
Limited Site Assessment

Project: The Perfect Image (Incident #12634)
Hickory, NC
Caldwell County
Latitude N 35° 44' 23"
Longitude W 81° 21' 32"

Prepared for: NCDENR – UST Section
Mooresville Regional Office
Mooresville, North Carolina 28115

Date: July 31, 2007

Prepared by:



529 Main Street
N. Wilkesboro, NC 28659
(336) 838-2500
(336) 838-4179 fax

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Division of Waste Management
UST Section
Mooresville Regional Office

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BLUE RIDGE
ENGINEERING PLLC

529 Main Street
N. Wilkesboro, NC 28659
(336) 838-2500
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Limited Site Assessment Report

A. Site Identification

DATE OF REPORT: July 31, 2007
Facility I.D.: _____ UST Incident Number (if known): 12634
Site Name: The Perfect Image
Site Location: 1907 3rd Avenue Drive
City/Town: Hickory County: Catawba

UST Owner: Terry Church
Address: 1781 12th St Dr; Hickory, NC 28601 Phone: (828)396-2185 (Body shop)

UST Operator: Not applicable – closed 1994
Address: _____ Phone: _____

Property Owner: Terry Church
Address: 1781 12th St Dr; Hickory, NC 28601 Phone: (828) 396-2185 (Body shop)

Property Occupant: Mickey Automotive
Address: 1907 3rd Avenue Drive; Hickory, NC 28601 Phone: _____

Contractor: Environmental Abatements
Address: P.O. Box 221; Newton, NC 28658 Phone: (828) 850-4709

Consultant: Blue Ridge Engineering PLLC
Address: 529 Main Street; North Wilkesboro, NC 28659 Phone: (336) 838-2500

Laboratory: Blue Ridge Labs
Address: PO Box 2940, Lenoir, NC 28645 Phone: 828/728-0149

Release Information

Date Discovered: July 22, 1994
Latitude: 35 44' 23" **Longitude:** 81 21' 32" (NAD27)
Estimated Quantity of Release: Estimated 20 to 50 gals
Cause of Release: Unknown – corrosion or spills
Source of Release (Piping/UST): UST operation

Sizes and contents of UST system(s) from which the release occurred: Tank #3 a 3,000 gal gasoline tank, Tank #4 - a 2,000 gallon gasoline tank, and Tank #6 – a 280 gallon gasoline tank.
For complete information on other tanks please see tables

ENGINEER'S CERTIFICATION

I, W. Ronald Haynes, a Professional Engineer for Blue Ridge Engineering, PLLC, and consultant to The Perfect Image certify that the information contained in this report is correct and accurate to the best of my knowledge.



W. Ronald Haynes

Date: July 31, 2007

B. Risk Characterization

The risk characterization information (Q&A form) is in Appendix C.

C. Receptor Information Site Investigation

1. Water Supply Wells (Complete and attach Table B-5 and attach map showing well locations) *See Table Sections*

The Site Check investigation during UST Closure revealed no water supply well on site. The investigators located no drinking water wells within 1,500 feet of the site in the LSA wells survey.

2. Public Water Supplies

Are public water supplies available within 1,500 feet of the source area of the release? **YES**

If yes, where is the location of the nearest public water lines and the source(s) of the public water supply. (Indicate on map) Describe.

The area has municipal water and the surrounding commercial facilities, nearby residential areas, and site are connected to the City of Hickory water system. The water main runs along 3rd Avenue Drive fronting the property. The source of water is the City of Hickory water treatment plant west of the City on the Catawba River. The intake is more than one mile from the UST site and down-gradient of the site.

3. Surface Water

Identify all surface water bodies (e.g., ditch, pond, stream, lake, river) within 1,500 feet of the source area of the release. This information must be shown on the USGS topographic map.

Please refer to the Location Map, a section of the Hickory USGS quadrangle. The likely receptor of surface drainage is an Frye Creek a tributary to the Catawba River that lies northwest of the property and runs southwest to northeast from Hwy 321. Drainage from the site flows to this

tributary through the storm sewers and other conveyances north and west of the site. The distance to this stream is approximately 1,100 feet. There is a smaller streams east of the site that is a tributary to Cripple Creek. This stream approximately 1,000 feet east of the site is the nearest surface water body. Cripple Creek is northeast of the site and is greater than 1,500 feet distant. The UST site is on a low ridge running from northwest to southeast.

4. Wellhead Protection Areas

Identify all planned or approved wellhead protection areas (e.g., ditch, pond, stream, lake, river) within 1,500 feet of the source area of the release.

No wellhead protection areas are located within 1,500 feet of the site. Catawba County will not issue well permits for building sites in an area located near a municipal water supply, therefore, no new wells will be permitted in this area. No wellhead protection areas are listed for Catawba County on the NC DENR web page for PWSS. Areas within 0.5 miles under development have access to municipal water. Ref. Contact with City Hickory Public Works Dept.

5. Describe Deep Aquifers in the Coastal Plain Physiographic Region (refer to page 19 of the guidelines):

Not applicable

6. Describe Subsurface Structures

The buildings on site have no basements or work pits in the service area and no accumulation of vapors was found in the site assessment. No subsurface structures exist on the property.

7. Property Owners and Occupants

Land use at the site is commercial. The surrounding area is primarily commercial with residential. The nearest place of public assembly located within 1,500 feet is a church, Oakland Heights Baptist, which is approximately at the radius limit of 1,500 feet from the contaminated area. The nearest residence is approximately 500 feet north of the site.

Potential exposure to the release is limited because the remaining contamination is underground. There is no security fence to limit casual visits to the property; however, the actual contamination is inaccessible without serious intent.

The remaining contaminated soil is below the utility lines that cross the site. There are no utilities located such that they provide a pathway for rapid migration.

The nearest receptor surface water is approximately 1,100 feet west of the site.

D. Site Geology and Hydrogeology

Salem Environmental installed a monitoring well in 1994 in the area with the highest soil contamination of the UST Closure soil sampling. The well is near the former location of Tank 4.

The driller advanced five borings during a Site Assessment under the pre-1998 UST Guidelines. Boring D of the five was converted into the monitoring well. There is a boring log available for the well installation. The 1994 documents show that the site has a top layer of 8 feet of clayey silt in the location of the former tank #4 that appears to be fill material. It was reported that the

excavations revealed this upper fill layer extends over the site. It was placed over the natural material that lies at 8 feet depth and below. The lower layer likely has a few feet of soil that transitions to a very weathered saprolite. The soil and saprolite from 8 feet to a depth of 35 to 40 feet had the characteristic of sandy silt. Bedrock was not reached during the excavation or drilling. There is no confining layer to the upper water table. The soil with clay content lies above the approximate depth of the primary source from the original release. It appears that there are no physical characteristics that would impede the migration of the contaminants through the soil and groundwater.

The site is reportedly in the Inner Piedmont Belt. The underlying bedrock is likely micaeous schist. There is a significant elevation difference between the site which is higher and neighboring parcels to the north west that are lower. The site configuration with fill and a retaining wall presents a technical problem for soil remediation by excavation.

The factors affecting contaminant migration on this site are the absence of any restraining layers in the soil and the terrain. It is likely that contamination at the site has migrated from its original point of release. A significant time (13 years) has elapsed since the release was reported and this has likely acted to attenuate the concentrations of contamination by migration and natural degradation.

E. Sampling Results:

Discussion of samples analysis results from the Phase 1 LSA

BRE and Environmental Abatements obtained a sample from the existing monitoring well described in section D. The analytical results show Benzene and aromatic VPH compounds above the 2L standards. The results of the sample analysis are in Table B-4.

The previous investigators took soil samples under the pre-1998 Guidelines. They pushed five borings designated A through E into locations near the former tanks. Boring D was converted into the monitoring well as indicated in the previous section. It had the highest concentration of TPH at 34.0 mg/kg. Of the other four borings, only boring C had detectable TPH at 20.7 mg/kg. A sample from only one boring, E, was submitted for risk based analysis. The results of the sample show non-detection for all listed constituents on the Method 8021 list. The Section selected the location of the 8021 analytical. The selection appears influenced by the fact that the potential source was a waste oil tank. This single sample is not sufficient to allow a determination with current guidelines that require a comparison for commercial/industrial, residential and soil-to-groundwater standards for soil contamination.

The groundwater sampling at the time of the previous Site Characterization (1994) was limited to one sample from the monitoring well. The results of the analysis showed high levels of BTEX, gasoline additives – MTBE and EDB, and other chlorinated organics. At the time of the sampling and analysis, the VPH analysis was not used in North Carolina, therefore no VPH data is available for the 1994 groundwater sample. The constituent with the highest relative concentration was Benzene at 143 ug/l which is over 100 times the 2L standard. The other contaminants ranged from 1.3 to 6 times the corresponding 2L standard. These levels are now lower as described in the first paragraph of Section E above. The data is included in table B-4.

Sampling and analytical from the UST Removal

This LSA was necessary because the contaminated soil left in the base of the excavation at UST removal was above the regulatory standards. Please refer to the July 21, 1994 Closure Report.

The tank closure investigators reported relatively high levels of 5030 range Total Petroleum Hydrocarbons (TPH) remaining on site. The locations with contamination greater than TPH standards are around Tanks #3 and #4 and at the pump island. The levels at the tanks ranged from 301 to 504 mg/kg. The pump island sample result for gasoline range TPH was 238 mg/kg.

F. Conclusions and Recommendations

Based on the results of groundwater sampling and analysis, it can be assumed that risk based constituent soil contamination exceeded the soil-to-groundwater standards. Some areas of the site near the former Tank #4 may exceed the Residential soil standards.

The groundwater sample analytical results from the well in the former tank area showed contamination greater than 2L standards. The VPH C9-C10 aromatics concentration and benzene concentration for the current sample are less than 10 times the 2L standards and they did not exceed the gross contamination levels (GCL).

Considering the time elapsed since the tank removal and previous investigation, the contamination concentrations have decreased. The site conditions include no factor to limit the natural migration except the high percentage of paved area that reduces the water movement through the unsaturated zone.

There is no residential property immediately adjacent to the site. However, exposure to visitors which may include children is possible. The facility is partially secure from access due to the location and activity at the site. The area of contaminated soil that remains with concentrations potentially above residential standards is under 10 to 12 feet of fill in the former tank pit.

Based on Guidelines criteria, this site appears to have a LOW risk to health and environment. Treatment of the remaining contaminated soil at the 10 feet and greater depth under the location of the former tanks and re-sampling select areas to demonstrate that soil contamination levels are below the residential standards and soil-to-groundwater standards could be considered. If results showing the necessary reduction are obtained this action would be effective in reaching a status of "No further action" without requiring a deed restriction. However, the resumption of cleanup by excavation at this point in time would face the same problem of high cost to prevent structural failure of the west side retaining wall.

Treating the soil to reduce contaminant concentrations or allowing natural attenuation to below Residential standards would decrease the risk to health on site. The limited extent of soil contamination, the depth to groundwater, and the site location in an area served by a municipal water source makes it unlikely that a groundwater source of drinking water will be affected offsite during limited treatment or even natural attenuation.

G. Free Product Investigation/Recovery (if applicable)

No free product was found during the UST removal and LSA.

H. Site History:

Closure, Emergency Response and Release Reporting

There were no known past releases for this site. The UST closure was a planned event due to business decision of the owner. During the tanks closure, the investigators discovered and reported the release.

The closure contractor was on site to remove the tanks and conducted an immediate response to the release by removing contaminated soil and remaining product. Continued excavation of contaminated soil was terminated due to concerns of structural stability of the retaining wall on the west side of the site. The removal date for the tanks was July 11-12, 1994. Tanks #2, #3, and #8 were closed in place on site by filling with an inert material. Please see the UST Closure Report for additional detail.

Excavation, Treatment and/or Disposal of Contaminated Soil.

There is no record of the volume of contaminated soil removed available at this date from readily available documents.

LSA Phase 1 Activities

Salem Environmental performed a site assessment in 1994. They installed a monitoring well near Tank A and performed soil borings for soil sampling in other areas. The monitoring well boring was 40 feet deep with the water table at approximately 34 feet. The borings found no free product.

On March 28 2007, BRE and Environmental Abatements sample the monitoring well for 601/602 and VPH analysis.

I. Figures *NOTE: ALL DRAWINGS EXCEPT FOR USGS DEVELOPED FROM CATAWBA COUNTY GIS SERVICE.*

All drawings and maps are in the Figures section that follows the text of this report. The location map, Figure 1, a portion of the USGS Hickory, NC quad sheet, shows the general features of the area around the site. There are no water supply wells on the site or on adjacent properties. The nearest down gradient surface water is located greater than 1,100 feet west.

Sheet 1 of the drawings is a Site Map shows detail of the local area. The site is in the area of west Hickory in a commercial/industrial setting. The commercial buildings, homes and churches in the local area are typically older than 50 years. Sheet 2 shows the location of the former USTs. Sheet 3 shows the boring location for the existing monitoring well. A table on Sheet 3 summarizes the groundwater samples analytical results for the 2007 and 1994 groundwater samples. There are no underground utilities that traverse the former tank beds, and no additional pathways identified for contamination migration.

J. Other Information

- Boring logs and lithologic descriptions; *See Appendix A- excerpt from 1994 Site Characterization*
- Well construction records; *See Appendix B – Installed by Salem Environmental*
- Field measurements (e.g., pH, dissolved oxygen, specific conductivity, temperature) made during groundwater sampling; *Unavailable*
- Risk characterization information *See Appendix C*
- Standard procedures used for sampling, field equipment decontamination, field screening, etc.; *Blue Ridge Engineering and Environmental Abatements followed standard procedures outlined in the “Guidelines” See Appendix D*
- Disposal manifests; *Not Applicable – No waste materials created during this phase of work*
- Laboratory reports and chain-of-custody documents *See Appendix F and E*

TABLES

Table B4

Summary of Groundwater Sampling Results (ug/L)

Date: July 31, 2007 Incident Number and Name: 12634 The Perfect Image

Facility ID#:

Well ID	Sample ID	Date Collected (m/dd/yy)	Analytical Method (e.g., VOC by EPA 601) →										EPA 602	EPA 602	EPA 602	EPA 602	EPA 602	EPA 602	EPA 602	EPA 602	
			Benzene	Chloro-benzene	Dichloro-benzene, 1,2-	Dichloro-benzene, 1,3-	Dichloro-benzene, 1,4-	Ethyl Benzene	IPB	MTBE	Naphthalene	Toluene									Xylene, o-
MW-1	MW-1 P.I.	08/29/94	143	<0.5	<0.5	<0.5	<0.5	<0.5	195	7.5	1082	NR	384	706	Total only						
MW-1	MW-1	03/28/07	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	14.1	<0.5	<0.5	<0.5	2.2	5.4	36.5						
2L Standard (ug/l)			1	50	620	620	75	29	70	200	21	1000	530	530	530						
GCL (ug/l)			5,000	50,000	72,500	61,500	39,500	29,000	70,000	200,000	15,500	257,500	87,500	87,500	87,500						

- Indicate method detection limit for contaminants when analyzed, but not detected (e.g., < 1, 10, 42)
- List any contaminant detected above the method detection limit
- Results must be reported in ug/l 178 denotes concentration greater than the 2L standard; 1556 denotes concentration 10X greater than 2B WQ standards and 7,020 denotes concentration greater than gross contamination level
- GCL = gross contamination level NR – not analyzed
- ** Concentration is above the upper limit of the laboratory calibration curve

Table B4
 Date: July 31, 2007 Incident Number and Name: 12634 The Perfect Image
 Summary of Groundwater Sampling Results(ug/L)
 Facility ID#:

Well ID	Sample ID	Date Collected (m/dd/yy)	Contaminant of Concern →											
			EPA 601	EPA 601	EPA 601	EPA 601	EPA 601	EPA 601	EPA 601	EPA 601	EPA 601	EPA 601		
MW-1	MW-1 P.I.	08/29/94	Bromoform	Carbon Tetrachloride	1,1 Dichloro-ethene	1,2 Dichloro-ethane	Ethylene Dibromide	Methylene Chloride	Tetrachloroethylene	1,1,1 Tri-chloroethylene	Tri-chloroethylene	MADEP VPH C8-Aliphatics	MADEP VPH C9-VPH C9-Aromatics	MADEP VPH C12-Aliphatics
MW-1	MW-1	03/28/07	<0.5	<0.5	<0.5	<0.5	8.4	<5.0	<0.5	<0.5	<0.5	NR	NR	NR
			NA											<68
2L Standard (ug/l)			NA	NA	7	70	NA	0.7	0.7	NA	2.8	420	210	42,000
GCL (ug/l)			NA	NA	7,000	70,000	NA	700	700	NA	2,800	NA	NA	NA

- Indicate method detection limit for contaminants when analyzed, but not detected (e.g., < 1, 10, 42)
- List any contaminant detected above the method detection limit
- Results must be reported in ug/l 178 denotes concentration greater than the 2L standard; 1556 denotes concentration 10X greater than 2B WQ standards and 7,020 denotes concentration greater than gross contamination level
- GCL = gross contamination level NR – not analyzed
- ** Concentration is above the upper limit of the laboratory calibration curve

Table B-6

Property Owners/ Occupants

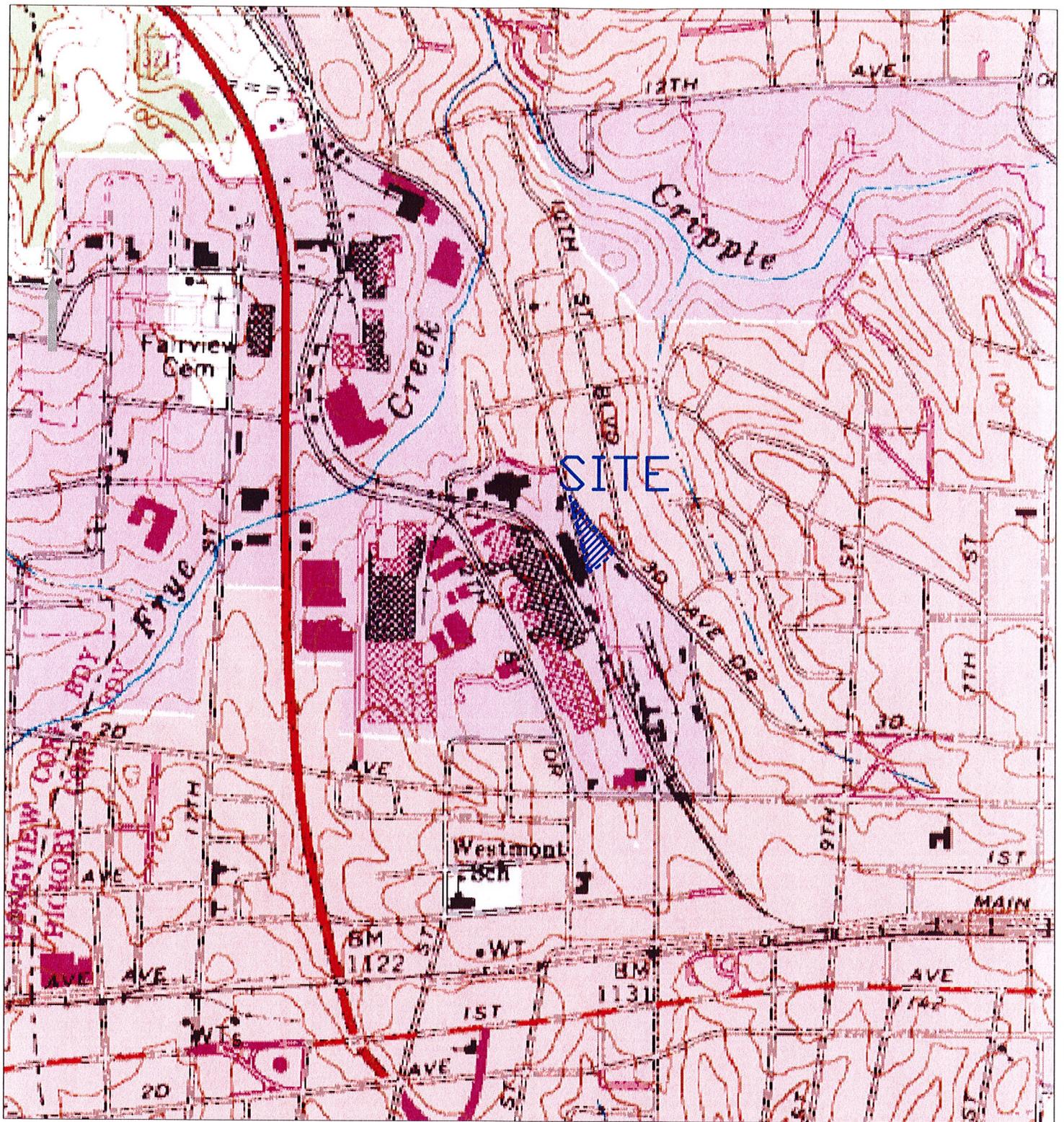
Date: July 30, 2007

Incident No. and Name: 12634 Perfect Image

ID#:unkown

Tax Parcel Number/ Map ID	Owner/ Occupant Name (Last, First MI)	Address
2712	Truck & Auto Service, Inc.	P.O. Box 443 Hickory, NC 28603
9462	ETHC, LLC.	509 11 th St NW Hickory, NC 28601
9634	ETHC, LLC	509 11 th St NW Hickory, NC 28601
9713	ETHC, LLC	509 11 th St NW Hickory, NC 28601
1465	Causey, Kathryn Viola Keever	3740 6 th Dt NE Hickory, NC 28601

FIGURES



Site Coords 35d 44' 23" N
 NAD83 81d 21' 32" W

Figure 1: Site Map
 The Perfect Image

LSA Phase 1 Project 7046
 The Perfect Image - Terry Church
 Hickory, NC

Approx Scale 1" = 1,000'

Copied from USGS
 1993
 Granite Falls Quad

7/23/07 WRH, PE



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ron.haynes@brepllc.com



Map details copied from Catawba County GIS

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**BLUE RIDGE
 ENGINEERING**

NAME: *The Perfect Image Incident # 12634*

SHEET TITLE: *AREA MAP*

Drawn By: WRH

Approved:

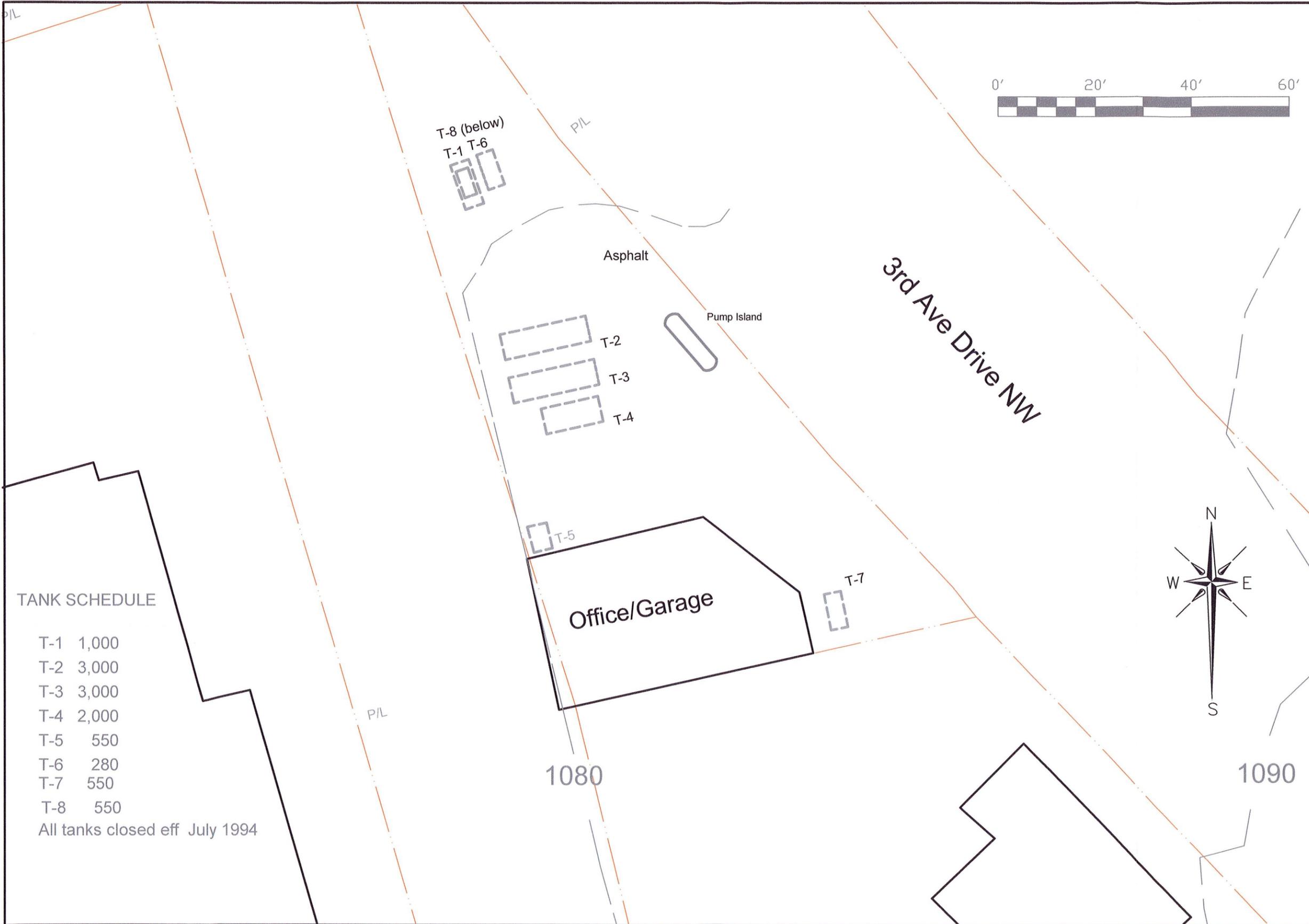
Date: 7-12-07

Scale: 1" = 100'

Sheet: 1

DWG Name: J-7046

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TANK SCHEDULE

T-1	1,000
T-2	3,000
T-3	3,000
T-4	2,000
T-5	550
T-6	280
T-7	550
T-8	550

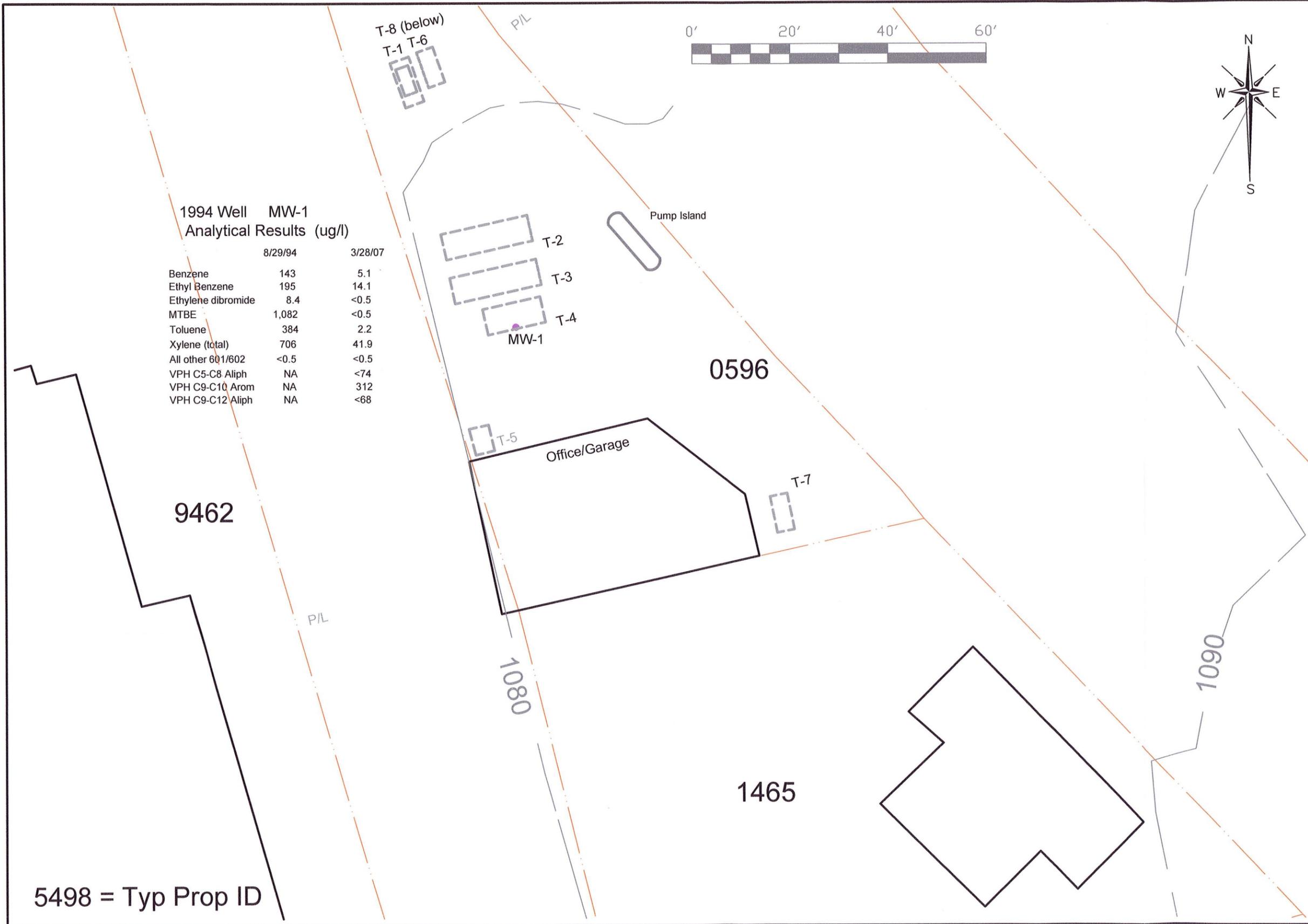
All tanks closed eff July 1994

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NAME: *The Perfect Image Incident # 12634*
 SHEET TITLE: *SITE PLAN*

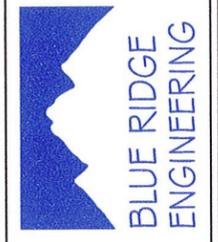
Drawn By: WRH
 Approved:
 Date: 6-30-07
 Scale: 1" = 20'
 Sheet: 2
 DWG Name: J-7046



1994 Well MW-1 Analytical Results (ug/l)

	8/29/94	3/28/07
Benzene	143	5.1
Ethyl Benzene	195	14.1
Ethylene dibromide	8.4	<0.5
MTBE	1,082	<0.5
Toluene	384	2.2
Xylene (total)	706	41.9
All other 601/602	<0.5	<0.5
VPH C5-C8 Aliph	NA	<74
VPH C9-C10 Arom	NA	312
VPH C9-C12 Aliph	NA	<68

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NAME: The Perfect Image Incident # 12634
 SHEET TITLE: MONITORING WELLS GW DATA

Drawn By: WRH
 Approved:
 Date: 7-12-07
 Scale: 1" = 20'
 Sheet: 3
 DWG Name: J-7009

5498 = Typ Prop ID

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APPENDIX A
BORING LOGS

Boring records are not available. The wells was installed in 1994.

& NATURAL RESOURCES

OCT 11 1994

DIVISION OF ENVIRONMENTAL MANAGEMENT
HICKORY REGIONAL OFFICE

**SITE CHARACTERIZATION REPORT:
THE PERFECT IMAGE (CHURCH'S BODY SHOP)
3RD AVE. DRIVE (OLD LENOIR ROAD),
HICKORY, CATAWBA COUNTY**

Prepared For: Mr. Terry Church
Church's Body Shop, Inc.
P. O. Box 1528
Hickory, NC 28603-1528
704-396-2185

Prepared by: Salem Environmental/Certifoam Services, Inc.
P. O. Box 5524
Winston-Salem, NC 28113-5524
910-661-9231 fax 661-9241

OCTOBER 11, 1994

I. SUMMARY

Environmental assessment at UST system closure in July of this year found petroleum impacted soil. Total petroleum hydrocarbons (TPH) concentrations were elevated under three gasoline USTs, product lines, and pump island. Excavation removed as much impacted soil as possible.

Five soil borings investigation were advanced for initial site characterization. TPH concentrations at boring bottoms are less than in closure samples. One boring was completed as a monitoring well. Ground water sampled from the well is impacted.

II. BACKGROUND

Cultural Setting The former Church's Body Shop facility sits in near west side of Hickory. The area is heavily developed with manufacturing and commercial facilities. A former auto dealership is across 3rd Ave. Drive and a furniture factory is downhill across the rear street. The site occupies a wedge between 3rd Avenue Drive and 11th Street Drive. The facility was originally a service station and probably dates from the 1940's or earlier. The site is now leased to The Perfect Image, an auto detailing business. City water and sanitary sewer serve the area. No supply wells are suspected to exist within 1500 feet.

Two maps are provided. Figure 1 locates the site on the Hickory topographic map. Figure 2 is a map of the site showing pertinent features.

Physical Setting The site is built up to the grade of 3rd Avenue Drive (Old Lenoir Road). A retaining wall elevates the grade above 11th Street Drive. The wall is bowed out and the fill dirt under the facility pavement has settled. Several USTs were set so close to this wall that they could not be excavated and were filled with foam. Storm sewers run along both roads. The property has a modest slope toward the north. Runoff goes to 11th Street Drive.

Geologic setting of the site is in the Inner Piedmont Belt. The 1985 Geologic Map of NC indicates that bedrock beneath the site is a micaceous schist. The soil developed on these crystalline rocks consists of a thin topsoil lacking in organic matter and a clay rich residuum followed below by a thick subsoil having the texture and structures of the underlying crystalline rock. This is saprolite, a soil developed in place by chemical weathering of bedrock. Most ground water is contained in the porous saprolite. Far greater permeability exists in fractures in the deeper, much less porous bedrock. As a result, much ground water movement takes place through bedrock while most storage is in the saprolite.

Church's Body Shop

Page 1

UST Closure Eight tanks were closed at this site starting on July 11. Two of these USTs (#s 6 & 8) were orphan tanks discovered during our work; UST #8 was beneath tanks 1 & 6. Four were excavated and removed while three others were closed in place due to physical constraints prohibiting removal. The three closed in place were numbers 2, 3, & 7, shown on the site map. There was strong petroleum odor in soil beneath UST #4 and light odor in soil beneath UST #6 and at the pump island. Faint petroleum odor was also present in sample 3B, taken by hand auger. The highest TPH concentration found was 504 ppm by 5030/8015M in sample 4B.

Scope of Services Mr. Terry Church is the responsible party. He authorized Certifoam Services/Salem Environmental to perform a soil borings investigation and to install a ground water monitoring well in one of the borings. We were also to prepare a report of results as a first step toward a comprehensive site assessment. Blue Ridge Labs, Lenoir, was subcontracted to perform the analytical work.

III. INVESTIGATION

The soil borings investigation took place on August 29. Five borings were advanced with our hollow-stem auger drill rig. Boring locations are shown on Figure 3. Borings were located close to closure sampling points in the area indicated by lab results to be impacted. Boring E was advanced at the former waste oil UST location so that a sample could be obtained for EPA method 8021 analysis, not originally run. A monitoring well was installed in boring D with 15 feet of .010" slot, 2" diameter, screen and 25 feet of riser, both Schedule 40 PVC. Completion was by flush mount protective casing with bolt down lid. The well is secured with padlocked expansion cap. Well construction record is enclosed. Ground water sampling procedure is described below.

Ground Water Sampling Procedure Representative ground water samples are collected in accordance with EPA recommendations outlined in the "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document". These procedures include purging 3 to 5 well volumes or bailing to dryness followed by a brief period to allow the well to recharge. The purged volume is calculated by multiplying the bailer capacity by the number of bails removed from the well and compared to the calculated volume of water in the well prior to bailing. Clean bailer and cord are used to take the sample. Care is taken to prevent dirtying the cord or splashing or otherwise agitating the well water. The bailer has a closed top to prevent off-gassing of volatiles and a bottom entry, ball check valve to avoid agitation. Disposable vinyl gloves are worn during sample collection from each well to prevent cross-contamination of the samples. Water is slowly poured from the bailer into teflon lined or teflon septum polypropylene capped bottles provided by the laboratory. The samples are immediately put in a chilled cooler. A chain-of-custody form accompanies the samples to the lab.

IV. RESULTS

The upper portions of the borings consisted of orange, clayey silt. Much or all of this material is backfill used to bring the site to grade. Below, we found tan, micaceous, sandy silt with a looser, less cohesive texture. In the monitor well, boring D, water was found at about 33 feet.

The results of soil sample analyses are shown on Table 1, below.

SAMPLE	A-10	B-10	C-10	D-28	E-8
TPH, EPA 5030/8015m	nd	nd	20.7	34.0	-
COMPOUND, EPA 8021 (none detected)	-	-	-	-	nd

Water quality in the source well had been found to be heavily impacted by BTEX compounds. The total concentration of BTEX compounds found by EPA 602 analysis is 2517.5 ppb. Benzene concentration is 143 ppb; the NCAC 2L standard for benzene is 1 ppb. Other compounds found in concentrations above 2L standards are MTBE, total xylenes, and ethylbenzene. Certificate of analysis and chain of custody form for the recent samples are enclosed.

V. ASSESSMENT

The two orphan tanks were both extensively rusted with many holes. Tank 6 had no structural integrity; it fell apart while being removed. The location of Tank 8 beneath tanks 1 & 6 suggests an older UST system abandoned when the site was further built up.

No appreciable volume of contaminated soil could be excavated at this site because of the proximity of the unstable retaining wall standing only three feet from 11th Street Drive. However, the subsequent soil borings investigation shows that TPH concentrations rapidly decline with depth. Given a typical piedmont SSE score of 60 to 90, the cleanup level for soil will be 180 ppm TPH as gasoline.

Due to the setting, the ground water contamination at this site will probably be given a low priority by regulators. This is a category E site; public water is available, there are no impacted private supply wells, and probably no supply wells in use within 1500 feet.

VI. LIMITATIONS & CERTIFICATION

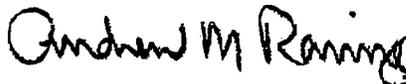
The initial ground water investigation, site characterization at The Perfect Image, formerly Church's Body Shop has been performed for the exclusive use of Mr. Terry Church. Activities were limited to the authorized scope of work. Results are limited by the assumption that third party information, including laboratory analytical data, is accurate as reported to us. Applicability of results is limited to the site and to the time of our field investigation. Should further information become available to us, we reserve the right to alter our interpretations.

We, the undersigned, certify that this report fairly and completely represents conditions at the site as we found them. We further certify that our work was conducted following regulatory guidance and standard industry practice, to the best of our ability.

Sincerely,



Harvey C. Danner, Jr.
President/Project Manager



Andrew M. Raring, Ph.D., P.G.
Consulting Geologist



APPENDIX B
WELL CONSTRUCTION RECORDS

Division of Environmental Management - Groundwater Section
P.O. Box 26535 - Raleigh, N.C. 27629-0535
Phone (919) 733-3221

FOR OFFICE USE ONLY
QUAD. NO. SERIAL NO.
Lat. Long. RO
Municipality
Basin Code
Master Est. GW-1 Est.

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR: CERTIFORM SERVICES, INC

STATE WELL CONSTRUCTION PERMIT NUMBER:

DRILLER REGISTRATION NUMBER: 1251

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: HICKORY County: CATAWBA

OLD LENOIR ROAD, 3RD AVENUE DRIVE

(Road, Community, or Subdivision and Lot No.)

2. OWNER MR TERRY CHURCH

ADDRESS P.O. BOX 1528

HICKORY

City or Town

NC

State

28603-1528

Zip Code

3. DATE DRILLED 8/29/94 USE OF WELL MONITORING

4. TOTAL DEPTH

5. CUTTINGS COLLECTED YES NO

6. DOES WELL REPLACE EXISTING WELL? YES NO

7. STATIC WATER LEVEL Below Top of Casing: 34 FT.

(Use "+" if Above Top of Casing)

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

* Casing Terminated after Below Land Surface in Wells unless a variance is issued in accordance with 15A NCAC 2C .0110

9. YIELD (gpm): N/A METHOD OF TEST

10. WATER ZONES (depth): UNCONFINED AQUIFER

11. CHLORINATION: Type N/A Amount

12. CASING:

From	Depth To	Diameter Ft.	Wall Thickness or Weight/Ft.	Material
	<u>0</u> To <u>25</u>	<u>2</u>	<u>Sch 40</u>	<u>PVC</u>
From	To	Ft.		
From	To	Ft.		

13. GROUT:

From	Depth To	Material	Method
	<u>0</u> To <u>21</u>	<u>Cement</u>	<u>Poured</u>
	<u>21</u> To <u>23</u>	<u>Benlate</u>	<u>Poured</u>
From	To	Ft.	

14. SCREEN:

From	Depth To	Diameter Ft.	Slot Size in.	Material
	<u>25</u> To <u>40</u>	<u>2</u>	<u>.010</u>	<u>PVC</u>
From	To	Ft.	in.	
From	To	Ft.	in.	

15. SAND/GRAVEL PACK:

From	Depth To	Size	Material
	<u>23</u> To <u>40</u>	<u>FL Coarse</u>	<u>Qtz Sand</u>
From	To	Ft.	

16. REMARKS: Flush manvat protective casing, install down
fit - padlocked expansion cap

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

[Signature]

Oct. 3rd, 1994

SIGNATURE OF CONTRACTOR

DATE

Submit original to Division of Environmental Management and copy to well owner.



APPENDIX C
RISK CHARACTERIZATION
INFORMATION

THE PERFECT IMAGE. RISK CHARACTERIZATION JULY 30, 2007

Part I - Groundwater/Surface Water/Vapor Impacts

High Risk

1. Has the release contaminated any water supply well including any well used for non-drinking purposes?
NO
2. Is a water supply well used for drinking water located within 1,000 feet of the source area of the release?
NO, The site is located in the Hickory, NC service area.
3. Is a water supply well not used for drinking water (e.g., irrigation, washing cars, industrial cooling water, filling swimming pools) located within 250 feet of the source area of the release?
NO
4. Does groundwater within 500 feet of the source area of the release have the potential for future use (there is no other source of water supply other than the groundwater)?
NO
5. Do vapors from the release pose a threat of explosion because of accumulation of the vapors in a confined space or pose any other serious threat to public health, public safety or the environment?
NO
6. Are there any other factors that would cause the release to pose an imminent danger to public health, public safety, or the environment?
NO

Intermediate Risk

7. Is a surface water body located within 500 feet of the source area of the release?
NO
If YES, does the maximum groundwater contaminant concentration exceed the surface water quality standards and criteria found in 15A NCAC 2B .0200 by a factor of 10?
NOT APPLICABLE
8. Is the source area of the release located within an approved or planned wellhead protection area as defined in 42 USC 300h-7(e)?
NO
9. Is the release located in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985?
NO
10. Do the levels of groundwater contamination for any contaminant exceed the gross contamination levels established by the Department?
NO

Part II – Land Use

Property Containing Source of Release

1. Does the property contain one or more primary or secondary residences (permanent or temporary)?
NO
2. Does the property contain a school, daycare center, hospital, playground, park, recreation area, church, nursing home, or other place of public assembly?
NO
3. Does the property contain a commercial (e.g., retail, warehouse, office/business space, etc.) or industrial (e.g., manufacturing, utilities, industrial research and development, chemical/petroleum bulk storage, etc.) enterprise, an inactive commercial or industrial enterprise, or is the land undeveloped?
YES, The property is commercial – Automotive repair
4. Do children visit the property
YES
Is access to the property reliably restricted consistent with its use (e.g., by fences, security personnel or both)?
YES, this type facility is not typically fenced
5. Do pavements, buildings, or other structures cap the contaminated soil?
YES
If yes, what mechanisms are in place or can be put into place to ensure that the contaminated soil will remain capped in the foreseeable future? Administrative
6. What is the zoning status of the property?
The site is zoned C5 - commercial
7. Is the use of the property likely to change in the next 20 years?
Uncertain, this site is now in an area of post-mature commercial activity. The site grading and location may result in continued commercial use. Similar areas in Hickory have been redeveloped..

Property Surrounding Source Area of Release

1. What is the distance from the source area of the release to the nearest primary or secondary residence (permanent or temporary)?
425 ft.
2. What is the distance from the source area of the release to the nearest school, daycare center, hospital, playground, park, recreation area, church, nursing home or other place of public assembly
1,500 ft.
3. What is the zoning status of properties in the surrounding area?
C-5 – commercial and I-2 – Industrial
4. Briefly characterize the use and activities of the land in the surrounding area.
The site itself is a commercial use. The surrounding properties are used for a variety of commercial and industrial activities with some residential is nearby.

PERFECT IMAGE. RECEPTOR INFORMATION

7/30/07

1. Water Supply Wells
No water supply wells were discovered during the receptor check for the surrounding area.
2. Public Water Supplies
The site and surrounding area is supplied with public water and public sewer. The location of the force main(s) is on both sides of 3rd Ave. Dr.
3. Surface Water
Please see the text of the report. There are two medium sized streams within the 1,500 ft. radius of the site.
4. Wellhead Protection Areas
There are no wellhead protection areas within 1,500 ft of the source area.
5. Describe Deep Aquifers in the Coastal Plain Physiographic Region.
Not applicable.
6. Describe Subsurface Structures.
No subsurface structures are located on the property of the former tank site.
7. Property Owners and Occupants
See Table B-6

Standard Procedures – The Perfect Image, Hickory, NC

The sampling procedure for work on this shall follow in general the “Guidelines for the Investigation and Remediation of Soil and Groundwater” of the NC DENR UST Section. Field personnel will take soil samples and/or groundwater samples. Take soil samples from the 5 ft soil columns of the push probe by cutting the plastic cylinder and removing soil by hand using clean gloves. If soil samples are taken manually from depth greater than 0.5 ft use decontaminated stainless steel hand augers and new gloves.

A field sampling kit will hold materials to clean sampling equipment as necessary. Use Alconox and tap water followed by a rinse with tap water. Pre-cleaned hand augers and trowels shall be taken to the site ready for use. Clean the equipment between sampling locations and immediately before taking a new sample. Plan the work if possible to take background or potentially clean samples first in order and known contaminated samples last.

All samples for laboratory analysis shall be packed into clean jars or vials supplied by the laboratory that meet specifications of the UST Section. As the samples are obtained, the sample jars must be sealed, labeled, and placed in a cooler for transportation to the analytical lab. The samples must be labeled according to the boring, pump, tank and/or monitoring well where they originated. A chain of custody shall be maintained throughout the sampling event until the samples are submitted to the analytical laboratory.

The field technicians shall use new hand bailers to obtain the water samples from the well. The samples shall be preserved as required by the latest EPA protocols and NC policies and procedures prior to transport to the laboratory for analysis. The analytical methods selected shall be based on exposure to fuel oil range constituents.

Other Information

Boring logs shall be recorded for each soil sampling boring or boring converted to a monitoring well. Any monitoring well installed on a temporary basis shall be abandoned in place within two weeks of final sampling by the procedures required in the NC regulations including filling with soil and bentonite. Follow NC guidelines for handling of materials like soil and purge water created during the sampling activities.

Digital photographs provide a good record of investigation activities. The investigators should record pertinent documentation for photographs including the direction of the view (North, South, etc.) and the photographer’s name.

A good general reference for environmental sampling is the EPA Region IV Standard Operating Procedures manual latest edition.

APPENDIX E
CHAIN OF CUSTODY

Blue Ridge Labs, Inc.

P.O. Box 2940
 Lenoir, NC 28645
 Telephone (828) 728-0149 Fax (828) 728-0131

CHAIN OF CUSTODY RECORD

286

UST

DS Reporting Groundwater Sanitary Landfill Hazardous Waste Industrial or QC Non State Reporting

Report To: Environmental Remediation Project Name: Perfect Image (Church's Body Shop)

John Higgins at Blue Ridge Labs PO Number: NC 28645

Sample ID	Sample Type	Date	FIELD		Preservatives Lab Check				Requested Analysis
			Time & Temp HR:MM °C	Resid. Chlor. Field Check	Field Dechlorination	pH	Resid Chlor P or A	Temp °C	
	W	3/28/07	11:00	✓	✓			3.16	601/602 EXP, VPH

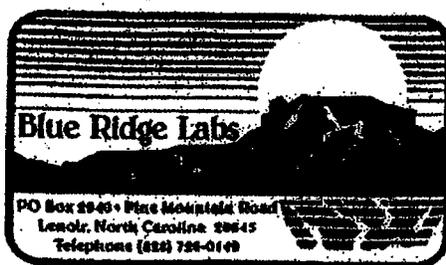
Inquired by: [Signature] Date: 3-29-07 Time: 11:35

Received by: [Signature] Date: 3/28/07 Time: 11:35

Page 1 of 1 Rev. 05/05/98

In submission of samples, buyer agrees that invoices are due at the time work is completed. Open accounts are due 20 days following the invoice date. A finance charge of 1.5% per month will be imposed on all late accounts. When requesting sample to Blue Ridge Labs (BRL), buyer authorizes BRL to perform only the analysis indicated above and also agrees to pay collection and attorneys fees if the account comes delinquent. BRL reserves the right to deny all QA/QC documentation for any work where payment has not been made. Without payment, BRL owns all the documentation and reserves the right to notify government agency (local, state, or federal) that there will be no QA/QC support for the data. BRL also does not guarantee that any work submitted will be accepted by any regulatory authority; therefore, it is the buyer's responsibility to verify the required tests with the appropriate regulatory agency. All work for state reporting is under the jurisdiction of the Laboratory Section of NC DENR.

APPENDIX F
LABORATORY ANALYTICAL REPORTS



Client : Environmental Abatements
 PO Box 221
 Newton, NC 28658

Attention: John Sigmon

Date Received: 28-Mar-07

Report Date: 16-Apr-07

Sample Date: 28-Mar-07

BRL #: BRL-2007-0286

Lab Sample ID: LSID-2007-01819

Client Sample ID: Perfect Image

Church's Body Shop

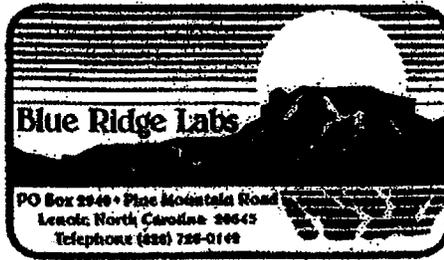
Parameter	Result	MLQ	Unit	Method	Analysis Time	Analysis Date	Analyst
Bromodichloromethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Bromoform	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Bromomethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Carbon Tetrachloride	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Chloroethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Chloroethylvinyl Ether, 2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Chloroform	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Chloromethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dibromochloromethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichlorodifluoromethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloroethane, 1,1-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloroethane, 1,2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloroethene, 1,1-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloroethene, trans-1,2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloropropane, 1,2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloropropene, cis-1,3-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Dichloropropene, trans-1,3-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Ethylene Dibromide (EDB)	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM

Reported By:

[Signature]
 K.S. Matheson, S.J. Johnson

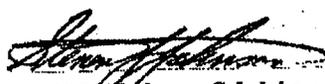
* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275



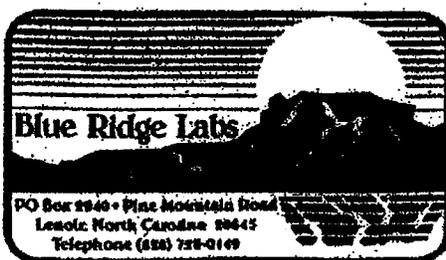
Client : Environmental Abatements
 PO Box 221
 Newton, NC 28658
Attention: John Sigmon
Date Received: 28-Mar-07
Report Date: 16-Apr-07
Sample Date: 28-Mar-07
BRL #: BRL-2007-0286
Lab Sample ID: LSID-2007-01819
Client Sample ID: Perfect Image

Parameter	Result	MQL	Unit	Method	Analysis Time	Analysis Date	Analyst
Methylene Chloride	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Tetrachloroethane, 1,1,2,2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Tetrachloroethene	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Trichloroethane, 1,1,1-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Trichloroethane, 1,1,2-	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Trichloroethene	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Trichlorofluoromethane	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM
Vinyl Chloride	*	0.5	ug/l	EPA-601 Exp.	7:47	3/29/2007	KSM

Reported By: 
 K.S. Matheson, S.J. Johnson

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275

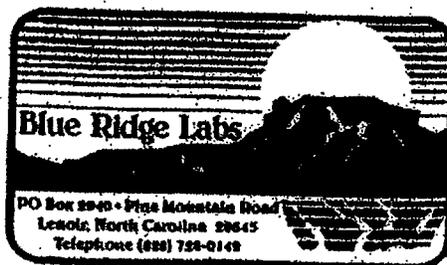


Client : Environmental Abatements
 PO Box 221
 Newton, NC 28658
Attention: John Sigmon
Date Received: 28-Mar-07
Report Date: 16-Apr-07
Sample Date: 28-Mar-07
BRL #: BRL-2007-0286
Lab Sample ID: LSID-2007-01820
Client Sample ID: Perfect Image

Parameter	Result	MLQ	Unit	Method	Analysis Time	Analysis Date	Analyst
Benzene	5.1	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Chlorobenzene	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Dichlorobenzene, 1,2-	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Dichlorobenzene, 1,3-	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Dichlorobenzene, 1,4-	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Ethyl Benzene	14.1	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
IPE	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
MTBE	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Naphthalene	*	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Toluene	2.2	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Xylene, o-	5.4	0.5	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM
Xylenes, m & p-	36.5	1	ug/l	EPA-602 Exp	8:31	3/29/2007	KSM

Reported By: 
 K.S. Matheson, S.J. Johnson

* Concentrations are below Minimum Quantification Limit except where noted.
 NC Laboratory Certificate No. 275



Client : Environmental Abatements
 PO Box 221
 Newton, NC 28658
Attention: John Sigmon
Date Received: 28-Mar-07
Report Date: 16-Apr-07
Sample Date: 28-Mar-07
BRL #: BRL-2007-0286
Lab Sample ID: LSID-2007-01821
Client Sample ID: Perfect Image

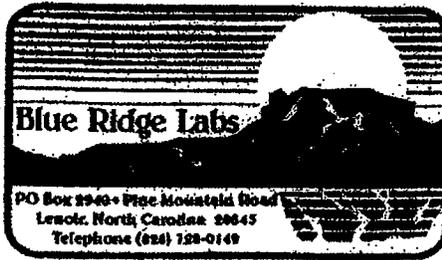
Parameter	Result	ML	Unit	Method	Analysis Time	Analysis Date	Analyst
VPH C5-C8 Aliphatics	*	0.074	mg/l	MADEP-VPH	5:44	4/7/2007	KSM
VPH C9-C10 Aromatics	0.312	0.072	mg/l	MADEP-VPH	5:44	4/7/2007	KSM
VPH C9-C12 Aliphatics	*	0.068	mg/l	MADEP-VPH	5:44	4/7/2007	KSM

Reported By: _____

[Signature]
 K.S. Matheson, S.J. Johnson

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275



Client : Environmental Abatements
PO Box 221
Newton, NC 28658

Attention: John Sigmon

Date Received: 28-Mar-07

Report Date: 16-Apr-07

Sample Date:

BRL #: BRL-2007-0286

Lab Sample ID: LSID-2007-01822

Client Sample ID: Trip Blank

Parameter	Result	MQL	Unit	Method	Analysis Time	Analysis Date	Analyst
VPH C5-C8 Aliphatics	*	0.074	mg/l	MADEP-VPH	3:31	4/7/2007	KSM
VPH C9-C10 Aromatics	*	0.072	mg/l	MADEP-VPH	3:31	4/7/2007	KSM
VPH C9-C12 Aliphatics	*	0.068	mg/l	MADEP-VPH	3:31	4/7/2007	KSM

Reported By:

K.S. Matheson, S.J. Johnson

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275

BLUE RIDGE LABS
VPH (Aliphatics/Aromatics) REPORTING FORM

CLIENT: Environmental Abatelements
 PROJECT:

NC LAB CERTIFICATION # 275
 SITE LOCATION:

SAMPLE INFORMATION AND ANALYTICAL RESULTS

Sample ID	1822	1821		
Sample Matrix	Water TB	Water		
Collection	NA	NA		
Option (Soil)*				
Date Collected	3/28/07	3/28/07		
Date Received	3/28/07	3/28/07		
Date Extracted	4/6/07	4/6/07		
Date Analyzed	4/7/07	4/7/07		
Dry Weight	NA	NA		
Dilution	1.0	1.0		
Factor				
C5-C8	< 0.074 mg/l	< 0.074 mg/l		
Aliphatics**				
C9-C12	< 0.068 mg/l	< 0.068 mg/l		
Aliphatics**				
C9-C10	< 0.072 mg/l	0.312 mg/l		
Aromatics**				
Surrogate %	80.5	79.8		
Recovery-PID				
Surrogate %	81.2	79.9		
Recovery-FID				

*Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand) Option 3 = Field weight of soil

**Range results should exclude any surrogates, internal standards, or Target PAH analytes

*** Estimated value, beyond linear range ^a No trip blank submitted ^b Observed in method or trip blank

% Recovery-Fortified Blank (Spike)-PID	NA	C9-C12 Aliphatic	NA	C9-C10 Aromatic	97.4 %
Relative % Difference-PID Dup	NA		NA		0.9 %
Percent Recovery-Fortified Blank (Spike)-FID	99.7 %		96.9 %		NA
Relative % Difference-FID Dup	0.4 %		0.7 %		NA

BLUE RIDGE LABS VPH REPORTING FORM

Initial Calibration Date: 12/20/06

Sample Identification: 1822, 1821

Calibration Ranges and Limits

RANGE	MDL	ML	RL
C5-C8 Aliphatics	0.0231 mg/l	0.0735 mg/l	0.074 mg/l
C9-C12 Aliphatics	0.0214 mg/l	0.0679 mg/l	0.068 mg/l
C9-C10 Aromatics	0.0227 mg/l	0.0721 mg/l	0.072 mg/l

Note: Please include appropriate units

Method of Quantitation: Curve or Average Response Factor

Calibration Concentration Levels

RANGE	LEVELS	% RSD OR CCC
C5-C8 Aliphatics	0.050 mg/l	CCC=0.9981
	0.200 mg/l	
	0.400 mg/l	
	0.600 mg/l	
	0.800 mg/l	
C9-C12 Aliphatics	0.050 mg/l	CCC=0.9981
	0.200 mg/l	
	0.400 mg/l	
	0.600 mg/l	
	0.800 mg/l	
C9-C10 Aromatics	0.050 mg/l	CCC=0.9980
	0.200 mg/l	
	0.400 mg/l	
	0.600 mg/l	
	0.800 mg/l	

Note: Please include appropriate units

Calibration Check Date: 4/6/07

Calibration Check

RANGE	LEVEL	RPD
C5-C8 Aliphatics	0.399 mg/l	0.1 %
C9-C12 Aliphatics	0.397 mg/l	0.4 %
C9-C10 Aromatics	0.390 mg/l	1.2 %

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

