70144.05c

State of North Carolina
Department of Environment,
Health and Natural Resources
Asheville Regional Office

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary

DEHNR

GROUNDWATER SECTION

December 20, 1996

Mr. Allen G. Belenson
SKF USA Inc.
1100 First Avenue
King of Prussia, PA 19406-1352

Dear Mr. Belenson:

Subject: Analytical Data from Newly Constructed Monitor Well
Located at NC Dept. of Transportation Site
Re: Girmes Site, Formerly SKF USA, Inc.
Groundwater Incident No. 10032
Buncombe County, North Carolina

During October and November 1996, two groundwater monitor wells were constructed by the Groundwater Section on the North Carolina Department of Transportation site adjacent to Girmes, Formerly SKF USA, Inc. The purpose of the drilling program was to determine if groundwater contamination exists in the deep bedrock aquifer so as to ascertain if natural attenuation is the appropriate remediation option for the northeast contaminant plume as posited by SKF.

One well was drilled to a depth of 66 feet, then was abandoned due to the inability to properly seat the casing into bedrock. Monitor Well 2 was initially drilled to a depth of 102 feet, sampled, then completed to a depth of 242 feet and sampled again. Attached is the supporting data showing the monitor well location, well construction records, and analytical data.

40

The initial sample, collected on November 4, 1996 with the well depth at 102 feet, indicated significant groundwater contamination with the primary contaminant being Trichloroethene at a concentration of 2600 micrograms per liter. Another sample collected on November 19, 1996 after completion of the well to a depth of 242 feet, showed Trichloroethene at a concentration of 1700 micrograms per liter.

Interchange Building,
59 Woodfin Place,
Asheville, North Carolina 28801

Reduce Reuse Recycle

Voice 704-251-6208 FAX 704-251-6452
An Equal Opportunity Affirmative Action Employer
50% recycled/10% post-consumer paper

Since it has been demonstrated that there is significant groundwater contamination in the bedrock aquifer associated with the northeast contaminant plume, corrective action is required for that area.

Please contact me at (704) 251-6208 by January 10, 1997, as to your intent to proceed with corrective action at this site.

Sincerely,

Kay Dechant

Laura Kay Dechant
Hydrogeologist

\lkd

cc: Burrie Boshoff
William McGlocklin
William Clarke
Paul R. Flay
Amos Dawson, III
Robert Stevens
Dan O. Madison
Barry Nelson

North Carolina - Department of Environment, Health, and Natural Resources
Division of Environmental Management - Groundwater Section
P.O. Box 29535 - Raleigh, N.C. 27626-0535
Phone (919) 733-3221

FOR OFFICE USE ONLY
QUAD. NO. [illegible] SERIAL NO. [illegible]
Lat. [illegible] Long. [illegible] RO [illegible]
Minor Basin [illegible]
Basin Code [illegible]
Header Ent. [illegible] GW-1 Ent. [illegible]

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR: EHNR

DRILLER REGISTRATION NUMBER: 1000

~~STATE WELL CONSTRUCTION PERMIT NUMBER:~~ Incident No. 10032

1. WELL LOCATION: (Show sketch of the location below)
Nearest Town: Asheville County: Buncombe
N.C. Dept. Maintenance Facility, 11 Old Charlotte Hwy.
(Road, Community, or Subdivision and Lot No.)
2. OWNER N.C. Dept. EHNR
ADDRESS P.O. Box 29535
(Street or Route No.)
Raleigh N.C. 27626
City or Town State Zip Code
3. DATE DRILLED 10-29-96 USE OF WELL Monitor
4. TOTAL DEPTH 66
5. CUTTINGS COLLECTED YES [✓] NO [ ]
6. DOES WELL REPLACE EXISTING WELL? YES [ ] NO [✓]
7. STATIC WATER LEVEL Below Top of Casing: _____ FT.
(Use "+" if Above Top of Casing)
8. TOP OF CASING IS 0 FT. Above Land Surface*
* Casing Terminated at/or below land surface is illegal unless a variance is issued in accordance with 15A NCAC 2C .0118
9. YIELD (gpm): 0 METHOD OF TEST air lift
10. WATER ZONES (depth): 50'-66
11. CHLORINATION: Type N/A Amount N/A
12. CASING:

	Depth		Diameter	Wall Thickness or Weight/Ft.	Material
From 0	To 50	Ft.	6 1/4	Sch 40	GLV
From	To	Ft.			
From	To	Ft.			

13. GROUT:

	Depth		Material	Method
From 0	To 66	Ft.	Cement	Pumped in
From	To	Ft.		

14. SCREEN:

	Depth		Diameter	Slot Size	Material
From 50	To 66	Ft	6 1/8 in.	Open in.	Hole
From	To	Ft.	in.	in.	
From	To	Ft.	in.	in.	

15. SAND/GRAVEL PACK:

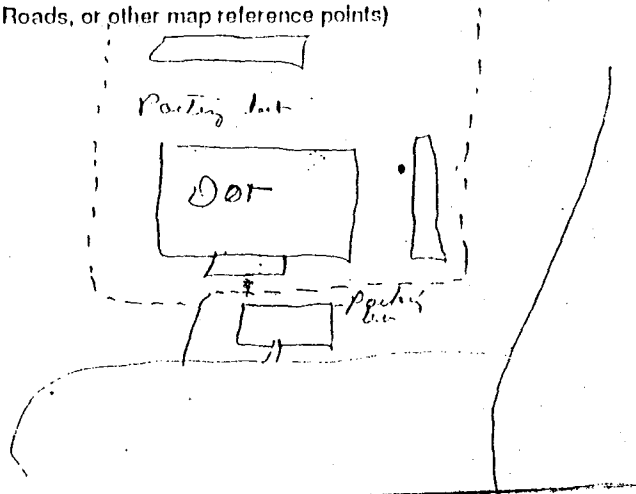
	Depth		Size	Material
From	To	Ft.		
From	To	Ft.		

16. REMARKS: Casing [illegible] seal cemented hole up 16 bags

DEPTH From	To	DRILLING LOG Formation Description
0	2"	ashaft
2"	18'	light brown silt clay
18'	20'	water black silt clay w/ some sand
20	32'	black silt clay w/ some sand damp
32'	336	rock
336	40'	light brown silt clay (damp)
40	43'	light brown silt clay (damp)
		rock
43	50'	weathered rock

If additional space is needed use back of form Over

LOCATION SKETCH
(Show direction and distance from at least two State Roads, or other map reference points)



RECEIVED
DEC 16 1996
GROUNDWATER SECTION
WATER REGIONAL OFFICE

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.

[illegible signature] 10-31-96
SIGNATURE OF CONTRACTOR OR AGENT DATE

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

GW-1 REV. 9-91

North Carolina
Department of Natural Resources and Community Development
Division of Environmental Management

P. O. Box 27687 - Raleigh, N. C. 27611

ABANDONMENT RECORD

CONTRACTOR N.C. Dept EHNR. REG. NO. 1000

WELL LOCATION: (Show a sketch of the location on back of form.)

Nearest Town: Asheville County: Buncombe

N.C. DOT Maintenance Facilit. Quadrangle No. N-85, e-3 mw#1
(Road, Community, Subdivision, Lot No.) INC. No. 11032

OWNER: N.C. Dept EHNR.

ADDRESS: P.O. Box 29535 Raleigh, NC 27620

TOPOGRAPHY: draw, slope, hilltop, valley, flat

USE OF WELL: Monitor DATE: 10-31-96

TOTAL DEPTH: 65 DIAMETER: 6 1/8

CASING REMOVED:

feet	diameter
0	6 1/8"

SEALING MATERIAL:

Neat cement	Sand cement
bags of cement 16	bags of cement
gals. of water 96	yds. of sand
	gals. of water

Other
Type material

Amount

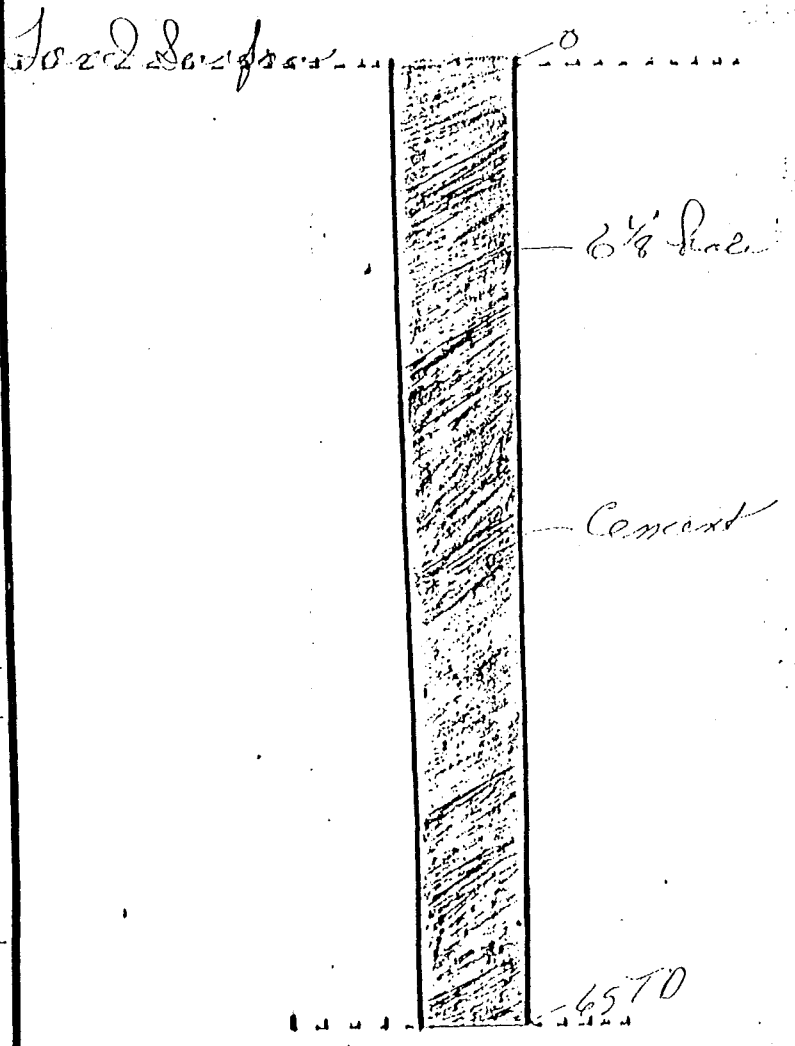
EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL

Mixed cement w/water pumped down hole until it came out top of hole and stayed.

I do hereby certify that this well abandonment record is true and exact.

[signature] 1-3-96
Signature of Contractor or Agent Date

WELL DIAGRAM: Draw a detailed sketch of the well showing total depth, depth and diameter of screens remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.



Submit original to the Division of Environmental Management, one copy to the Driller, and one copy to the Owner.

[illegible]

MW-2 Water Sample

North Carolina - Department of Environment, Health, and Natural Resources
Division of Environmental Management - Groundwater Section
P.O. Box 29535 - Raleigh, N.C. 27626-0535
Phone (919) 733-3221

FOR OFFICE USE ONLY
QUAD. NO. [illegible] SERIAL NO. [illegible]
Lat. [illegible] Long. [illegible] RO [illegible]
Minor Basin [illegible]
Basin Code [illegible]
Header Ent. [illegible] GW-1 Ent. [illegible]

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR: EHNR

DRILLER REGISTRATION NUMBER: 1000

~~STATE WELL CONSTRUCTION PERMIT NUMBER:~~ Incident # 10032

1. WELL LOCATION: (Show sketch of the location below)
Nearest Town: Asheville County: Buncombe
NC Dot Maintenance Facility, 11 alt Charlotte Hwy
(Road, Community, or Subdivision and Lot No.)
2. OWNER NC Dept EHNR
ADDRESS P.O. Box 29535
(Street or Route No.)
Raleigh NC 27626
City or Town State Zip Code
3. DATE DRILLED 10-31-96 USE OF WELL Monitor
4. TOTAL DEPTH 100' (actually 102' KB)
5. CUTTINGS COLLECTED YES [ ] NO [✓]
6. DOES WELL REPLACE EXISTING WELL? YES [ ] NO [✓]
7. STATIC WATER LEVEL Below Top of Casing: 8.35 FT.
(Use "+" if Above Top of Casing)
8. TOP OF CASING IS 0 FT. Above Land Surface*
*Casing Terminated at/or below land surface is illegal unless a variance is issued in accordance with 15A NCAC 2C .0118
YIELD (gpm): 15 METHOD OF TEST air lift
10. WATER ZONES (depth): 46'-100' open hole
11. CHLORINATION: Type N/A Amount N/A
12. CASING:

	Depth		Diameter	Wall Thickness or Weight/Ft.	Material
From 0'	To 46'	Ft.	6 1/4	Sch 40	PVC
From	To	Ft.			
From	To	Ft.			

GROUT:

	Depth		Material	Method
From 0	To 46'	Ft.	Cement	Pumped in
From	To	Ft.		

SCREEN: open hole

	Depth		Diameter	Slot Size	Material
From 46	To 100	Ft	6 1/4	In. open	in PVC
From	To	Ft.	In.		in.
From	To	Ft.	In.		in.

SAND/GRAVEL PACK:

	Depth		Size	Material
From	To	Ft.		
From	To	Ft.		

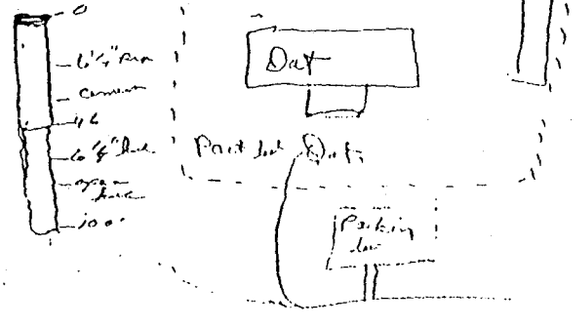
REMARKS: Water sample taken at 46'-100' (102') KB 5 bags cement

DRILLING LOG

DEPTH From	DEPTH To	Formation Description
0	3"	asphalt
3	18'	light brown silty clay (damp)
18'	20'	Black silty clay w/ some fine sand (wet)
20'	32'	Black silty clay w/ some fine sand (damp)
32'	33.6'	rock
33.6	40	light brown silty clay (damp)
40'	43'	light brown silty clay (damp)

If additional space is needed use back of form over

LOCATION SKETCH
(Show direction and distance from at least two State Roads, or other map reference points)



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GROUNDWATER SECTION
ASHEVILLE REGIONAL OFFICE

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.

Pipe
-2.1
-5'

Billy Ray Cooper 10-31-96
SIGNATURE OF CONTRACTOR OR AGENT DATE

REV. 9-91

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

DEPTH From	to	DRILLING LOG formation desc.
43	46'	brown weathered
		rock
46'		rock
46'	60'	Black and white
		granite, soft
		and hard layers
		(water)
60'	80'	Black and white
		granite, soft and
		hard layers
		(water)
80'	100'	Black and white
		granite, soft
		and hard layers
		water

Figure 12 Typical Well Types For Above Ground Installation

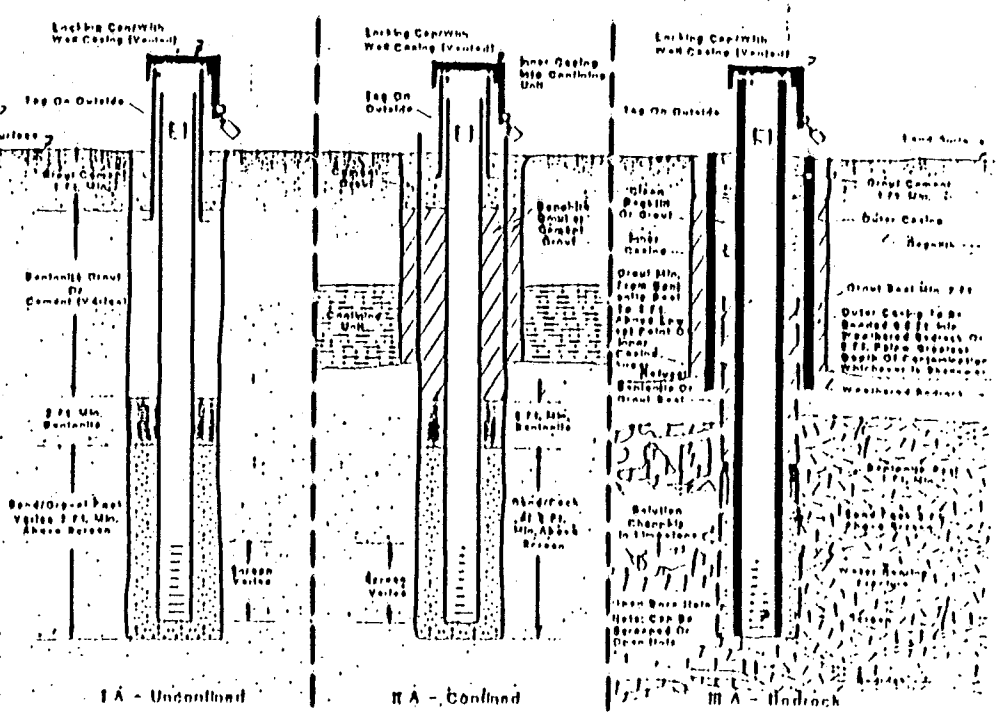
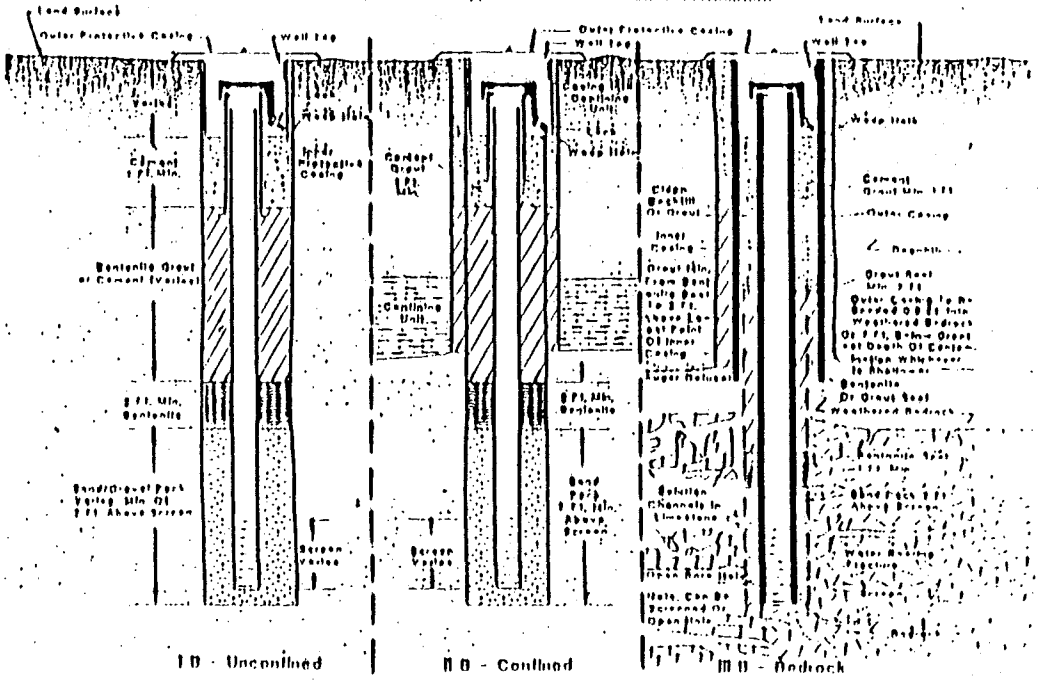


Figure 13 Typical Well Types For Below Ground Installation



North Carolina - Department of Environment, Health, and Natural Resources
Division of Environmental Management - Groundwater Section
P.O. Box 29535 - Raleigh, N.C. 27626-0535
Phone (919) 733-3221

FOR OFFICE USE ONLY
QUAD. NO. N-85-E-3B SERIAL NO. 175567
Lat. 35.3417 Long. 82.2955 RO
Minor Basin
Basin Code
Header Ent. GW-1 Ent.

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR: EHNR

DRILLER REGISTRATION NUMBER: 1000

STATE WELL CONSTRUCTION PERMIT NUMBER: Incident # 10032

1. WELL LOCATION: (Show sketch of the location below)
Nearest Town: Asheville County: Buncombe
NC Dot. Maintenance Facility, 11 Old Charlotte Hwy.
(Road, Community, or Subdivision and Lot No.)

2. OWNER NC Dept EHNR
ADDRESS P.O. Box 29535
(Street or Route No.)
Raleigh (City or Town) NC (State) 27626 (Zip Code)

3. DATE DRILLED 11-6-96 USE OF WELL Monitor
4. TOTAL DEPTH 242
5. CUTTINGS COLLECTED YES ☐ NO ☑
6. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☑
7. STATIC WATER LEVEL Below Top of Casing: 8.35 FT.
(Use "+" if Above Top of Casing)
8. TOP OF CASING IS 0 FT. Above Land Surface*
* Casing terminated at/or below land surface is illegal unless a variance is issued in accordance with 15A NCAC 2C .0118
9. YIELD (gpm): 25 METHOD OF TEST air lift
10. WATER ZONES (depth): 46'-242' open hole
11. CHLORINATION: Type N/A Amount N/A
12. CASING:

	Depth		Diameter	Wall Thickness or Weight/Ft.	Material
From 0	To 46'	Ft.	6¼	sch 40	SW.
From	To	Ft.			
From	To	Ft.			

13. GROUT:

	Depth		Material	Method
From 0	To 46'	Ft.	cement	Pumped in
From	To	Ft.		

14. ~~SCREEN~~: open hole

	Depth		Diameter	Slot Size	Material
From 46	To 242	Ft	6¼ in.	open in.	hole
From	To	Ft.	in.	in.	
From	To	Ft.	in.	in.	

15. SAND/GRAVEL PACK:

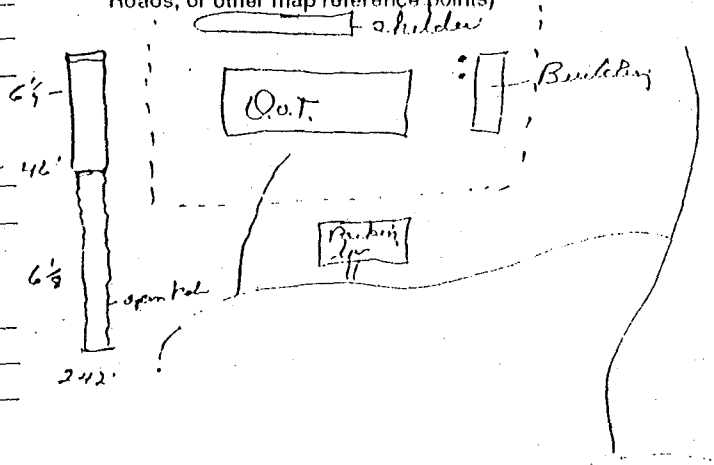
	Depth		Size	Material
From	To	Ft.		
From	To	Ft.		

16. REMARKS: Water sample taken from 46'-242'

DEPTH From	To	DRILLING LOG Formation Description
0-3'		ashalt
3'-18'		light brown silty clay (damp)
18'-20'		Black silty clay w/ some fine sand (wet)
20'-32'		Black silty clay w/ some fine sand (damp)
32'-33.6'		rock
33.6'-40'		light brown silty clay (damp)
40-43'		light brown silty clay (damp)

If additional space is needed use back of form over

LOCATION SKETCH
(Show direction and distance from at least two State Roads, or other map reference points)



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.

RECEIVED
DEC 16 1996
GROUNDWATER SECTION
ASHEVILLE REGIONAL OFFICE

6¼ pipe
0-2.1.1
1-5'

Billy R. Casper 11-6-96
SIGNATURE OF CONTRACTOR OR AGENT DATE

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

GW-1 REV. 9/91

DEPTH from	to	DRILLING LOG formation desc.
3	146	Brown weathered
	T	rock
146	T	rock
146	160	Black and white
	T	granite, salt
	T	and Sand Layers
	T	(water)
160	180	Black and white
	T	granite, salt and
	T	Sand Layers
	T	(water)
180	200	Black and white
	T	granite, salt and
	T	Sand Layers (water)
200	220	Black and white
	T	granite, salt and
	T	Sand Layers (water)
220	240	Black and white
	T	granite, salt and
	T	Sand Layers (water)
240	260	Black and white
	T	granite, salt and
	T	Sand Layers (water)
260	280	Black and white
	T	granite, salt and
	T	Sand Layers (water)
280	300	Black and white
	T	granite, salt and
	T	Sand Layers (water)
300	320	Black and white
	T	granite, salt and
	T	Sand Layers (water)
320	340	Black and white
	T	granite, salt and
	T	Sand Layers (water)
340	360	Black and white
	T	granite, salt and
	T	Sand Layers (water)
360	380	Black and white
	T	granite, salt and
	T	Sand Layers (water)
380	400	Black and white
	T	granite, salt and
	T	Sand Layers (water)
400	420	Black and white
	T	granite, salt and
	T	Sand Layers (water)
420	440	Black and white
	T	granite, salt and
	T	Sand Layers (water)
440	460	Black and white
	T	granite, salt and
	T	Sand Layers (water)
460	480	Black and white
	T	granite, salt and
	T	Sand Layers (water)
480	500	Black and white
	T	granite, salt and
	T	Sand Layers (water)
500	520	Black and white
	T	granite, salt and
	T	Sand Layers (water)
520	542	Black and white
		granite, salt and
		Sand Layers (water)

Figure 12 Typical Well Types For Above Ground Installation

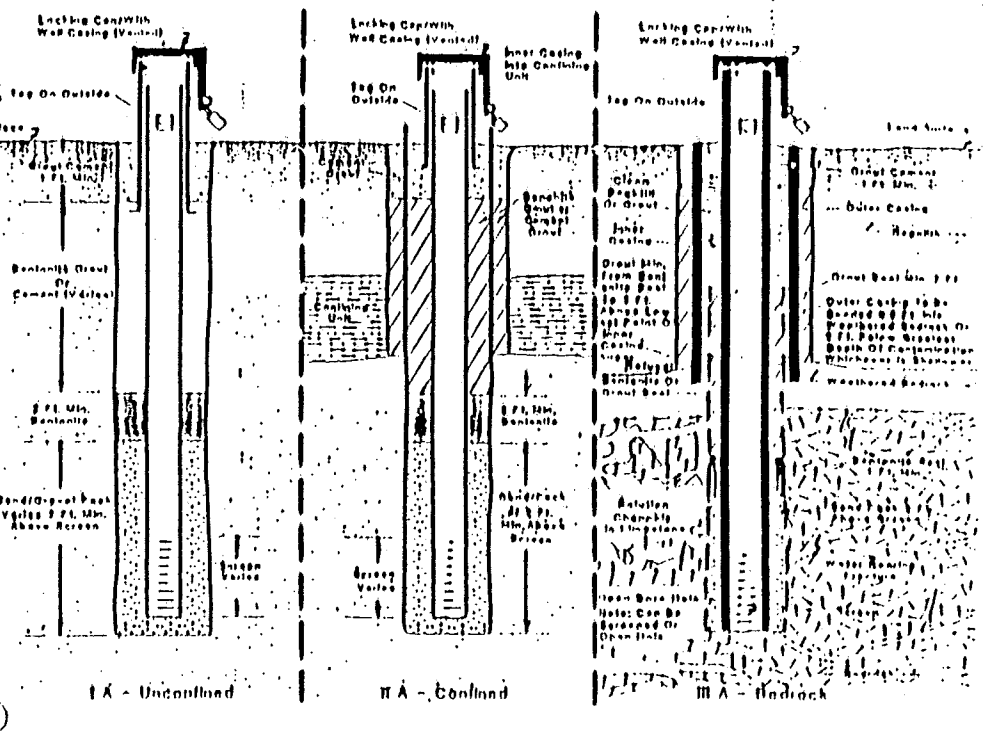
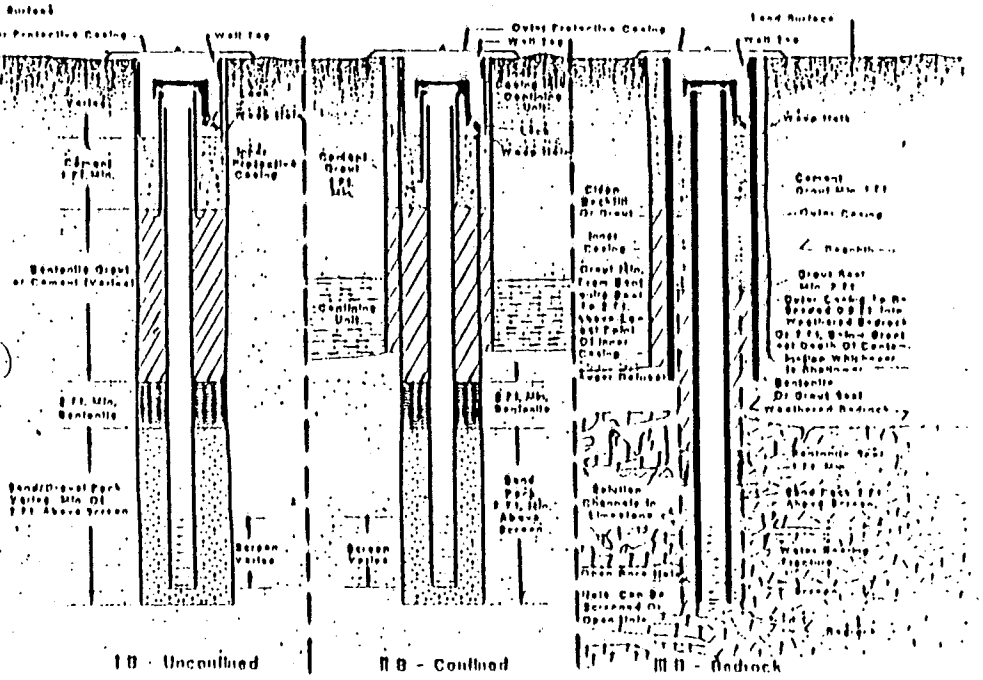


Figure 13 Typical Well Types For Below Ground Installation



NOV 22 1996

DIVISION OF ENVIRONMENTAL MANAGEMENT

Chemistry Laboratory Report / Ground Water Quality

Lab Number :	6G2517
Date Received :	11/6/96
Time Received :	9:00 AM
Received By :	DS
Released By :	DS
Date reported :	11/20/96

COUNTY : BUNCOMBE
QUAD NO:

REPORT TO : ARO Regional Office
COLLECTOR(S) : DECHANT
DATE: 11/4/96
TIME:
PURPOSE:

SAMPLE PRIORITY
[X] ROUTINE [ ] EMERGENCY
[ ] CHAIN OF CUSTODY
[W] SAMPLE TYPE

Owner: NC DOT MW-1
Location or Site:
Description of sampling point
Sampling Method:
Remarks: * Number Changed to MW-2

LABORATORY ANALYSIS

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC	mg/l
	Turbitity	NTU
	Residue., Suspended 530	mg/L
	Total Suspended solids	mg/L
	pH	units
	Alkalinity to pH 4.5	mg/L
	Alkalinity to pH 8.3	mg/L
	Carbonate	mg/L
	Bicarbonate	mg/L
	Carbon dioxide	mg/L
	Chloride	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	c.u
	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	mg/L
	Sulfide 745	mg/L
	MBAS	mg/L
	Oil and Grease	mg/L
	Silica	mg/L
	Boron	
	NH3 as N 610	mg/L
	TKN as N 625	mg/L
	NO2 +NO3 as n 630	mg/L
	P: Total as P 665	mg/L
	PO4	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadium 46559	ug/L
	Cr-Chromium 46560	ug/L
	Cu- Copper 1042	ug/L
	Fe- Iron 1045	ug/L
	Hg- Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg- Magnesium 927	mg/L
	Mn-Manganese 1055	ug/L
	Na- Sodium 929	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn_Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	Semivolatiles
	TPH-Diesel Range
X	Volatile Organics (VOA bottle)
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

COMMENTS :

6G2517.NOV

GROUNDWATER FIELD/LAB FORM

North Carolina
Department of Environment, Health, and Natural Resources
DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION

CHAIN OF CUSTODY

County: Buncombe
Quad No. _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE PRIORITY

☑ ROUTINE ☐ EMERGENCY
☐ CHAIN OF CUSTODY

Changed to MW-2

Lab Number: 6G2517
Date Received: 11/6/96 Time: 9:00
Rec'd by: DS From: Bus, Courier, Hand Del.,
Other: _____
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): K. Dechant Date 11/4/96 Time 2:45
Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: Inc. 10032 (circle one)

FIELD ANALYSES

pH_{400} _____ Spec. Cond.$_{94}$ _____ at 25° C
Temp.$_{10}$ _____ °C Odor _____
Appearance _____
Field Analysis By: _____

Owner: NC DOT - MW1
Location or site: MW1
Description of sampling point: well head
Sampling Method: pumped (Pump, bailer, etc.) Sample Interval _____
Remarks: Duplicate samples are included (pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD_5 310	mg/l		Diss. Solids 70300	mg/l		Ag - Silver 46566	ug/l		Organochlorine Pesticides
	COD High 340	mg/l		Flouride 951	mg/l		Al - Aluminum 46557	ug/l		Organophosphorus Pesticides
	COD Low 335	mg/l		Hardness: Total 900	mg/l		As - Arsenic 46551	ug/l		Nitrogen Pesticides
	Coliform: MF Fecal 31616	/100ml		Hardness (non-carb) 902	mg/l		Ba - Barium 46558	ug/l		
	Coliform: MF Total 31504	/100ml		Phenols 32730	ug/l		Ca - Calcium 46552	mg/l		Acid Herbicides
	TOC 680	mg/l		Specific Cond. 95	uMhos/cm²		Cd - Cadmium 46559	ug/l		
	Turbidity 76	NTU		Sulfate 945	mg/l		Cr - Chromium 46560	ug/l		Semivolatile Organics
	Residue., Suspended 530	mg/l		Sulfide 745	mg/l		Cu - Copper 46562	ug/l		
							Fe - Iron 46563	ug/l		
							Hg - Mercury 71900	ug/l	✓	Volatile Organics (VOA bottle)
	pH 403	units					K - Potassium 46555	mg/l		
	Alkalinity to pH 4.5 410	mg/l					Mg - Magnesium 46554	mg/l		TPH - Gasoline Range
	Alkalinity to pH 8.3 . 415	mg/l					Mn - Manganese 46565	ug/l		TPH - BTEX Gasoline Range
	Carbonate 445	mg/l		NH_3 as N 610	mg/l		Na - Sodium 46556	mg/l		
	Bicarbonate 440	mg/l		TKN as N 625	mg/l		Ni - Nickel	ug/l		
	Carbon dioxide 405	mg/l		$NO_2 + NO_3$ as N 630	mg/l		Pb - Lead 46564	ug/l		
	Chloride 940	mg/l		P: Total as P 665	mg/l		Se - Selenium	ug/l		
	Chromium: Hex 1032	ug/l					Zn - Zinc 46567	ug/l		
	Color: True 80	Pt-Co								
	Cyanide 720	mg/l								

Lab Comments: _____

GW-54 REV. 6/93 For Dissolved Analysis - submit filtered sample and write "DIS" in block.

EHNR/DEM LABORATORY
VOLATILE ANALYTICAL REPORT

LAB NO. 6G2517

REPORTED BY DJB
CHECKED BY
REVIEWED BY

SUPERVISOR REK
DATE 11/18/96
ENTERED BY
DATE 11/18/96

SAMPLE TYPE: WATER

ANALYSIS RESULTS

CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L		CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L	
75-35-4	1,1-Dichloroethene	0.75	0.93T		96-18-4	1,2,3-Trichloropropane	0.25		U
75-09-2	Methylene Chloride	10		U	108-86-1	Bromobenzene	1		U
156-60-5	trans-1,2-Dichloroethene	0.75	12 E		95-49-8	2-Chlorotoluene	0.25		U
75-34-3	1,1-Dichloroethane	0.25		U	106-43-4	4-Chlorotoluene	0.25		U
590-20-7	2,2-Dichloropropane	0.25		U	541-73-1	1,3-Dichlorobenzene	0.25	0.27T	
156-59-4	cis-1,2-Dichloroethene	25	250M		106-46-7	1,4-Dichlorobenzene	0.25		U
67-66-3	Chloroform	0.25	1.9T		95-50-1	1,2-Dichlorobenzene	0.25		U
74-97-5	Bromochloromethane	0.75		U	96-12-8	1,2-Dibromo-3-Chloropropane	1		U
71-55-6	1,1,1-Trichloroethane	0.25		U	120-82-1	1,2,4-Trichlorobenzene	0.25		U
563-58-6	1,1-Dichloropropene	0.25		U	87-68-3	Hexachlorobutadiene	0.25		U
56-23-5	Carbon Tetrachloride	0.75		U	87-61-6	1,2,3-Trichlorobenzene	0.75		U
107-06-2	1,2-Dichloroethane	0.25		U	1634-04-4	Methyl-tert-butyl ether	5		U
79-01-6	Trichloroethene	250	2600M		71-43-2	Benzene	1		U
78-87-5	1,2-Dichloropropane	0.25		U	108-88-3	Toluene	1		U
75-27-4	Bromodichloromethane	0.25		U	100-41-4	Ethyl benzene	1		U
74-95-3	Dibromomethane	1		U	108-38-3	m,p-Xylenes	2		U
10061-01-5	cis-1,3-Dichloropropene	0.25		U	95-47-6	o-Xylene	1		U
10061-02-6	trans-1,3-Dichloropropene	0.25		U	100-42-5	Styrene	1		U
79-00-5	1,1,2-Trichloroethane	0.25	0.42T		98-82-8	Isopropylbenzene	1		U
127-18-4	Tetrachloroethene	0.25		U	103-65-1	n-Propylbenzene	1		U
142-28-9	1,3-Dichloropropane	0.25		U	108-67-8	1,3,5-Trimethylbenzene	1		U
124-48-1	Dibromochloromethane	0.75		U	98-06-6	tert-Butylbenzene	1		U
106-93-4	1,2-Dibromoethane	1		U	95-63-6	1,2,4-Trimethylbenzene	1		U
108-90-7	Chlorobenzene	0.25		U	135-98-8	sec-Butylbenzene	1		U
630-20-6	1,1,1,2-Tetrachloroethane	0.25		U	99-87-6	p-isopropyltoluene	1		U
75-25-2	Bromoform	0.5		U	104-51-8	n-Butylbenzene	1		U
79-34-5	1,1,2,2-Tetrachloroethane	0.75		U	91-20-3	Naphthalene	1		U

	mg/L	mg/L	
Gasoline Range Estimated Total Petroleum Hydrocarbon	0.25		N

Other purgeables detected (up to 10 highest peaks)	Detected ug/L
NO VOLATILE ORGANIC COMPOUNDS	
DETECTED BY GC/PID.	

TQL- Target Quantitation Limit- Subject to change due to instrument sensitivity
T- Tentatively Identified, not confirmed
E- Estimated Value
U- Samples analyzed for this compound but not detected
N- Sample not analyzed for this compound
D- Detected below quantitation limit
M- GC/MS Analysis performed

COMMENTS:

DIVISION OF ENVIRONMENTAL MANAGEMENT

Chemistry Laboratory Report / Ground Water Quality

Lab Number :	6G2655
Date Received :	11/21/96
Time Received :	9:25 AM
Received By :	DS
Released By :	DS
Date reported :	12/9/96

COUNTY : BUNCOMBE
QUAD NO:

REPORT TO : ARO Regional Office
COLLECTOR(S) : DECHANTS
DATE: 11/19/96
TIME:
PURPOSE:

SAMPLE PRIORITY
[X] ROUTINE [ ] EMERGENCY

[X] CHAIN OF CUSTODY

[W] SAMPLE TYPE

MW-2

Owner: NCDOT-MW-2
Location or Site:
Description of sampling point
Sampling Method.
Remarks:

LABORATORY ANALYSIS

	BOD 310	mg/L		Diss. Solids 70300	mg/L		Ag-Silver 46566	ug/L		Organochlorine Pesticides
	COD High 340	mg/L		Fluoride 951	mg/L		Al-Aluminum 46557	ug/L		Organophosphorus Pesticides
	COD Low 335	mg/L		Hardness total 900	mg/L		As-Arsenic 46551	ug/L		Nitrogen Pesticides
	Coliform: MF Fecal 31616	/100ml		Hardness: (non-carb) 902	mg/L		Ba-Barium 46558	ug/L		
	Coliform: MF Total 31504	/100ml		Phenols 32730	ug/L		Ca-Calcium 46552	mg/L		Acid Herbicides
	TOC	mg/l		Specific Cond. 95	uMhos/cm2		Cd-Cadium 46559	ug/L		
	Turbitity	NTU		Sulfate	mg/L		Cr-Chromium 46560	ug/L		Semivolatiles
	Residue., Suspended 530	mg/L		Sulfide 745	mg/L		Cu- Copper 1042	ug/L		TPH-Diesel Range
	Total Suspended solids	mg/L		MBAS	mg/L		Fe- Iron 1045	ug/L		
				Oil and Grease	mg/L		Hg- Mercury 71900	ug/L	X	Volatile Organics (VOA bottle)
	pH	units		Silica	mg/L		K-Potassium 46555	mg/L		
	Alkalinity to pH 4.5	mg/L		Boron			Mg- Magnesium 927	mg/L		TPH-Gasoline Range
	Alkalinity to pH 8.3	mg/L					Mn-Manganese 1055	ug/L		TPH-BTEX Gasoline Range
	Carbonate	mg/L		NH3 as N 610	mg/L		Na- Sodium 929	mg/L		
	Bicarbonate	mg/L		TKN as N 625	mg/L		Ni-Nickel	ug/L		
	Carbon dioxide	mg/L		NO2 +NO3 as n 630	mg/L		Pb-Lead 46564	ug/L		
	Chloride	mg/L		P: Total as P 665	mg/L		Se-Selenium	ug/L		
	Chromium: Hex 1032	ug/L		PO4	mg/L		Zn_Zinc 46567	ug/L		
	Color-True 80	c.u								
	Cyanide 720	mg/L								

COMMENTS :

DEC 12 1996

6G2655.NOV

GROUNDWATER FIELD/LAB FORM

North Carolina
Department of Environment, Health, and Natural Resources
DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION

CHAIN OF CUSTODY

County: Buncombe
Quad No. _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE PRIORITY
[✓] ROUTINE [ ] EMERGENCY
[ ] CHAIN OF CUSTODY

MW-2

Lab Number: 6G 2655
Date Received: 11/21/96 Time: 9:25
Rec'd by: DS From: Bus, Courier, Hand Del.,
Other: _____
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): Dechant Date 11/19/96 Time 4:55
Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: Incident 10032 (circle one)

FIELD ANALYSES

pH_{400} _____ Spec. Cond.$_{94}$ _____ at 25° C
Temp.$_{10}$ _____ °C Odor _____
Appearance _____
Field Analysis By: _____

Owner: NCDOT - MW-2
Location or site: Adjacent to Grimes
Description of sampling point: well head
Sampling Method: pumped (Pump, bailer, etc.) Sample Interval _____
Remarks _____ (pumping time, air temp. etc.)

LABORATORY ANALYSES

	BOD_5 310	mg/l		Diss. Solids 70300	mg/l		Ag - Silver 46566	ug/l		Organochlorine Pesticides
	COD High 340	mg/l		Flouride 951	mg/l		Al - Aluminum 46557	ug/l		Organophosphorus Pesticides
	COD Low 335	mg/l		Hardness: Total 900	mg/l		As - Arsenic 46551	ug/l		Nitrogen Pesticides
	Coliform: MF Fecal 31616	/100ml		Hardness (non-carb) 902	mg/l		Ba - Barium 46558	ug/l		
	Coliform: MF Total 31504	/100ml		Phenols 32730	ug/l		Ca - Calcium 46552	mg/l		Acid Herbicides
	TOC 680	mg/l		Specific Cond. 95	uMhos/cm²		Cd - Cadmium 46559	ug/l		
	Turbidity 76	NTU		Sulfate 945	mg/l		Cr - Chromium 46560	ug/l		Semivolatile Organics
	Residue., Suspended 530	mg/l		Sulfide 745	mg/l		Cu - Copper 46562	ug/l		
							Fe - Iron 46563	ug/l		
							Hg - Mercury 71900	ug/l	✓	Volatile Organics (VOA bottle)
	pH 403	units					K - Potassium 46555	mg/l		
	Alkalinity to pH 4.5 410	mg/l					Mg - Magnesium 46554	mg/l		TPH - Gasoline Range
	Alkalinity to pH 8.3 415	mg/l					Mn - Manganese 46565	ug/l		TPH - BTEX Gasoline Range
	Carbonate 445	mg/l		NH_3 as N 610	mg/l		Na - Sodium 46556	mg/l		
	Bicarbonate 440	mg/l		TKN as N 625	mg/l		Ni - Nickel	ug/l		
	Carbon dioxide 405	mg/l		NO_2 + NO_3 as N 630	mg/l		Pb - Lead 46564	ug/l		
	Chloride 940	mg/l		P: Total as P 665	mg/l		Se - Selenium	ug/l		
	Chromium: Hex 1032	ug/l					Zn - Zinc 46567	ug/l		
	Color: True 80	Pt-Co								
	Cyanide 720	mg/l								

Lab Comments: _____

DEC 12 1996

GW-54 REV. [illegible] For Dissolved Analysis - submit filtered sample and write "DIS" in block.

DIVISION OF ENVIRONMENTAL MANAGEMENT

Chemistry Laboratory Report / Ground Water Quality

Lab Number :	6G2656
Date Received :	11/21/96
Time Received :	9:25 AM
Received By :	DS
Released By :	DS
Date reported :	12/9/96

COUNTY : BUNCOMBE
QUAD NO:

REPORT TO : ARO Regional Office
COLLECTOR(S) : DECHANT
DATE: 11/19/96
TIME:
PURPOSE:

SAMPLE PRIORITY
[X] ROUTINE [ ] EMERGENCY

[X] CHAIN OF CUSTODY

[W] SAMPLE TYPE MW-2DUP

Owner: NCDOT-MW-2DUP
Location or Site:
Description of sampling point
Sampling Method:
Remarks:

LABORATORY ANALYSIS

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC	mg/l
	Turbitity	NTU
	Residue , Suspended 530	mg/L
	Total Suspended solids	mg/L
	pH	units
	Alkalinity to pH 4.5	mg/L
	Alkalinity to pH 8.3	mg/L
	Carbonate	mg/L
	Bicarbonate	mg/L
	Carbon dioxide	mg/L
	Chloride	mg/L
	Chromium Hex 1032	ug/L
	Color True 80	c u
	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	mg/L
	Sulfide 745	mg/L
	MBAS	mg/L
	Oil and Grease	mg/L
	Silica	mg/L
	Boron	
	NH3 as N 610	mg/L
	TKN as N 625	mg/L
	NO2 +NO3 as n 630	mg/L
	P. Total as P 665	mg/L
	PO4	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadium 46559	ug/L
	Cr-Chromium 46560	ug/L
	Cu- Copper 1042	ug/L
	Fe- Iron 1045	ug/L
	Hg- Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg- Magnesium 927	mg/L
	Mn-Manganese 1055	ug/L
	Na- Sodium 929	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn_Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	Semivolatiles
	TPH-Diesel Range
X	Volatile Organics (VOA bottle)
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

COMMENTS :

DEC 12 1996

6G2656.NOV

GROUNDWATER FIELD/LAB FORM

North Carolina
Department of Environment, Health, and Natural Resources
DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION

CHAIN OF CUSTODY

County Buncombe
Quad No. _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE PRIORITY

☑ ROUTINE ☐ EMERGENCY
☐ CHAIN OF CUSTODY

MW-2Dup

Lab Number 662656
Date Received 11/21/96 Time 9:25
Rec'd by DS From: Bus, Courier, Hand Del.,
Other: _____
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): Dechant Date 11/19/96 Time 5:00
Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: Incident 10032 (circle one)

FIELD ANALYSES

pH_{400} _____ Spec. Cond.$_{94}$ _____ at 25° C
Temp.$_{10}$ _____ °C Odor _____
Appearance _____
Field Analysis By: _____

Owner NCDOT - MW-2Dup
Location or site Adjacent to Barnes
Description of sampling point well head
Sampling Method pumped (Pump, bailer, etc.) Sample Interval _____
Remarks _____ (pumping time, air temp. etc.)

LABORATORY ANALYSES

	BOD_5 310	mg/l		Diss. Solids 70300	mg/l		Ag - Silver 46566	ug/l		Organochlorine Pesticides
	COD High 340	mg/l		Flouride 951	mg/l		Al - Aluminum 46557	ug/l		Organophosphorus Pesticides
	COD Low 335	mg/l		Hardness: Total 900	mg/l		As - Arsenic 46551	ug/l		Nitrogen Pesticides
	Coliform: MF Fecal 31616	/100ml		Hardness (non-carb) 902	mg/l		Ba - Barium 46558	ug/l		
	Coliform: MF Total 31504	/100ml		Phenols 32730	ug/l		Ca - Calcium 46552	mg/l		Acid Herbicides
	TOC 680	mg/l		Specific Cond. 95	uMhos/cm²		Cd - Cadmium 46559	ug/l		
	Turbidity 76	NTU		Sulfate 945	mg/l		Cr - Chromium 46560	ug/l		Semivolatile Organics
	Residue., Suspended 530	mg/l		Sulfide 745	mg/l		Cu - Copper 46562	ug/l		
							Fe - Iron 46563	ug/l		
							Hg - Mercury 71900	ug/l	✓	Volatile Organics (VOA bottle)
	pH 403	units					K - Potassium 46555	mg/l		
	Alkalinity to pH 4.5 410	mg/l					Mg - Magnesium 46554	mg/l		TPH - Gasoline Range
	Alkalinity to pH 8.3 415	mg/l					Mn - Manganese 46565	ug/l		TPH - BTEX Gasoline Range
	Carbonate 445	mg/l		NH_3 as N 610	mg/l		Na - Sodium 46556	mg/l		
	Bicarbonate 440	mg/l		TKN as N 625	mg/l		Ni - Nickel	ug/l		
	Carbon dioxide 405	mg/l		NO_2 + NO_3 as N 630	mg/l		Pb - Lead 46564	ug/l		
	Chloride 940	mg/l		P: Total as P 665	mg/l		Se - Selenium	ug/l		
	Chromium: Hex 1032	ug/l					Zn - Zinc 46567	ug/l		
	Color: True 80	Pt-Co								
	Cyanide 720	mg/l								

Lab Comments: _____

RECEIVED
DEC 12 [redacted]
Groundwater Section
Asheville Regional Office

GW-54 REV. [redacted] For Dissolved Analysis - submit filtered sample and write "DIS" in [redacted]

EHNR/DEM LABORATORY
VOLATILE ANALYTICAL REPORT

LAB NO. 6G2655

REPORTED BY DJB 12/3/96
CHECKED BY [illegible]
REVIEWED BY [illegible]

SUPERVISOR REK
DATE 12/4/96

ENTERED BY [illegible]
DATE 12/4

SAMPLE TYPE: WATER

ANALYSIS RESULTS

CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L		CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L	
75-35-4	1,1-Dichloroethene	0.75	1.1ET		96-18-4	1,2,3-Trichloropropane	0.25		U
75-09-2	Methylene Chloride	10		U	108-86-1	Bromobenzene	1		U
156-60-5	trans-1,2-Dichloroethene	0.75		U	95-49-8	2-Chlorotoluene	0.25		U
75-34-3	1,1-Dichloroethane	0.25		U	106-43-4	4-Chlorotoluene	0.25		U
590-20-7	2,2-Dichloropropane	0.25		U	541-73-1	1,3-Dichlorobenzene	0.25	D	
156-59-4	cis-1,2-Dichloroethene	2.5	240M		106-46-7	1,4-Dichlorobenzene	0.25	D	
67-66-3	Chloroform	0.25	1.9ET		95-50-1	1,2-Dichlorobenzene	0.25	0.30ET	
74-97-5	Bromochloromethane	0.75		U	96-12-8	1,2-Dibromo-3-Chloropropane	1		U
71-55-6	1,1,1-Trichloroethane	0.25		U	120-82-1	1,2,4-Trichlorobenzene	0.25		U
563-58-6	1,1-Dichloropropene	0.25		U	87-68-3	Hexachlorobutadiene	0.25		U
56-23-5	Carbon Tetrachloride	0.75		U	87-61-6	1,2,3-Trichlorobenzene	0.75		U
107-06-2	1,2-Dichloroethane	0.25	0.50ET		1634-04-4	Methyl-tert-butyl ether	5		U
79-01-6	Trichloroethene	13	1700M		71-43-2	Benzene	1		U
78-87-5	1,2-Dichloropropane	0.25		U	108-88-3	Toluene	1		U
75-27-4	Bromodichloromethane	0.25		U	100-41-4	Ethyl benzene	1		U
74-95-3	Dibromomethane	1		U	108-38-3	m,p-Xylenes	2		U
10061-01-5	cis-1,3-Dichloropropene	0.25		U	95-47-6	o-Xylene	1		U
10061-02-6	trans-1,3-Dichloropropene	0.25	1.5ET		100-42-5	Styrene	1		U
79-00-5	1,1,2-Trichloroethane	0.25		U	98-82-8	Isopropylbenzene	1		U
127-18-4	Tetrachloroethene	0.25	0.58ET		103-65-1	n-Propylbenzene	1		U
142-28-9	1,3-Dichloropropane	0.25		U	108-67-8	1,3,5-Trimethylbenzene	1		U
124-48-1	Dibromochloromethane	0.75		U	98-06-6	tert-Butylbenzene	1		U
106-93-4	1,2-Dibromoethane	1		U	95-63-6	1,2,4-Trimethylbenzene	1		U
108-90-7	Chlorobenzene	0.25	1.1ET		135-98-8	sec-Butylbenzene	1		U
630-20-6	1,1,1,2-Tetrachloroethane	0.25		U	99-87-6	p-isopropyltoluene	1		U
75-25-2	Bromoform	0.5		U	104-51-8	n-Butylbenzene	1		U
79-34-5	1,1,2,2-Tetrachloroethane	0.75		U	91-20-3	Naphthalene	1		U

	mg/L	mg/L	
Gasoline Range Estimated Total Petroleum Hydrocarbon	0.25		N

Other purgeables detected (up to 10 highest peaks)	Detected ug/L
NO VOLATILE ORGANIC COMPOUNDS	
DETECTED BY GC/PID.	

TQL- Target Quantitation Limit- Subject to change due to instrument sensitivity
T- Tentatively Identified, not confirmed
E- Estimated Value
U- Samples analyzed for this compound but not detected
N- Sample not analyzed for this compound
D- Detected below quantitation limit
M- GC/MS Analysis performed

COMMENTS:

DEC 12 1996

EHNR/DEM LABORATORY

VOLATILE ANALYTICAL REPORT

LAB NO. 6G2656

REPORTED BY DJB

CHECKED BY DRC

REVIEWED BY DRC

SUPERVISOR REK

DATE 12/4/96

ENTERED BY DC

DATE 12/4

SAMPLE TYPE: WATER

ANALYSIS RESULTS

CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L	CAS#	VOA TARGET COMPOUND	TQL ug/L	DETECTED ug/L
75-35-4	1,1-Dichloroethene	0.75	1.3 T	96-18-4	1,2,3-Trichloropropane	0.25	U
75-09-2	Methylene Chloride	10	U	108-86-1	Bromobenzene	1	U
156-60-5	trans-1,2-Dichloroethene	0.75	19 E,T	95-49-8	2-Chlorotoluene	0.25	U
75-34-3	1,1-Dichloroethane	0.25	D,T	106-43-4	4-Chlorotoluene	0.25	U
590-20-7	2,2-Dichloropropane	0.25	U	541-73-1	1,3-Dichlorobenzene	0.25	U
156-59-4	cis-1,2-Dichloroethene	250	250 M	106-46-7	1,4-Dichlorobenzene	0.25	D,T
67-66-3	Chloroform	0.25	U	95-50-1	1,2-Dichlorobenzene	0.25	0.27 T
74-97-5	Bromochloromethane	0.75	U	96-12-8	1,2-Dibromo-3-Chloropropane	1	U
71-55-6	1,1,1-Trichloroethane	0.25	U	120-82-1	1,2,4-Trichlorobenzene	0.25	U
563-58-6	1,1-Dichloropropene	0.25	U	87-68-3	Hexachlorobutadiene	0.25	U
56-23-5	Carbon Tetrachloride	0.75	U	87-61-6	1,2,3-Trichlorobenzene	0.75	U
107-06-2	1,2-Dichloroethane	0.25	U	1634-04-4	Methyl-tert-butyl ether	5	U
79-01-6	Trichloroethene	500	1700 M	71-43-2	Benzene	1	U
78-87-5	1,2-Dichloropropane	0.25	U	108-88-3	Toluene	1	U
75-27-4	Bromodichloromethane	0.25	U	100-41-4	Ethyl benzene	1	U
74-95-3	Dibromomethane	1	U	108-38-3	m,p-Xylenes	2	U
10061-01-5	cis-1,3-Dichloropropene	0.25	U	95-47-6	o-Xylene	1	U
10061-02-6	trans-1,3-Dichloropropene	0.25	U	100-42-5	Styrene	1	U
79-00-5	1,1,2-Trichloroethane	0.25	0.49 T	98-82-8	Isopropylbenzene	1	U
127-18-4	Tetrachloroethene	0.25	U	103-65-1	n-Propylbenzene	1	U
142-28-9	1,3-Dichloropropane	0.25	U	108-67-8	1,3,5-Trimethylbenzene	1	U
124-48-1	Dibromochloromethane	0.75	U	98-06-6	tert-Butylbenzene	1	U
106-93-4	1,2-Dibromoethane	1	U	95-63-6	1,2,4-Trimethylbenzene	1	U
108-90-7	Chlorobenzene	0.25	U	135-98-8	sec-Butylbenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	0.25	U	99-87-6	p-isopropyltoluene	1	U
75-25-2	Bromoform	0.5	U	104-51-8	n-Butylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.75	U	91-20-3	Naphthalene	1	U

	mg/L	mg/L
Gasoline Range Estimated Total Petroleum Hydrocarbon	0.25	N

TQL- Target Quantitation Limit- Subject to change due to instrument sensitivity

T- Tentatively Identified, not confirmed

E- Estimated Value

U- Samples analyzed for this compound but not detected

N- Sample not analyzed for this compound

D- Detected below quantitation limit

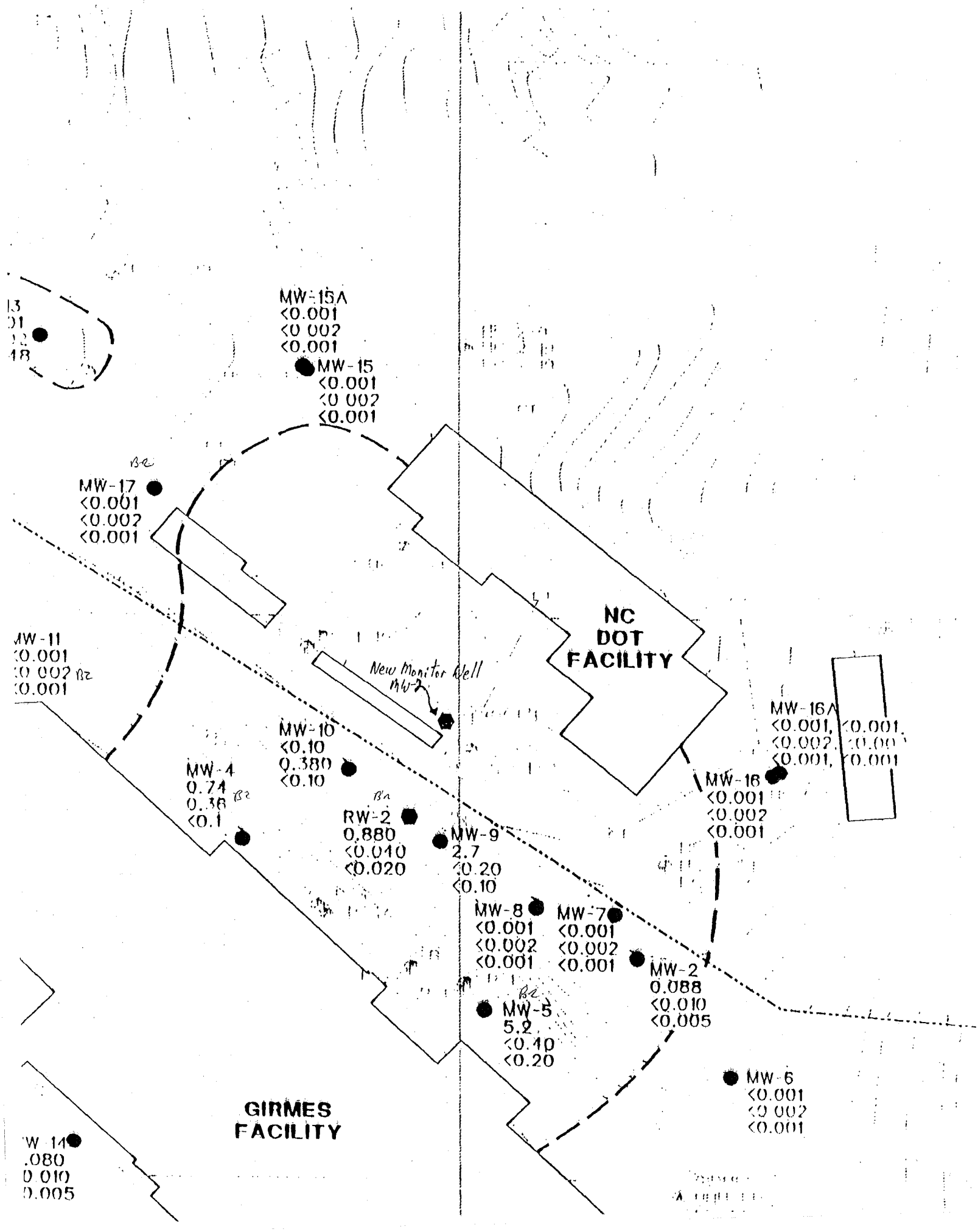
M- GC/MS Analysis performed

Other purgeables detected (up to 10 highest peaks) — Detected ug/L

NO VOLATILE ORGANIC COMPOUNDS DETECTED BY GC/PID.

COMMENTS:

DEC 12 1996


MW-15A
<0.001
<0.002
<0.001
MW-15
<0.001
<0.002
<0.001
MW-17
<0.001
<0.002
<0.001
NC
DOT
FACILITY
New Monitor Well
MW-2
MW-11
<0.001
<0.002
<0.001
MW-10
<0.10
0.380
<0.10
MW-4
0.74
0.36
<0.1
RW-2
0.880
<0.010
<0.020
MW-9
2.7
<0.20
<0.10
MW-16A
<0.001
<0.002
<0.001
MW-16
<0.001
<0.002
<0.001
MW-8
<0.001
<0.002
<0.001
MW-7
<0.001
<0.002
<0.001
MW-2
0.088
<0.010
<0.005
MW-5
5.2
<0.10
<0.20
MW-6
<0.001
<0.002
<0.001
GIRMES
FACILITY
W-14
.080
0.010
0.005