131789

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-01

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12139 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB_22FEB91-B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0177

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/22/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12139 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12139 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-10-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12139 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.16	250	J
2.	UNKNOWN	6.34	510	J
3.	UNKNOWN	6.49	1400	J
4.	UNKNOWN	6.57	2800	AJ
5. 123422	2-PENTANONE, 4-HYDROXY-4-MET	7.26	1900	AJ
6.	UNKNOWN	7.36	350	J
7.	UNKNOWN	7.46	580	J
8.	UNKNOWN	7.57	1100	J
9.	UNKNOWN	7.77	970	J
10. 96480	BUTYROLACTONE	8.73	220	J
11.	UNKNOWN	8.87	830	AJ
12.	UNKNOWN	9.95	150	J
13.	C5-H10-O	10.15	180	J
14.	UNKNOWN	10.97	220	J
15.	UNKNOWN	11.33	240	J
16.	UNKNOWN	12.33	200	J
17.	SUBSTITUTED HEXANEDIOIC ACID	32.44	3200	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-02

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12139 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: MB_15FEB91-A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1922

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/15/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-03

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12139 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: MB_22FEB91-B

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V2119

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/22/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	6	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD_BLANK

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 12205-0003

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0179

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. Date Analyzed: 02/22/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD_BLANK

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 12205-0003

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0179

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. Date Analyzed: 02/22/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD_BLANK

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 12205-0003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B9501

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/18/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/15/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD_BLANK

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 12205-0003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B9501

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/18/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/15/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-01

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: MB_23FEB91-A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V2148

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/23/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK-01

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: MB_23FEB91-A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V2148

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/23/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	28.44	7.0	J

FORM I VOA-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 18FEB91BWB

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F3210

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/18/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/04/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 18FEB91BWB

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F3210

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/18/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/04/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 18FEB91BWB

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F3210

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/18/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/04/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN AMIDE	31.11	46	J
2.	UNKNOWN AMIDE	35.33	25	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-02

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB_22FEB91-B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0177

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/22/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK-02

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12205 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB_22FEB91-B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0177

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/22/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_02

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 22FEB91A-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B9724

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/22/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/28/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-10-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK_02

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 22FEB91A-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B9724

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/22/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/28/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.27	3400	AJ
2.	UNKNOWN	7.91	140	J
3.	UNKNOWN	29.17	340	J
4.	UNKNOWN	31.41	280	J
5.	SUBSTITUTED HEXANEDIOIC ACID	31.56	660	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_03

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 16APR91A-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G0624

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/16/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/26/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_03

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 16APR91A-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G0624

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/16/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/26/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-10-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	180	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	66	J
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK_03

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12205 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 16APR91A-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G0624

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 04/16/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/26/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.31	3900	AJ

FORM I SV-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK-01

Lab Name: ENSECO EAST Contract: 68-W8-0069

Lab Code: Case No.: 12048 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: MB_14FEB91-A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1903

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/14/91

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12048 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12048 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-10-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK_01

Lab Name: ENSECO-EAST Contract: _____

Lab Code: EEAST Case No.: 12048 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 14FEB91B-SB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F3577

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/14/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/21/91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.16	250	J
2.	UNKNOWN	6.34	510	J
3.	UNKNOWN	6.49	1400	J
4.	UNKNOWN	6.57	2800	AJ
5. 123422	2-PENTANONE, 4-HYDROXY-4-MET	7.26	1900	AJ
6.	UNKNOWN	7.36	350	J
7.	UNKNOWN	7.46	580	J
8.	UNKNOWN	7.57	1100	J
9.	UNKNOWN	7.77	970	J
10. 96480	BUTYROLACTONE	8.73	220	J
11.	UNKNOWN	8.87	830	AJ
12.	UNKNOWN	9.95	150	J
13.	C5-H10-O	10.15	180	J
14.	UNKNOWN	10.97	220	J
15.	UNKNOWN	11.33	240	J
16.	UNKNOWN	12.33	200	J
17.	SUBSTITUTED HEXANEDIOIC ACID	32.44	3200	J

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

1361501

Lab Name: ROCKY MOUNTAIN ANALYTICAL Contract: _____

Lab Code: ENSECO Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: FIELDBLANK

Level (low/med): LOW Date Received: 02/18/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.8	B		P
7440-36-0	Antimony	41.0	U		P
7440-38-2	Arsenic	2.0	U		F
7440-39-3	Barium	6.7	B		P
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium	1010	B		P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	8.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	61.7	B		P
7439-92-1	Lead	2.5	B		F
7439-95-4	Magnesium	100	B		P
7439-96-5	Manganese	7.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	13.0	U		P
7440-09-7	Potassium	174	U		P
7482-49-2	Selenium	2.0	U	W	F
7440-22-4	Silver	6.0	U		P
7440-23-5	Sodium	1540	U		P
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	6.4	B		P
	Cyanide	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

THIS SAMPLE IS A FIELD BLANK.

FORM I - IN 7/88

APPENDIX G

APPENDIX G

BORING LOGS AND MONITORING WELL CONSTRUCTION DETAILS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In Reply Refer To: 3HW21

Dr. Richard Reisenweber (110-SG05)
Environmental Remediation
Rockwell International Corporation
2201 Seal Beach Boulevard
P.O. Box 2515
Seal Beach, California 90740

July 7, 1992

Re: Recticon/Allied Steel Site
Parkerford, PA

Dear Dr. Reisenweber:

Enclosed please find a copy of the Well Schedule for one of the three known pumping wells located on the Allied Steel portion of the referenced site. This well corresponds to PW3 on the enclosed Figure 5 from the RI/FS Work Plan for this site.

The well schedule documents that PW3 is 160 feet deep with casing to 44 feet and at least two water bearing zones at 85 and 145 feet. Recent geophysical testing of the nearest monitoring well (DBR5) indicates that in this location, there is probably a downward flow of groundwater between water-bearing zones connected by a well borehole. Consequently, there is a great potential that contaminated shallow groundwater is migrating to deeper zones via PW3 and possibly via the other pumping wells on both the Allied Steel and Recticon portions of the site.

Please note that during a recent telephone conversation, Mr. Richard Snyder provided the following information concerning the Allied pumping wells.

PW1- This well is approximately 120 feet deep and does not contain any piping, electrical or a pump.

PW2- This well is reportedly a shallow well approximately 25 feet deep that was capped and not used due to high bacterial contamination.

PW3- In addition to the above information, this well has a submerged pump at 125 feet with associated PVC pipe and electrical cable.

Page 7 of the RI/FS Work Plan includes a discussion regarding the three pumping wells on the Recticon portion of the site. Based on that information, those wells do not represent open boreholes and consequently do not pose a migration pathway for contaminated groundwater.

In order to control the timeframe and subsequent cost of any potential groundwater remedy for this site, it is imperative to control any potential migration pathways for contaminated groundwater at the earliest possible time. Based on the existing information, these wells will probably need to be abandoned (grouted) or reconstructed into wells that are screened over an appropriate interval. Consequently, EPA recommends that any open boreholes at this site be further characterized using borehole geophysics to confirm or deny whether they represent a migration pathway.

By copy of this letter, Allied Steel Products Corporation is notified and their response is requested regarding EPA's plan to characterize and/or modify the existing pumping wells on the Allied Steel portion of the site.

Please provide a response to this correspondence at your earliest convenience. In the meantime, you may contact me at (215) 597-8309 if you have any questions.

Sincerely,

David G. Byro

David G. Byro, Project Manager
S.E. Pennsylvania Section (3HW21)

Enclosures

cc: J. Carmody, Rockwell
K. Hess, PADER
M. Edelman, Dames & Moore
R. Golia, Dames & Moore
T. Vellios, Dynamac
J. Van Dzura, Jr., Allied Steel

FORM 9-1642 (1-68)

Well No. CH-2353

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

E. Coventry

MASTER CARD

Record by R. Sloto — Source of data Field Drillers rept — Date 6-19-75 — Map PHO-7½

State 42 — County (or town) CH

Latitude: 401213 N — Longitude: 075351 0 — Sequential number: 1

Lat-long accuracy: 2 — T ___ S, R ___ W, Sec ___, ___ ¼, ___ ¼, ___ ¼ — B & M

Local well number: 11U2353 — Other number:

Local use: — Owner or name:

Owner or name: ALLIED STEEL CO — Address:

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — N

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other — N

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed. — ~~W~~ U 1992

DATA AVAILABLE: Well data ___ Freq. W/L meas.: ___ Field aquifer char. ___

Hyd. lab. data: ___

Qual. water data; type: ___

Freq. sampling: ___ Pumpage inventory: yes no, period: ___

Aperture cards: yes

Log data: D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD — Depth well: ___ ft 160 Meas. rept accuracy 3

Depth cased (first perf.) ___ ft 49 — Casing type: ___; Diam. ___ in 6

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., (S) screen, (T) sd. pt., (W) shored, (X) open hole, (Z) other — X

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other — A

Date Drilled: 11-21-1973 — Pump intake setting: ___ ft

Driller: C. S. Garber & Sons

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple, (cent.), (M) multiple, (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other — Deep ___ Shallow ___

Power (type): diesel, elec, nat gas, gasoline, hand, LP gas, wind; H.P. ___ Trans. or meter no. ___

Descrip. MP ___ ft above below LSD, Alt. MP ___

Alt. LSD: 128 — Accuracy (source): ±10' (TOPO) — 4

Water Level ___ ft above below MP; ft above below LSD 25 — Accuracy: ___ — D

Date meas: 11-21-73 — Yield: ___ gpm 60 — Method determined 5

Drawdown: ___ ft 135 — Accuracy: ___ 3 — Pumping period ½ hrs 1

QUALITY OF WATER DATA: Iron ___ ppm — Sulfate ___ ppm — Chloride ___ ppm — Hard. ___ ppm

Sp. Conduct ___ K x 10^6 — Temp. 51 °F 105 — Date sampled 11-21-73

Taste, color, etc.

Well No.

AR302730

2353

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

PENNSYLVANIA SUPPLEMENTARY DATA CARD

Record by: ____ Source of data: ____ Date: ____ Map: ____ [5] [4]

State: ____ [2] [2] County (or town): ____ Sequential number: [19] [1]

Latitude: [5] 40 deg. [7] 12 min. [9] 13 sec. [11] N

Longitude: [12] 075 deg. [15] 35 min. [18] 16 sec.

Driller's name: Garber

Driller's license no.: [20] 018 [23]

Specific capacity: 60/135 = 0.4 gpm/ft [24] 0.4 [27]

Duration of specific capacity test: 1/2 hr. [28] [31]

Source of specific capacity data: [32] 2

Water-bearing zones: Total no. of zones: [33] 2

No. of zone-card: [34] 1

Source of data on zones: [35] 2

Number of zone:	Depth of zone:	Yield of zone:
	ft. [36] 85 [38]	gpm [39] [41]
	ft. [42] 145 [44]	gpm [45] [47]
	ft. [48] [50]	gpm [51] [53]
	ft. [54] [56]	gpm [57] [59]
	ft. [60] [62]	gpm [63] [65]

Field quality of water data: pH: [66] . [68] Hardness: ____ gpg [69] [70]

Specific conductance: ____ micromhos at 25 C [71] [74]

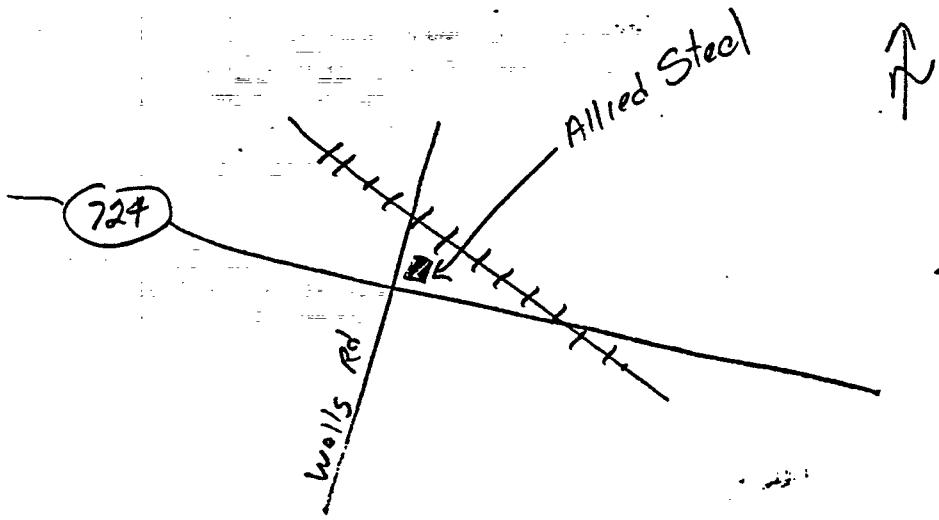
Bacterial analysis: ____ [75]

Date of bacterial analysis: [76] [78] Source of bacterial data: ____ [79]

Card no.: ____ [80] #

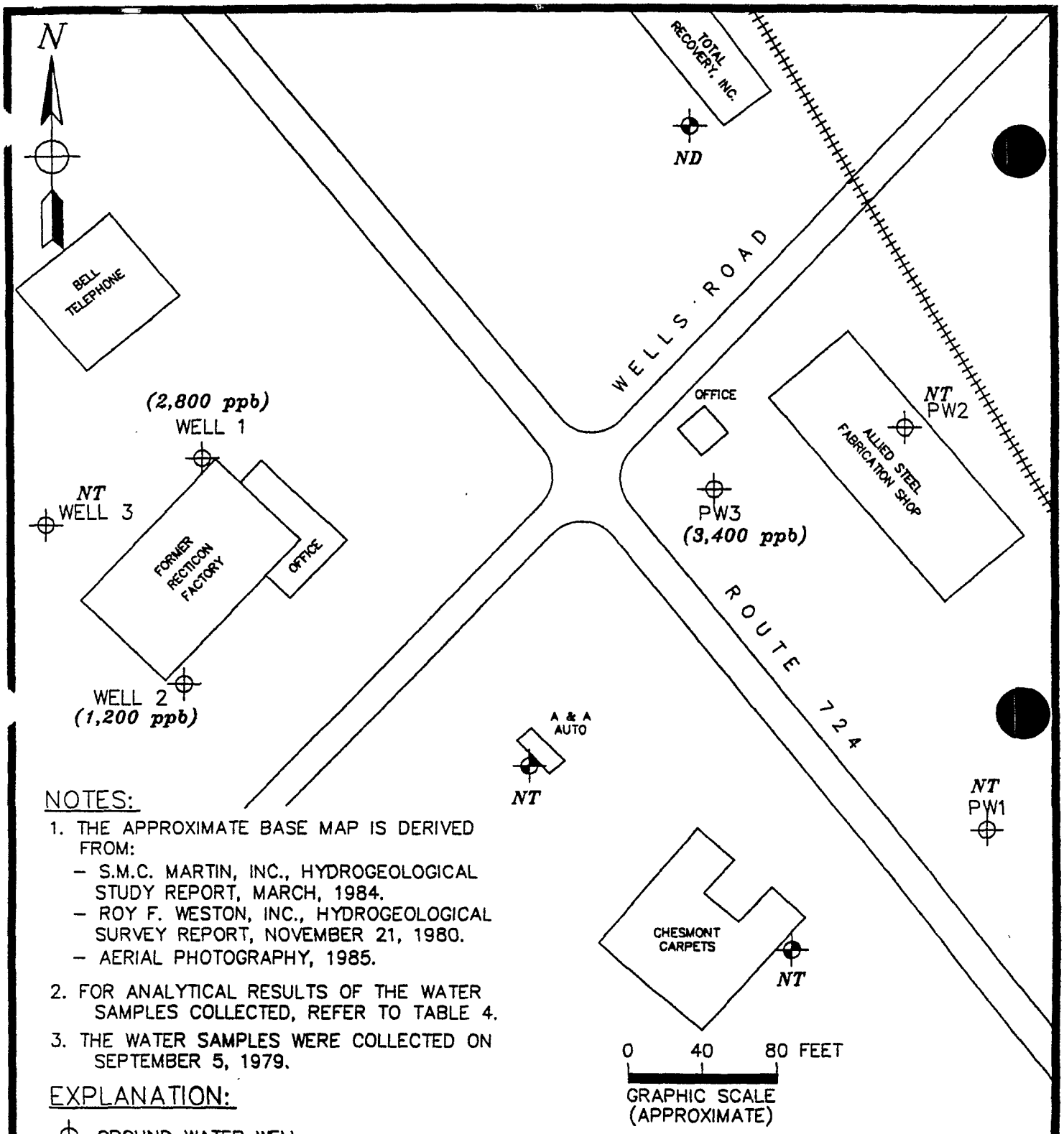
Use the following notation for distinguishing letters and numbers: oh Ø, eye I, zee Z; zero 0, one 1, two 2

Do not slash a seven (i.e., 7) as it will be interpreted as a Z.



drlr log
0-24 clay
24-160 shale

AR302731



NOTES:

1. THE APPROXIMATE BASE MAP IS DERIVED FROM:
   - S.M.C. MARTIN, INC., HYDROGEOLOGICAL STUDY REPORT, MARCH, 1984.
   - ROY F. WESTON, INC., HYDROGEOLOGICAL SURVEY REPORT, NOVEMBER 21, 1980.
   - AERIAL PHOTOGRAPHY, 1985.
2. FOR ANALYTICAL RESULTS OF THE WATER SAMPLES COLLECTED, REFER TO TABLE 4.
3. THE WATER SAMPLES WERE COLLECTED ON SEPTEMBER 5, 1979.

EXPLANATION:

- GROUND WATER WELL WITH TCE CONCENTRATION
- GROUND WATER WELL (APPROXIMATE LOCATION) WITH TCE CONCENTRATION

NT NOT TESTED

ND NOT DETECTED

RAS-GW (4)

TITLE GROUND WATER WELL LOCATION MAP		
PROJECT RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA		
Dames & Moore WILLOW GROVE, PENNSYLVANIA		
SCALE AS NOTED	DWN. BY EM2	JOB NO. 10839-047
DATE 11/30/89	APPR. BY LH	FIG. NO. 5

AR302732

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In Reply Refer To: 3HW21

Dr. Richard Reisenweber (110-SG05)
Environmental Remediation
Rockwell International Corporation
2201 Seal Beach Boulevard
P.O. Box 2515
Seal Beach, California 90740

July 17, 1992

Re: Recticon/Allied Steel Site
Parker Ford, PA

Dear Dr. Reisenweber:

As a follow-up to EPA's letter dated July 7, 1992, please find enclosed a copy of the Water Well Inventory Report for the existing pumping well on the Recticon portion of the subject site. This report confirms the depth of the well and casing and was requested by Dames & Moore.

Please feel free to contact me at (215) 597-8186 if you have any questions concerning this correspondence.

Sincerely,

David G. Byro

David G. Byro, Project Manager
S.E. Pennsylvania Section (3HW21)

Enclosure

cc: J. Carmody, Rockwell
K. Hess, PADER
M. Edelman, Dames & Moore
R. Golia, Dames & Moore
T. Vellios, Dynamac

Department of Environmental Resources — TOPOGRAPHIC AND GEOLOGIC SURVEY — Water Well Inventory Report

OFFICE USE ONLY

Block: Lat: Long: Sec: Acc: Map: Well: Phyelo. Prov.: U.S. Basin: Topo.: Aquifer: Aquifer:

SAMBONE Brothers
10 30 W Germantown Pk
Box 287
Fairview Village, Pa
19434

Well Site – Township: E. Coventry

County: Chester

Well Owner (last name): Gambone Bros. (first initial):

Address: 1030 W. Germantown Pk
Box 287
Fairview Village, Pa 19434

Ownership: private, city, corp/co, state, federal, county (CIRCLE ONE)

Water Use: home, public, industry, irrigation, stock, institution (CIRCLE ONE)

Well Use: production, dry hole, recharge, test, abandoned (CIRCLE ONE)

Saltwater Zone: yes / no (CHECK ONE)

298' → Well Depth: 298 ft.

212' 9" → Casing Length: 212' 9" ft. STEEL

Well Diameter: to nearest inch

Well Finish: open hole, screen, perforated/slotted, other (CIRCLE ONE)

Date Drilled month year: DECEMBER 1983

26' Water Level Before Test: 26 ft.

Level at End of Test: 298 ft.

60+ Yield: 60+ gpm

Flow Measure Method: bailer, orifice, meter, weir, watch and bucket, estimate, other (CIRCLE ONE)

Drawdown: 272 ft.

1/2 hr. Length of Test: 1 hr. min.

Depth to Bedrock: 65 ft. Landform at Site (CIRCLE ONE): level, hilltop, valley, hillside

Surface: OFFICE USE ONLY

Driller's License: 188 Driller's Name: C S GARBER & SON

Depth to Water Bearing Zones (1): 225 ft. (2): 257 ft. (3): 263 ft. (4): ft.

Pa. Basin: OFFICE USE ONLY

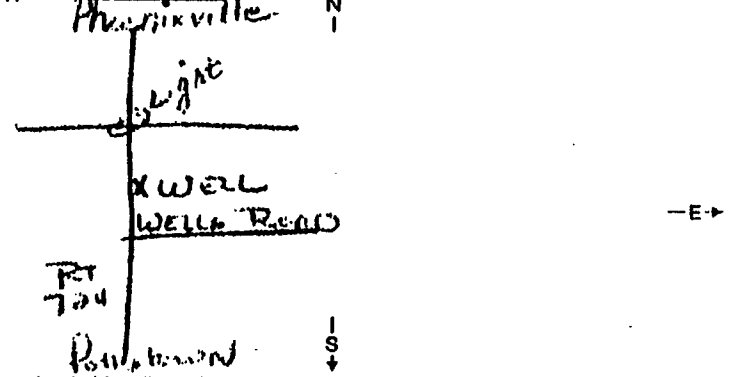
Written Well Location Directions: Highview Gardens Inc. Wells Rd. + Rt 724

Development name (if applicable): Phoenixville

Lot:

Color and Rock Type	From	To
SOFT RED SANDSTONE	–	15
" " Shale	15 –	65
RED SHALE	65 –	298

SKETCH MAP

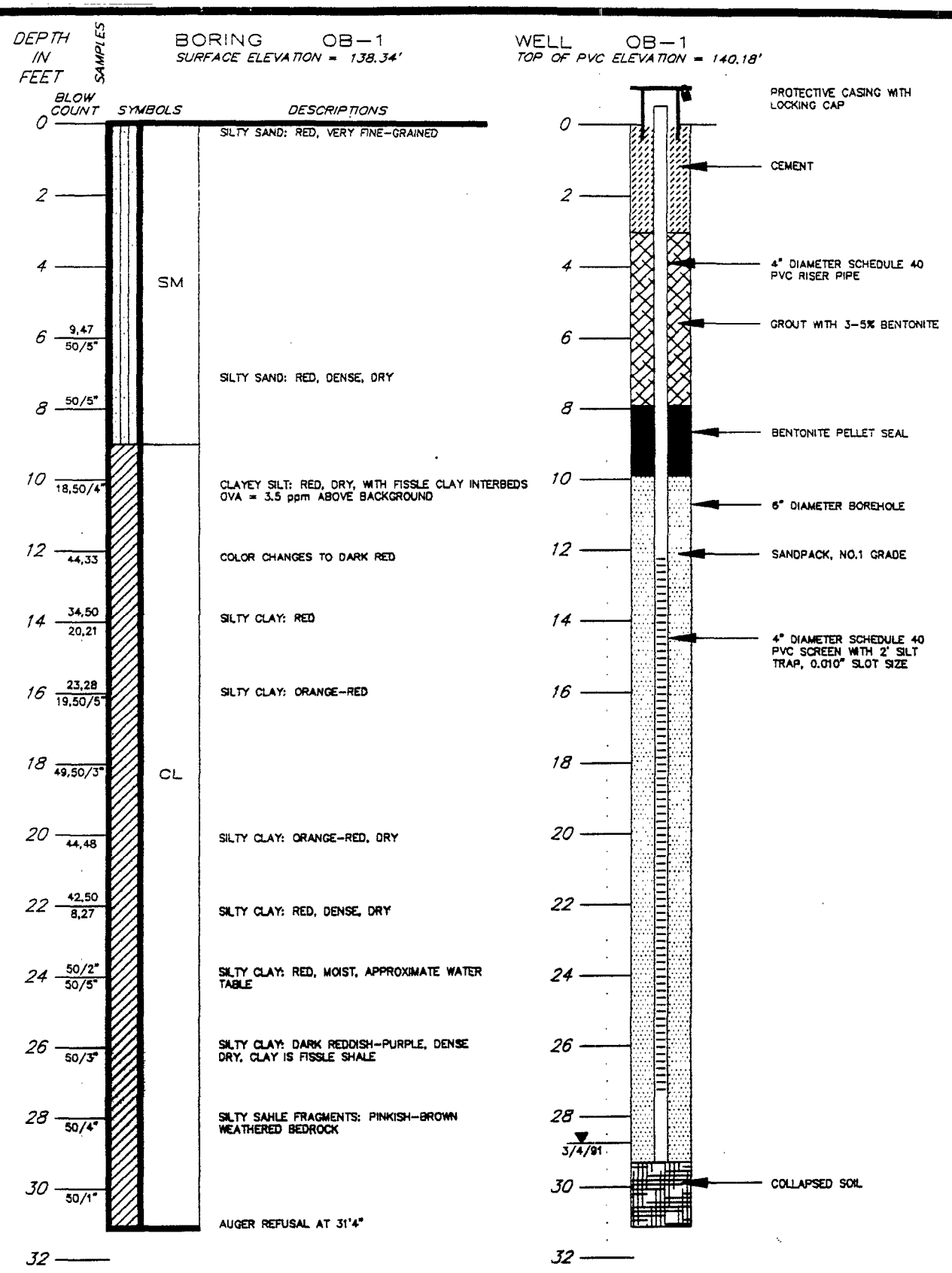


Indicate route no's, intersections, schools, churches, cemeteries, streams, towns, and any notable feature such as quarries, bridges, railroads, etc. Be sure to show distances between these features.

ER-TGS-15 REV. 01/79

4TH COPY FOR DRILLER

AR302734



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

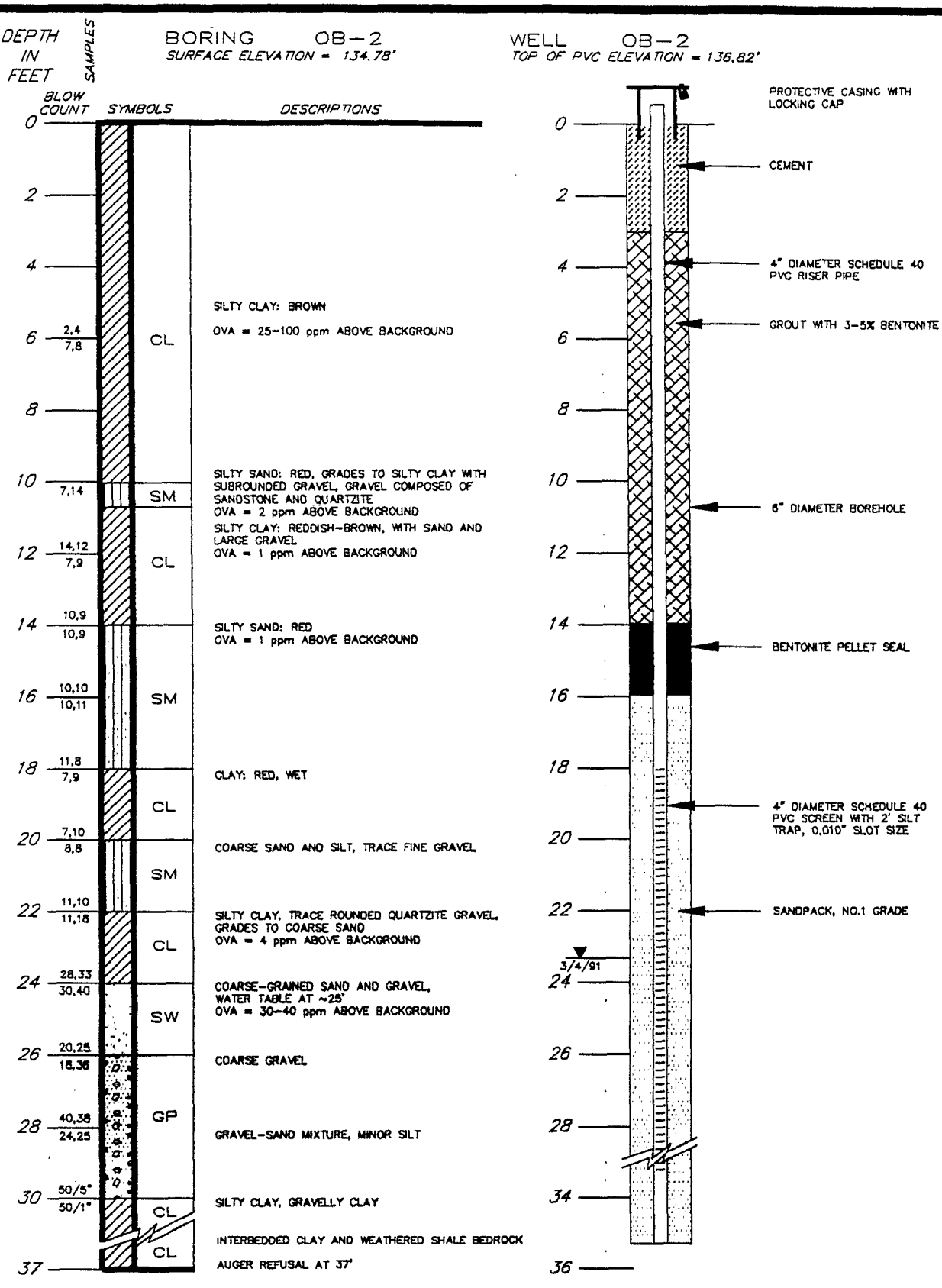
NOTES:

1. BORING COMPLETED TO A DEPTH OF 31'4" ON FEBRUARY 14, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 29'3" ON ON FEBRUARY 14, 1991 BY M&R SOIL INVESTIGATIONS, INC.

ALLIED\OB-1 (7)

DAMES & MOORE

AR302735



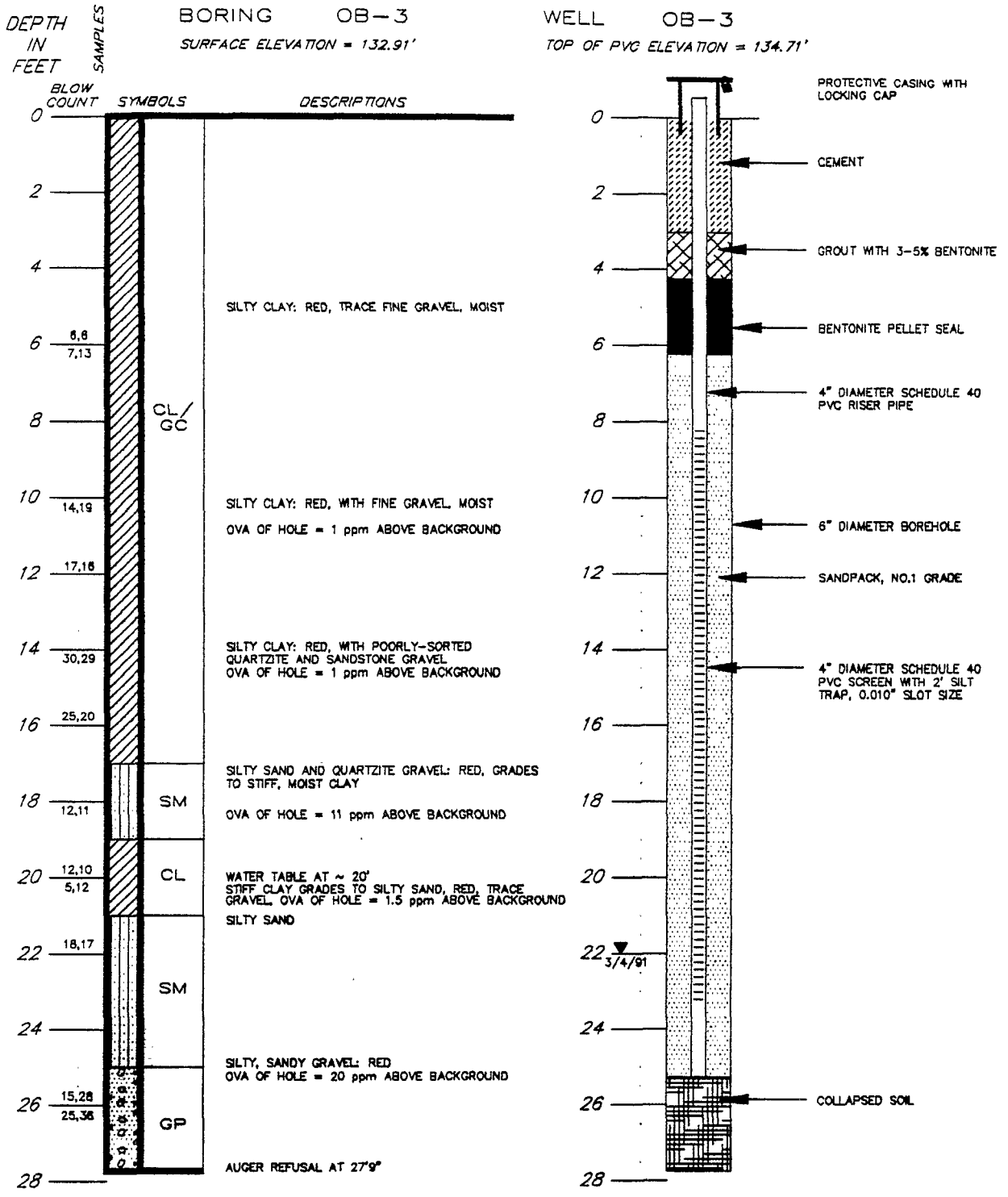
NOTES:

1. BORING COMPLETED TO A DEPTH OF OF 37' ON FEBRUARY 15, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 35'4" ON FEBRUARY 15, 1991 BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL
RECTICON/ALLIED STEEL SITE
PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-2 (6)



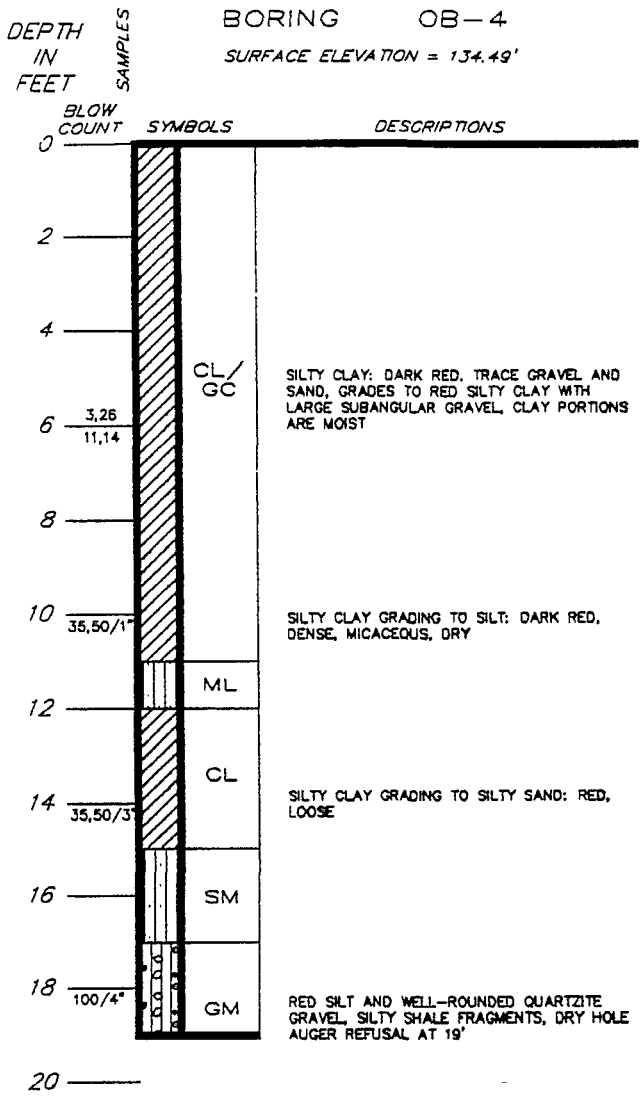
NOTES:

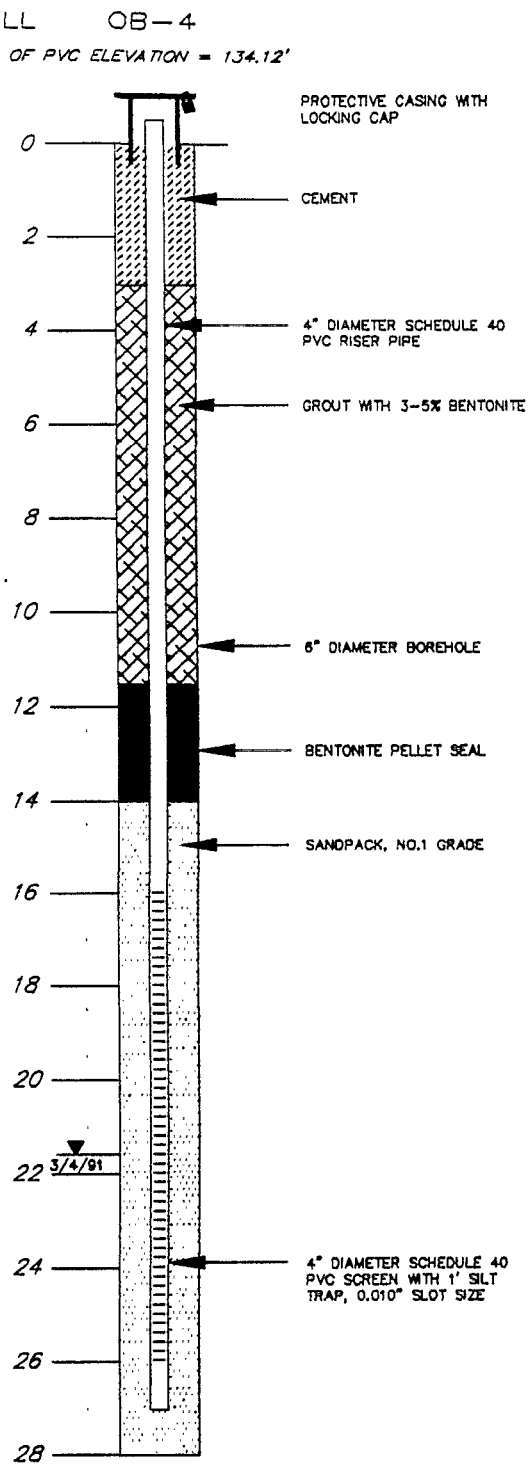
1. BORING COMPLETED TO A DEPTH OF 27'9" ON FEBRUARY 20, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 25'3" ON FEBRUARY 20, 1991, BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL
RECTICON/ALLIED STEEL SITE
PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-3 (6)





NOTES:

1. BORING COMPLETED TO A DEPTH OF 19' ON FEBRUARY 20,1991, USING HOLLOW STEM AUGERS BY M&R SOIL INVESTIGATIONS, INC.. NO WATER WAS PRESENT IN BORE HOLE ON FEBRUARY 21, 1991, SO BOREHOLE WAS GROUTED.

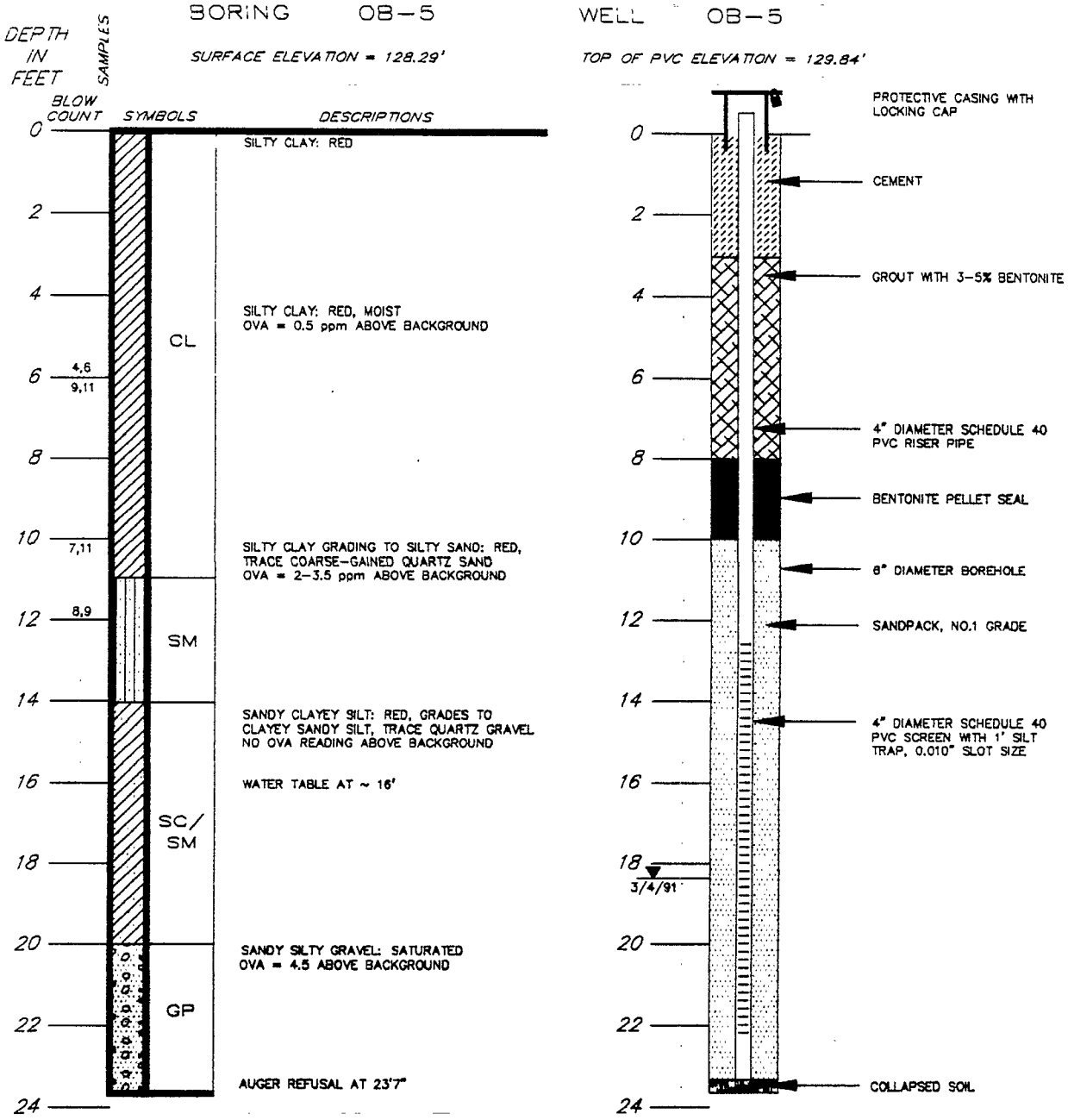
2. BORING REDRILLED ON MARCH 1, 1991 USING AIR ROTARY DRILL RIG BY KEN-DRILL WELL DRILLING, INC.. DEPTH OF BORE HOLE WAS 28'. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 27'.

LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-4 (4)

AR302738



NOTES:

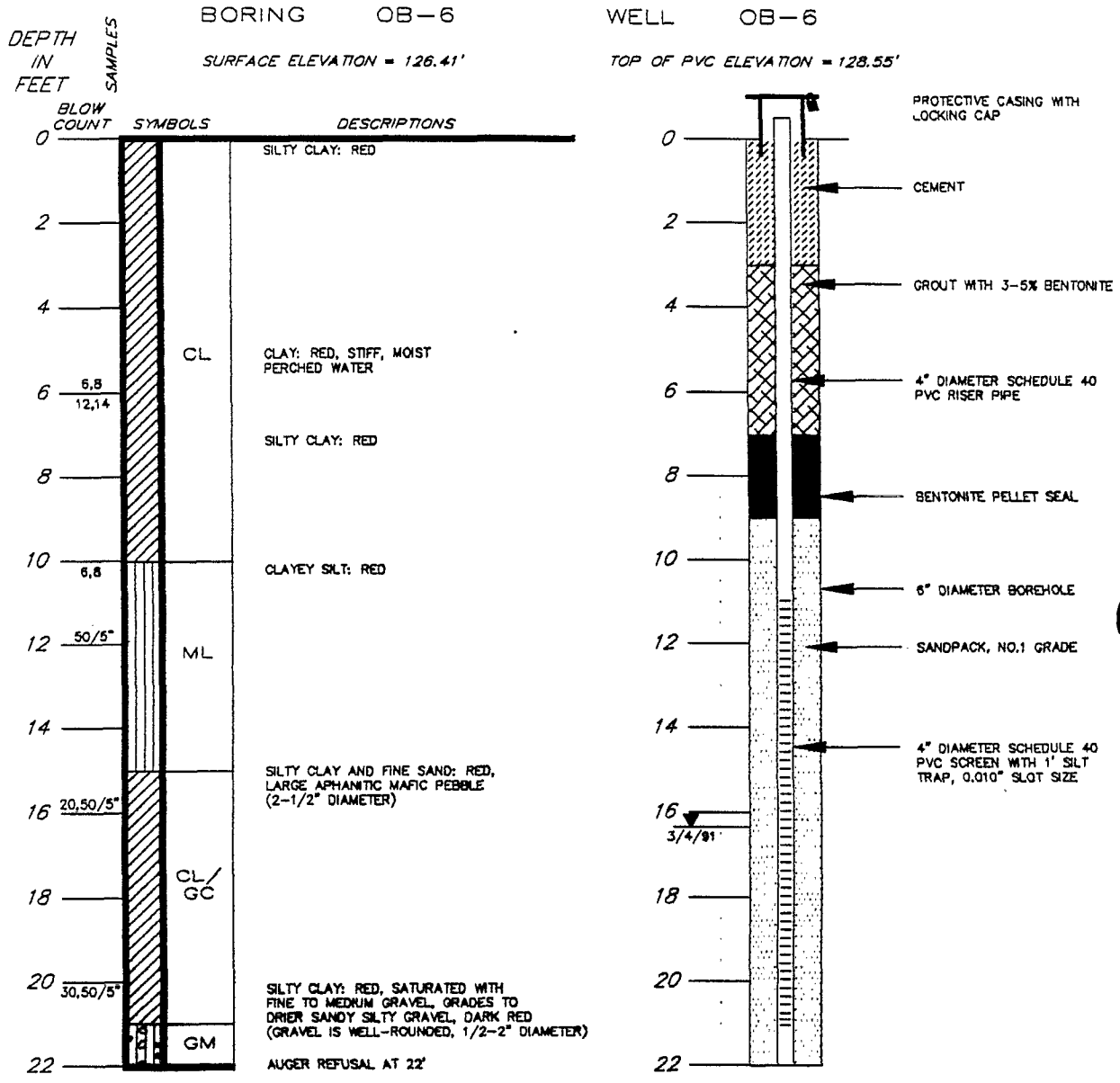
1. BORING COMPLETED TO A DEPTH OF 23'7" ON FEBRUARY 21, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 23'4" ON FEBRUARY 21, 1991, BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL
RECTICON/ALLIED STEEL SITE
PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-5 (3)

AR 302739



NOTES:

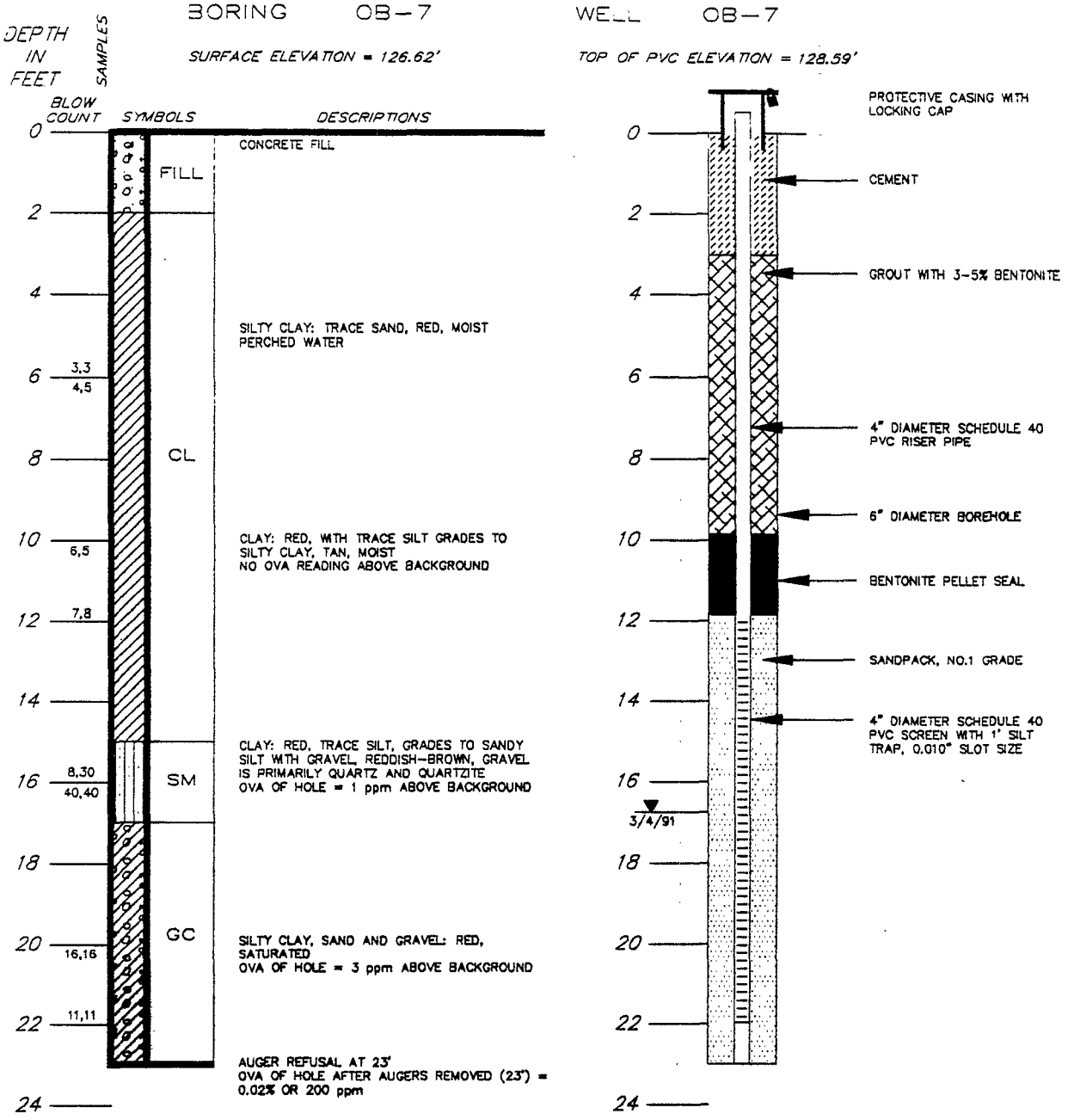
1. BORING COMPLETED TO A DEPTH OF 22' ON FEBRUARY 22, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 22' ON FEBRUARY 22, 1991, BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL
RECTICON/ALLIED STEEL SITE
PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-6 (4)

AR302740



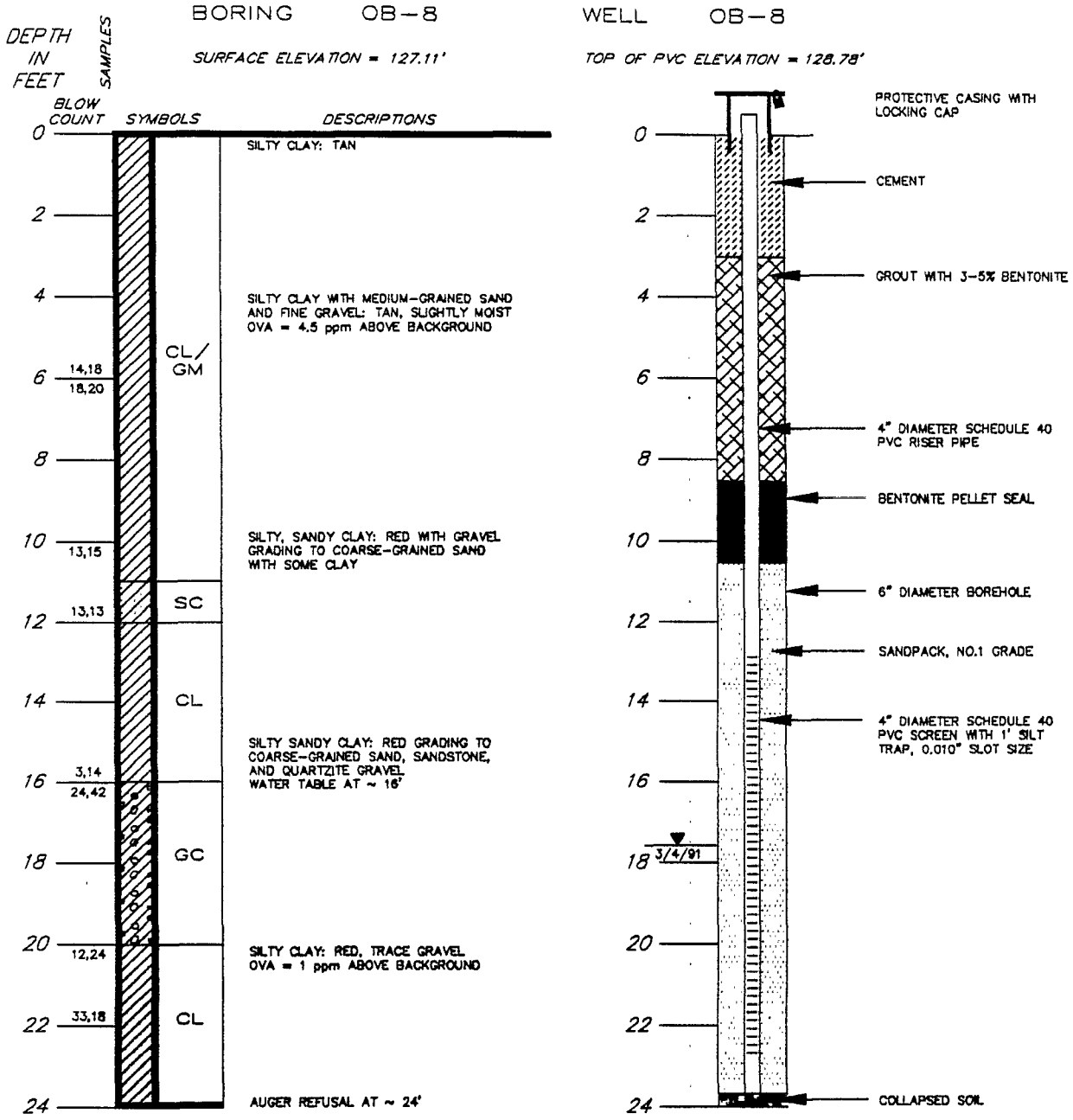
NOTES:

1. BORING COMPLETED TO A DEPTH OF 23' ON FEBRUARY 22, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 23' ON FEBRUARY 22, 1991, BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-7 (3)



NOTES:

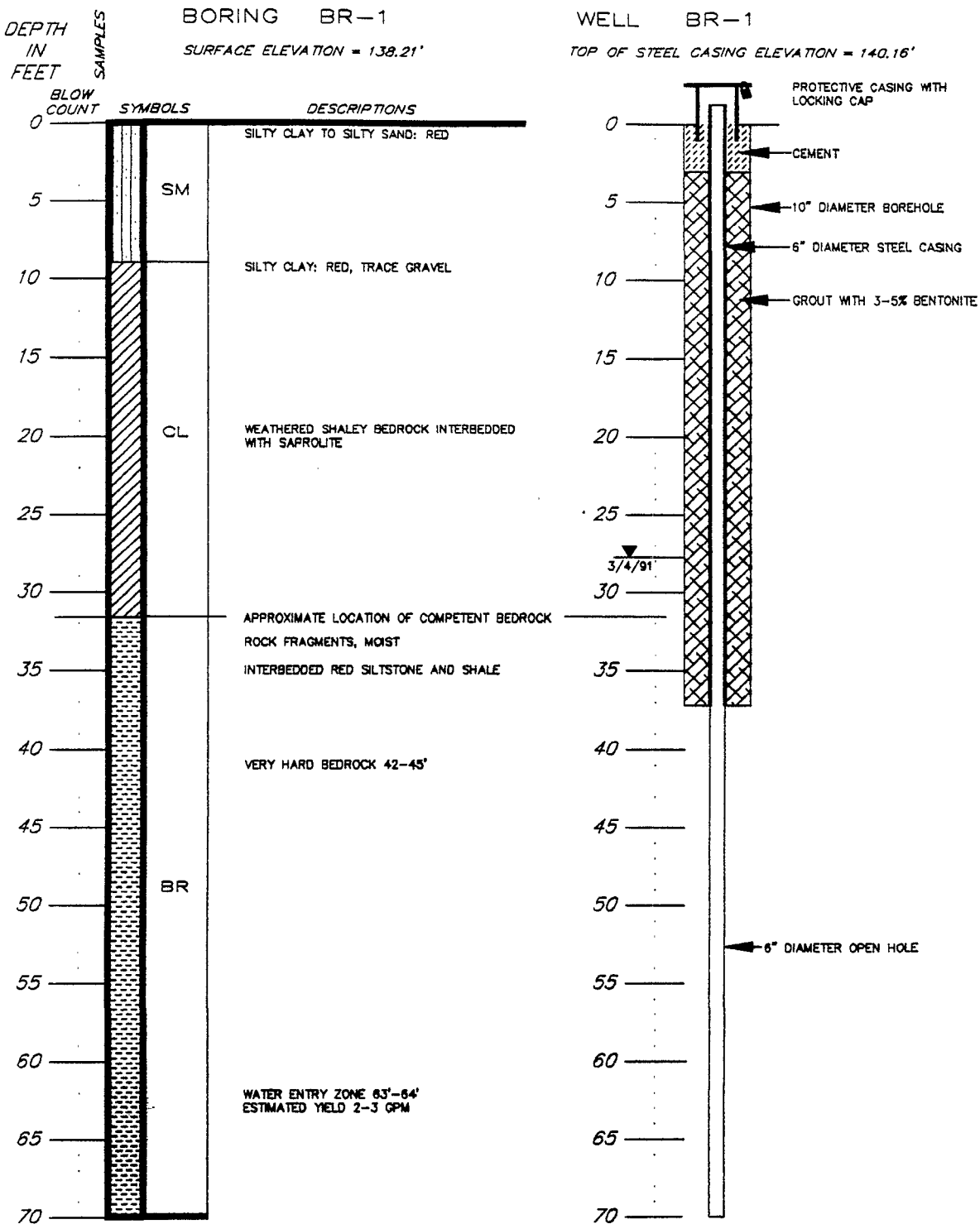
1. BORING COMPLETED TO A DEPTH OF 24' ON FEBRUARY 20, 1991.
2. OVERBURDEN MONITORING WELL INSTALLED TO A DEPTH OF 23'8" ON FEBRUARY 20, 1991, BY M&R SOIL INVESTIGATIONS, INC.

LOG OF BORING AND MONITORING WELL DETAIL
RECTICON/ALLIED STEEL SITE
PARKER FORD, PENNSYLVANIA

DAMES & MOORE

ALLIED\OB-8 (4)

AR302742



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

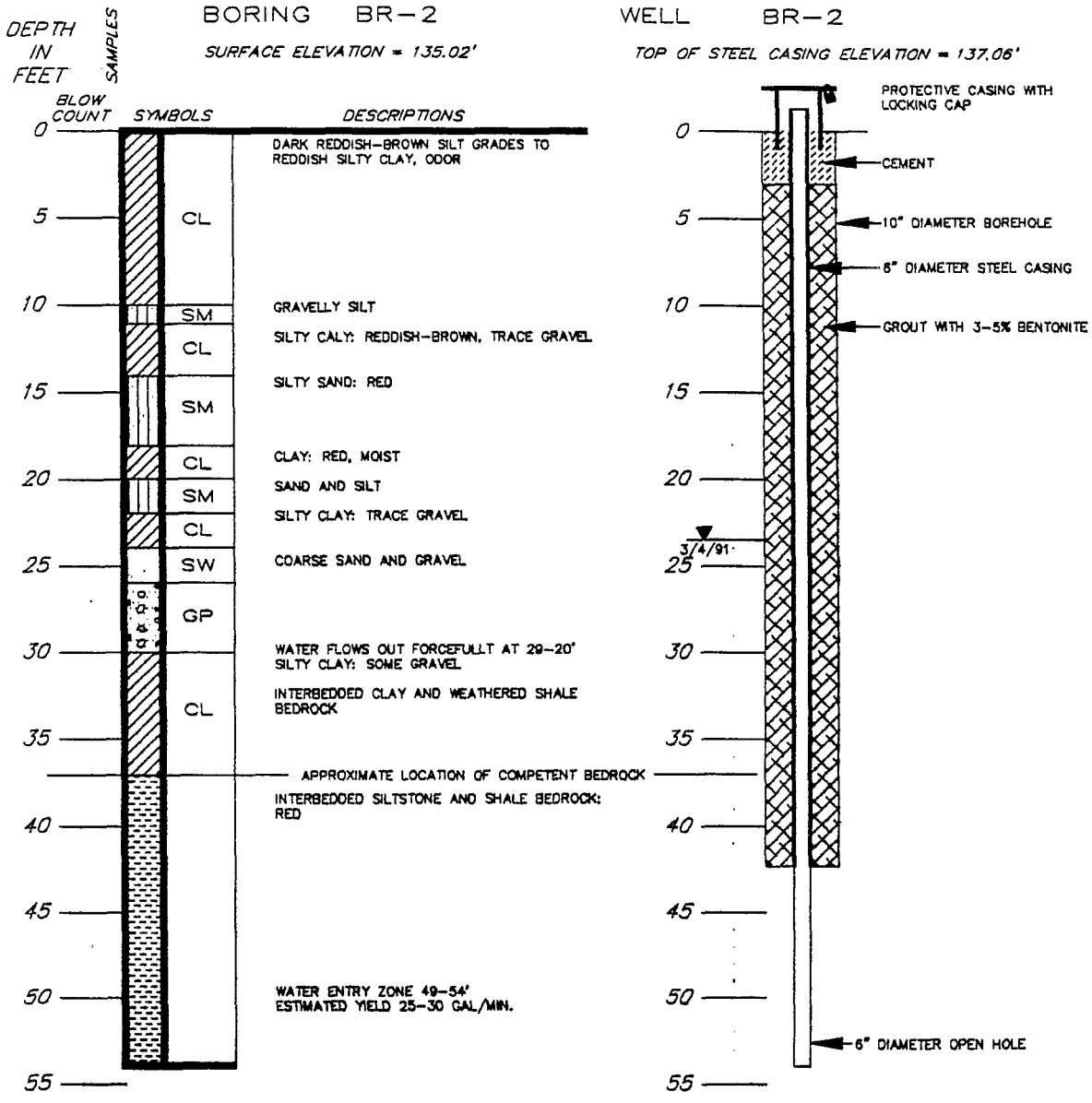
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 37'1" ON FEBRUARY 26, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 70' ON FEBRUARY 28, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-1 (4)

DAMES & MOORE

AR302743



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

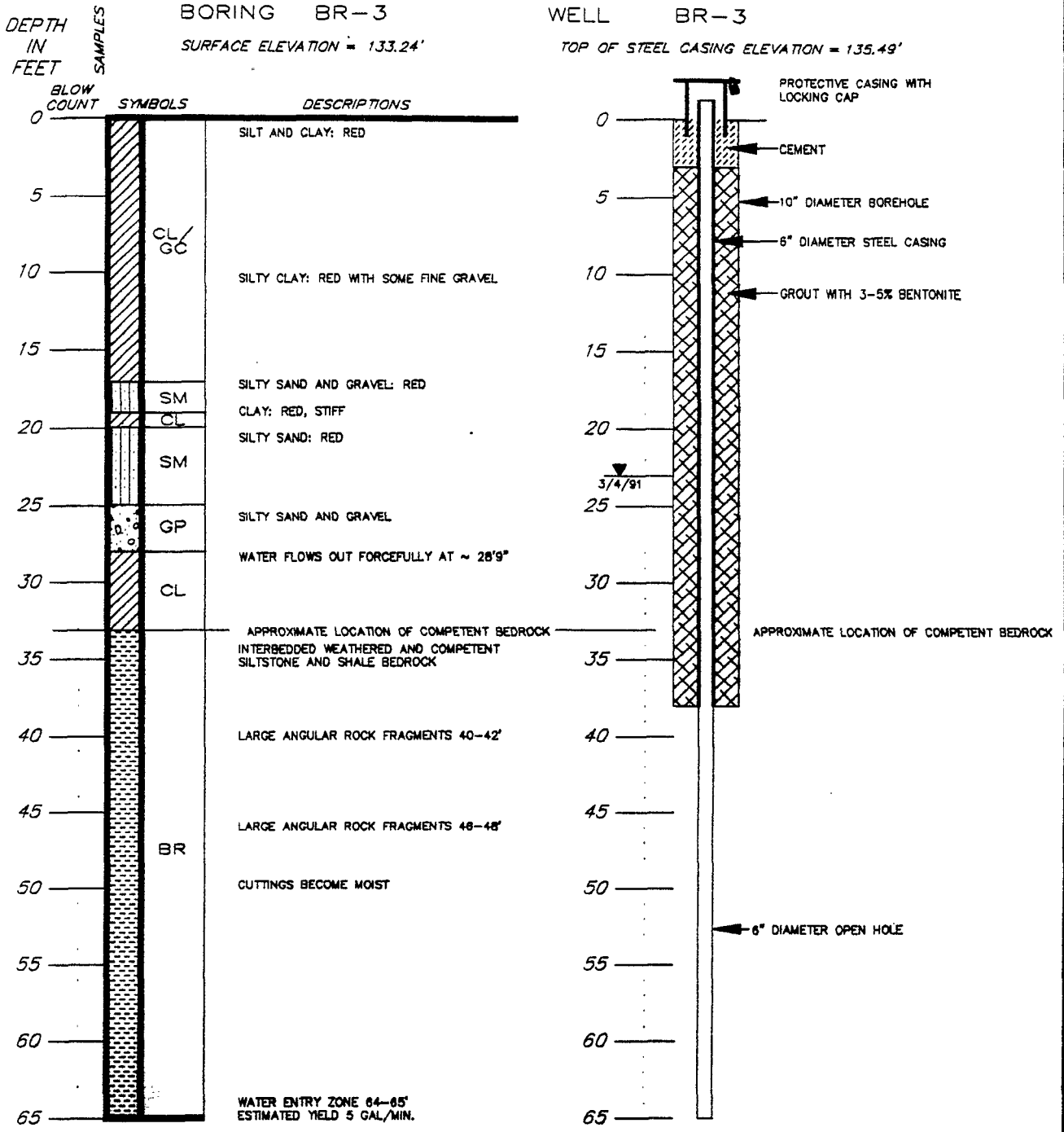
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 42'6" ON FEBRUARY 26, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 54' ON FEBRUARY 28, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-2 (4)

DAMES & MOORE

AR302744



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

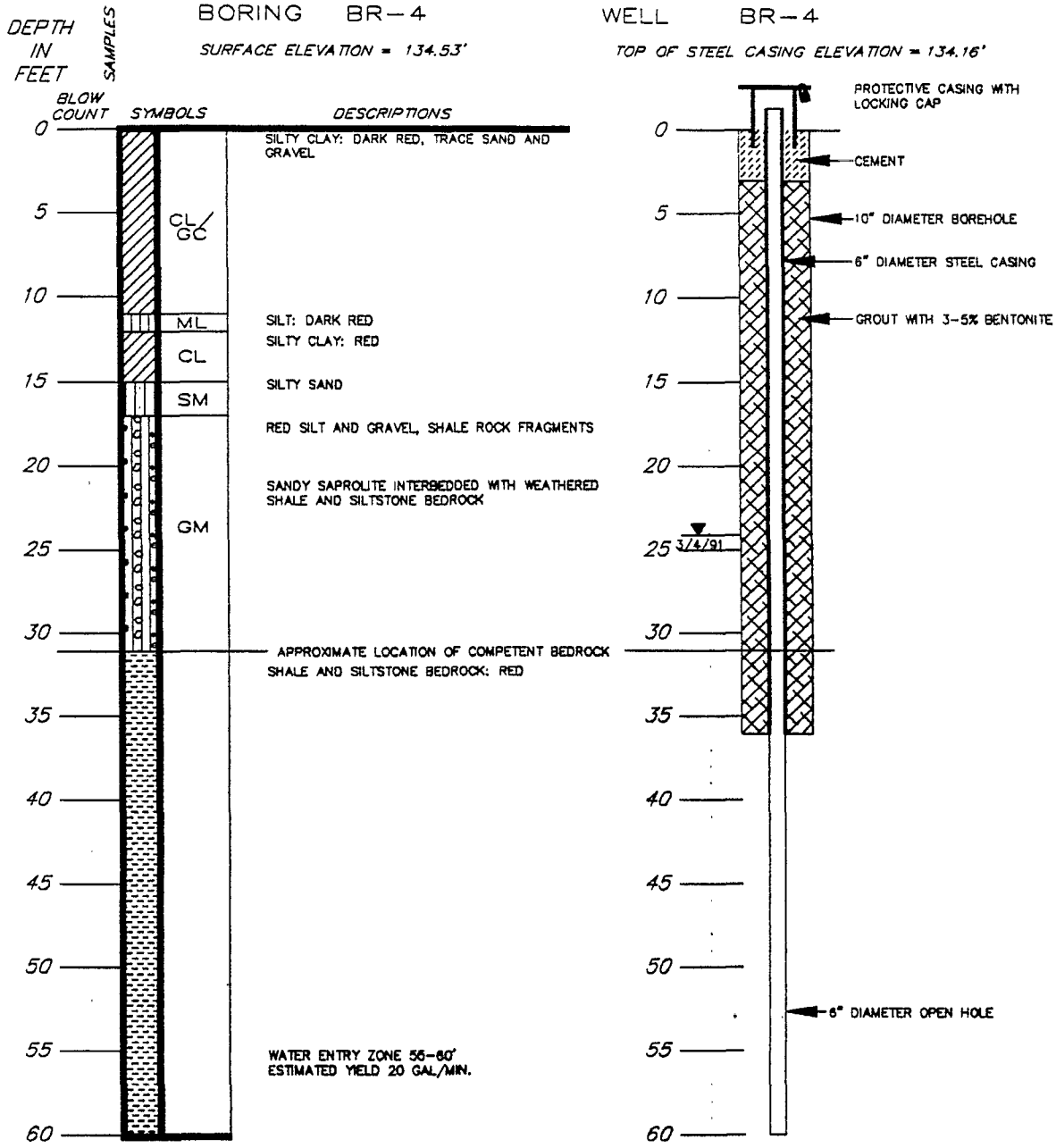
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 38' ON FEBRUARY 26, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 65' ON FEBRUARY 28, 1991 BY KEN-DRILL WELL DRILLING, INC.

ALLIED\BR-3 (4)

DAMES & MOORE

AR302745



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

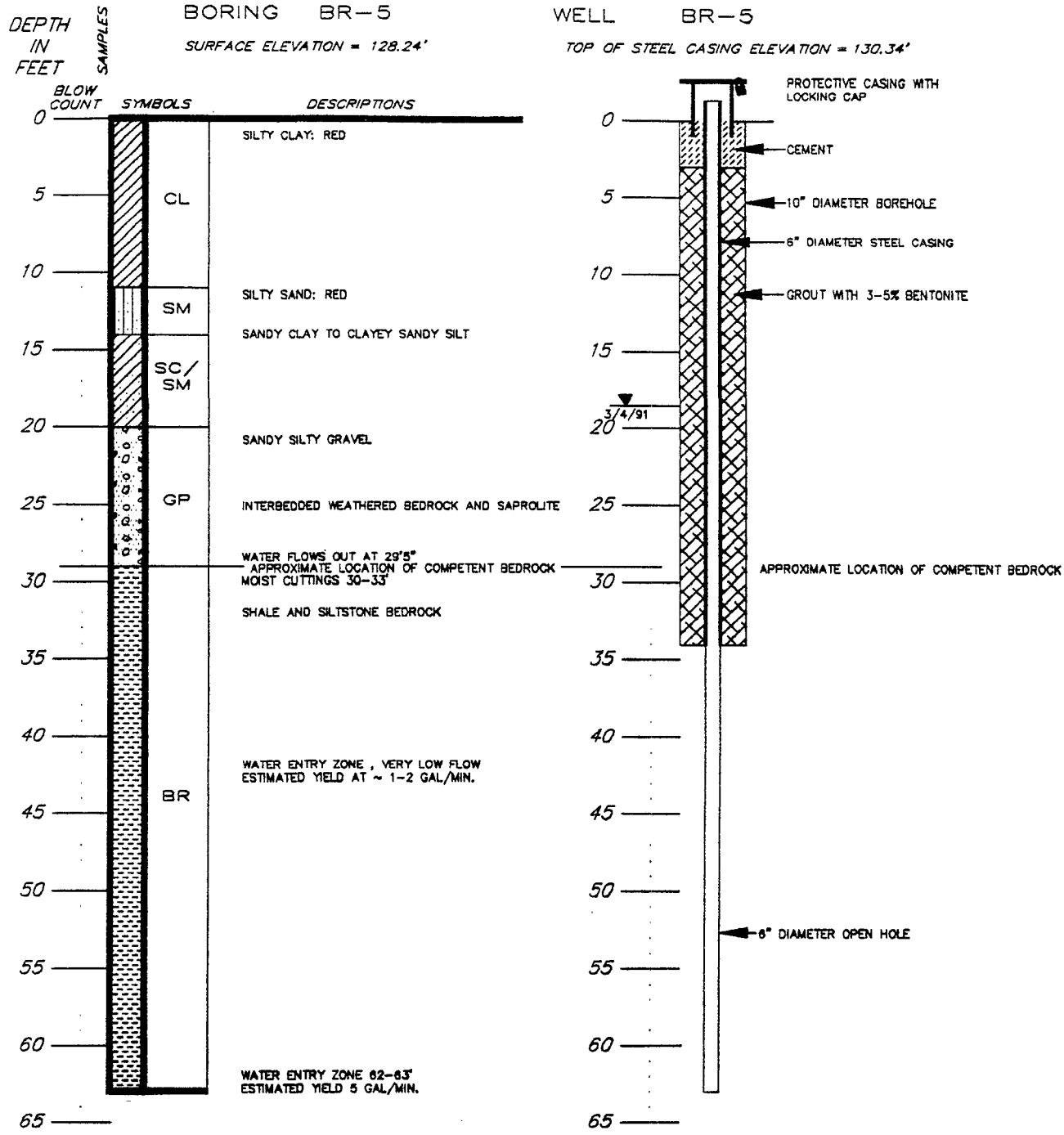
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 36' ON FEBRUARY 25, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 60' ON FEBRUARY 28, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-4 (4)

DAMES & MOORE

AR302746



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

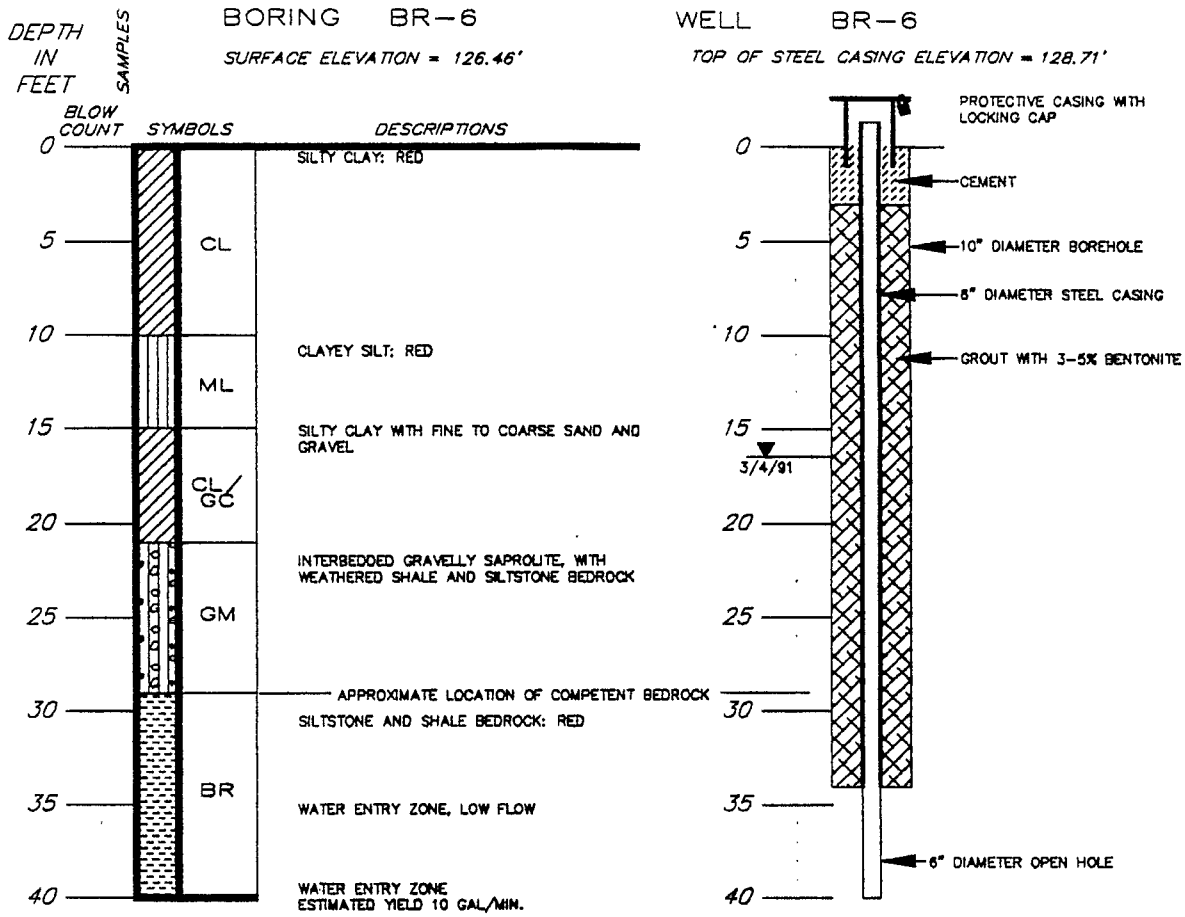
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 34' ON FEBRUARY 28, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 63' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-5 (4)

DAMES & MOORE

AR 302 747



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

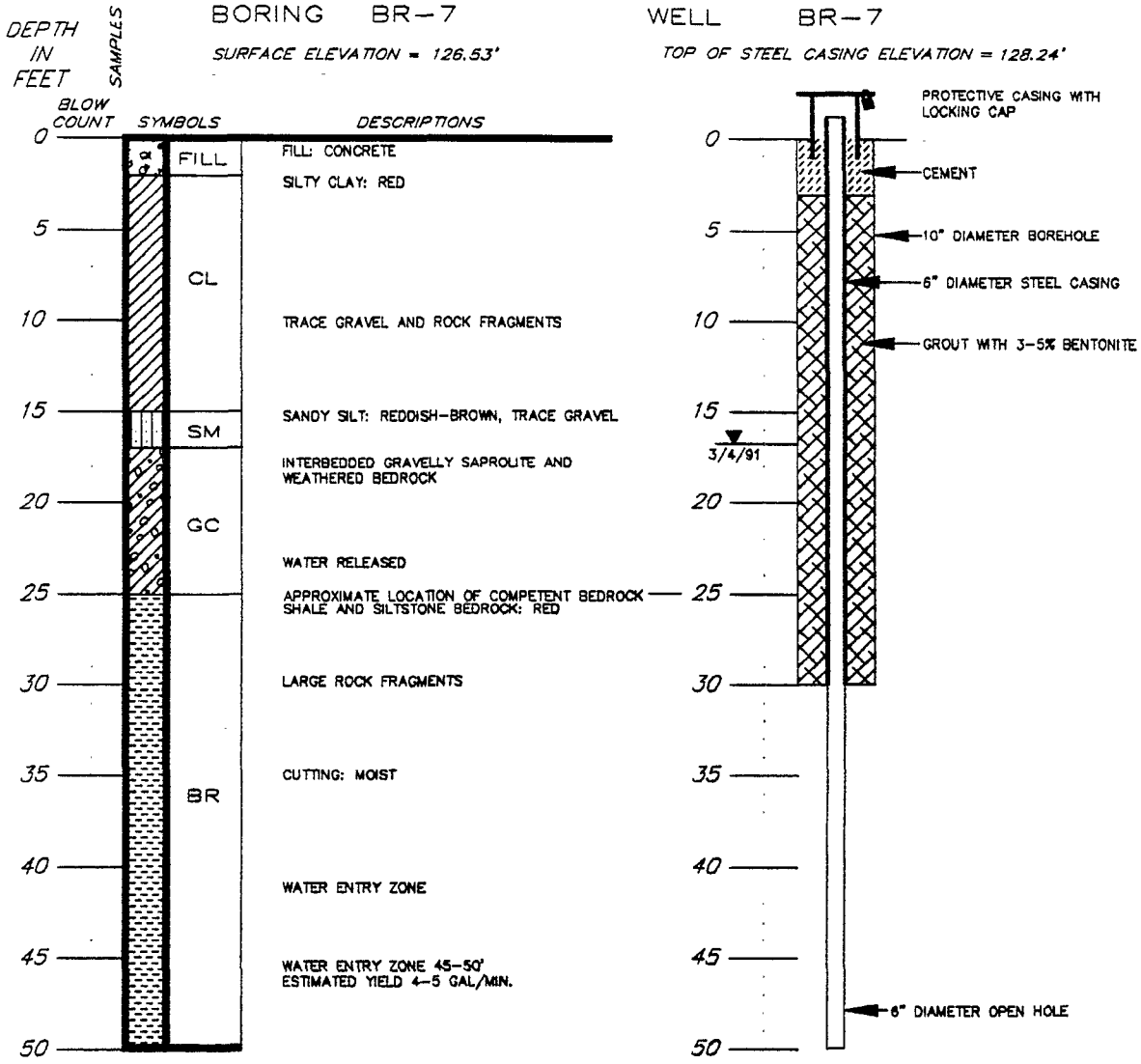
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 34' ON FEBRUARY 27, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 40' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-6 (4)

DAMES & MOORE

AR302748



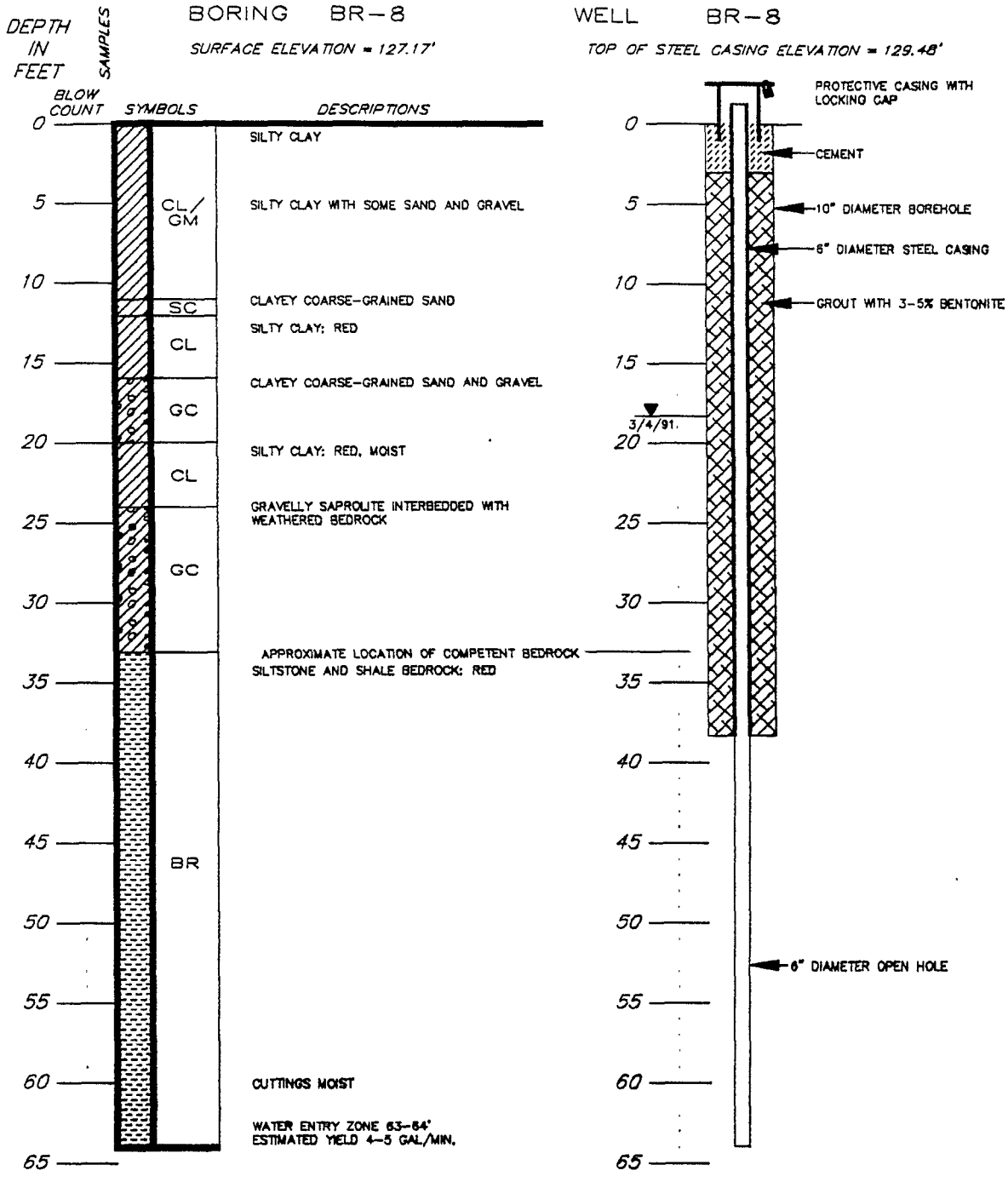
LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 30' ON FEBRUARY 27, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 50' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-7 (4)

DAMES & MOORE



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

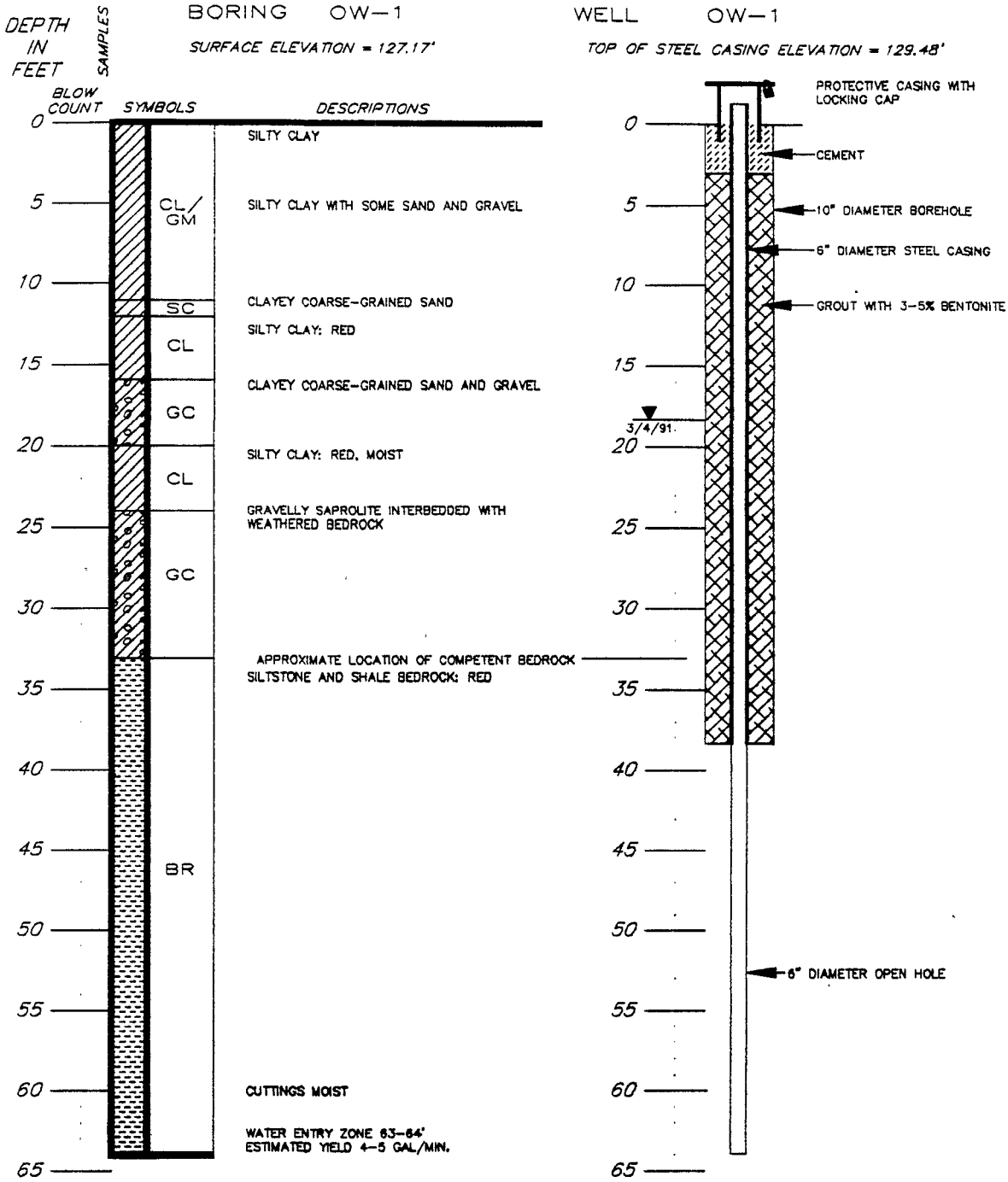
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 38'4" ON FEBRUARY 27, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 64' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\BR-8 (4)

DAMES & MOORE

AR302750



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

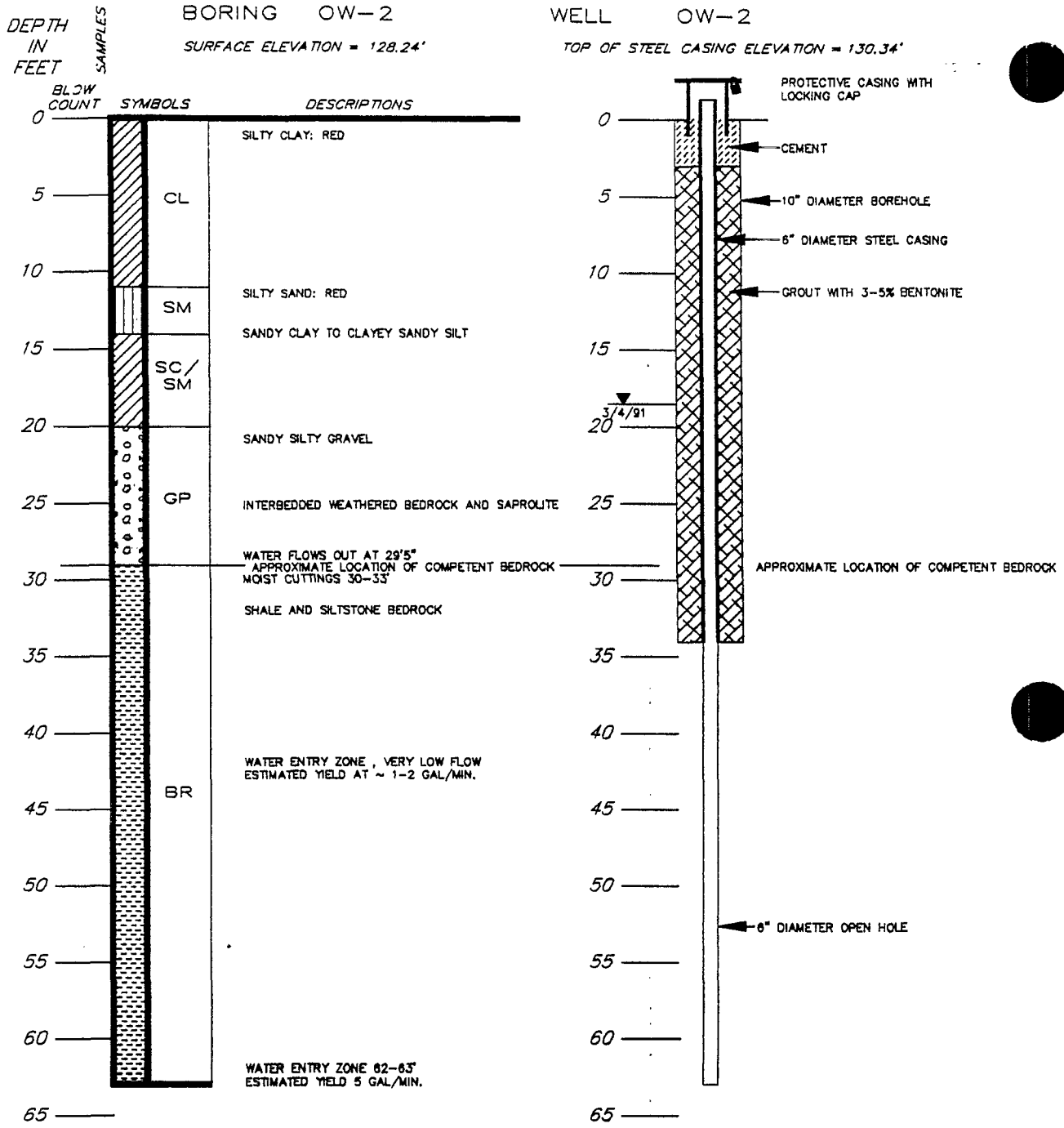
NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 38'4" ON FEBRUARY 27, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 64' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

ALLIED\OW-1 (4)

DAMES & MOORE

AR302751



LOG OF BORING AND MONITORING WELL DETAIL RECTICON/ALLIED STEEL SITE PARKER FORD, PENNSYLVANIA

NOTES:

1. STEEL CASING INSTALLED TO A DEPTH OF 34' ON FEBRUARY 28, 1991, USING AN AIR ROTARY DRILL RIG.
2. BEDROCK MONITORING WELL DRILLED TO A DEPTH OF 63' ON MARCH 1, 1991 BY KEN-DRILL WELL DRILLING, INC..

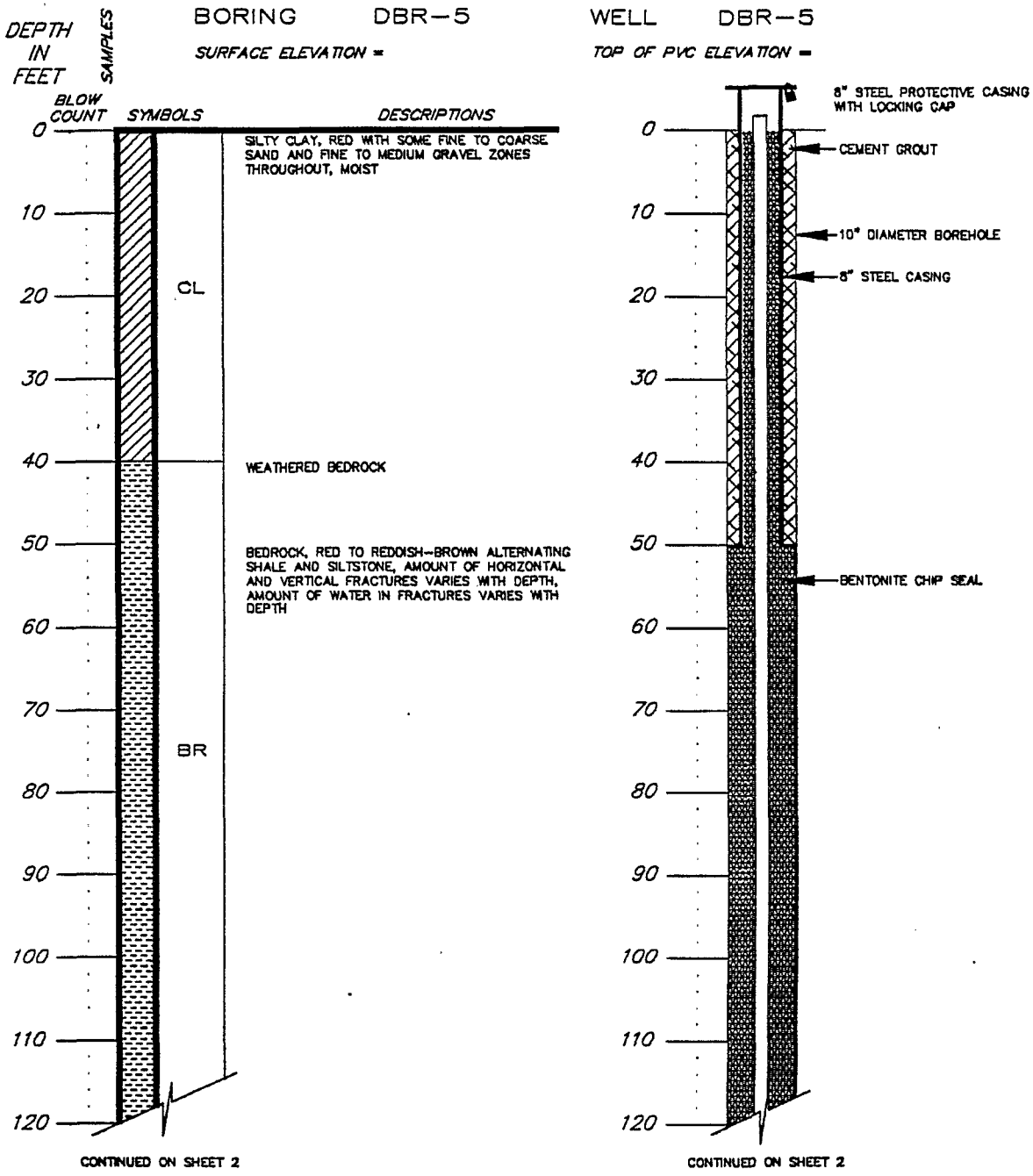
ALLIED\OW-2 (4)

DAMES & MOORE

AR302752

APPENDIX S

DBR MONITORING WELL BORING LOGS AND MONITORING WELL CONSTRUCTION DETAILS



LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

NOTES:

1. DBR-5 WAS DRILLED AND MODIFIED BY M&R SOIL INVESTIGATIONS, INC. OF HAMMONTON, NEW JERSEY FROM 5/1/92 TO 8/19/92.
2. BOREHOLE LOGGING OF DBR-5 WAS PERFORMED BY J. VOLPE OF DAMES & MOORE.
3. DBR-5 WAS ADVANCED USING AIR ROTARY DRILLING.
4. APPROXIMATELY 400 GALLONS WAS DEVELOPED FROM DBR-5 BY DAMES & MOORE.

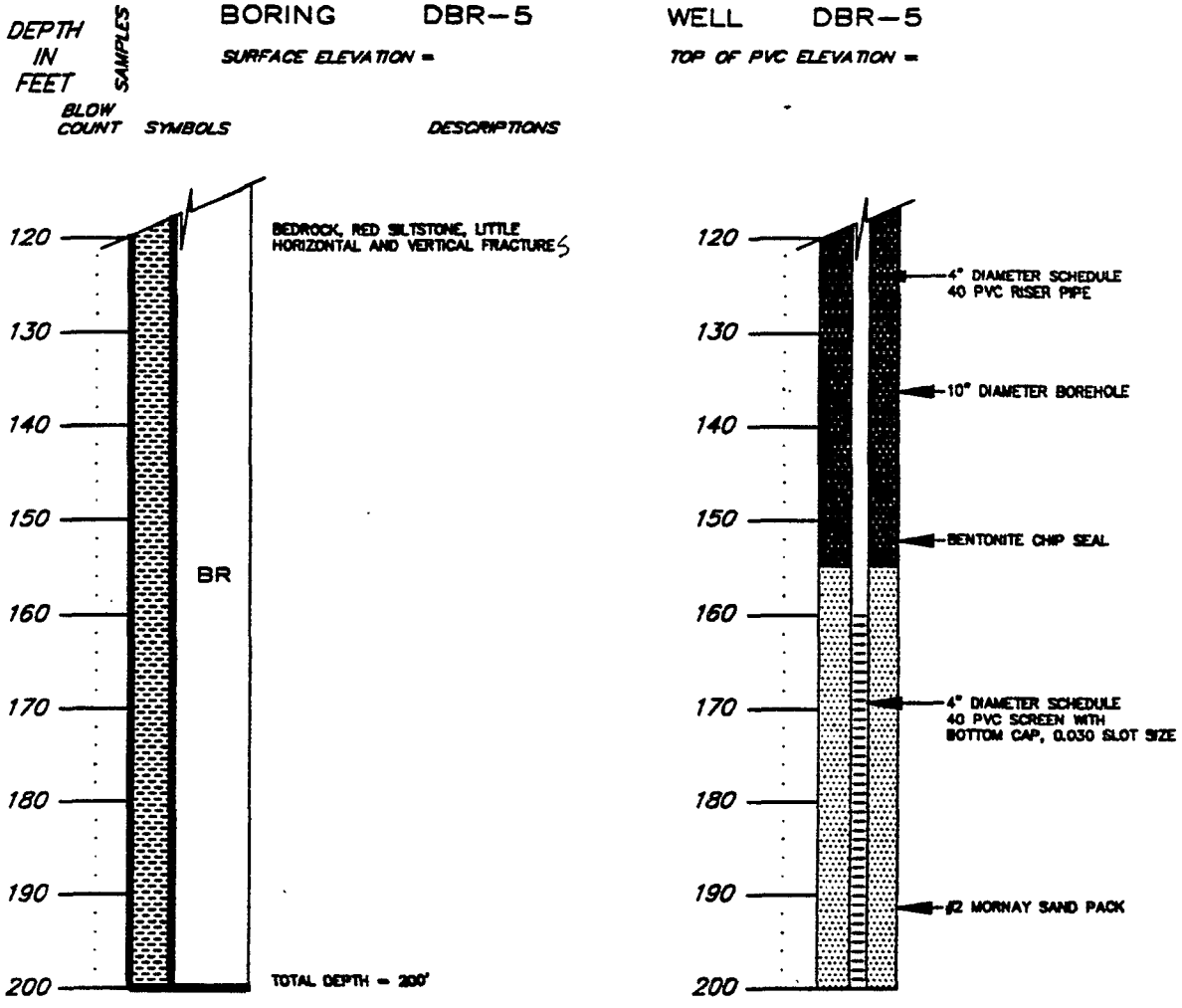
SHEET 1 OF 2

DAMES & MOORE

(3) ALLIED\DBR-5 10/20/92 12:20

AR302754

CONTINUED FROM SHEET 1

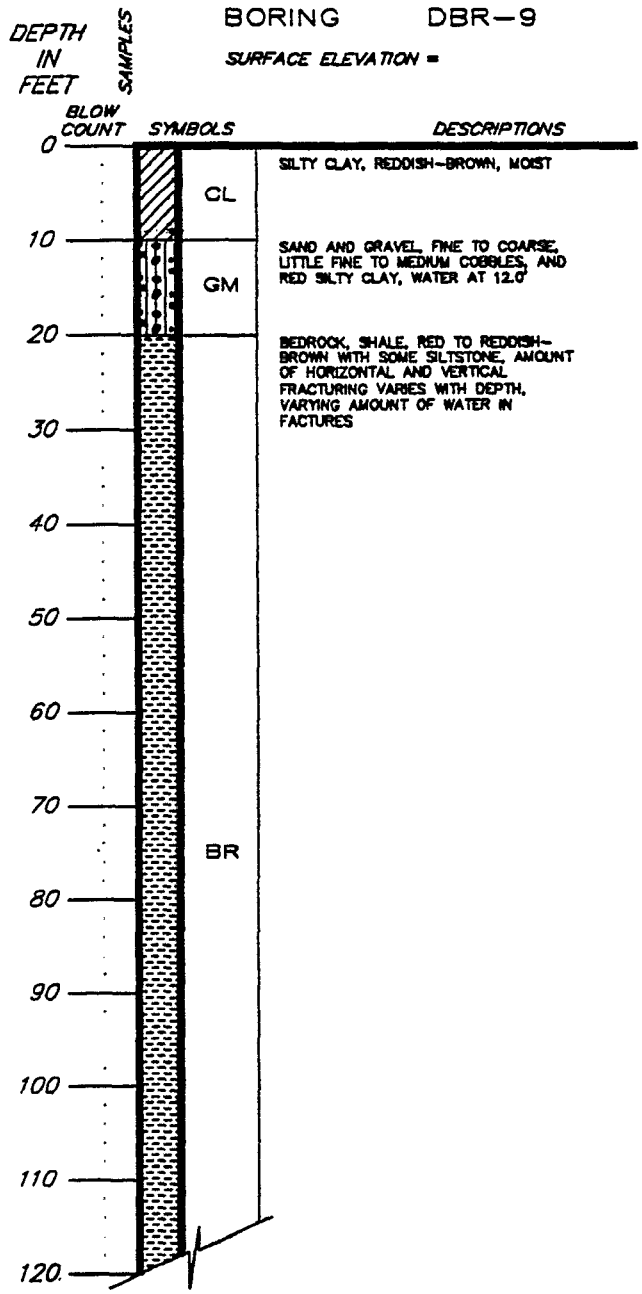


LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

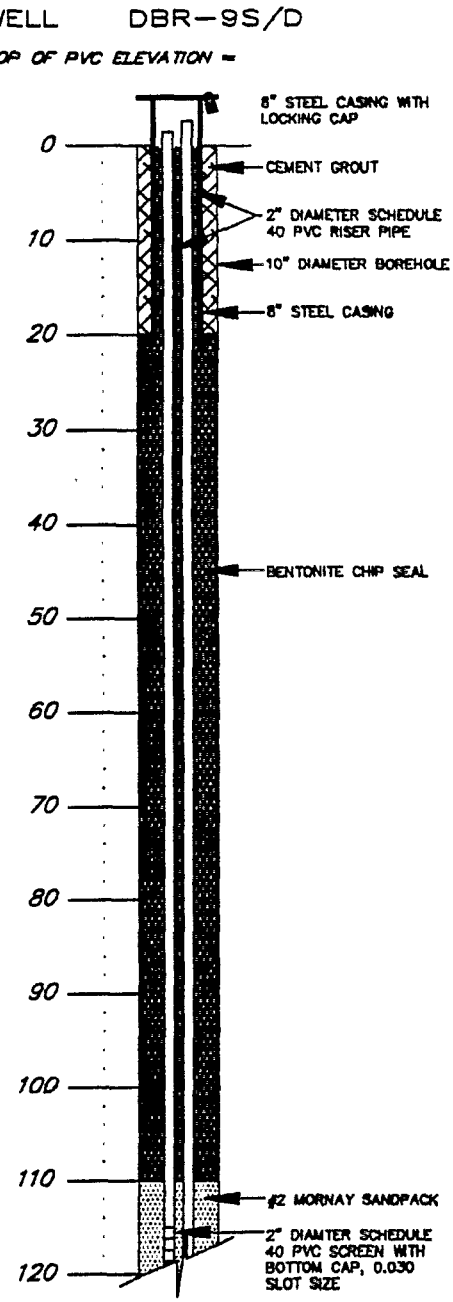
(1) ALLIED\DBR-5A 09/28/92 08:27

SHEET 2 OF 2

DAMES & MOORE



CONTINUED ON SHEET 2



CONTINUED ON SHEET 2

LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

NOTES:

1. DBR-9 WAS DRILLED AND MODIFIED BY M&R SOIL INVESTIGATIONS, INC. OF HAMMONTON, NEW JERSEY FROM 6/12/92 TO 8/19/92.
2. BOREHOLE LOGGING OF DBR-9 WAS PERFORMED BY J. VOLPE OF DAMES & MOORE.
3. DBR-9 WAS ADVANCED USING AIR ROTARY DRILLING.
4. APPROXIMATELY 120 GALLONS WAS DEVELOPED FROM DBR-9D AND 100 GALLONS FROM DBR-9S BY DAMES & MOORE.

(1) ALLIED\DBR-9 10/20/92 12:25

SHEET 1 OF

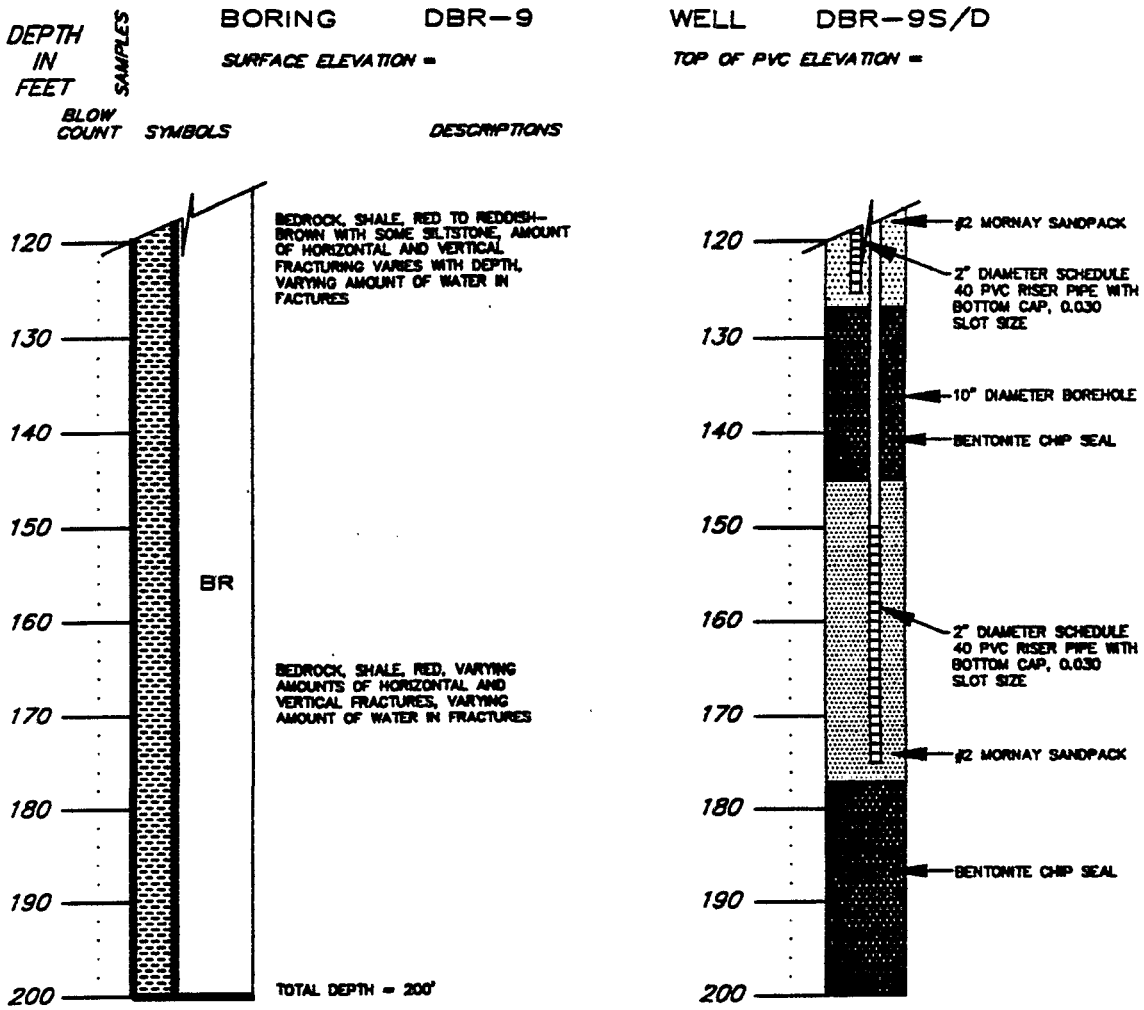
DAMES & MOORE

AR302756

CONTINUED FROM SHEET 1

BORING DBR-9 WELL DBR-9S/D

SURFACE ELEVATION = TOP OF PVC ELEVATION =



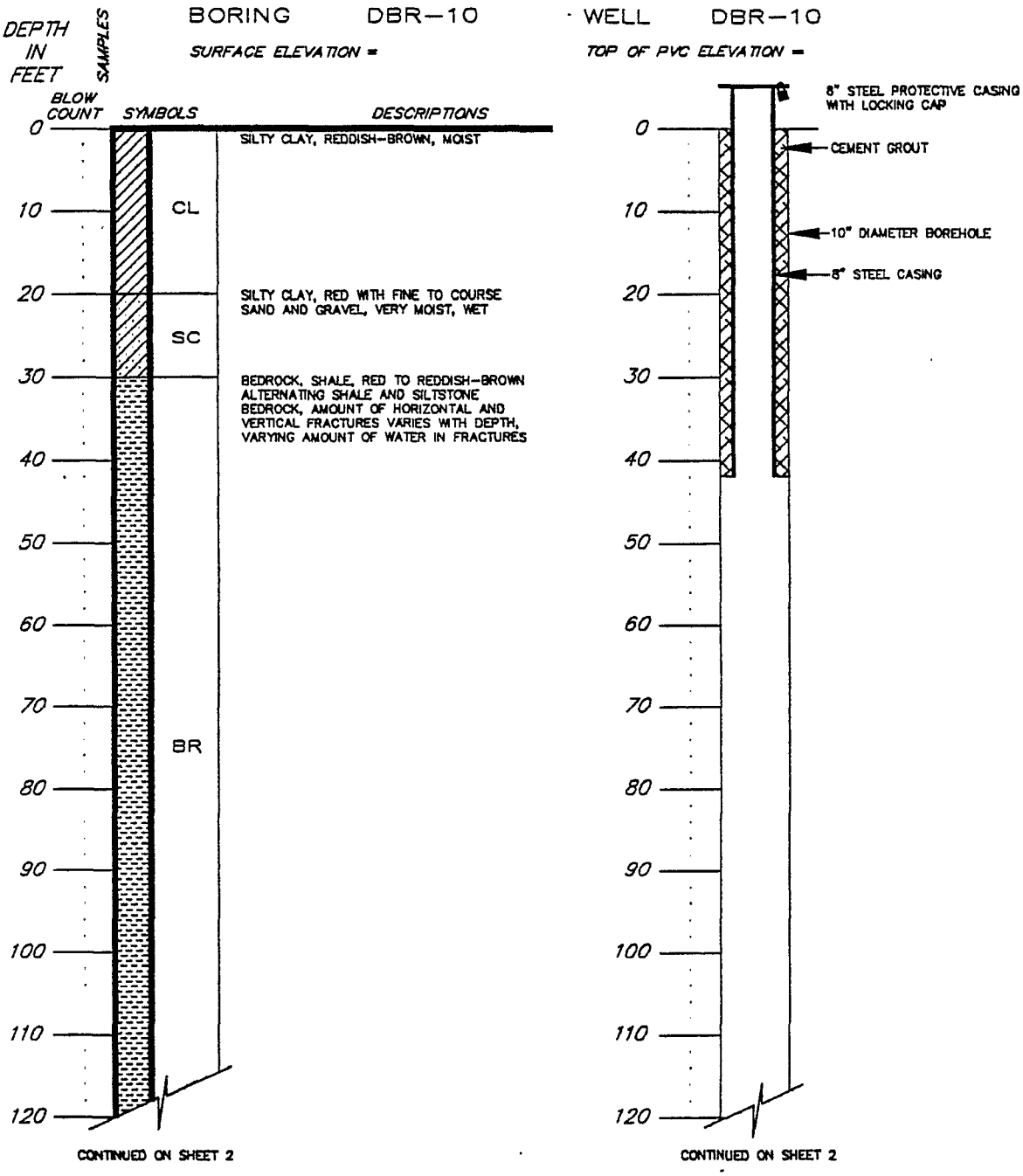
LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

(1) ALLIED\DBR-9A 08/25/92 10:27

SHEET 2 OF 2

DAMES & MOORE

AR302757



LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

NOTES:

1. DBR-10 WAS DRILLED AND MODIFIED BY M&R SOIL INVESTIGATIONS, INC., OF HAMMONTON, NEW JERSEY FROM 6/10/92 TO 8/19/92.
2. BORHOLE LOGGING OF DBR-10 WAS PERFORMED BY J. VOLPE OF DAMES & MOORE.
3. DBR-10 WAS ADVANCED USING AIR ROTARY DRILLING.
4. APPROXIMATELY 220 GALLONS WAS DEVELOPED FROM DBR-10 BY DAMES & MOORE.

(2) ALLIED\DBR-10 10/20/92 13:33

SHEET 1 OF 2

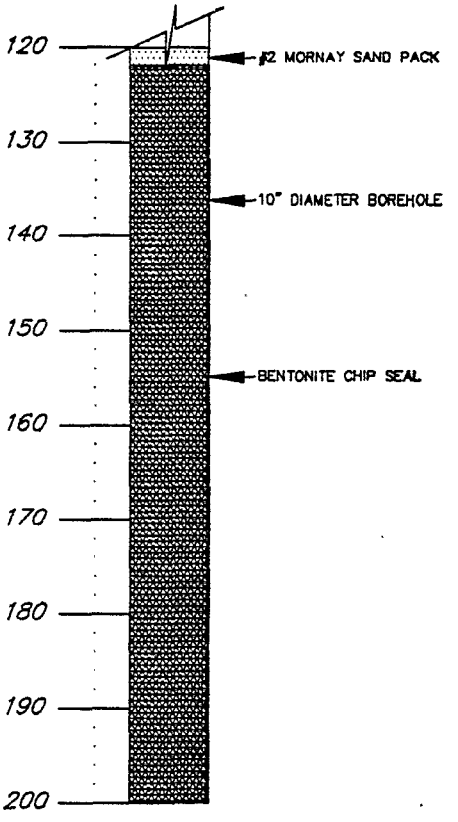
DAMES & MOORE

CONTINUED FROM SHEET 1

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
				BORING DBR-10 — SURFACE ELEVATION =
120				BEDROCK, SHALE, RED TO REDDISH-BROWN ALTERNATING SHALE AND SILTSTONE BEDROCK, AMOUNT OF HORIZONTAL AND VERTICAL FRACTURES VARIES WITH DEPTH, VARYING AMOUNT OF WATER IN FRACTURES
130				
140				
150			BR	BEDROCK, RED TO REDDISH-BROWN, AMOUNT OF HORIZONTAL AND VERTICAL FRACTURES VARIES WITH DEPTH, VARYING AMOUNT OF WATER IN FRACTURES VARIES WITH DEPTH
160				
170				
180				
190				
200				TOTAL DEPTH = 200'

WELL DBR-10

TOP OF PVC ELEVATION =



LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

NOTES:

(2) ALLIED\DBR-10A 09/28/92 07:30

SHEET 2 OF 2

DAMES & MOORE

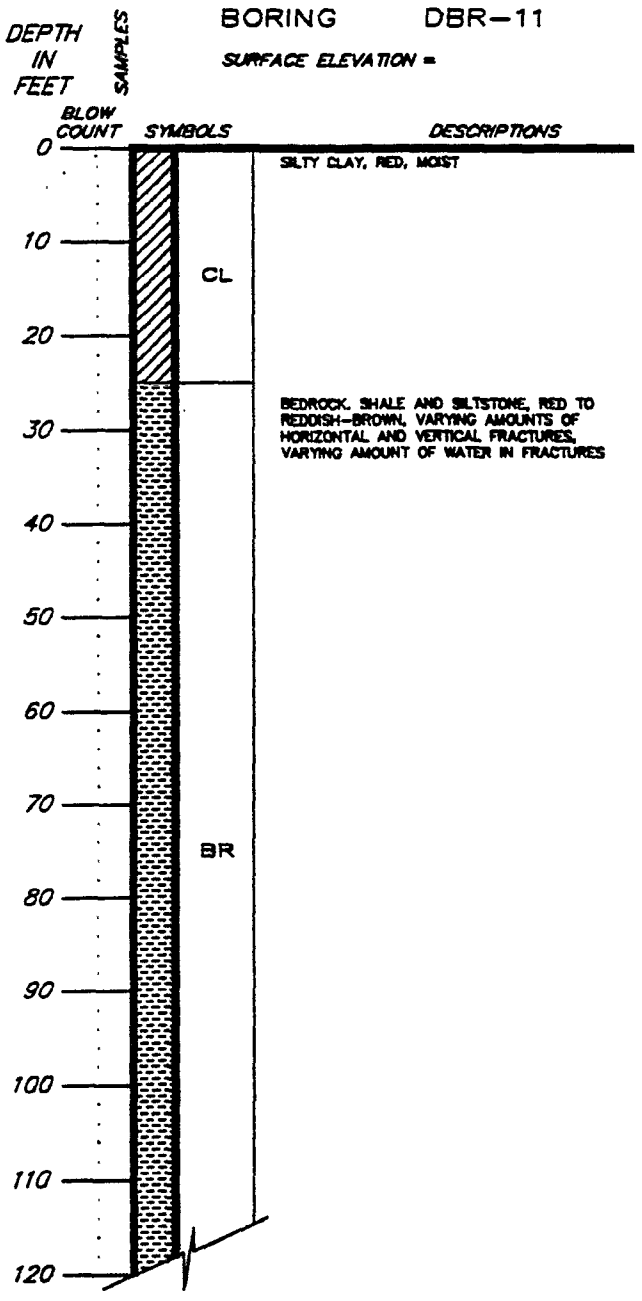
AR302759

BORING DBR-11

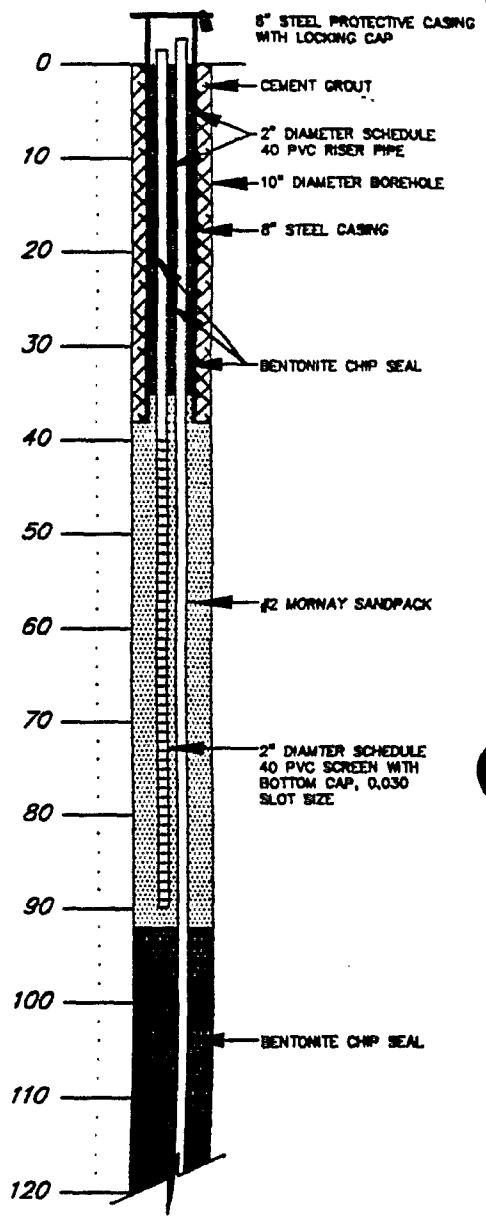
SURFACE ELEVATION =

WELL DBR-11S/D

TOP OF PVC ELEVATION =



CONTINUED ON SHEET 2



CONTINUED ON SHEET 2

NOTES:

1. DBR-11 WAS DRILLED BY EICHELBERGERS, INC. OF MECHANICSBURG, PENNSYLVANIA AND MODIFIED BY SOIL INVESTIGATIONS, INC. OF HAMMONTON, NEW JERSEY FROM 6/8/92 TO 8/19/92.
2. BOREHOLE LOGGING OF DBR-11 WAS PERFORMED BY T. GLANCEY OF DAMES & MOORE.
3. DBR-11 WAS ADVANCED USING AIR ROTARY DRILLING.
4. APPROXIMATELY 35 GALLONS WAS DEVELOPED FROM DBR-11S AND 90 GALLONS FROM DBR-11D BY DAMES & MOORE.

LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

SHEET 1 OF

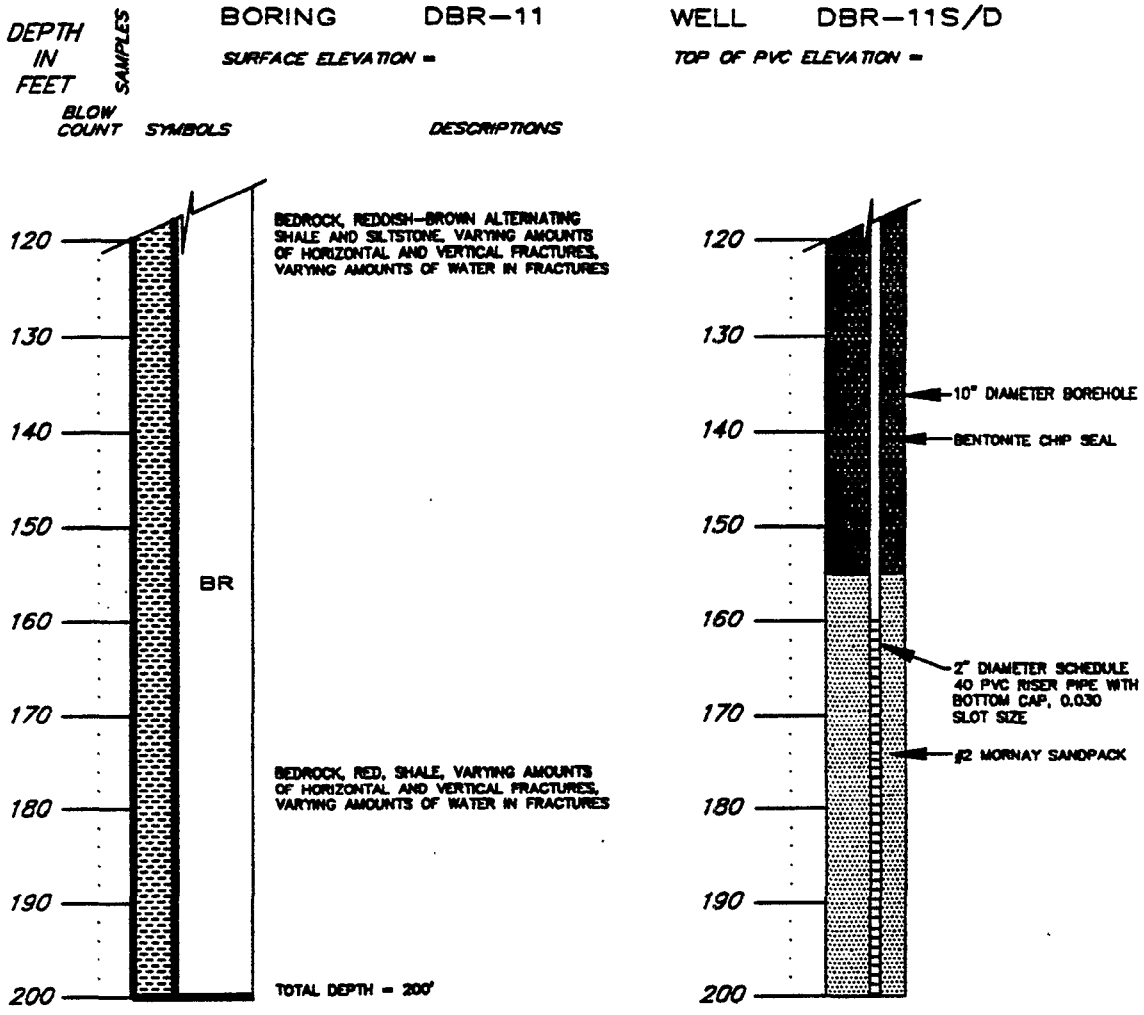
DAMES & MOORE

(1) ALLIED\DBR-11 10/20/92 12:39

CONTINUED FROM SHEET 1

BORING DBR-11 WELL DBR-11S/D

SURFACE ELEVATION = TOP OF PVC ELEVATION =



LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

(1) ALLIED\DBR-11A 08/25/92 12:55

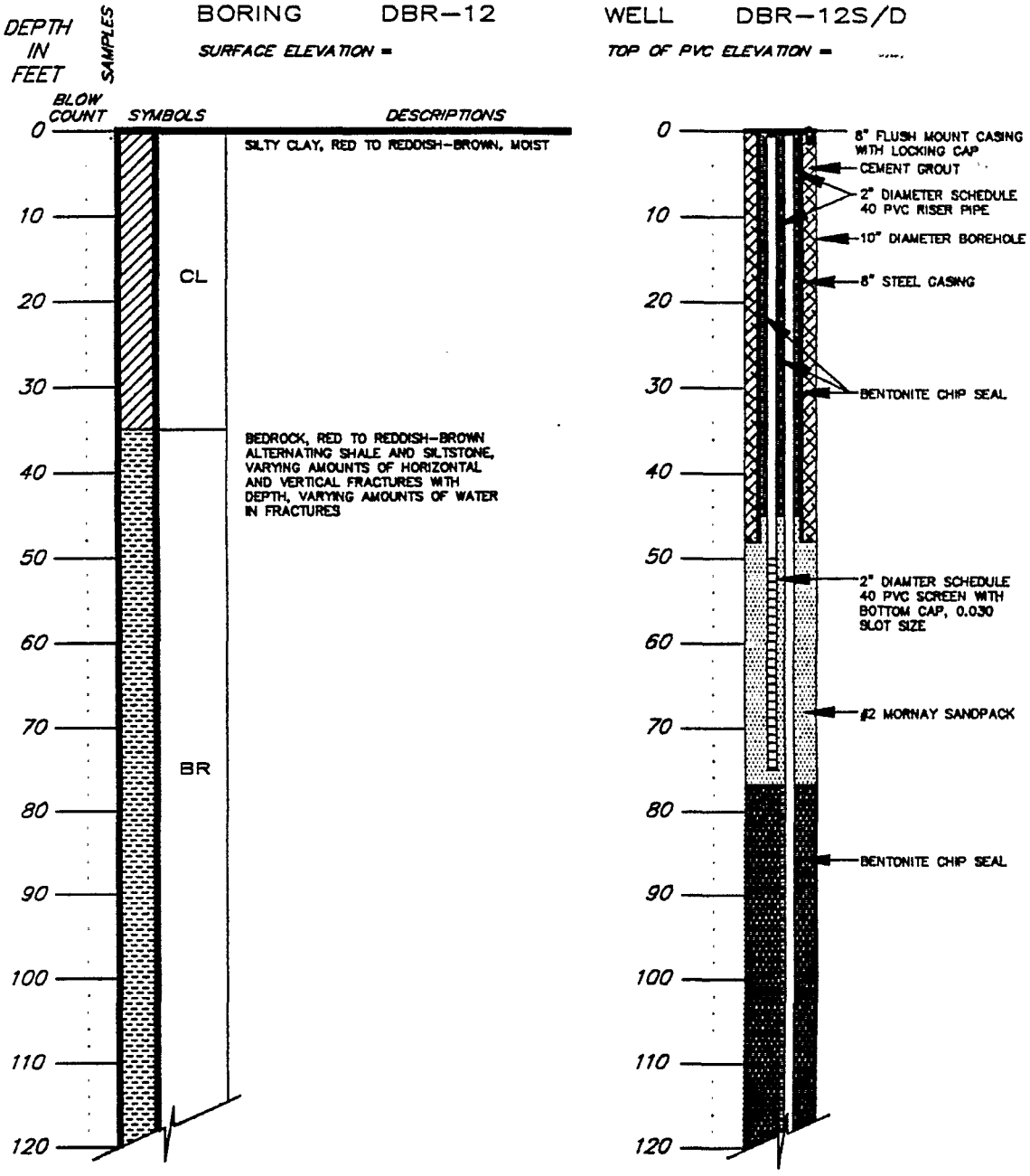
SHEET 2 OF 2

DAMES & MOORE

AR302761

BORING DBR-12 WELL DBR-12S/D

SURFACE ELEVATION = TOP OF PVC ELEVATION = ...



CONTINUED ON SHEET 2

CONTINUED ON SHEET 2

LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

NOTES:

1. DBR-12 WAS DRILLED BY EICHELBERGERS, INC. OF MECHANICSBURG, PENNSYLVANIA AND MODIFIED BY M&R SOIL INVESTIGATIONS, INC. OF HAMMONTON, NEW JERSEY FROM 6/10/92 TO 8/19/92.
2. BOREHOLE LOGGING OF DBR-12 WAS PERFORMED BY J. VOLPE OF DAMES & MOORE.
3. DBR-12 WAS ADVANCED USING AIR ROTARY DRILLING.
4. APPROXIMATELY 30 GALLONS WAS DEVELOPED FROM DBR-12S AND 50 GALLONS FROM DBR-12D BY DAMES & MOORE.

(1) ALLIED\DBR-12 10/20/92 12:46

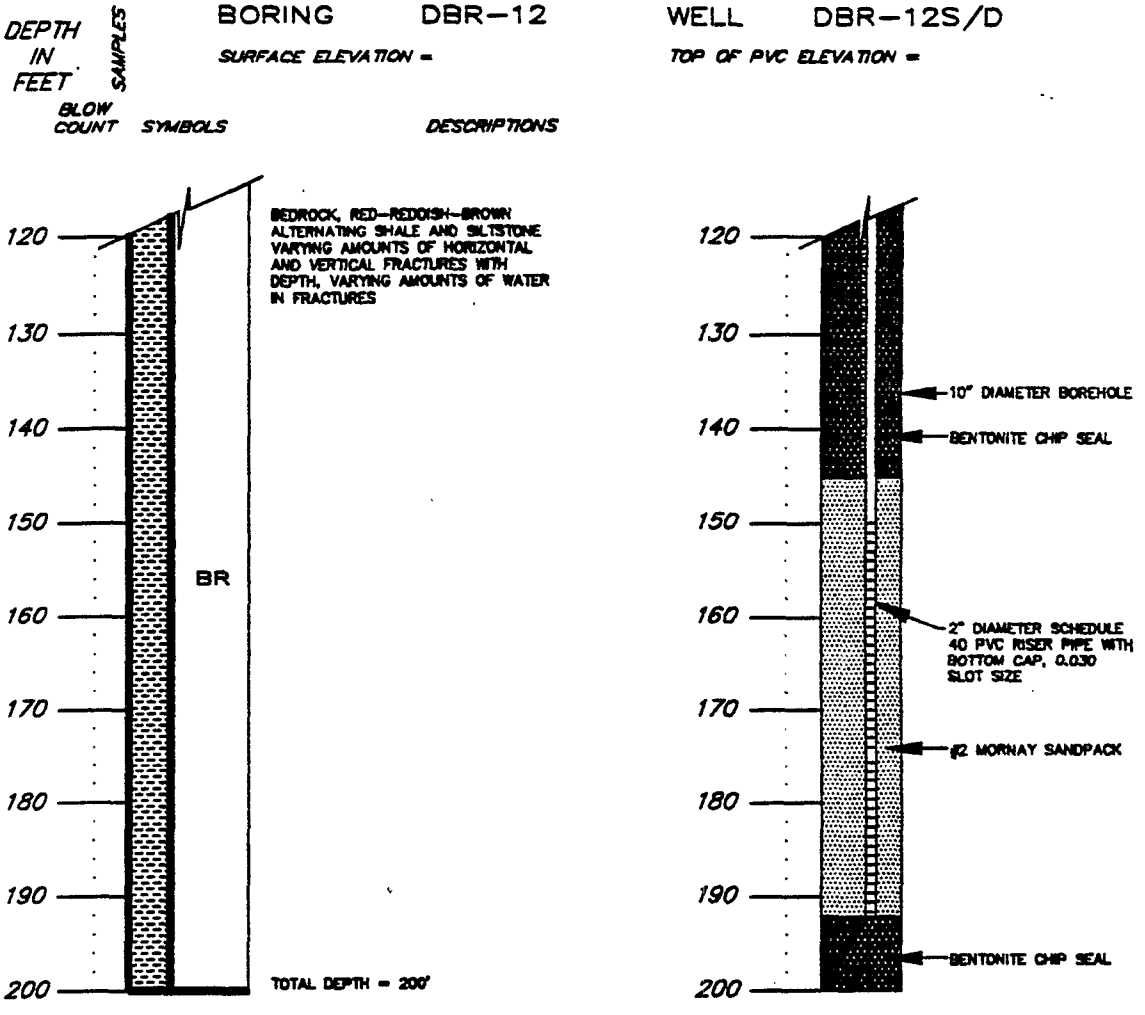
SHEET 1 OF 2

DAMES & MOORE

CONTINUED FROM SHEET 1

BORING DBR-12 WELL DBR-12S/D

SURFACE ELEVATION = TOP OF PVC ELEVATION =



LOG OF SOIL BORING AND MONITORING WELL DETAIL ALLIED STEEL/RECTICON PARKER FORD, PENNSYLVANIA

(1) ALLIED\DBR-12A 09/25/92 12:33

SHEET 2 OF 2

DAMES & MOORE