**11,830**	**255**	<250	**88.2**	**227**
MW-7	08/27/1999	230	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	19.5	**163**	**0.74**	9
MW-8	08/27/1999	120	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	3.8	**96.0**	**0.11**	10
DW-1	08/27/1999	<100	<100	<101	<101	<100	<253	ND	<1	<1	<1	<1	<1	<5	<0.02	<3
NC 2L Standard		420	4,200		42,000	210			1	1,000	29	530	200	70	0.0004	15
GCL		NE	NE		NE	NE			5,000	257,500	29,000	87,500	200,000	70,000	50	15,000
10x Surface Water Std		NE	NE		NE	NE			714	110	NE	NE	NE	NE	NE	250

Well	Date	EPA 601 (ug/l)		EPA 625 (ug/l)
		Ethylene Dibromide	1,2-Di-chloroethane	Naphtha-lene
MW-1	03/31/1999	<1	<1	<11.6
MW-2	03/31/1999	<1	<1	<11.2
MW-3	03/31/1999	<1	<1	<11.2
MW-4	03/31/1999	<1	<1	<11.9
MW-5	03/31/1999	<1	<1	<11.1
MW-6	05/10/1999	**70.0**	<1	--
	05/19/1999	--	--	**410**
	08/27/1999	**180**	<50	**700**
MW-7	08/27/1999	**3.0**	**1.8**	<11.1
MW-8	08/27/1999	<1	**1.3**	<10
DW-1	08/27/1999	<1	<1	<10
NC 2L Standard		0.0004	0.38	21
GCL		50	380	15,500

Only those compounds detected are shown in tables

ND = No compounds detected

NE = No standard established

ug/l = micrograms per liter

"--" = Not analyzed

Results shown in bold exceed NC 2L standard

g:\jerry\exxon\4-4951\divestment\tables.xls

Environmental
Resources
Management

7300 Carmel Executive
Park, Suite 200
Charlotte, NC 28226
(704) 541-8345
(704) 541-8416 (fax)

Certified Mail #: 7099 3400 5951 4494
Return Receipt Requested

September 12, 2000

Ms. Linda Estkowski
NCDENR Division of Waste Management
UST Section
585 Waughtown Street
Winston-Salem, NC 27107

Reference: LSA Addendum
Exxon Retail Location 4-4951
801 S. Main Street
King, Stokes County
Incident #: 20919
Risk Classification: Intermediate

Dear Ms. Estkowski:

In accordance with your request, and on behalf of Exxon Mobil Corporation, ERM is re-submitting the attached Limited Site Assessment Addendum. As we discussed in our meeting on September 7, NCDENR has agreed to separate the used oil UST soil chromium incident from the gasoline UST incident. In addition, NCDENR agreed to review all of the available used oil UST soil chromium data and issue a Notice of No further Action for the chromium incident, if warranted.

Please contact Mr. James F. Medlin of ExxonMobil (704-529-4263) if you have any questions.

Sincerely,

Jerry Prosser

Jerry Prosser, P.G.
Project Manager

JP
Enclosure: LSA addendum
cc: J.F. Medlin - ExxonMobil

Environmental
Resources
Management

7300 Carmel Executive
Park, Suite 200
Charlotte, NC 28226
(704) 541-8345
(704) 541-8416 (fax)

Certified Mail #: Z 340 143 660
Return Receipt Requested

April 24, 2000

Ms. Linda Estkowski
NCDENR Division of Waste Management
UST Section
585 Waughtown Street
Winston-Salem, NC 27107

Reference: Exxon Retail Location 4-4951
801 S. Main Street
King, Stokes County
Incident #: Pending
Risk Classification: Pending

Dear Ms. Estkowski:

In response to your request for additional soil and ground water data, and on behalf of Exxon Mobil Corporation, ERM is submitting the enclosed data as an addendum to the Phase II Limited Site Assessment (LSA) report was submitted for Exxon 4-4951 on September 28, 1999. Updated Figures 2 and 6, and Tables 3 and 4, summarize the additional data collected from the site. Soil and ground water laboratory data sheets for samples collected from the site in March 2000 can be referenced in Attachments A and B respectively.

The additional data address the following concerns that you expressed in your previous correspondences to ExxonMobil:

1. **Former Used Oil UST**: *Soil samples and a ground water sample must be collected from the former used oil UST location as a result of the chromium concentration in the UST closure soil sample (Sample T-1: 91.7 mg/kg).*

   The requested data were obtained from soil boring and monitor well MW-10. The soil sample was collected from 12 to 16 feet below the ground surface. The depth to ground water is approximately 25 feet below the ground surface. The water sample obtained was not analyzed for semi-volatile organic compounds due to insufficient sample volume from the 1-inch diameter well. The concentration of chromium in the ground water sample was below the laboratory detection limit.

2. **Additional Assessment**: *The source of the gasoline/diesel UST system release requires additional assessment.*

   The pump islands were evaluated as potential sources by collecting soil soil samples at 10-foot intervals from two Geoprobe borings, PI-1 and PI-2, located adjacent to each pump island. All analytical results for these samples were below detection.

   The UST field was evaluated as a potential source of the release by collecting soil and ground water samples from soil boring and monitor well MW-9. The soil analytical results were below detection and only trace concentrations of petroleum hydrocarbons were detected in the ground water sample.

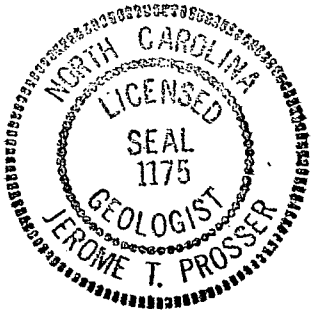
   The UST system soil and ground water data did not result in identification of a potential source of the UST system release.

Please contact Mr. James F. Medlin of ExxonMobil (704-529-4263) if you have any questions regarding the data presented in this report.

Sincerely,

Jerry Prosser

Jerry Prosser, P.G.
Project Manager



JP
enclosures
cc: J.F. Medlin - ExxonMobil

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Linda Estkowski
NCDENR Div. of Waste Management
UST Section
585 Waughtown Street
Winston-Salem, NC 27107

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Maggie Wagner
B. Date of Delivery: 4-25-00

C. Signature
X Maggie Wagner ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

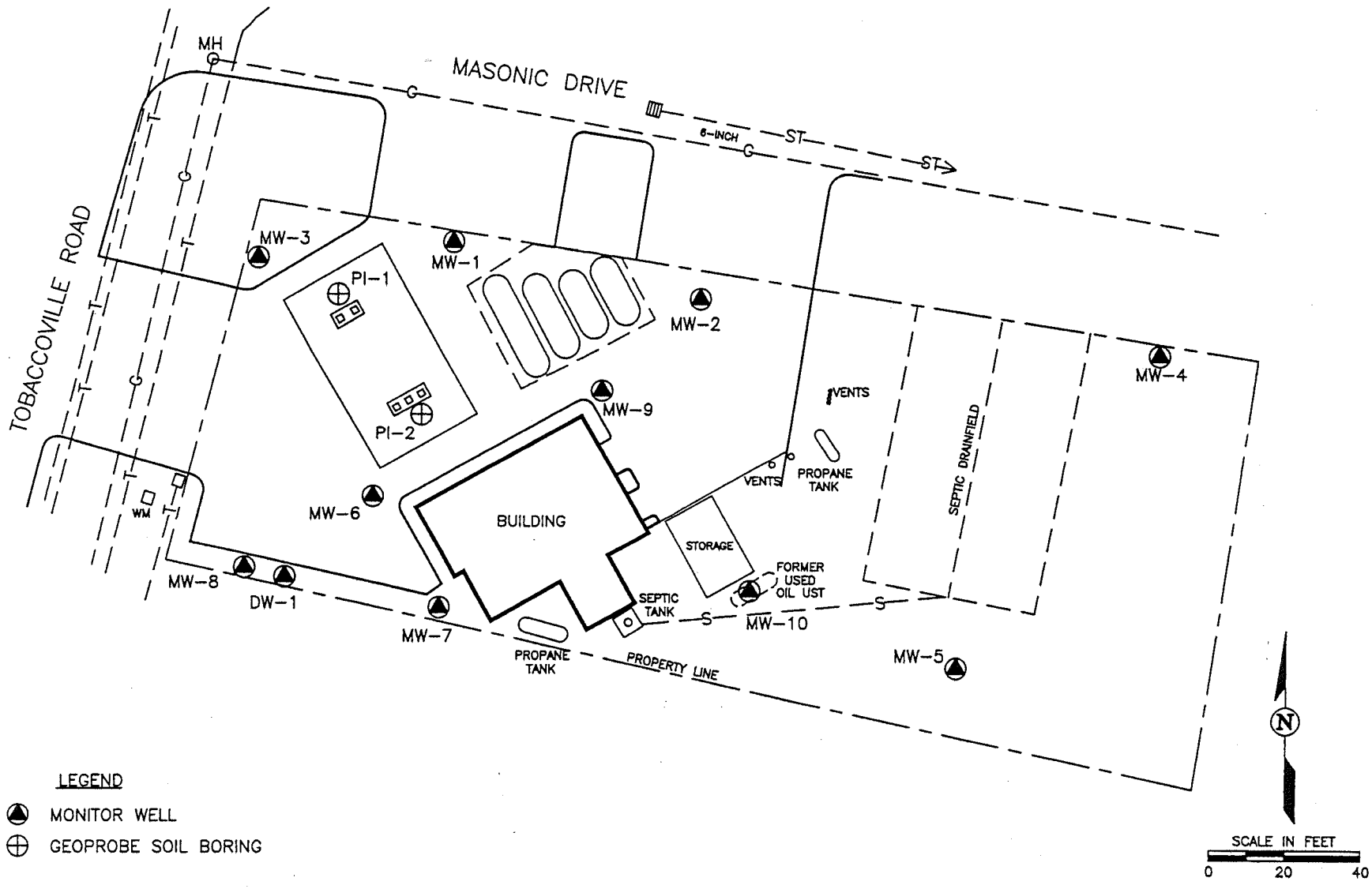
3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
Z 340 143 660

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

9483SITE1.D... 3/7/00 1=40 CUH/JP



Environmental Resources Management
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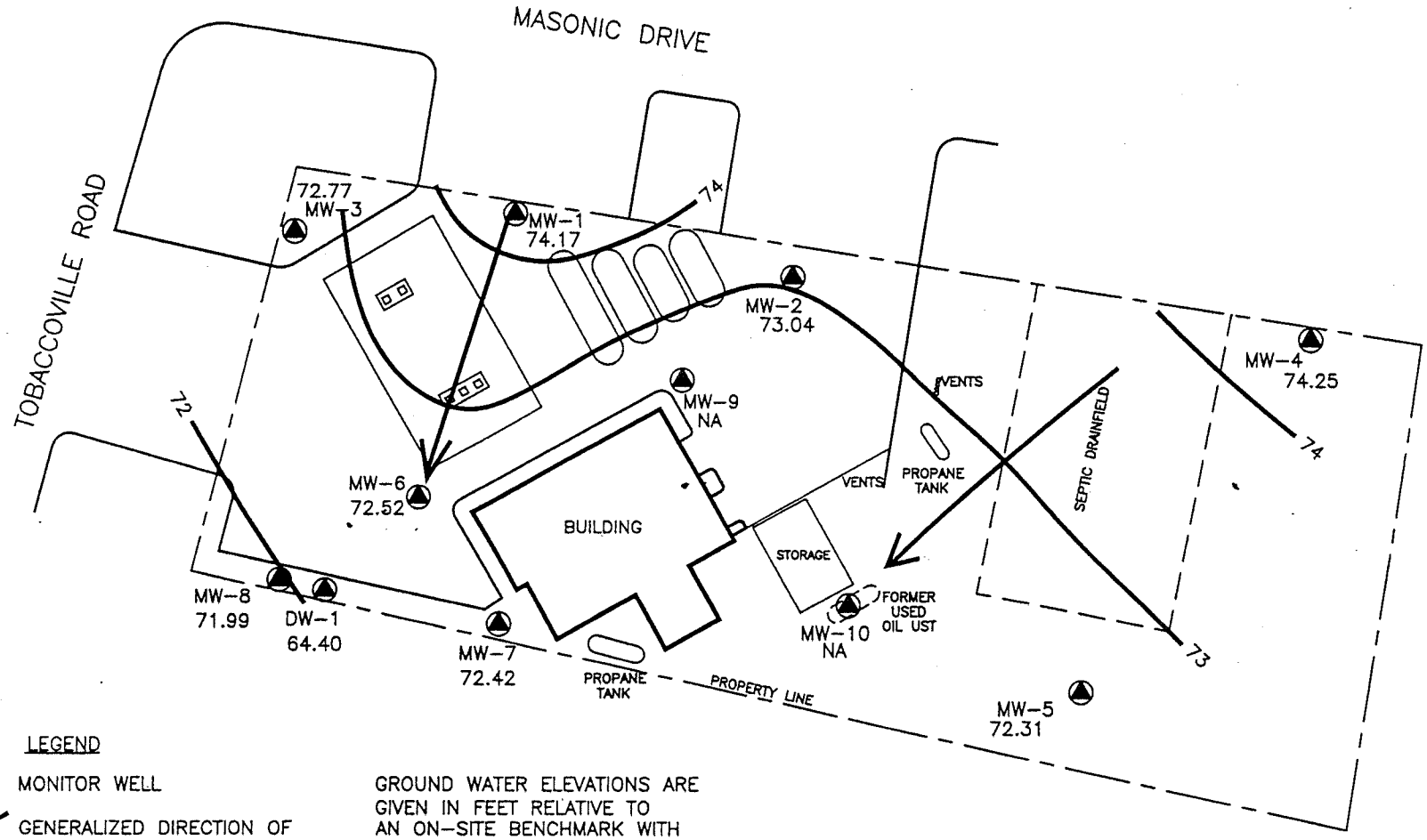
SITE PLAN
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE
2

9483GWEL1.DWG 3/7/00 1=40 CUH/JP



LEGEND

MONITOR WELL

GENERALIZED DIRECTION OF GROUND WATER FLOW

GROUND WATER ELEVATIONS ARE GIVEN IN FEET RELATIVE TO AN ON-SITE BENCHMARK WITH AN ASSIGNED ELEVATION OF 100.00 FEET.

NA = NO DATA AVAILABLE

ERM Environmental Resources Management

GROUND WATER ELEVATION CONTOUR MAP-8/25/99

EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE 6

TABLE 3A
LIMITED SITE ASSESSMENT ADDENDUM SOIL ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-6767
GREENSBORO, NORTH CAROLINA

Sample Number	Date	Depth (feet)	PID Field Screen	MADEP VPH/EPH (mg/kg)						EPA 8015 (mg/kg)		EPA 8270	EPA 6010 (mg/kg)	
				C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C10 Aromatics	C11-C22 Aromatics	TPH - 5030	TPH - 3550	All Compounds	Chromium	Lead
PI-1	3/3/2000	5-6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--
		16-20	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--
PI-2	3/3/2000	5-6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--
		16-20	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--
MW-9	3/3/2000	16-20	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--
MW-10	3/3/2000	12-16	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	224.224	ND
Soil-to-ground water MSCC				72	3,255		Immobile	34		10	10			
Residential MSCC				939	9,386		93,660	469						
Industrial/commercial MSCC				24,528	245,280		>100%	12,264						

Sample Number	Date	Depth (feet)	EPA METHOD 8260 - Volatile Organic Compounds (mg/kg)							
			Carbon disulfide	Ethylbenzene	Naphthalene	n-Propyl-benzene	Toluene	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Xylenes
PI-1	3/3/2000	5-6	ND	ND	ND	ND	ND	ND	ND	ND
	3/3/2000	16-20	0.0031	ND	0.0328	0.0024	ND	0.0441	0.0097	0.0100
PI-2	3/3/2000	5-6	0.0184	ND	ND	ND	ND	ND	ND	ND
		16-20	ND	0.0045	0.0231	ND	0.0187	0.0197	0.0037	0.0431
MW-9	3/3/2000	16-20	ND	ND	ND	ND	ND	ND	ND	ND
MW-10	3/3/2000	12-16	0.0026	ND	ND	ND	ND	ND	ND	ND
Soil-to-ground water MSCC			NE	0.24	0.58	2	7	8	7	5
Residential MSCC			NE	1,560	63	156	3,200	782	782	32,000
Industrial/commercial MSCC			NE	40,000	1,635	4,088	82,000	20,440	20,440	200,000

-- = Not analyzed

Only detected compounds are shown in table

NE = No MSCC established

MSCC = Maximum soil contaminant concentration

Results shown in bold exceed soil-to-ground water MSCCs

ND = Not detected

TABLE 4
GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

Well	Date	MADEP VPH/EPH (ug/l)						BTEX+MTBE+IPE by EPA 602/6210D (ug/l)							EPA 504.1
		C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C10 Aromatics	C11-C22 Aromatics	Total BTEX	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	IPE	EDB (ug/l)
MW-1	3/31/1999	<100	<100	<115	<115	<100	<287	ND	<1	<1	<1	<1	<1	<10	<0.02
MW-2	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
MW-3	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
MW-4	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
MW-5	3/31/1999	<100	<100	<110	<110	<100	<275	2.2	<1	<1	<1	2.2	8.6	<10	<0.02
MW-6	5/10/1999	**16,300**	**7,990**	--	--	**8,860**	--	18,660	**970**	**6,500**	**1,240**	**9,950**	**285**	<500	**78.6**
	5/19/1999	--	--	<112	<112	--	<281	--	--	--	--	--	--	--	--
	8/27/1999	**15,100**	**7,600**	<105	216	**13,300**	**925**	21,160	**790**	**7,100**	**1,440**	**11,830**	**255**	<250	**88.2**
MW-7	8/27/1999	230	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	19.5	**163**	**0.74**
MW-8	8/27/1999	120	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	3.8	**96.0**	**0.11**
MW-9	3/7/2000	<100	<100	<100	<100	<100	<250	1.4	<1	<1	<1	1.4	15.4	<10	<0.02
MW-10	3/7/2000	<100	<100	<101	<101	<100	<253	ND	<0.5	<0.5	<0.5	<0.5	--	--	--
DW-1	8/27/1999	<100	<100	<101	<101	<100	<253	ND	<1	<1	<1	<1	<1	<5	<0.02
NC 2L Standard		420	4,200		42,000	210			1	1,000	29	530	200	70	0.0004
GCL		NE	NE		NE	NE			5,000	257,500	29,000	87,500	200,000	70,000	50
10x Surface Water Std		NE	NE		NE	NE			714	110	NE	NE	NE	NE	NE

TABLE 4
GROUND WATER ANALYTICAL RESULTS
EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

Well	Date	EPA 601/6210D (ug/l)		EPA 625 (ug/l)	3030C (ug/l)	
		Ethylene Dibromide	1,2-Di-chloroethane	Naphtha-lene	Lead	Chromium
MW-1	3/31/1999	<1	<1	<11.6	11	--
MW-2	3/31/1999	<1	<1	<11.2	9	--
MW-3	3/31/1999	<1	<1	<11.2	11	--
MW-4	3/31/1999	<1	<1	<11.9	11	--
MW-5	3/31/1999	<1	<1	<11.1	7	--
MW-6	5/10/1999	**70.0**	<1	--	**206**	--
	5/19/1999	--	--	**410**	--	--
	8/27/1999	**180**	<50	**700**	**227**	--
MW-7	8/27/1999	**3.0**	**1.8**	<11.1	9	--
MW-8	8/27/1999	<1	**1.3**	<10	10	--
MW-9	3/7/2000	<1	<1	--	<3	--
	3/16/2000	--	--	<10	--	--
MW-10	3/7/2000	--	<0.5	<0.5*	<3	<5
DW-1	8/27/1999	<1	<1	<10	<3	--
NC 2L Standard		0.0004	0.38	21	15	50
GCL		50	380	15,500	15,000	50,000

Only those compounds detected are shown in tables

ND = No compounds detected

NE = No standard established

ug/l = micrograms per liter

"--" = Not analyzed

Results shown in bold exceed NC 2L standard

* - Analysis by EPA Method 6210D, EPA 625 analysis is not available

Exxon Comp. USA #44951 SD/4

Environmental
Resources
Management

7300 Carmel Executive
Park, Suite 200
Charlotte, NC 28226
(704) 541-8345
(704) 541-8416 (fax)

Certified Mail #: 7001 0360 0000 9785 8130
Return Receipt Requested

February 9, 2004

Ms. Cindy Rintoul
NCDENR Division of Waste Management
UST Section
585 Waughtown Street
Winston-Salem, NC 27107

ERM

Reference: Ground Water Monitoring Report
Exxon Retail Location 4-4951
801 S. Main Street
King, Stokes County
Incident #: 20919
Risk Classification: Intermediate

Dear Ms. Rintoul:

On behalf of Exxon Mobil Corporation, ERM is submitting a ground water monitoring report for the above referenced site. The previously submitted sensitive receptor information for the site, and the ground water quality data provided in the attached ground water monitoring report, support our request for the site to be re-classified to Low Risk. – stream nearby.

Please contact Mr. James F. Medlin of ExxonMobil (704-849-6889) if you have any questions or comments concerning the report.

Sincerely,

Jerry Prosser

Jerry Prosser, P.G.
Project Manager

Enclosure: Monitoring report
cc: J.F. Medlin – ExxonMobil
S. Williams – A.T. Williams

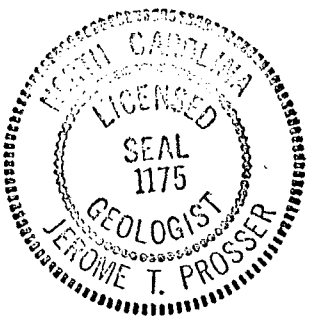
Ground Water Monitoring Report
Exxon Retail Location 4-4951
801 South Main Street
King, North Carolina

Facility I.D. #:	0-008044
Ground Water Incident #:	20919
RBCA Rank:	Intermediate
Land Use Category:	Residential
Suspected Source of Release:	Gasoline/Diesel UST system
Date of Release Discovery:	May 19, 1999
Estimated Quantity of Release:	Unknown
Cause of Release:	Unknown
Latitude of Release:	36° 15' 31"
Longitude of Release:	80° 21' 57"

Responsible Party:	Exxon Mobil Corporation 5601 77 Center Drive Charlotte, North Carolina 28217-0735 (704) 529-4263
Property Owner: (as of July 1999)	A.T. Williams Company P.O. Box 7287 Winston-Salem, NC 27109 (336) 767-6280

February 9, 2004

Jerry Prosser, P.G.
Project Manager



Environmental Resources Management.
7300 Carmel Executive Park
Suite 200
Charlotte, NC 28226

ERM

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 *INTRODUCTION*

Exxon Retail Location 4-4951, also known as King Exxon, is an active gasoline retail store and automotive service facility located at 801 South Main Street in King, North Carolina. The site facilities include one gasoline/diesel UST system. A site plan showing the facility layout is provided in Figure 1.

There have been no documented petroleum hydrocarbon releases at the site prior to May 1999. The former used oil UST was closed by removal on November 16, 1998. Laboratory analysis of the UST closure confirmation soil samples indicated concentrations of chromium above the soil-to-ground water maximum soil contaminant concentration (MSCC). A background soil sample was collected from the site in January 1999 and analyzed for chromium to establish whether chromium occurs naturally in the site soils. Chromium was detected in the background sample at a concentration above the chromium MSCC of 27 milligrams/kilogram.

ExxonMobil conducted a property transaction environmental site assessment of the property in April 1999. Laboratory analysis of ground water samples collected from the site indicated the presence of petroleum hydrocarbons and lead in ground water in concentrations that were above North Carolina ground water standards. The North Carolina Department of Environment and Natural Resources Division of Waste Management - UST Section (DWM) was notified of the release on May 19, 1999. A Phase II Limited Site Assessment (LSA) report was submitted to NCDENR in September 1999. Additional site check soil sampling was conducted in 2000 and submitted to NCDENR as addendums to the LSA report in March and September 2000.

The site is classified by NCDENR as Intermediate Risk due to the presence of two unnamed creeks within 500 feet of the petroleum release.

2.0 *DISCUSSION OF SAMPLING RESULTS*

Selected site monitor wells were sampled on December 3, 2003.

2.1 *SUMMARY OF ANALYTICAL RESULTS*

Ground water analytical and gauging results are summarized in Tables 1 and 2. The extent of petroleum-affected ground water is shown in Figures 1 and 2 respectively. Laboratory data sheets can be referenced in Appendix A.

2.2 *DESCRIPTION OF PLUME*

Maximum contaminant concentrations in ground water at the site, based on the December 3, 2003 sampling results are summarized below.

Compound	Maximum Concentration (ug/l)	T15A NCAC 2L Ground Water Standard (ug/l)	Gross Contamination Level (ug/l)	10X NC Surface Water Stds. (ug/l)
Benzene	**22.0**	1	5,000	714
Toluene	63.0	1,000	257,500	110
Ethylbenzene	**33.0**	29	29,000	10,900
Xylenes	**1,520**	530	87,500	885
MTBE	88.0	200	200,000	23,930
Isopropyl ether	**138**	70	70,000	190,000
C5-C8 Aliphatics	**561**	420	No GCL	20K
C9-C12 Aliphatics	3,030	4,200	No GCL	250K
C9-C10 Aromatics	**3,030**	210	No GCL	1,180
1,2-DCA	**<1**	0.38	380	99
EDB	**4.87**	0.0004	50	25,000
Carbon disulfide	--	700	700,000	67,500
Chloroform	**14.60**	0.19	No GCL	57
Lead	7.0	15	15,000	250

Results shown in bold exceed NC 2L stds. Shaded results exceed 10X NC surface water stds.

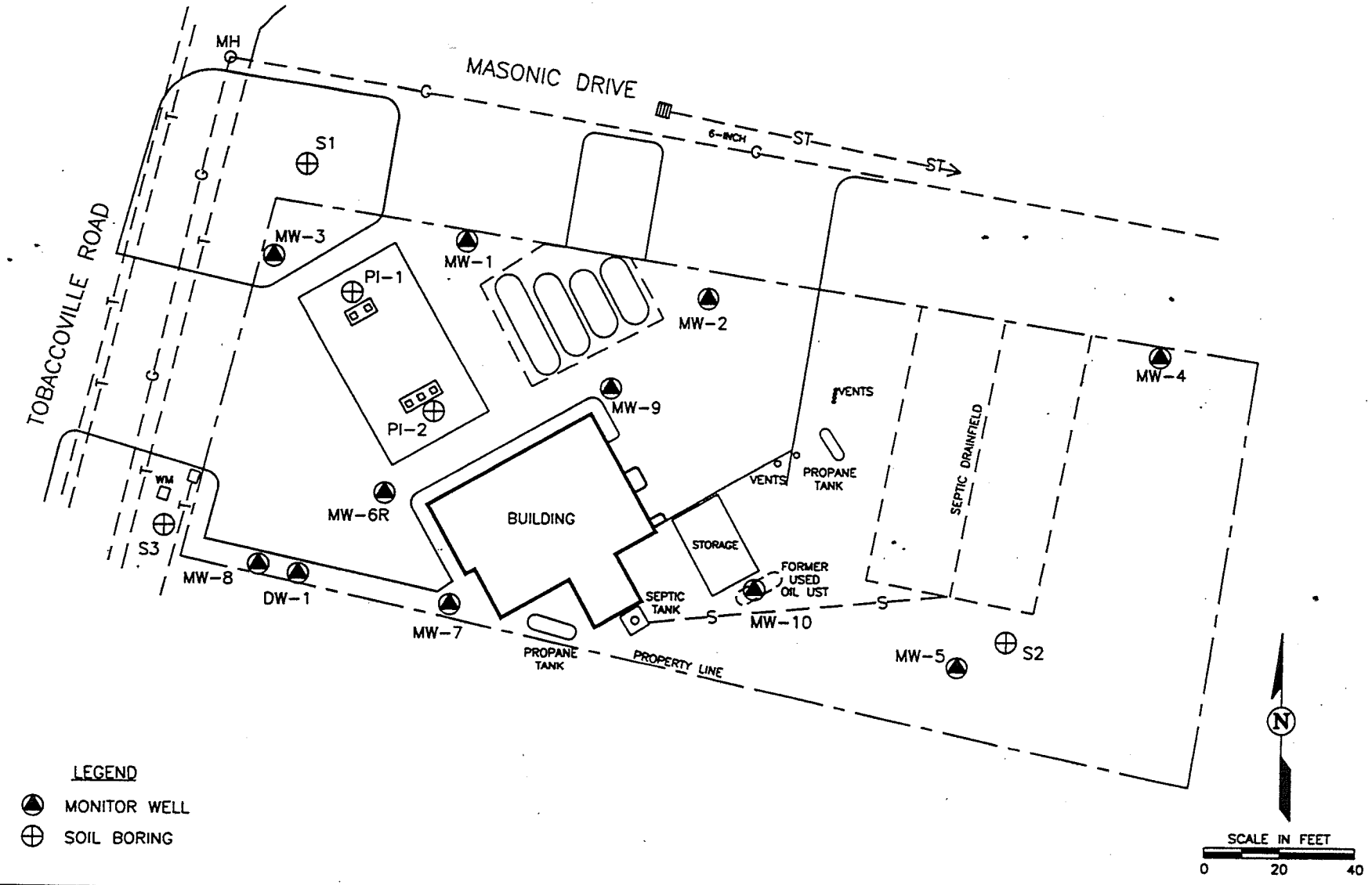
3.0 *CONCLUSIONS AND RECOMMENDATIONS*

Two areas of concern have been identified at the site. Elevated chromium levels in soil at the former used oil UST location, and gasoline range VOC affected ground water downgradient of the gasoline UST system.

Additional soil quality data collected from the site in June 2003 indicate that elevated chromium levels in soil collected beneath the former used oil UST basin are naturally occurring. These data were presented in the 2nd quarter 2003 ground water monitoring report. Regulatory closure of soil and ground water quality issues associated with the used oil UST was requested in the report on the basis of this information.

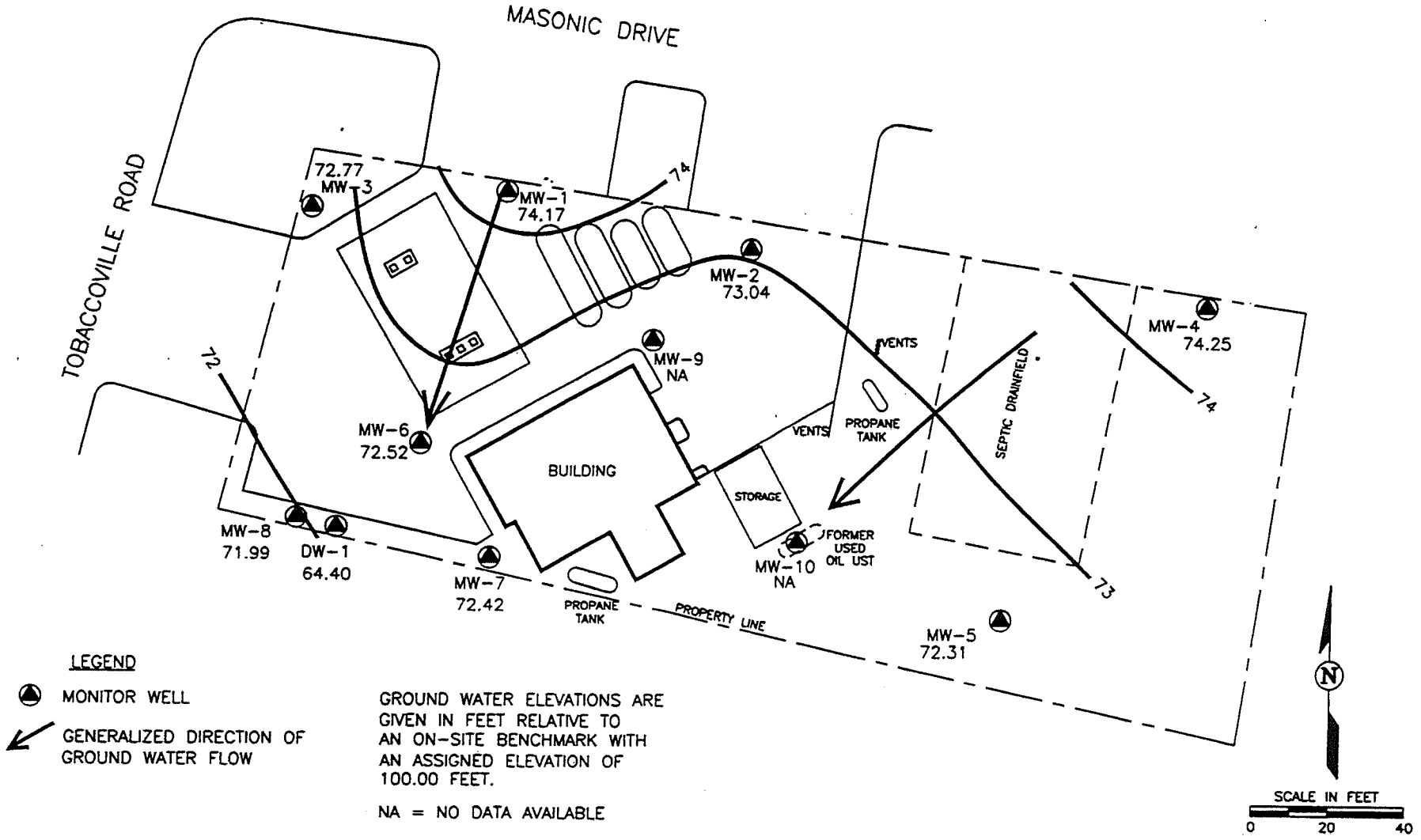
The site is currently classified by NCDENR as an Intermediate Risk site. Two creeks are located 400 feet northwest and 500 feet southwest of the site respectively. However, the downgradient extent of the ground water plume appears to be less than 100 feet and the plume does not appear to be expanding. The ground water quality and sensitive receptor data collected from the site in indicate that an appropriate risk classification for the site is Low Risk. Re-classification of the site to Low Risk is requested.

9598SITE.DWG 8/8/03 1=40 CUH/JP



ERM Environmental Resources Management	**SITE PLAN** EXXON RETAIL LOCATION 4-4951 801 SOUTH MAIN STREET KING, NORTH CAROLINA	FIGURE 1

9483GWEL1.DWG 3/7/00 1=40 CUH/JP



LEGEND

MONITOR WELL

GENERALIZED DIRECTION OF GROUND WATER FLOW

GROUND WATER ELEVATIONS ARE GIVEN IN FEET RELATIVE TO AN ON-SITE BENCHMARK WITH AN ASSIGNED ELEVATION OF 100.00 FEET.

NA = NO DATA AVAILABLE

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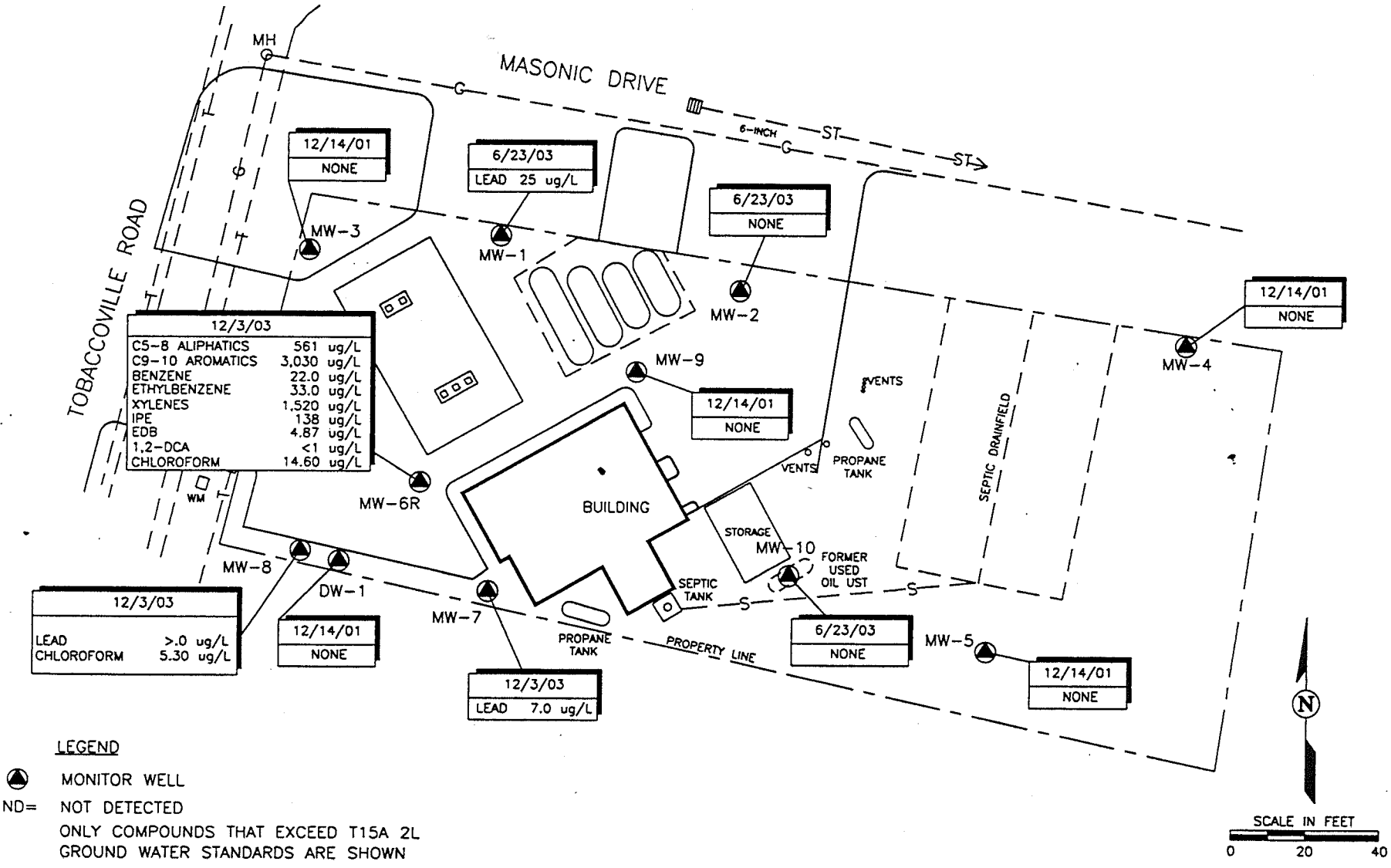
GROUND WATER ELEVATION CONTOUR MAP-8/25/99

EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE 2

13067GWAR.DWG 2/2/04 1=40 CUH/JP



LEGEND

MONITOR WELL

ND= NOT DETECTED

ONLY COMPOUNDS THAT EXCEED T15A 2L GROUND WATER STANDARDS ARE SHOWN

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GROUND WATER ANALYTICAL RESULTS EXCEEDING T15A 2L STANDARDS

EXXON RETAIL LOCATION 4-4951
801 SOUTH MAIN STREET
KING, NORTH CAROLINA

FIGURE 3

TABLE 1. GROUND WATER ANALYTICAL RESULTS -EXXON RETAIL LOCATION 4-4951

Well	Date	MADEP VPH/EPH (ug/l)						BTEX+MTBE+IPE by EPA 602/6210D (ug/l)							504.1
		C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C10 Aromatics	C11-C22 Aromatics	Total BTEX	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	IPE	EDB (ug/l)
MW-1	3/31/1999	<100	<100	<115	<115	<100	<287	ND	<1	<1	<1	<1	<1	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
	6/23/2003	<100	<100	--	--	<100	--	ND	<1	<1	<1	<1	9.9	<1	--
MW-2	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
	6/23/2003	<100	<100	--	--	<100	--	ND	<1	<1	<1	<1	<1	<1	--
MW-3	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
MW-4	3/31/1999	<100	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	<1	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
MW-5	3/31/1999	<100	<100	<110	<110	<100	<275	2.2	<1	<1	<1	2.2	8.6	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
MW-6	5/10/1999	**16,300**	**7,990**	--	--	**8,860**	--	18,660	**970**	**6,500**	**1,240**	**9,950**	**285**	<500	**78.6**
	5/19/1999	--	--	<112	<112	--	<281	--	--	--	--	--	--	--	--
	8/27/1999	**15,100**	**7,600**	<105	**216**	**13,300**	**925**	21,160	**790**	**7,100**	**1,440**	**11,830**	**255**	<250	**88.2**
	12/4/2000	--	--	--	--	--	--	17,438	**358**	**4,740**	**1,180**	**11,160**	**132**	**300**	**14.6**
	12/14/2001	--	--	--	--	--	--	14,345	**295**	**1,830**	**1,220**	**11,000**	--	--	--
MW-6R	8/22/2002	186	503	--	--	**514**	--	400	**10.1**	9.2	22.4	358	24.9	52.2	--
	12/11/2002	<100	<100	<100	<100	<100	<100	18	<1	<1	<1	18	<1	<1	--
	6/23/2003	**722**	3,900	--	--	**2,950**	--	2,441	**38.4**	81.2	**71.4**	**2,250**	81.8	**142**	**8.69**
	12/3/2003	**561**	3,030	548	ND	**3,030**	403	1,638	**22.0**	63.0	**33.0**	**1,520**	88.0	**138**	**4.87**
MW-7	8/27/1999	230	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	19.5	**163**	**0.74**
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
	6/23/2003	<100	<100	--	--	<100	--	ND	<1	<1	<1	<1	3.7	3.7	--
	12/3/2003	<100	<100	<100	<100	<100	<100	ND	<1	<1	<1	<1	2.2	4.7	<1
MW-8	8/27/1999	120	<100	<111	<111	<100	<278	ND	<1	<1	<1	<1	3.8	**96.0**	**0.11**
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
	6/23/2003	184	<100	--	--	<100	--	ND	<1	<1	<1	<1	10.7	**155**	--
	12/3/2003	<100	<100	<100	<100	<100	<100	ND	<1	<1	<1	<1	14.9	36	<1
MW-9	3/7/2000	<100	<100	<100	<100	<100	<250	1.4	<1	<1	<1	1.4	15.4	<10	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
MW-10	3/7/2000	<100	<100	<101	<101	<100	<253	ND	<0.5	<0.5	<0.5	<0.5	ND	ND	ND
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
	6/23/2003	<100	<100	<100	<100	<100	<100	ND	<1	<1	<1	<1	1.7	ND	--
	12/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-1	8/27/1999	<100	<100	<101	<101	<100	<253	ND	<1	<1	<1	<1	<1	<5	<0.02
	12/14/2001	--	--	--	--	--	--	ND	<0.4	<0.4	<0.4	<0.4	--	--	--
NC 2L Standard		420	4,200		42,000	210			1	1,000	29	530	200	70	0.0004
GCL		No GCL	No GCL		No GCL	No GCL			5,000	257,500	29,000	87,500	200,000	70,000	50
10x Surface Water Std.		20,000	Sheen	Sheen	Sheen	1,180	320		714	110	10,900	885	23,930	190,000	25,000

TABLE 1. GROUND WATER ANALYTICAL RESULTS -EXXON RETAIL LOCATION 4-4951

Well	Date	3030C (ug/l)		EPA 625	EPA 601/6210D (ug/l)									
		Lead	Chromium	Naphthalene (ug/l)	Ethylene Dibromide	1,2-Dichloroethane	Carbon Disulfide	Chloroform	Isopropylbenzene	Methylene chloride	Naphthalene	n-propylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
MW-1	3/31/1999	11	--	<11.6	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	**100**	--	--	--	<0.4	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	6/23/2003	**25.0**	--	--	<1	<1	--	<1	--	<5	--	--	--	--
MW-2	3/31/1999	9	--	<11.2	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	**16.0**	--	--	--	<0.4	0.9	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	6/23/2003	6.0	--	--	<1	<1	--	<1	--	<5	--	--	--	--
MW-3	3/31/1999	11	--	<11.2	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	4.0	--	--	--	<0.4	18.1	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
MW-4	3/31/1999	11	--	<11.9	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	<3	--	--	--	<0.4	22.6	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
MW-5	3/31/1999	7	--	<11.1	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	<3	--	--	--	<0.4	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
MW-6	5/10/1999	**206**	--	--	**70.0**	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	5/19/1999	--	--	**410**	--	--	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	8/27/1999	**227**	--	**700**	**180**	<50	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/4/2000	**226**	--	--	<20	<20	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	**146**	--	--	--	<0.4	<0.4	**50.0**	45.0	**200**	**1,100**	**160**	**2,970**	**770**
MW-6R	8/22/2002	<3	--	--	**1.50**	<1	--	**6.70**	--	<1	--	--	--	--
	12/11/2002	**30**	--	<10	<1	<1	--	<1	--	<5	<10*	--	--	--
	6/23/2003	<3	--	--	**4.70**	**1.7**	--	**10.90**	--	<5	--	--	--	--
	12/3/2003	<5	--	--	**5.60**	<1	--	**14.60**	--	<5	--	--	--	--
MW-7	8/27/1999	9	--	<11.1	**3.0**	**1.8**	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	14.0	--	--	--	**0.4**	0.9	**3.6**	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	6/23/2003	<3	--	--	<1	<1	--	<1	--	<5	--	--	--	--
	12/3/2003	7.0	--	--	<1	<1	--	<1	--	<5	--	--	--	--
MW-8	8/27/1999	10	--	<10	<1	**1.3**	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	9.0	--	--	--	<0.4	1.9	**4.7**	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	6/23/2003	**19.0**	--	--	<1	<1	--	**1.30**	--	<5	--	--	--	--
	12/3/2003	7.0	--	--	<1	<1	--	**5.30**	--	<5	--	--	--	--
MW-9	3/7/2000	<3	--	--	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	3/16/2000	--	--	--	--	--	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	--	--	--	--	<0.4	29.0	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
MW-10	3/7/2000	<3	<5	--	--	<0.5	<0.4	<0.4	<0.4	<1	<5	<0.4	<0.4	<0.4
	12/14/2001	**44.0**	--	--	--	<0.4	0.6	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	6/23/2003	5.0	--	<1	<1	<1	--	<1	--	<5	--	--	--	--
	12/3/2003	<5	--	--	--	--	--	--	--	--	--	--	--	--
DW-1	8/27/1999	<3	--	<10	<1	<1	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
	12/14/2001	<3	--	<0.4	--	<0.4	3.0	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4
NC 2L Standard		15	50	21	0.0004	0.38	700	0.19	70	5	21	70	350	350
GCL		15,000	50,000	15,500	50	380	700,000	No GCL	25,000	5,000	15,500	30,000	28,500	25,000
10x Surface Water Std.		250	500	780	25,000	38	67,500	57	3,160	47	780	774	3,860	6,260

Only those compounds detected are shown in tables NE = No standard established "--" = Not analyzed ND = No compounds detected

ug/l = micrograms per liter Results shown in bold exceed NC 2L standard

TABLE 2. WELL CONSTRUCTION AND GROUND WATER ELEVATION DATA - EXXON 4-4951

MONITOR WELL I.D.	DATE INSTALLED	SCREENED INTERVAL (feet BGL)	SANDPACK INTERVAL (feet BGL)	BENTONITE GROUT INTERVAL (feet BGL)	TOP OF CASING ELEVATION (feet*)	GAUGING DATE	DEPTH TO WATER (feet BTOC)	GROUND WATER ELEVATION (feet*)
MW-1	3/30/1999	21-36	18-36	14-18	99.55	4/6/1999	25.09	74.46
		1-inch Diam.				5/10/1999	24.91	74.64
					99.64	8/27/1999	25.47	74.17
						12/14/2001	27.23	72.41
						6/23/2003	23.40	76.24
MW-2	3/30/1999	21-36	18-36	14-18	98.89	4/6/1999	24.53	74.36
		1-inch Diam.				5/10/1999	24.32	74.57
					99.01	8/27/1999	25.97	73.04
						12/14/2001	28.63	70.38
						6/23/2003	22.86	76.15
MW-3	3/30/1999	23-38	20-38	16-20	101.33	4/6/1999	28.20	73.13
		1-inch Diam.				5/10/1999	27.99	73.34
					101.16	8/27/1999	28.39	72.77
						12/14/2001	30.05	71.11
MW-4	3/30/1999	19-34	17-34	13-17	96.46	4/6/1999	21.39	75.07
		1-inch Diam.				5/10/1999	21.22	75.24
					96.30	8/27/1999	22.05	74.25
						12/14/2001	23.85	72.45
MW-5	3/30/1999	21-36	18-36	14-18	97.30	4/6/1999	24.59	72.71
		1-inch Diam.				5/10/1999	24.26	73.04
					97.24	8/27/1999	24.93	72.31
						12/14/2001	26.70	70.54
MW-6	5/4/1999	19-34	10-34	8-10	100.43	5/10/1999	28.56	71.87
		1-inch Diam.			100.28	8/27/1999	27.76	72.52
						12/4/2000	28.20	72.08
						12/14/2001	29.65	70.63
MW-6R	8/21/2002	17.5-47.5	15.5-47.5	13.5-15.5	NA	8/22/2002	30.02	NA
						12/11/2002	28.98	NA
						6/23/2003	25.30	NA
						12/3/2003	24.20	NA
MW-7	8/11/1999	20.5-35.5	19-35.5	15-19	100.42	8/27/1999	28.00	72.42
		1-inch Diam.				12/14/2001	29.80	70.62
						6/23/2003	25.35	75.07
						12/3/2003	24.20	76.22
MW-8	8/11/1999	20.5-35.5	18-35.5	12-18	99.82	8/27/1999	27.83	71.99
		1-inch Diam.				12/14/2001	29.63	70.19
						6/23/2003	25.10	74.72
						12/3/2003	24.18	75.64
MW-9	3/3/2000	20-36	14-36	12-14	NA	3/3/2000	27.00	NA
		1-inch Diam.				12/14/2001	28.00	NA
MW-10	3/3/2000	20-40	15-40	12-15	NA	3/3/2000	28.00	NA
		1-inch Diam.				12/14/2001	29.20	NA
						6/23/2003	24.85	NA
						12/3/2003	21.50	NA
DW-1	8/25/1999	52-62	50-62	46-50	100.08	8/27/1999	35.68	64.40
		6-inch steel casing to 48 feet				12/14/2001	36.40	63.68
		2-inch diam. screen						

* - Top of casing elevation is given in feet relative to an on-site benchmark with an assigned elevation of 100.00 feet

BTOC = Below top of well casing

BGL = Below ground level

All wells were constructed of 1-inch PVC and 0.010-inch slot screen

ATTACHMENT B

Pyramid Project # 2005100

GEOPHYSICAL INVESTIGATION REPORT

EM-61 & GPR SURVEYS

King-Tobaccoville Road (Main Street) Sites

King, North Carolina

May 13, 2005

Report prepared for: Mike Branson
EarthTech, Inc.
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Reviewed by: _____
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1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for Earth Tech of North Carolina, Inc. during the period of April 13 to May 2, 2005, within the proposed Right-of-Way (ROW) and easement areas at nine sites in King, North Carolina. The work was done as part of the North Carolina Department of Transportation (NCDOT) road widening project. The sites are located along the both sides of King-Tobaccoville Road (Main Street) from 0.25 miles west of US 52 to Meadowbrook Road. The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (UST's) were present beneath the proposed ROW and easement areas of each site.

Earth Tech's representative Mr. Michael Branson, PG, provided maps that outlined the geophysical survey areas of each site and visited the sites with Pyramid Environmental's representative Mr. Douglas Canavello, PG during the week of March 28, 2005. Geophysical surveys were conducted at the following nine sites:

William Oil Company Property (Parcel 6) Exxon Station

[redacted]

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 10-foot survey grid was established across the proposed ROW and easement areas of eight of the nine sites using water-based marking paint. The exception was the William Oil Property (Parcel 6) where the entire site was gridded and surveyed. These marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigations consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM surveys were performed using a Geonics EM61-MK1 metal detection instrument. According to the manufacture's specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. The EM61 data were digitally collected at each site along parallel northerly-southerly or easterly-westerly trending survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

Contour plots of the EM61 bottom coil results and the EM61 differential results for each site are included in this report. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines, small, isolated metal objects, and areas containing insignificant metal debris.

The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drums and UST's and ignore the smaller insignificant metal objects.

GPR surveys were conducted across selected EM61 differential anomalies, and steel-reinforced concrete using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Surveys were also performed across several areas where parked vehicles that obstructed the EM61 survey had since been removed. GPR data were digitally collected in a continuous mode along X and/or Y survey lines, spaced two to five feet apart using a vertical scan of 512 samples, at a rate of 24 scans per second. A 110 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were collected down to a maximum depth of approximately eight feet, based on an estimated two-way travel time of 6 nanoseconds per foot.

The GPR data were downloaded to a field computer and later reviewed in the office using Radprint software. Photos of the EM61 and GPR instruments are shown in Figure 1. The perimeters of possible UST's , based on the geophysical results, were marked and labeled in the field using orange, water-based marking paint.

During the weeks of April 25 and May 2 2005, preliminary contour plots of the EM61 bottom coil and the differential results were emailed to Mr. Branson.

3.0 DISCUSSION OF RESULTS

3.1 William Oil Company Property (Parcel 6)

The William Oil Company Property is located on the southern side of Main Street adjacent to the US 52 South on-ramp. The property contains the Exxon Station and a grass-covered field along the western portion of the property and a gravel-covered parking area along the eastern portion. The eastern and western portions of the property are separated by a gravel road. The geophysical investigation covered the entire parcel and survey line locations for the EM61 and GPR surveys are shown in Figure 2.

The bottom coil results and the differential results are presented in Figures 3 and 4, respectively. The majority of EM61 anomalies shown in the plots are probably in response to known cultural features such as the building, known UST's, steel-reinforced concrete, pump islands, vehicles, etc. Linear anomalies are probably in response to buried utility lines or conduits.

GPR surveys were conducted across the steel-reinforced concrete located around the pump island area and across selected differential anomalies. Excluding the area containing the active UST's, the geophysical results suggest that the remaining portion of the survey area at Parcel 6 does not contain metallic UST's. Detailed geophysical information on the EM61 anomalies is provided in Figures 3 and 4.

[redacted]

[redacted]

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW and easement areas at the nine sites in King, North Carolina provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic UST's within the surveyed portions of the proposed ROW and easement areas of each site.

- GPR surveys were conducted across selected EM61 differential anomalies, areas containing steel reinforced concrete, and at several areas where parked vehicles had obstructed the EM61 surveys.

- Linear EM61 anomalies at the nine sites are probably in response to buried utility lines and/or conduits. The majority of non-linear anomalies are probably in response to known cultural features.

- Excluding the areas containing active and known UST's, the geophysical results did not detect the presence of unknown metallic UST's within the surveyed portions of the proposed ROW and easement areas at the following sites:

William Oil Company Property (Parcel 6)

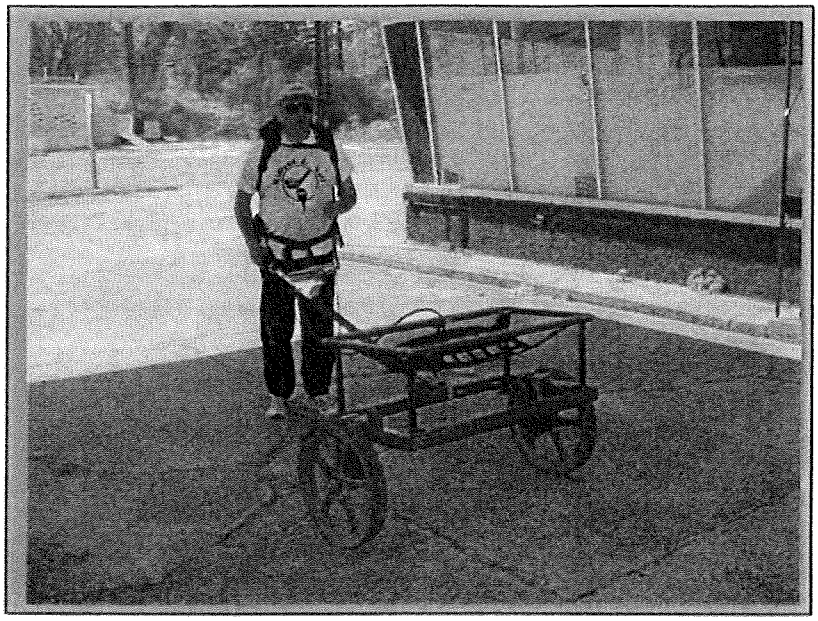
[redacted]

- [redacted]

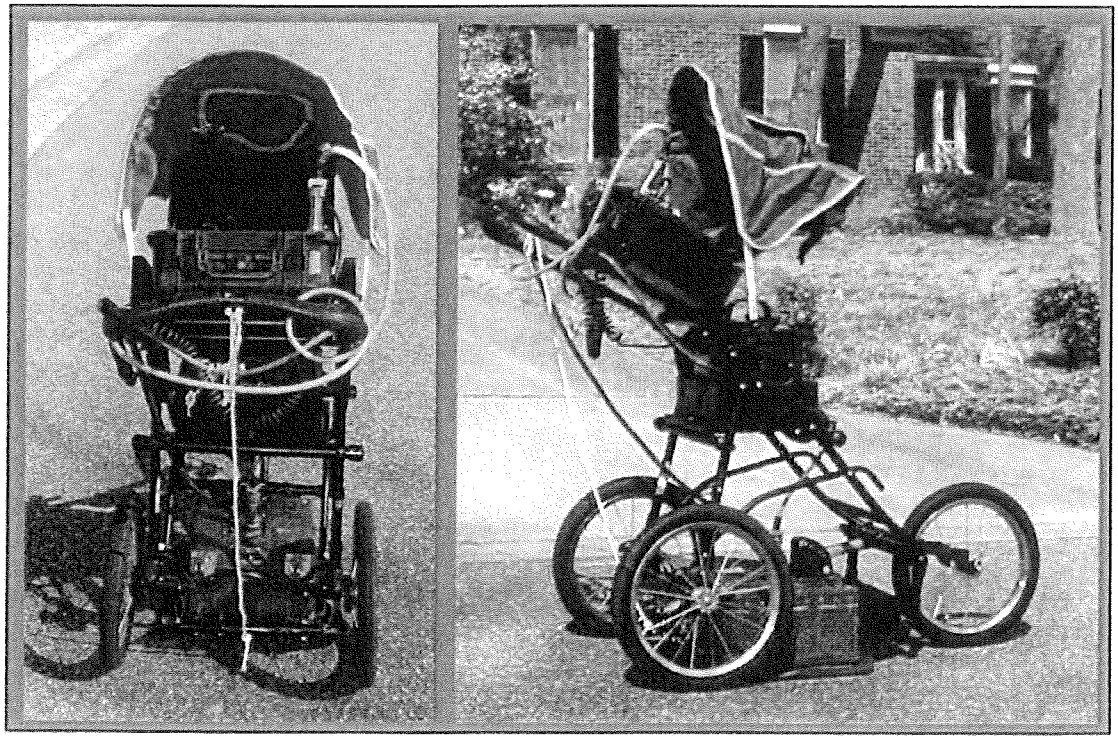
- [redacted]

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Earth Tech of North Carolina, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project do not conclusively define the locations of all metallic UST's but only suggest where some of the metallic UST's may be present. The EM61 and GPR anomalies, interpreted as possible UST's or tanks, may be attributed to other surface or subsurface conditions or cultural interference.



The Geonics EM61 metal detector was used to conduct the metal detection surveys at the King-Tobaccoville Road sites in April 2005.



The SIR-2000 GPR system equipped with a 400 MHz antenna that was used at the King-Tobacco Road sites in April and May 2005.

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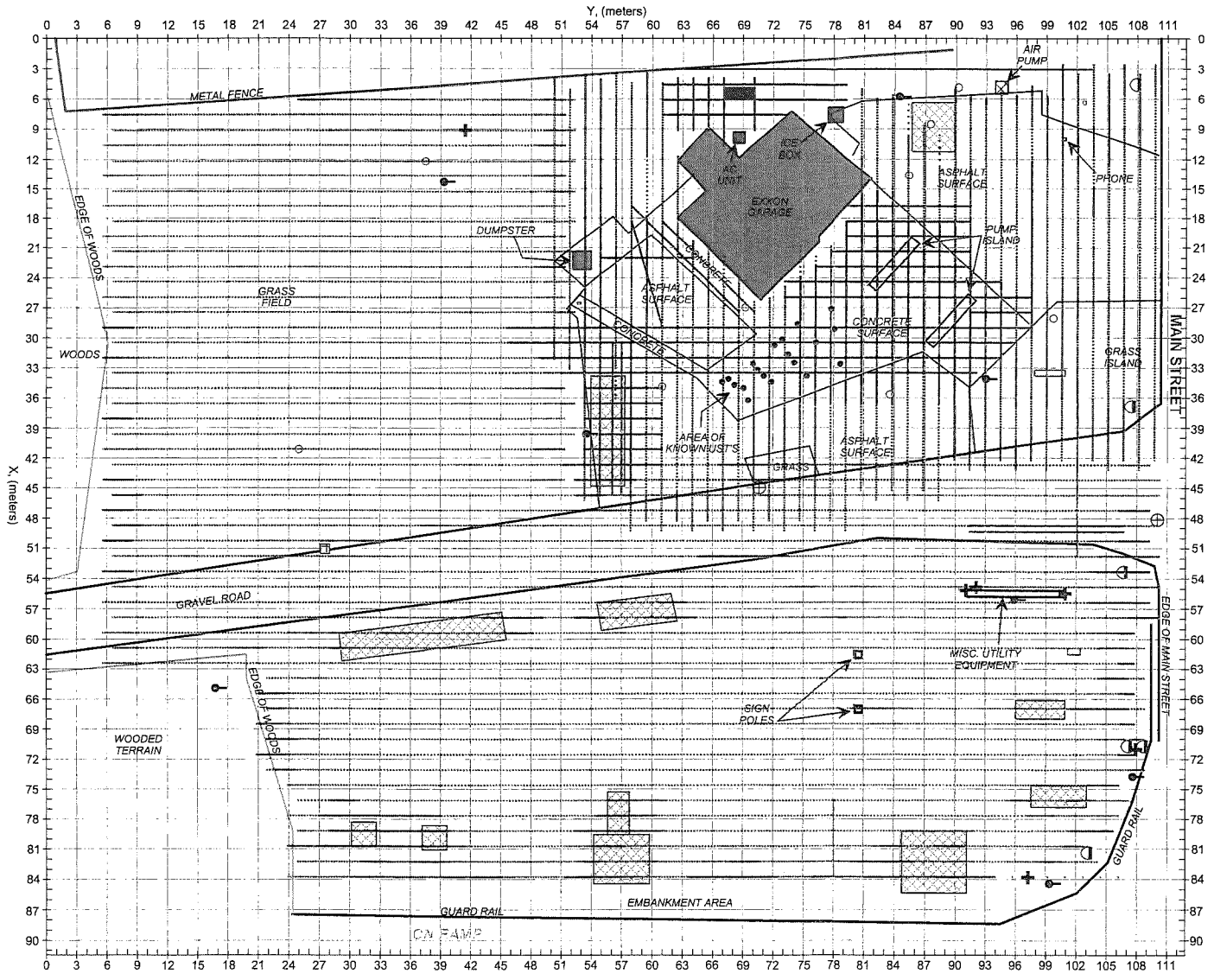
CLIENT	EARTH TECH OF NORTH CAROLINA, INC.	DATE	5/11/05	DRWN	
SITE	KING-TOBACCOVILLE ROAD (MAIN STREET) SITES	LAY		CHKD	
CITY	KING	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JOB	2005-100	PRINT	

GRAPHIC SCALE IN METERS

GEOPHYSICAL EQUIPMENT

FIGURE 1



APPROXIMATE NORTH

LEGEND

EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENDING LINES SPACED 1.5 METERS APART

- MONITORING WELL
- UTILITY POLE
- WATER METER OR VALVE COVER
- GUY WIRE
- MANHOLE COVER
- UST COVERS
- STORM SEWER GRATE
- TRAFFIC SIGN
- STORE SIGN
- RIGHT-OF-WAY MARKER
- EASEMENT MARKER
- VEHICLE OR EQUIPMENT
- INDIVIDUAL EM61 SURVEY LINE
- INDIVIDUAL GPR SURVEY LINE

Note: The plot shows the EM61 and GPR survey line locations in red dots and purple lines, respectively. The EM metal detection data were collected on April 18 & 28, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on May 2, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

GEOPHYSICAL SURVEY AREA

FIGURE 2

EARTH TECH OF NORTH CAROLINA, INC.

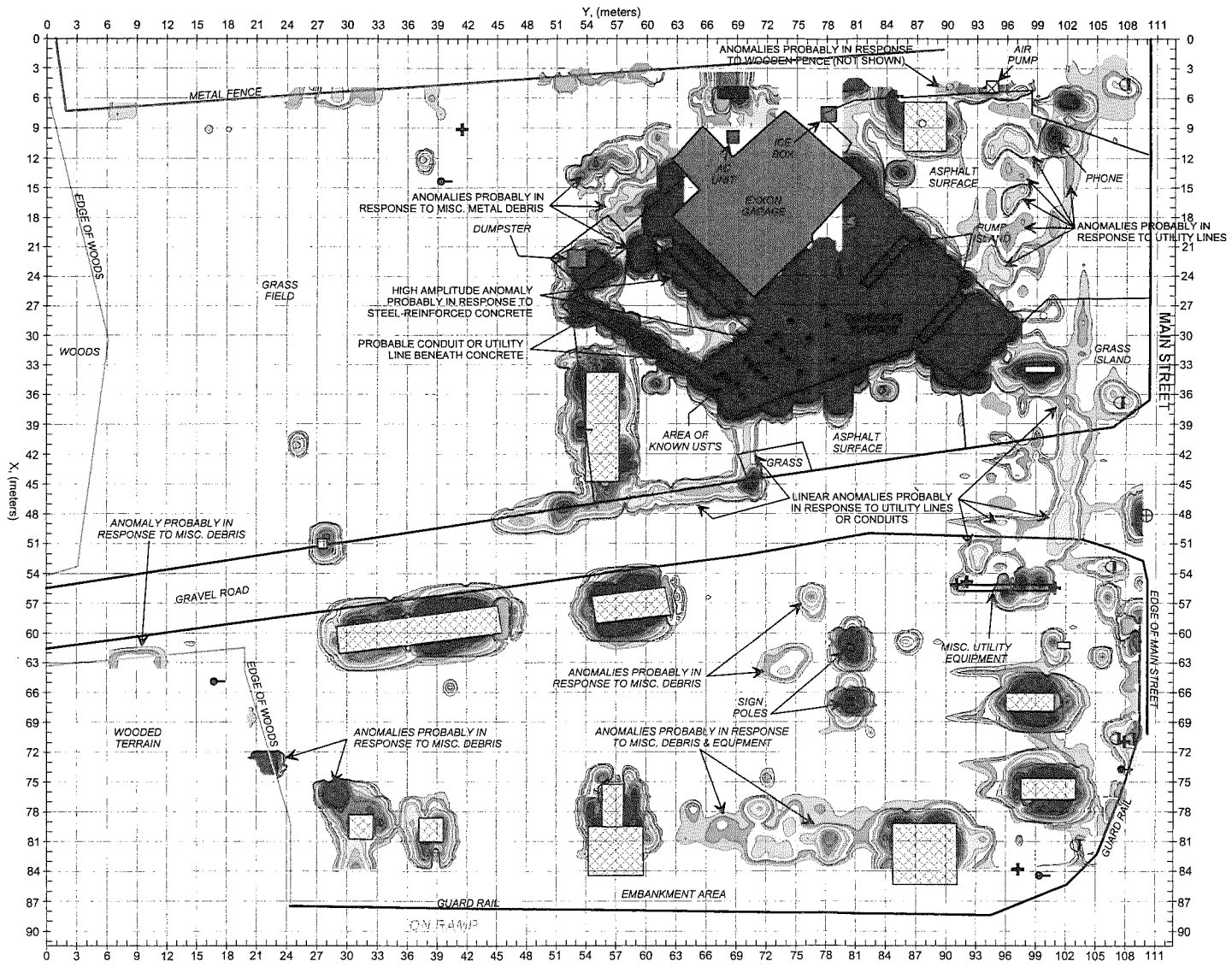
WILLIAMS OIL COMPANY PROPERTY (PARCEL 6)

KING | NORTH CAROLINA

GEOPHYSICAL RESULTS

DRAWN | CHKD | DATE 5/03/05 | LAY | DWG | FIGURE 2005-100 | J-NO

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.



Note: The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on April 18 & 28, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on May 2, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. The GPR results are not shown on this map.

FIGURE 3

EM61
BOTTOM COIL
RESULTS

GRAPHIC SCALE IN METERS

DRAWN	CHKD		FIGURE
DATE 5/11/05	LAY	DWG	JOB NO. 2005-100

EARTH TECH OF NORTH CAROLINA, INC.

WILLIAMS OIL COMPANY PROPERTY (PARCEL 6)

KING | NORTH CAROLINA

EM61 GEOPHYSICAL RESULTS

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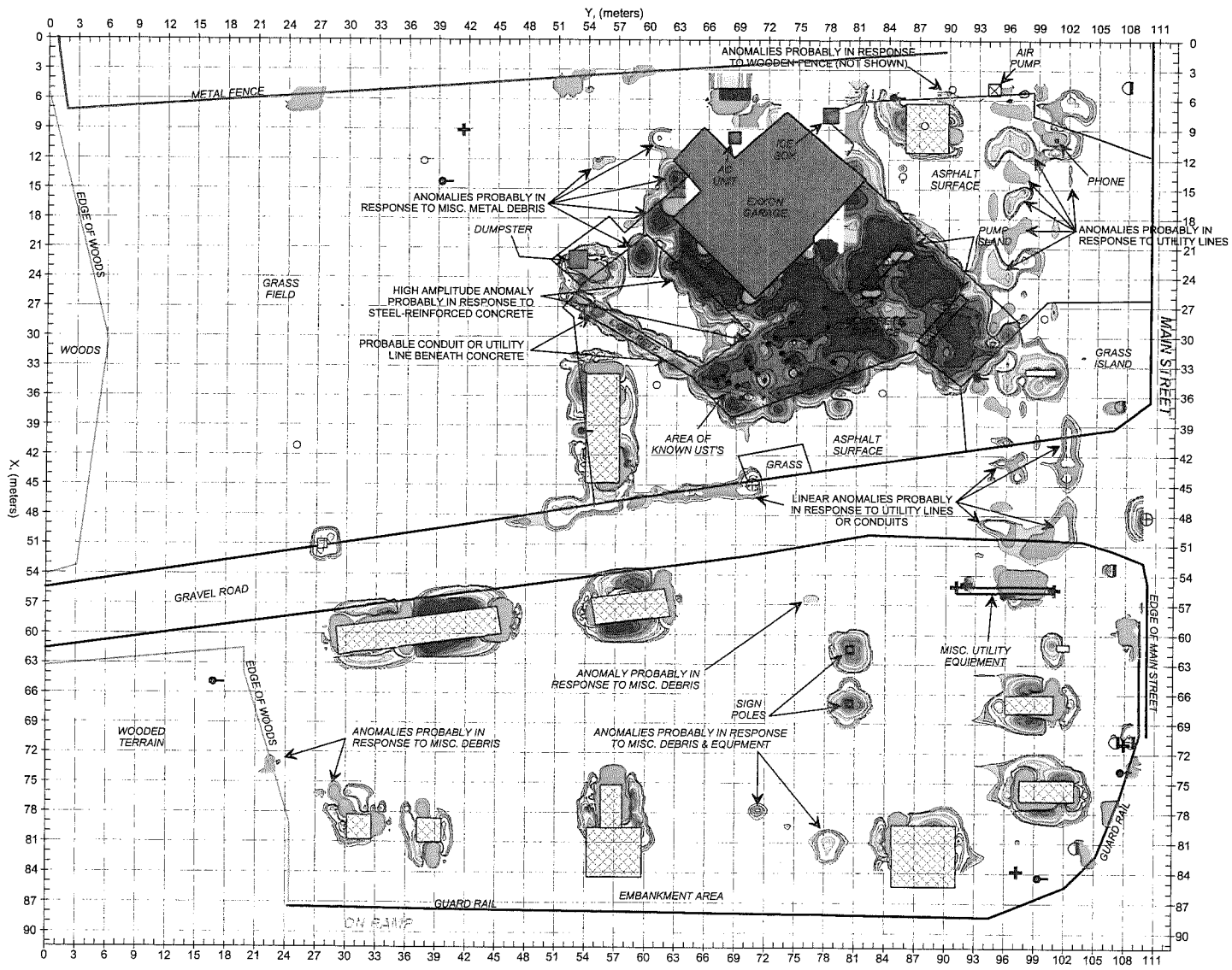

APPROXIMATE NORTH

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

1000
750
500
400
300
200
150
100
75
50
20
-99
-100
-200
-10000

LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENDING LINES SPACED 1.5 METERS APART
- MONITORING WELL
- UTILITY POLE
- WATER METER OR VALVE COVER
- GUY WIRE
- MANHOLE COVER
- UST COVERS
- STORM SEWER GRATE
- TRAFFIC SIGN
- STORE SIGN
- RIGHT-OF-WAY MARKER
- EASEMENT MARKER
- VEHICLE OR EQUIPMENT

Note: The contour plot shows the differential response between the bottom and top coils of the EM61 instrument in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and UST's and ignores smaller miscellaneous, buried, metal debris. The EM61 data were collected on April 18 & 28, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on May 2, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. GPR results are not shown on this map.

EM61 DIFFERENTIAL RESULTS

FIGURE 4

GRAPHIC SCALE IN METERS

DRWN	CHKD	DATE	DWG	FIGURE
		5/11/05	2005-100	

CLIENT	SITE	CITY	STATE
EARTH TECH OF NORTH CAROLINA, INC.	WILLIAMS OIL COMPANY PROPERTY (PARCEL 6)	KING	NORTH CAROLINA

TITLE: EM61 GEOPHYSICAL RESULTS

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ATTACHMENT C

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-1
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			4.29		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			4.17		AS ABOVE, DRY, NO ODOR.
			4.45		AS ABOVE, DRY, NO ODOR.
5.0					
			3.9		AS ABOVE, DRY, NO ODOR.
			4.32		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0					
			4.71		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			3.59		AS ABOVE, DRY, NO ODOR.
			4.19		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-2
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			3.92		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			4.27		AS ABOVE, DRY, NO ODOR.
			6.29		AS ABOVE, DRY, NO ODOR.
5.0					
			6.72		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			8.2		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0					
			7.59		AS ABOVE, DRY, NO ODOR.
			5.12		AS ABOVE, DRY, NO ODOR.
			6.55		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-3
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			12.83		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			9.37		AS ABOVE, DRY, NO ODOR.
			8.73		AS ABOVE, DRY, NO ODOR.
5.0					
			5.13		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			5.28		AS ABOVE, DRY, NO ODOR.
10.0			5.34		AS ABOVE, DRY, NO ODOR.
					LOST CUTTING SHOE AT 16 FEET, NO RECOVERY 12 TO 16 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-4
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			3.6		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			3.86		AS ABOVE, DRY, NO ODOR.
			7.11		AS ABOVE, DRY, NO ODOR.
5.0					
			10.12		AS ABOVE, DRY, NO ODOR.
			11.6		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0					
			12.6		AS ABOVE, DRY, NO ODOR.
			4.65		AS ABOVE, DRY, NO ODOR.
			2.8		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-5
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			11.56		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			11.12		AS ABOVE, DRY, NO ODOR.
			13.85		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0					
			7.22		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			10.89		AS ABOVE, DRY, NO ODOR.
10.0					
			9.12		AS ABOVE, DRY, NO ODOR.
			9.19		AS ABOVE, DRY, NO ODOR.
			7.78		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-6
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			20		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			21		AS ABOVE, DRY, NO ODOR.
			30		AS ABOVE, DRY, NO ODOR.
5.0					
			51		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, SLIGHT ODOR. SUBMIT TO LABORATORY ANALYSIS.
			22		AS ABOVE, DRY, NO ODOR.
10.0					
			47		AS ABOVE, DRY, NO ODOR.
			16.1		AS ABOVE, DRY, NO ODOR.
			16.25		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-7
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			18.2		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			21		AS ABOVE, DRY, NO ODOR.
			9.41		AS ABOVE, DRY, NO ODOR.
5.0					
			6.86		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			9.61		AS ABOVE, DRY, NO ODOR.
10.0					
			12.3		AS ABOVE, DRY, NO ODOR.
			11.5		AS ABOVE, DRY, NO ODOR.
			22		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-8
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			9.36		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			40		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			7.11		AS ABOVE, DRY, NO ODOR.
5.0					
			7.75		AS ABOVE, DRY, NO ODOR.
			7.23		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0					
			8.21		AS ABOVE, DRY, NO ODOR.
			7.48		AS ABOVE, DRY, NO ODOR.
			9.56		AS ABOVE, DRY, NO ODOR.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

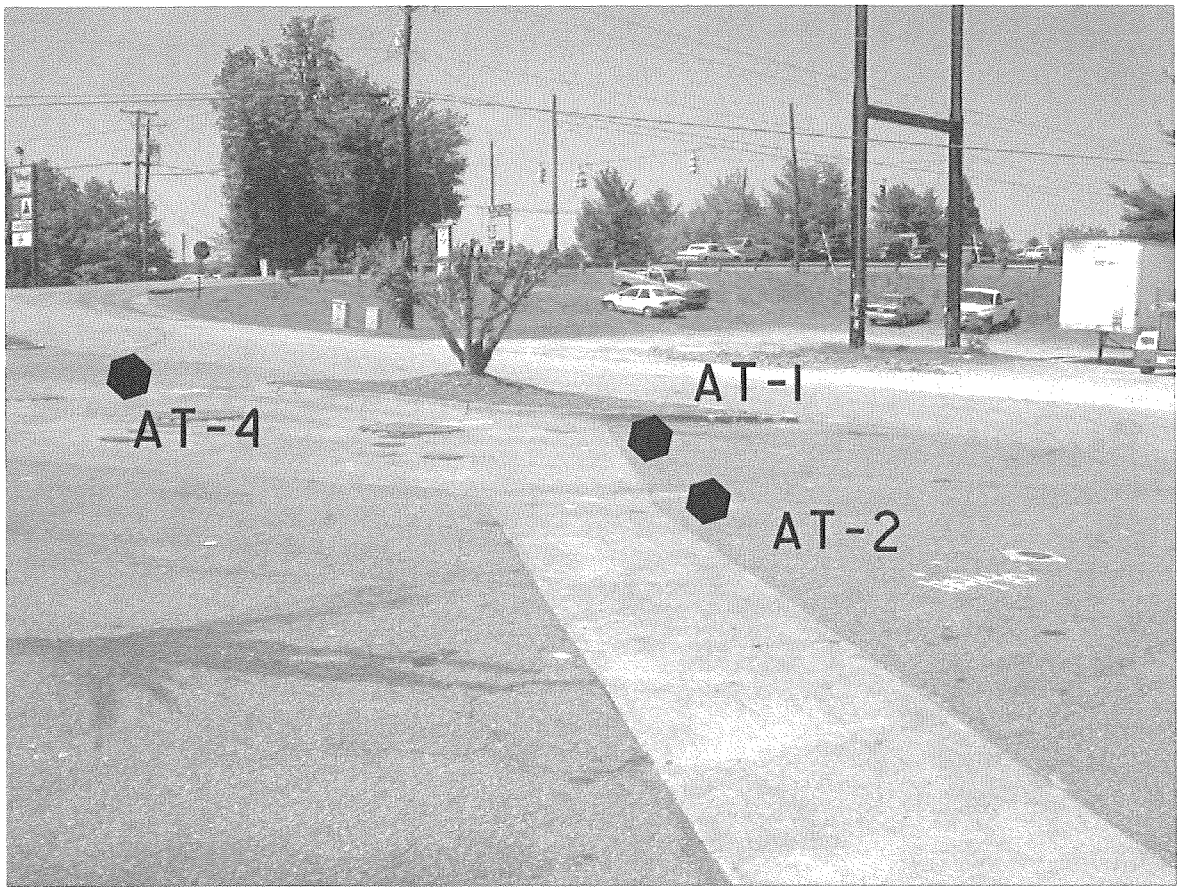
TEST BORING REPORT

PROJECT A.T. WILLIAMS PROPERTY (PARCEL #6)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER AT-9
PAGE 1
ELEVATION
DATE 5/9/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			7.92		POOR RECOVERY 0-4 FEET. 6" TOPSOIL/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			9.14		AS ABOVE, DRY, NO ODOR.
5.0					
			6.86		AS ABOVE, DRY, NO ODOR.
			7.91		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0			8.63		AS ABOVE, DRY, NO ODOR.
			7.32		AS ABOVE, DRY, NO ODOR.
			11.61		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

ATTACHMENT D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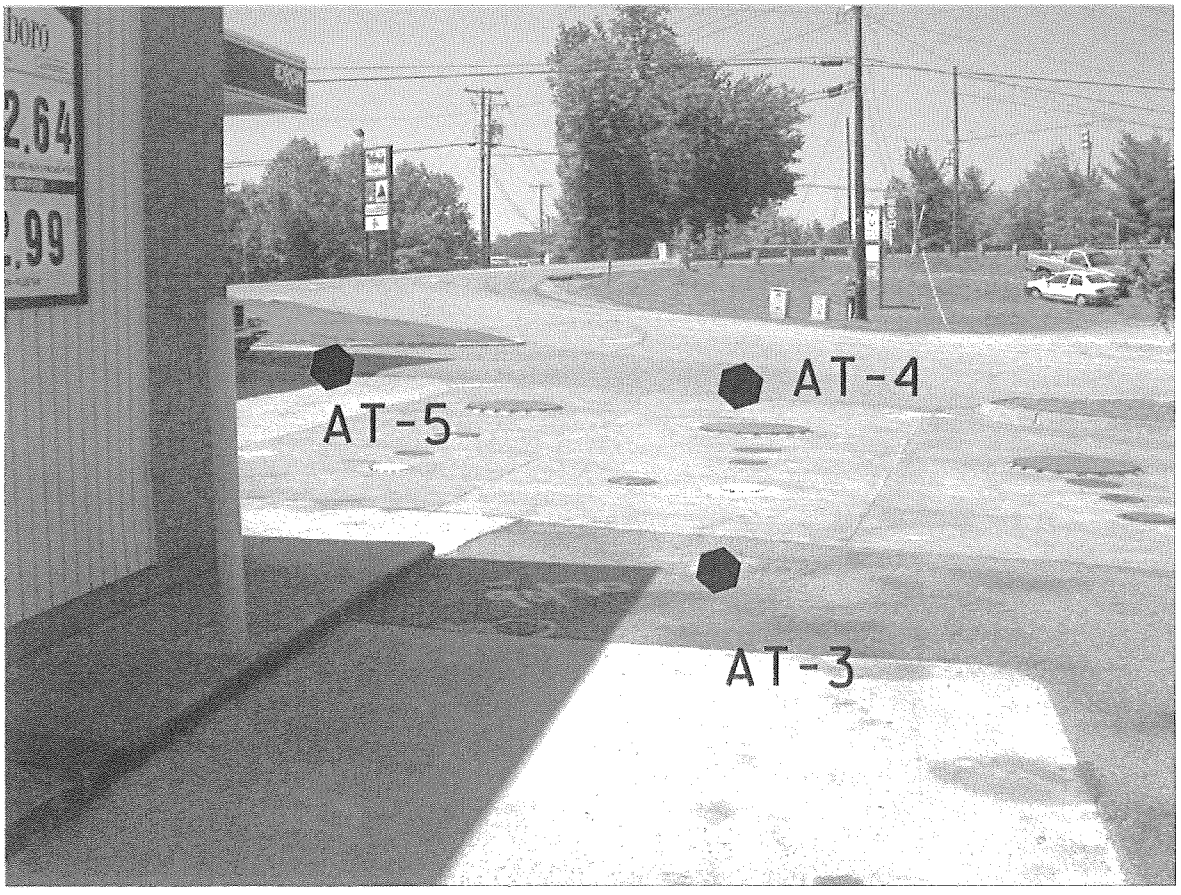
AT-2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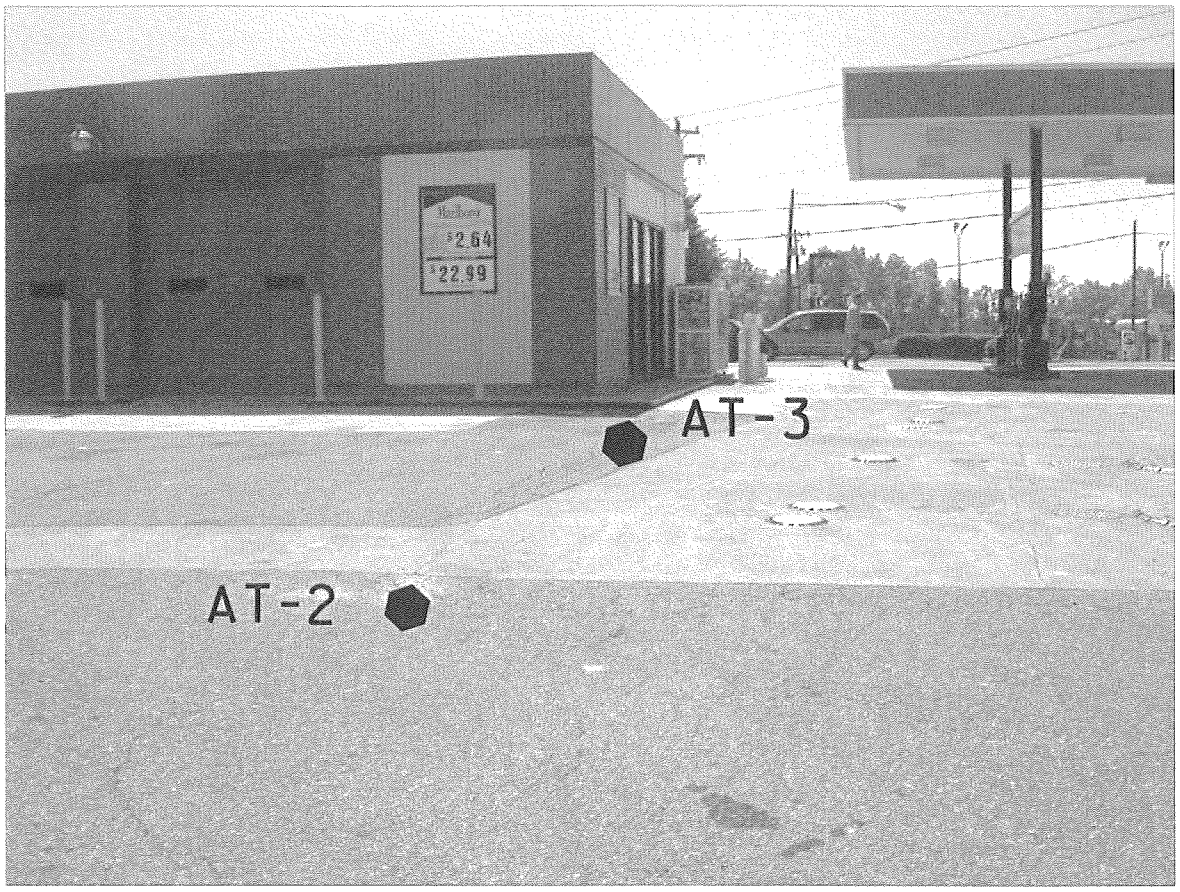
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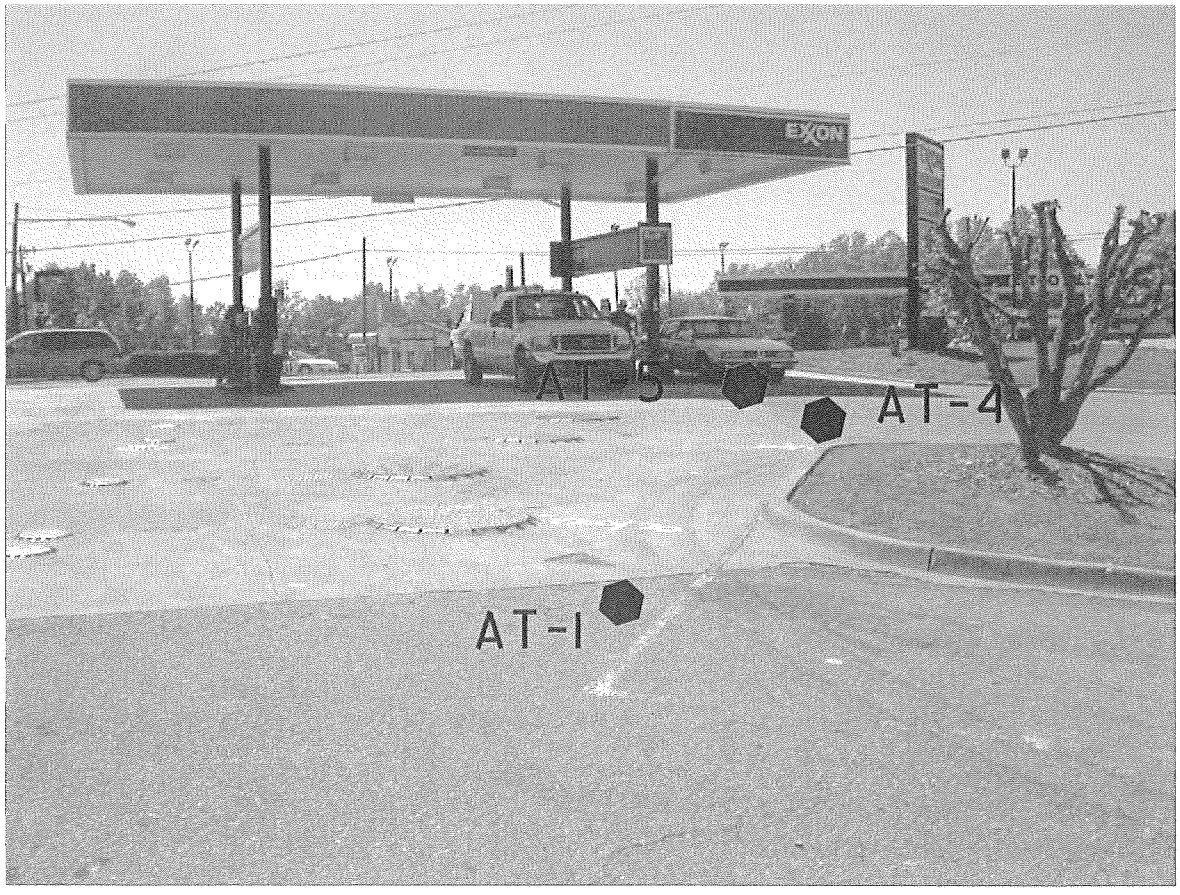
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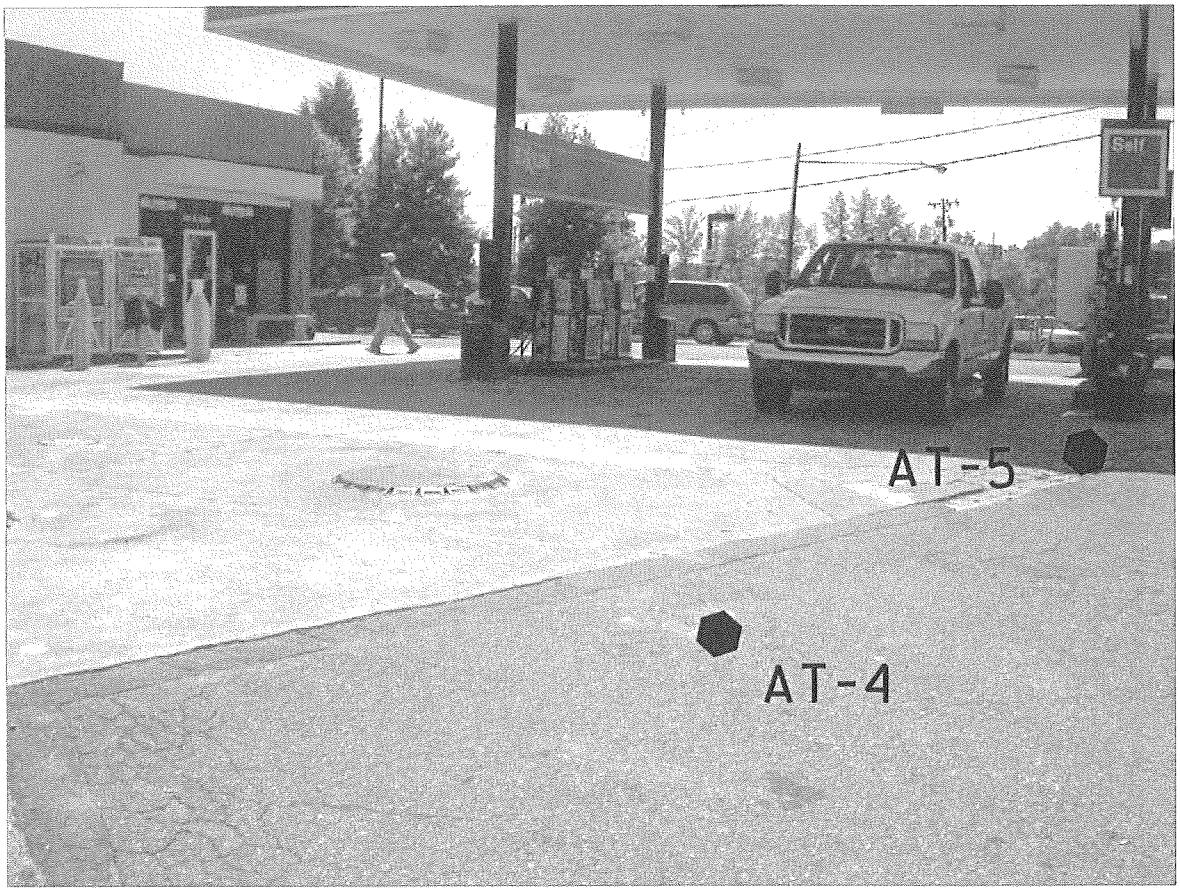
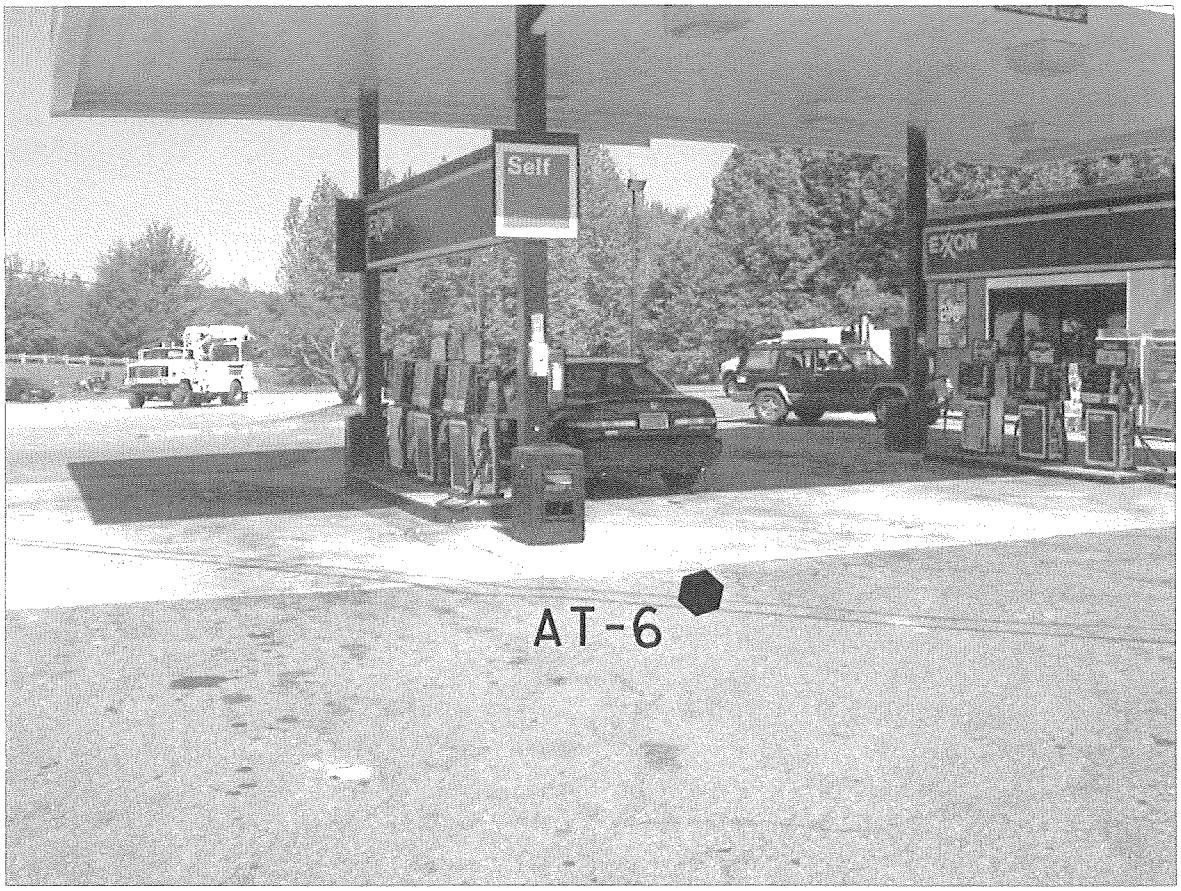

AT-5
AT-4


EXXON
EXXON
AT-5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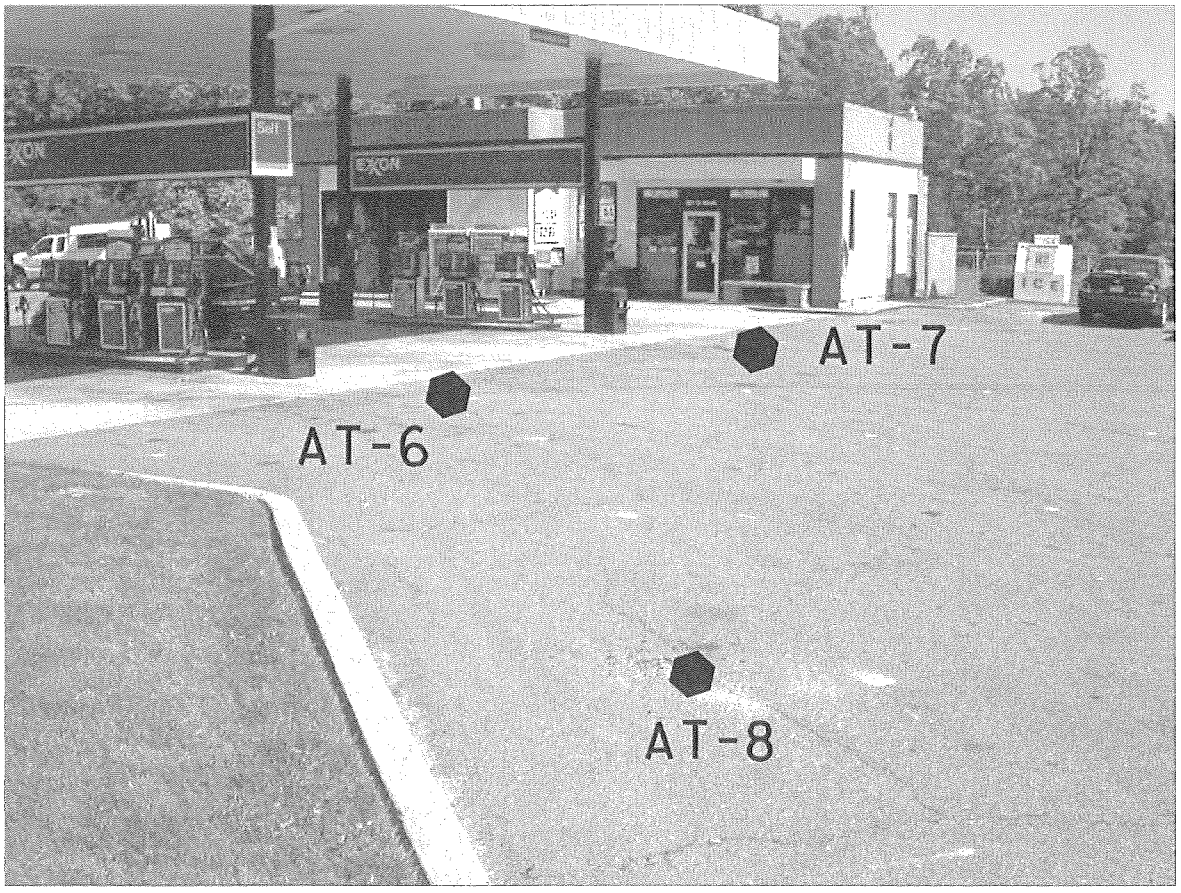
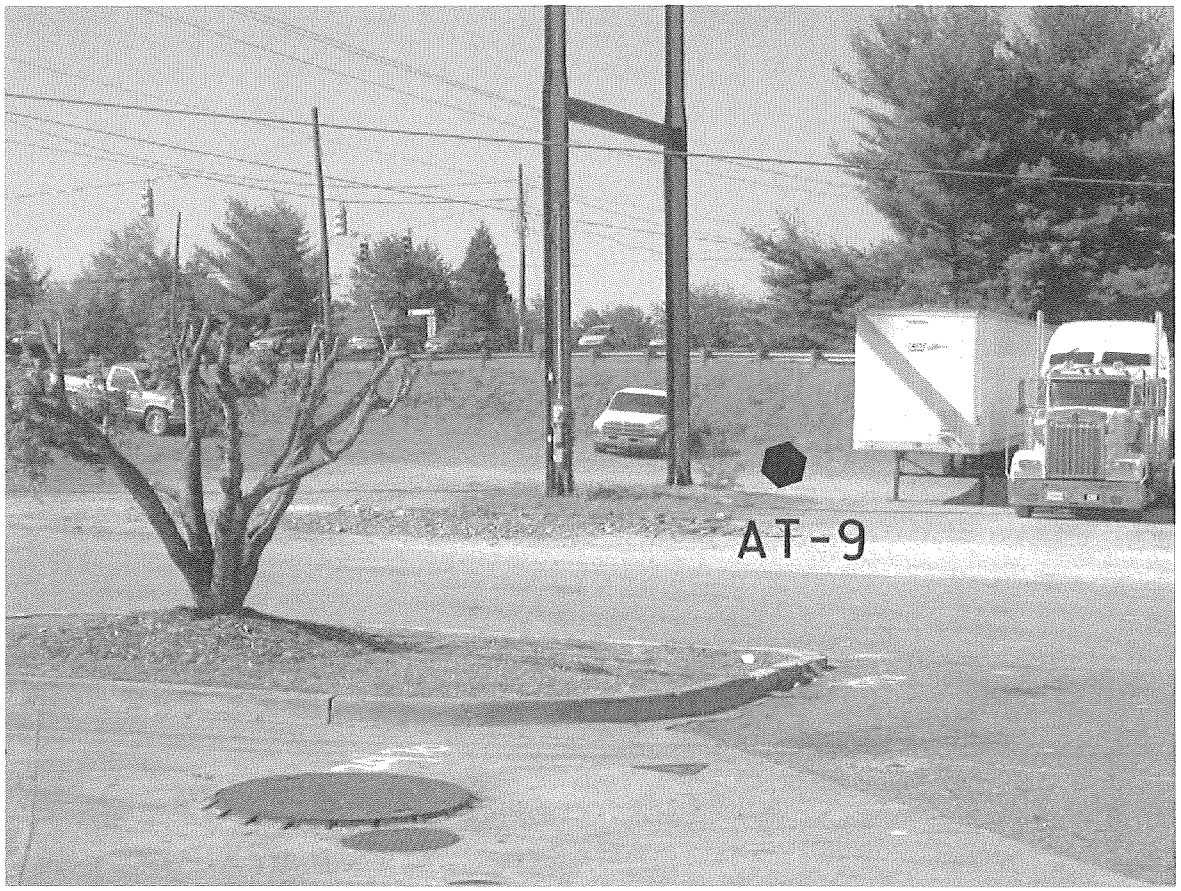
AT-6


EXXON
AT-7
AT-6
AT-8


AT-9

ATTACHMENT E

PARADIGM ANALYTICAL LABORATORIES, INC.
5500 Business Drive
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Mike Branson
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-450

Client Project: NCDOT-A.T. Williams

Dear Mr. Branson:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.

5/20/05
Laboratory Director Date
J. Patrick Weaver

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-1
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-1
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 11:30
Date Received: 5/11/05
Matrix: Soil
Solids 67.71

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.86	5030	1	05/14/05
Diesel Range Organics	BQL	9.18	3545	1	05/17/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-2
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-2
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 12:10
Date Received: 5/11/05
Matrix: Soil
Solids 66.86

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.97	5030	1	05/14/05
Diesel Range Organics	BQL	9.2	3545	1	05/17/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-3
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-3
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 12:40
Date Received: 5/11/05
Matrix: Soil
Solids 72.38

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.29	5030	1	05/14/05
Diesel Range Organics	BQL	8.54	3545	1	05/17/05

Reviewed By: mc

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-4
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-4
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 13:30
Date Received: 5/11/05
Matrix: Soil
Solids 78.55

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.64	5030	1	05/14/05
Diesel Range Organics	BQL	7.81	3545	1	05/17/05

Reviewed By: mc

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-5
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-5
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 14:10
Date Received: 5/11/05
Matrix: Soil
Solids 69.63

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.62	5030	1	05/17/05
Diesel Range Organics	BQL	8.85	3545	1	05/17/05

Reviewed By: mc

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-6
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-6
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 14:45
Date Received: 5/11/05
Matrix: Soil
Solids 71.69

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.37	5030	1	05/17/05
Diesel Range Organics	BQL	8.5	3545	1	05/17/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-7
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-7
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 15:15
Date Received: 5/11/05
Matrix: Soil
Solids 78.16

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.68	5030	1	05/17/05
Diesel Range Organics	BQL	7.99	3545	1	05/17/05

Reviewed By: mc

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-8
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-8
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 15:40
Date Received: 5/11/05
Matrix: Soil
Solids 80.98

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.41	5030	1	05/17/05
Diesel Range Organics	BQL	7.6	3545	1	05/17/05

Reviewed By: mc

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AT-9
Client Project ID: NCDOT-A.T. Williams
Lab Sample ID: G204-450-9
Lab Project ID: G204-450
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/9/05 16:15
Date Received: 5/11/05
Matrix: Soil
Solids 76.18

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.88	5030	1	05/17/05
Diesel Range Organics	BQL	8.15	3545	1	05/17/05

Reviewed By: MC

List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% soilds = Percent Solids

Special Notes:

1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.

2) Uncertainty for all reported data is less than or equal to 30 percent.

PARADIGM ANALYTICAL LABORATORIES, INC.
5500 Business Drive, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 44078

Page ____ of ____

Client: Earth Tech
Address: 701 Corporate Center Dr.
Address: Suite 475
Quote #: Raleigh, NC 27607

Project ID: NCDOT - A.T. Williams
Contact: Mike Branson
Phone: 919 854 6259
Fax: 919 854 6259

Date: 5/9/05
Turnaround: Standard
Job Number: 85239
P.O. Number: WBS # 34380.1.1

Report To: Mike Branson
Earth Tech
Invoice To: NCDOT

Sample ID	Date	Time	Matrix	Preservatives	Analyses: TPH-GRO	Analyses: TPH-Diesel	Comments: Please specify any special reporting requirements
							G204-450
AT-1	5/9/05	1130	SOIL		✓	✓	
AT-2	5/9/05	1210	SOIL		✓	✓	
AT-3	5/9/05	1240	SOIL		✓	✓	
AT-4	5/9/05	1330	SOIL		✓	✓	INVOICE NCDOT UNDER BLANKET PO
AT-5	5/9/05	1410	SOIL		✓	✓	
AT-6	5/9/05	1445	SOIL		✓	✓	
AT-7	5/9/05	1515	SOIL		✓	✓	
AT-8	5/9/05	1540	SOIL		✓	✓	
AT-9	5/9/05	1605	SOIL		✓	✓	

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
[signature]	5/10/05	1800	Julie Johnson	5/10/05	1015	24°C	NC K SC ____ Other ____

SEE REVERSE FOR TERMS AND CONDITIONS

ORIGIN

PARADIGM ANALYTICAL LABORATORIES, INC.

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