(5)

Guilford

Climax General Store

North Carolina Department of Human Resources
Division of Health Services
Drinking Water Health Risk Evaluation For
Petroleum Products

DATE: 4/11/90 LABORATORY NUMBER: 904742

This water is probably contaminated with a petroleum product that may be gasoline, fuel oil, kerosene, or other.

( ) The movement of chemicals into groundwater is difficult to predict. Although these results indicate that trace levels of contaminants are present, this water is acceptable for normal use now. However, since levels may increase or other chemicals might appear in the future, this water should be resampled in _____ month(s). (PLEASE INDICATE ON LAB SHEET THAT IT IS A RESAMPLE AND PROVIDE PREVIOUS SAMPLE NUMBER(S).)

(✓) Your water contains a chemical (benzene) that is known to cause cancer in humans. The U. S. Environmental Protection Agency has set a maximum contaminant level of 5 ug/l (ppb) for benzene. This is the level that is considered acceptable for public water supplies. Even at this level, there may be some risk of cancer. The level of benzene in this water cannot be predicted from one time to another.

(✓) Based on this benzene level, this water should not be used for drinking or cooking. Prolonged bathing/showering should be avoided.

( ) This water is highly contaminated and should not be used for drinking, cooking, or bathing/showering.

( ) This water sample contains multiple contaminants that suggest petroleum contamination. Since the toxicity of some of these agents is unknown or poorly understood, prudent public health policy recommends that this water should not be used for drinking and cooking. Prolonged bathing/showering should be avoided.

Comments: Gasoline contamination is indicated. Benzene levels are about 8 times the EPA MCL. Continued consumption may pose a significant health risk over time. Resample in 4 months.

For further information, contact Dr. Ted Taylor or Dr. Ken Rudo, Environmental Epidemiology Branch, (919) 733-3410.

DHS T475 (Revised 5/89)
Environmental Epidemiology Branch

62 E Aver

#2

N.C. Dept. of Environment, Health and Natural Resources
Division of Laboratory Services
State Laboratory of Public Health
P.O. Box 28047, Raleigh, N.C. 27611

Environmental Sciences Analysis Report

Name of Owner, Patient or Supply: Climax General Store

Address: P.O. Box 35, Climax NC 27233

County: Guilford

Report To: Terry Cole, Guilford Co. Env. Health

Address: 301 N. Eugene St.
Greensboro, NC 27401

Date Collected: 3-22-90

Collected By: Terry B Cole

Analysis Desired: VOC

VOC Analysis

Laboratory Number	Sample Number	Sample Description or Remarks	Results In
904742			SEE ATTACHED SHEET(S)

Date Received 3-23-90 mw

Date Extracted

Date Reported 4-3-90

Date Analyzed VOC 3/28/90 7pm

Reported By: John L Neal

DEHNR Form 2364 Revised (9-89)
Laboratory

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON ST, RALEIGH, N.C. 27611

Laboratory No. 904742 PURGEABLE COMPOUNDS Date of Analysis 3/28/90

COMPOUND	µg/l
Dichlorodifluoromethane	U
Chloromethane	↓
✓Vinyl Chloride	↓
Bromomethane	↓
Chloroethane	↓
Trichlorofluoromethane	↓
✓1,1-Dichloroethylene	↓
Methylene Chloride	↓
tert-Butyl Methyl Ether	↓
(Trans)1,2-Dichloroethylene	↓
Isopropyl ether	↓
1,1-Dichloroethane	↓
2,2-Dichloropropane	↓
(Cis) 1,2-Dichloroethylene	↓
Chloroform	↓
(BCM) Bromochloromethane	↓
✓1,1,1-Trichloroethane	↓
1,1-Dichloropropene	↓
✓Carbon Tetrachloride	↓
✓Benzene	39.9
✓1,2-Dichloroethane	U
✓Trichloroethylene	↓
1,2-Dichloropropane	↓
Bromodichloromethane	↓
Dibromomethane	↓
Toluene	6.0
1,1,2-Trichloroethane	U
Tetrachloroethene	↓
1,3-Dichloropropane	↓
Dibromochloromethane	↓
1,2-Dibromoethane (EDB)	↓
1-Chlorohexane	↓

COMPOUND	µg/l
Chlorobenzene	U
Ethylbenzene	↓
1,1,1,2-Tetrachloroethane	↓
p-Xylene	16.6
m-Xylene	↓
o-Xylene	94.1
Styrene	U
Bromoform	↓
Isopropylbenzene	↓
1,1,2,2-Tetrachloroethane	↓
Bromobenzene	↓
n-Propylbenzene	↓
1,2,3-Trichloropropane	↓
2-Chlorotoluene	↓
1,3,5-Trimethylbenzene	42.3 J
4-Chlorotoluene	U
(Tert) Butyl Benzene	↓
Pentachloroethane	↓
1,2,4-Trimethylbenzene	32.9 J
(Sec) Butyl Benzene	U
p-Isopropyltoluene	↓
1,3-Dichlorobenzene	↓
✓1,4-Dichlorobenzene	↓
n-Butylbenzene	↓
1,2-Dichlorobenzene	↓
(Bis) 2 Chloroisopropyl Ether	↓
1,2-Dibromo-3 Chloropropane	↓
1,2,4-Trichlorobenzene	↓
Hexachlorobutadiene	↓
Naphthalene	↓
1,2,3-Trichlorobenzene	↓

COMMENTS: Numerous unidentified peaks present

MDL - Minimum Detection Limit for water (EPA Method 502.2), is 1.0 µg/l.

J - Estimated value.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected.
NA - Not analyzed.
1/ - Tentative identification.
✓ - Regulated VOC
T - Trihalomethane

N.C. Division of Health Services
DHS 3068-0 (1/89 Laboratory)

COUNTY Guilford

QUAD NO. 1220 SERIAL NO. _____

LAT. 35°57'46" LONG. 79°42'08"

N.C. DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT

DEM

CHAIN OF CUSTODY

GROUNDWATER FIELD/LAB FORM

CHAIN OF CUSTODY

SAMPLE PRIORITY

☐ ROUTINE ☑ EMERGENCY

LAB NUMBER # 25316

DATE RECEIVED 9/10/90 Time 0855

Rec'd by: HMW From: Bus-Courier

Other _____

DATA ENTRY BY: DA CK: DS

DATE REPORTED: 4-30-90

Report to: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO Other _____

Shipped by: Bus, Courier, Other _____

COLLECTOR(S): S. Weiss DATE 4/19/90 TIME 11:45 PURPOSE: BASELINE, COMPLAINT, COMPLIANCE, LUST, OTHER _____ (circle one)

MAY 1 1990

GROUNDWATER SECTION

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C

Temp. 10 _____ °C Odor _____

Appearance _____ Taste _____

Field Analysis By: _____

Owner CERRAX LEUELLA STOLE

Location of site Rt. 62 E.

Description of sampling point FAUCET NEAREST THE RALEIGH NC / DC

Sampling Method D.H.P. (pump, bailer, etc.) Sample Interval _____

Remarks _____ (pumping time, air temp, etc.)

LABORATORY ANALYSES

	BOD_5 310	mg/l
	COD High 340	mg/l
	TOC Low 680	mg/l
	Coliform:MF Fecal 31616	/100ml
	Coliform:MF Total 31504	/100ml
	TDS 680	mg/l
	Turbidity 76	NTU
	pH 403	units
	Alkalinity to pH 4.5 410	mg/l
	Alkalinity to pH 8.3 415	mg/l
	Carbonate 445	mg/l
	Bicarbonate 440	mg/l
	Arsenic:Total 1002	ug/l
	Carbon dioxide 405	mg/l
	Chloride 940	mg/l
	Chromium:Hex 1032	ug/l
	Color:True 80	Pt-Co
	Cyanide 720	mg/l

	Diss. Solids 70300	mg/l
	Fluoride 951	mg/l
	Hardness:Total 900	mg/l
	Hardness (non-carb) 902	mg/l
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm²
	Sulfate 945	mg/l
	Sulfide 745	mg/l
	NH_3 as N 610	mg/l
	TKN as N 625	mg/l
	$NO_2 + NO_3$ as N 630	mg/l
	P:Total as P 665	mg/l

	Ag - Silver 1077	ug/l
	Al - Aluminum 1105	ug/l
	Ba - Barium 1007	ug/l
	Ca - Calcium 916	mg/l
	Cd - Cadmium 1027	ug/l
	Chromium:Total 1034	ug/l
	Cu - Copper 1042	ug/l
	Fe - Iron 1045	ug/l
	Hg - Mercury 71900	ug/l
	K - Potassium 937	mg/l
	Mg - Magnesium 927	mg/l
	Mn - Manganese 1055	ug/l
	Na - Sodium 929	mg/l
	Ni - Nickel 1067	ug/l
	Pb - Lead 1051	ug/l
	Se - Selenium 1147	ug/l
	Zn - Zinc 1092	ug/l

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Acid Herbicides
	Base / Neutral Extractable Organics
	Acid Extractable Organics
✓	Purgeable Organics (VOA bottle)
✓	1,2 - Dibromoethane (EDB)
	SEE ATTACHED ORGANICS ANALYSIS REPORT

Lab Comments: _____

GW-54 Revised 7/85

For Dissolved Analysis - submit filtered sample and write "DIS" in block

White copy - Headquarters Pink copy - Region Yellow copy - Lab

ORGANIC ANALYTICAL REPORT

LAB NO. 06316

REPORTED BY WA

ENTERED BY DA

CHECKED BY H

CHECKED BY DS

REVIEWED BY ALC

SUPERVISOR REK

DATE 4/30/90

SAMPLE TYPE: WATER

ANALYSIS RESULTS

STORET NO.	COMPOUND	CONCENTRATION
	NO VOLATILE ORGANICS DETECTED BY GC/ELCD	
34030	BENZENE	42 UG/L
34010	TOLUENE	5.3 UG/L
34371	ETHYL BENZENE	10 UG/L
81551	m,p-XYLENE	13 UG/L
81551	o-XYLENE	97 UG/L
	43 UNIDENTIFIED PEAKS DETECTED BY GC/PID	