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Burlington Menswear

A division of Burlington Industries

Executives Offices
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Clarksville, Va. 23927
(804) 374-8111

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FAYETTEVILLE REG. OFFICE

November 17, 1994

Mr. Stephen A. Barnhardt
DEHNR
Division of Environmental Mgmt.
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

RE: Burlington Industries - BMD Plant
Groundwater Remediation Update
Raeford, NC Plant Site
Incident No. 5531

Dear Mr. Barnhardt:

Burlington is submitting the following information as an update on the groundwater remediation activities at the Raeford site (BMD Plant).

Operation of a groundwater recovery well continues near the wastewater pre-treatment lagoon and former UST site. The average recovery rate since 4/15/94 is 135 gpd ranging between 101 to 213 gpd (see Table I for pumping data).

On 7/25/94, samples were collected from all monitoring wells for analysis. Results are tabulated in Table 2 (lab results are attached). The results continue to indicate that the plume of contamination is being contained on the Burlington site.

Table 3 and Figure 1 give monitor well water elevations and groundwater flow direction. The groundwater flow continues in a **northeast** direction.

If you have any questions or comments, please call me at 804-374-3514.

Sincerely,

G M Garlick

G. Mike Garlick
Division Environmental Engineer

GMG/dr

cc: T. Fripp - BMEO
B. Willis - BMEO
M. Cowley - BMEO
F. Sessoms - BMD
D. MacPherson - BMD
T. LeJeune - 3330/Energy

envir\water\gwupdate.bmd

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TABLE I
RECOVERY WELL DATA

DATE	TOTALIZER READING (GAL)	AVERAGE RECOVERY RATE (GAL/DAY)
1/19/93	19,982	
5/11/93	31,110	112
3/18/94	70,325	137
4/15/94	74,431	128
7/22/94	86,610	147
7/29/94	87,690	154
8/12/94	89,520	131
8/19/94	90,650	161
8/26/94	91,540	127
9/2/94	92,550	144
9/9/94	93,650	157
9/16/94	95,140	213
9/23/94	95,850	101
9/30/94	96,700	121
10/7/94	98,160	209
10/14/94	99,110	136
10/21/94	—	—
10/27/94	100,440	102

TABLE 2

TOTAL PURGEABLE HOLOCARBON "HITS" IN MONITORING WELLS FROM LABORATORY ANALYTICAL RESULTS

Monitoring Well	11/15/90	7/12/91	10/31/91	1/16/92	2/13/92	10/23/92	3/25/94	7/25/94
	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)
MW-4 (UPGRADIENT)	BQL	-	-	-	-	-	BQL	BQL
MW-5S	-	4*	-	-	-	-	6	BQL
MW-5i	-	28	60	-	-	48	55	65
MW-6S	386	-	-	-	-	-	140	51
MW-6i	-	52	63	-	-	105	127	170
MW-6D	-	-	-	23	32	36	13	7
RW-1 (RECOVERY WELL)	-	-	-	-	-	-	69	100
MW-7	-	115	60	-	-	-	13	25
MW-8	-	-	-	BQL	-	-	2@	BQL
MW-9	-	-	-	36	81	27	45	80
MW-10	-	-	-	BQL	-	-	BQL	BQL

NOTE: The recovery well started removing water on 8/24/92.
The recovery pump was lowered two feet on 8/20/93.

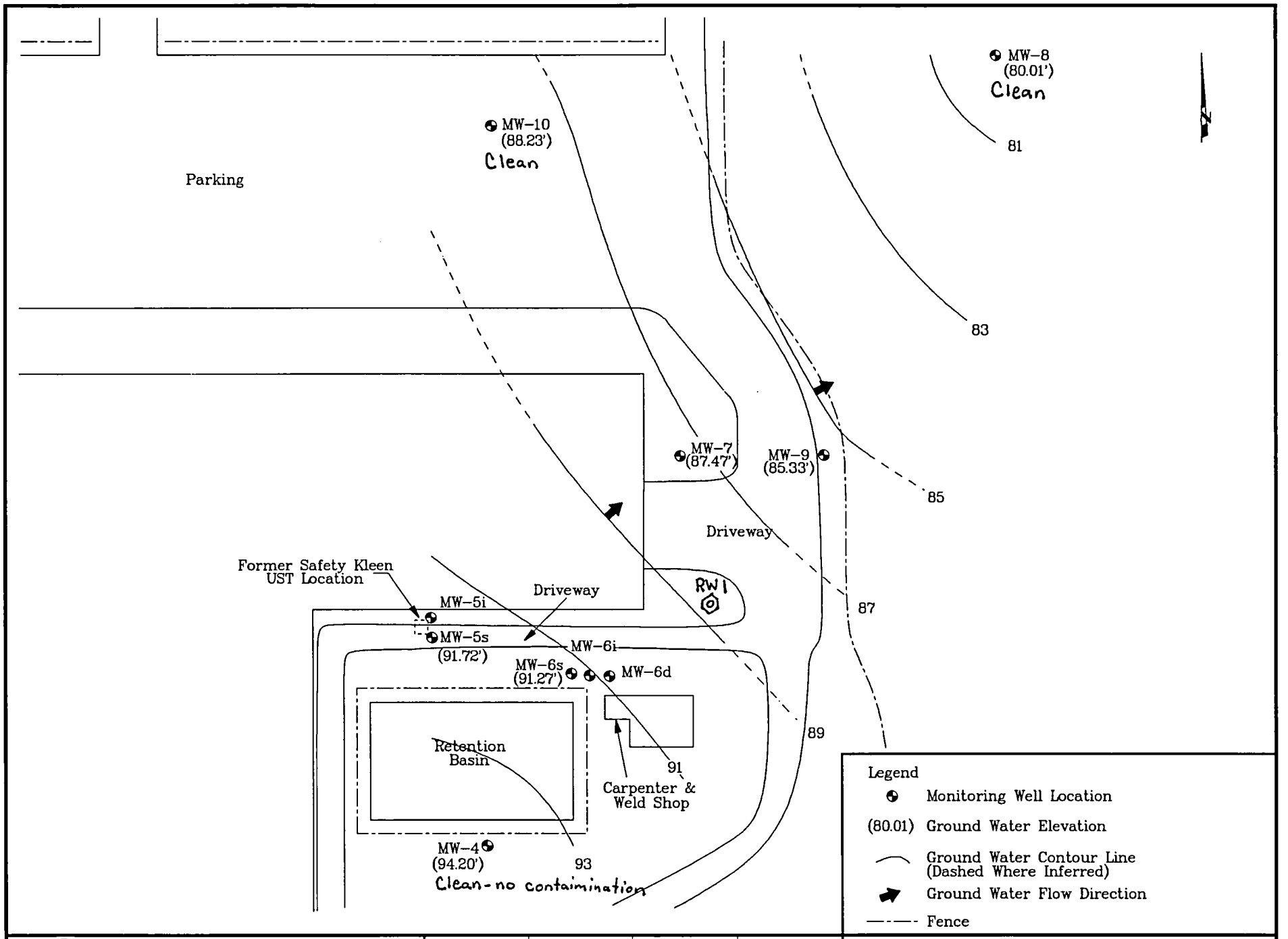
BQL = Below Quantitation Limit
- = not sampled
* = Purgeable Aromatics tested only
@ = Bromodichloromethane only. Poss. a false reading.

Table 3. Ground Water Elevation Data, July 22, 1994 – Burlington Industries, Inc., Raeford, North Carolina.

Well No.	Top of Casing	Depth to Water	Ground Water Elevation
MW-4	99.35	5.15	94.20
MW-5s	100.17	8.45	91.72
MW-5i	100.37	22.87	77.50
MW -6s	99.26	7.99	91.27
MW-6i	99.40	23.09	76.31
MW-6d	99.40	52.17	47.23
MW-7	99.98	12.51	87.47
MW-8	87.52	7.51	80.01
MW-9	96.32	10.99	85.33
MW-10	98.22	9.99	88.23

All units in feet.

Aquaterra Job Number 2146700



aquaterra
A GREAT LAKES CHEMICAL CORPORATION COMPANY

Author	Drawing	Layers	Date	Title
EVC	21467-1	0,1,2	9-7-93	Shallow Ground Water Contour Map (July 22, 1994)
Job No.	**Revision**	**Figure**	**Scale**	**Project**
2146700	8-3-94	4	1" = 100'	Burlington Industries, Inc. Raeford, North Carolina

FIGURE 1

Post Office Box 12846
Research Triangle Park, NC 27709

Phone 919·677·0090
Fax 919·677·0427

IEA
An Aquarion Company

August 8, 1994

Sharon Myers
Aquaterra, Inc.
4901 Water's Edge Dr.
Raleigh, NC 27606

IEA Project No.: 196434/9407458
IEA Reference No.: W9407259
Client Project I.D.: 2146700

Dear Ms. Myers,

Transmitted herewith are the results of analyses on 12 samples submitted to our laboratory.

The sample(s) were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call your project manager representative at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.

William R. Drago
Laboratory Director

Monroe, Connecticut 203·261·4458
Sunrise, Florida 305·846·1730
Schaumburg, Illinois 708·705·0740
N. Billerica, Massachusetts 617·272·5212
Whippany, New Jersey 201·428·8181

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IEA
An Aquarion Company

State Certification	
Alabama - #40210	North Carolina - #37720/#84
California - #1768	South Carolina - #99021
Florida - #87350/#E87439	Tennessee - #01814
Georgia - #816	Utah - #E226
Kansas - E-158/E-1189	Virginia - #00179
Kentucky - #90049	West Virginia - #9908C
Massachusetts - M-NC039	Wisconsin - #998051010
New Jersey - #67719	

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-01	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-5I	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	34
9	1,1-Dichloroethane	1.0	24
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	2
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	3
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	1
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	1
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

FORM 601 REV. 020494

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-02	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-5S	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-03	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-6S	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	48
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	3

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-04	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-6I	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	16
9	1,1-Dichloroethane	1.0	18
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	2
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	1
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	64
27	1,3-Dichlorobenzene	1.0	3
28	1,2-Dichlorobenzene	1.0	18
29	1,4-Dichlorobenzene	1.0	48

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-05	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-6D	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	2
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	2
14	Carbon tetrachloride	1.0	3
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-06	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-4	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-07	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-7	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	2
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	18
27	1,3-Dichlorobenzene	1.0	2
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	3

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-08	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/04/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-9	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	3
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	2
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	2
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	2
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	57
27	1,3-Dichlorobenzene	1.0	2
28	1,2-Dichlorobenzene	1.0	2
29	1,4-Dichlorobenzene	1.0	10

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-09	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/04/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-10	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-10	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/04/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	MW-8	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-11	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/04/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	EW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	6
9	1,1-Dichloroethane	1.0	8
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	1
13	1,1,1-Trichloroethane	1.0	4
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	1
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	58
27	1,3-Dichlorobenzene	1.0	2
28	1,2-Dichlorobenzene	1.0	4
29	1,4-Dichlorobenzene	1.0	16

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	07/25/94
IEA Sample Number:	9407458-12	Date Sampled:	07/22/94
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/04/94
Client Project ID:	2146700	Analysis By:	Tutor
Sample Identification:	TRIP BLANK	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	N/A
IEA Sample Number:	9407458	Date Sampled:	N/A
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/02/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	QC Blank (VO2BK17W)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9407458-01 through 04
FORM 601 REV. 020494

Industrial & Environmental Analysts, Inc. (IEA)
PURGEABLE HALOCARBONS EPA 601 COMPOUND LIST

IEA Project Number:	196-434	Date Received:	N/A
IEA Sample Number:	9407458	Date Sampled:	N/A
Client Name:	Aquaterra, Inc.	Date Analyzed:	08/03/94
Client Project ID:	2146700	Analysis By:	Collins
Sample Identification:	QC Blank (VO2BK25W)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Qualitative identifications performed using single GC column confirmation.
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9407458-05 through 12
FORM 601 REV. 020494

Industrial & Environmental Analysts, Inc. (IEA)
EPA METHOD 601 WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

IEA Project No.: 196-434
IEA Reference No: 9407458-02

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	20	BQL	16	80	28-167
Trichloroethene	20	BQL	17	85	35-146
Chlorobenzene	20	BQL	16	80	48-150

	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	20	17	85	6	15	28-167
Trichloroethene	20	17	85	0	15	35-146
Chlorobenzene	20	15	75	6	15	48-150

Comments:

Corresponding Samples:

9407548-01 through 04

Industrial & Environmental Analysts, Inc. (IEA)
EPA METHOD 601 WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

IEA Project No.: 196-434
IEA Reference No: 9407512-02

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	20	BQL	22	110	28-167
Trichloroethene	20	BQL	20	100	35-146
Chlorobenzene	20	BQL	19	95	48-150

	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	20	19	95	15	15	28-167
Trichloroethene	20	18	90	11	15	35-146
Chlorobenzene	20	18	90	5	15	48-150

Comments:

Corresponding Samples:

9407548-05 through 12

Industrial & Environmental Analysts, Inc. (IEA)
WATER VOLATILE SURROGATE RECOVERY
EPA Method 601

IEA Project No.: 196-434

Sample ID	SURR 1 % Recovery
VO2BK17W	89
9407458-01	85
9407458-02	87
9407458-03	90
9407458-04	92
9407458-02MS	73
9407458-02MSD	69
VO2BK25W	108
9407458-05	119
9407458-06	84
9407458-07	90
9407458-08	97
9407458-09	77
9407458-10	94
9407458-11	99
9407458-12	100
9407512-02MS	73
9407512-02MSD	73

QC Limits

(60-140)

S1 = 1,4-Dichlorobutane

aquaterra
A GREAT LAKES CHEMICAL CORPORATION COMPANY

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

№ 000118

PROJECT NAME: BI - RAEFORD

REPORT TO: SHARON MYERS

TURNAROUND: ☑ NORMAL ☐ 5-DAY ☐ OTHER (SPECIFY):

ADDRESS: RAEFORD, NC

AFFILIATION/LOCATION: Aquaterra, Raleigh

REQUESTED DUE DATE:

JOB NUMBER: 2146700

PHONE: (919) 859-9987

P.O. # / BILLING REFERENCE: RNC-8016

SAMPLED BY (PRINT): PAUL A. WOLCOTT / William D. Stewart

SAMPLER'S SIGNATURE: [signature] / [signature]

SAMPLE ID	SAMPLE LOCATION	DATE	TIME	MATRIX: WATER	SOIL	OTHER	NUMBER OF CONTAINERS: TOTAL	UNPRESERVED	H_2SO_4	HNO_3	HCL	N_aOH	pH < 2 OR > 12 Y	N	ANALYSES REQUEST: 601									REMARKS
MW-5i	See Map	7-22-94	1410	✓			3	3					✓		X									
MW-5s			1410	✓			3	3					✓		X									
MW-6s			1450	✓			3	3					✓		X									
MW-6i			1505	✓			3	3					✓		X									
MW-6d			1505	✓			3	3					✓		X									
MW-4			1525	✓			3	3					✓		X									
MW-7			1540	✓			3	3					✓		X									
MW-9			1555	✓			3	3					✓		X									
MW-10			1625	✓			3	3					✓		X									
MW-6			1630	✓			3	3					✓		X									

ADDITIONAL COMMENTS:

T=3°C

IEA# 196-434

received 2 vials for Trip Blank MV 7/23/94

RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME	AIRBILL #
William D. Stewart / Aquaterra	Catherine Thompson	7/22/94	18:45	

WHITE-LABORATORY REPORT COPY / PINK-LABORATORY COPY / CANARY-SAMPLER'S COPY

aquaterra

A GREAT LAKES CHEMICAL CORPORATION COMPANY

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

№ 000119

PROJECT NAME: BI - RAEFORD

REPORT TO: SHARON MYERS

TURNAROUND: ☑ NORMAL ☐ 5-DAY ☐ OTHER (SPECIFY):

ADDRESS: RAEFORD, NC.

AFFILIATION/LOCATION: AQUATERRA, Raleigh

REQUESTED DUE DATE:

JOB NUMBER: 2146.700

PHONE: (919) 859-9987

P.O. # / BILLING REFERENCE: RNC-8016

SAMPLED BY (PRINT): PAUL A. WOLCOTT / William D. Stewart

SAMPLER'S SIGNATURE: Paul A. Wolcott / William D. Stewart

SAMPLE ID	SAMPLE LOCATION	DATE	TIME	MATRIX WATER	MATRIX SOIL	MATRIX OTHER	NUMBER OF CONTAINERS TOTAL	UNPRESERVED	H_2SO_4	HNO_3	HCL	$NaOH$	pH < 2 OR > 12 Y	pH < 2 OR > 12 N	ANALYSES REQUEST: lead										REMARKS
EW-1	See Map	7-22-94	1530	✓			3	3					✓		X										

ADDITIONAL COMMENTS:

T=3°C

IEA #196-434

Received 2 vials for Trip Blank MV 7/23/94

RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME	AIRBILL #
William D. Stewart / Aquaterra	Catherine Thompson / IEA	7/22/94	18:45	

WHITE-LABORATORY REPORT COPY / PINK-LABORATORY COPY / CANARY-SAMPLER'S COPY

TABLE 1

TOTAL PURGEABLE HOLOCARBON "HITS" IN MONITORING WELLS FROM LABORATORY ANALYTICAL RESULTS

Monitoring Well	11/15/90	7/12/91	10/31/91	1/16/92	2/13/92	10/23/92	3/25/94
	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)	(Mg/L)
MW-4 (UPGRADIENT)	BQL	-	-	-	-	-	BQL
MW-5S	-	4*	-	-	-	-	6
MW-5i	-	28	60	-	-	48	55
MW-6S	386	-	-	-	-	-	140
MW-6i	-	52	63	-	-	105	127
MW-6D	-	-	-	23	32	36	13
RW-1 (RECOVERY WELL)	-	-	-	-	-	-	69
MW-7	-	115	60	-	-	-	13
MW-8	-	-	-	BQL	-	-	2@
MW-9	-	-	-	36	81	27	45
MW-10	-	-	-	BQL	-	-	BQL

← THIS IS UG/L

NOTE: The recovery well started removing water on 8/24/92.
The recovery pump was lowered two feet on 8/20/93.

BQL = Below Quantitation Limit
\- = not sampled
* = Purgeable Aromatics tested only
@ = Bromodichloromethane only. Poss. a false reading.

envir\water\groundwt.bmd

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT
DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION
P.O. BOX 27687 - RALEIGH, N.C. 27611, PHONE (919)733-3221

FOR OFFICE USE ONLY
Quad. No. _____ Serial No. 133594
Lat. _____ Long. _____ Pc _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

MW-6d

DRILLING CONTRACTOR Carolina Drilling

DRILLER REGISTRATION NUMBER 728

STATE WELL CONSTRUCTION PERMIT NUMBER: 46-0064-WM-0060

1. WELL LOCATION: (Show sketch of the location below)
Nearest Town: Raeford, North Carolina
401 Bypass & State Highway 210
(Road, Community, or Subdivision and Lot No.)

County: Hoke

2. OWNER Burlington Industries, Inc.
ADDRESS Post Office Box 788 (Street or Route No.)
Clarksville, VA 23927
City or Town State Zip Code

3. DATE DRILLED 1-13&14-92 USE OF WELL Monitoring
4. TOTAL DEPTH 76.0' CUTTINGS COLLECTED ☒ Yes ☐ No
5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No
6. STATIC WATER LEVEL: 47.4 FT. ☐ above ☒ below TOP OF CASING,
TOP OF CASING IS 0.0 FT. ABOVE LAND SURFACE.
7. YIELD (gpm): N/A METHOD OF TEST _____
8. WATER ZONES (depth): N/A
9. CHLORINATION: Type N/A Amount _____
10. CASING:

	Depth From	To	Diameter	Wall Thickness or Weight/Ft.	Material
Outer	0.0	47.5	6"	Sch.40	PVC
Inner	0.0	70.0	2"	Sch.40	PVC

11. GROUT:

Depth From	To	Material	Method
0.0	65.0	Portland #1	Pour

12. SCREEN:

Depth From	To	Diameter	Slot Size	Material
70.0	75.0	2 in.	0.010 in.	PVC
		in.	in.	
		in.	in.	

13. GRAVEL PACK:

Depth From	To	Size	Material
67.0	76.0	Torpedo	Sand

14. REMARKS: Bentonite seal from: 65.0' to 67.0'

DRILLING LOG

Depth From	To	Formation Description
		See Attached

If additional space is needed use back of form.

RECEIVED JAN 24 1992 GROUNDWATER SECTION RALEIGH, NC

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

See Attached

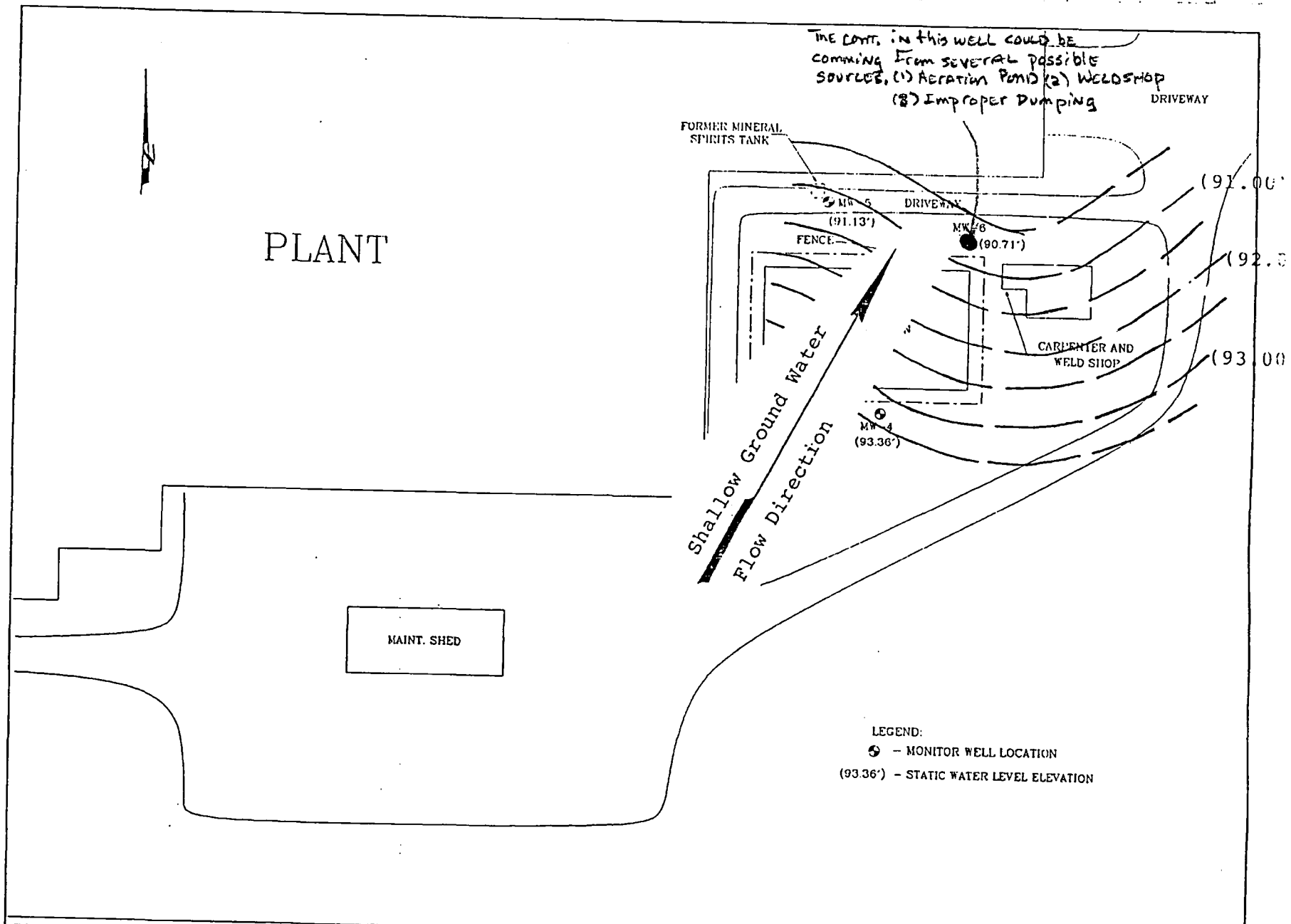
RECEIVED JAN 30 1992 ENV. MANAGEMENT FAYETTEVILLE REG. OFFICE

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

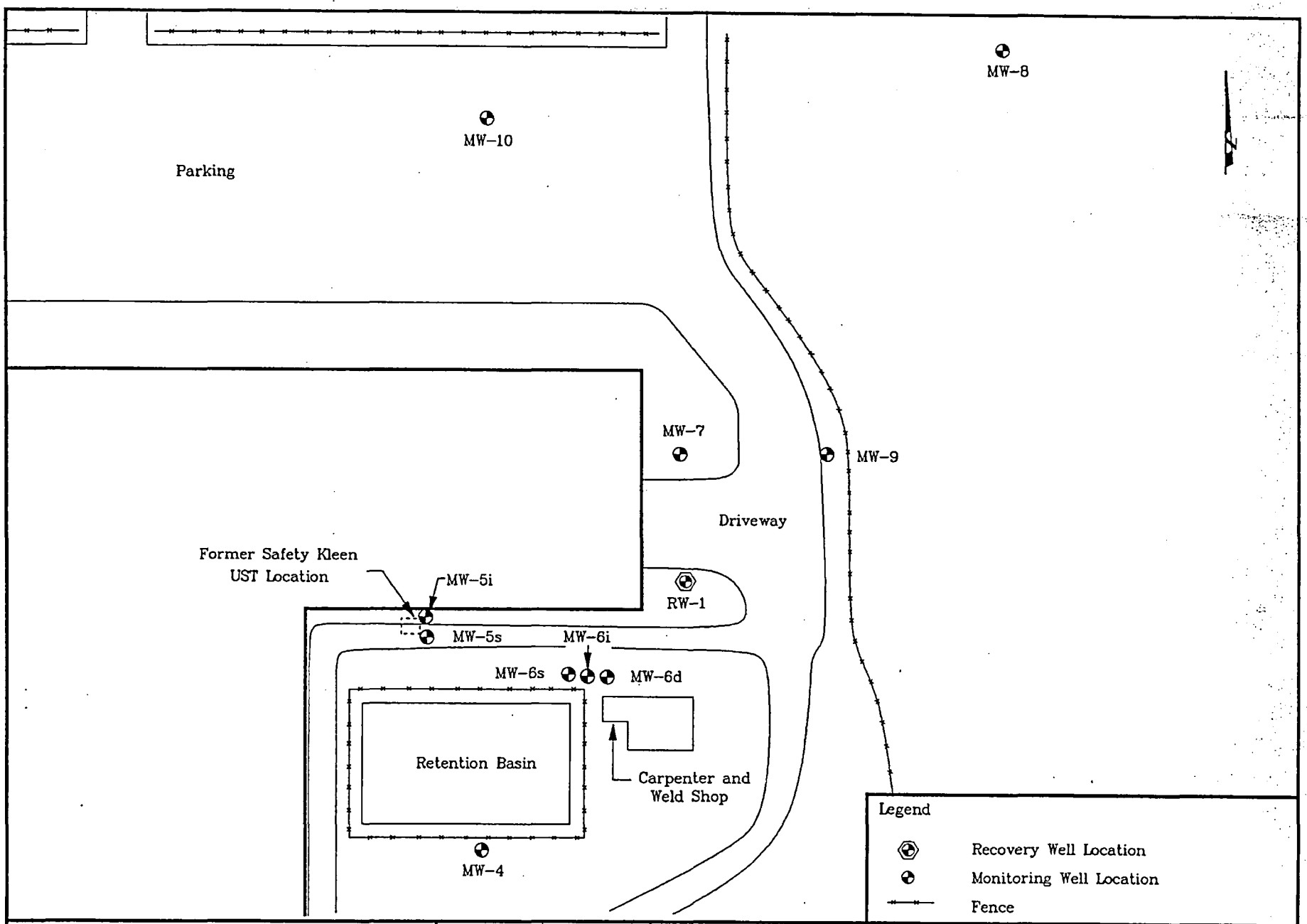
Steve M. Brown 1-21-92
SIGNATURE OF CONTRACTOR OR AGENT DATE

GW-1 Revised 6/88

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



PROJECT:	TITLE:				
BURLINGTON INDUSTRIES RAEFORD, NORTH CAROLINA	GROUNDWATER FLOW MAP				AQUATERRA, INC. RALEIGH, GREENSBORO, CHARLOTTE NORTH CAROLINA
	JOB: 467C	DRAWING: 467C–2	FIGURE: 5	SCALE: 1"=100'	



AQUATERRA, INC.
Raleigh, Greensboro, Charlotte
NORTH CAROLINA

Author	Drawing	Layers	Date	Title
LSG	467-2	0,1,2	03-16-92	Monitoring Well Location Map
Job No.	**Revision**	**Figure**	**Scale**	**Project**
467	3-10-93	2	1" = 100'	Burlington Industries, Inc. Raeford, North Carolina

WELL NUMBER: MW-6d
DRILLING METHOD: Hollow Stem Auger
DATE STARTED: 1-13-92
DRILLING FLUIDS: None
DATE FINISHED: 1-14-92
STATIC WATER LEVEL: _____ DATE: _____
GEOLOGIST/ENG. Scott Ball
OBSERVED BY: George Bridger
REMARKS: Total Depth (TD) Well Boring = 76.0'; TD Wellpoint = 75.20'; Wellpoint Length = 0.20'

O.D. OF BOREHOLE: 9"
O.D. OF CASING: 2.375"

PIPE STICKUP: 0.0'
SURFACE ELEVATION: --
GROUT TYPE: Portland #1

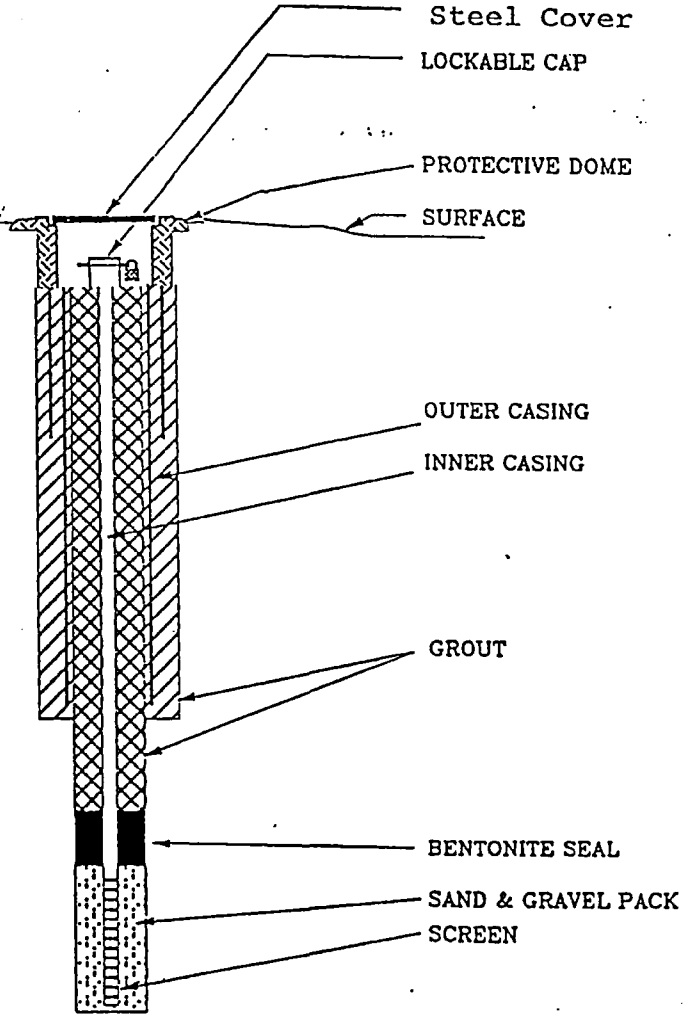
* (INNER)
CASING TYPE: PVC Sch. 40
CASING SIZE: 2"
BOREHOLE DIAMETER: 6"
* (OUTER)
CASING TYPE: PVC Sch 40
CASING SIZE: 6"
BOREHOLE DIAMETER: 9"

DEPTH TO BOTTOM OF OUTER CASING 47.5'
DEPTH TO BOTTOM OF INNER CASING 70.0'

DEPTH TO TOP OF BENTONITE 65.0'

DEPTH TO TOP OF GRAVEL 67.0'

DEPTH TO TOP OF SCREEN 70.0'
DEPTH TO BOTTOM OF SCREEN 75.0'
LENGTH OF SCREEN: 5.0'
SCREEN OPENING SIZE: 0.010"
SCREEN TYPE: PVC Sch. 40
SCREEN SIZE: 2"; slotted



PROJECT:	TITLE:				
Burlington Industries Raeford, North Carolina	MW-6d Well Schematic				AQUATERRA, INC. RALEIGH, GREENSBORO, CHARLOTTE NORTH CAROLINA
	JOB: C467	DRAWING: -	FIGURE: -	SCALE: -	