APPENDIX A

GEOLOGIC LOGS

APPENDIX A

GEOLOGIC LOGS

Description	Depth (feet)
Test Boring 8	
Sand, fine to medium, with little gravel, fine to coarse, occasional cobbles and boulders. Brown to dark brown, loose.	0 - 10
Sand, fine to coarse, with trace of silt, micaceous. Dark, brown, loose.	10 - 15
Sand, fine to very coarse, micaceous. Dark brown, loose.	15 - 30
Silt and sand, very fine. Dark brown, medium, hard.	30 - 37
Sand, fine to coarse, with little silt, trace of gravel, fine. Dark brown, loose.	37 - 43
Sand, fine to coarse, with some gravel, fine to coarse, trace of silt, subround to subangular grains, poorly sorted. Gray and brown, loose.	43 - 50
Silt and sand, fine to coarse with little gravel, fine to coarse, occasional cobbles. Dark brown.	50 - 60
Sand, fine to coarse, and gravel, fine to coarse, some silt, few cobbles. Dark brown.	60 - 70
Sand, fine to coarse, with some gravel, fine to coarse, little silt, few cobbles. Black and brown.	70 - 78
Test Boring 9 (Well 4)	
Top soil.	0 - 2
Gravel, fine to medium with some sand, fine to coarse, trace of silt. Dark brown, loose.	2 - 15

Description	Depth (feet)
Sand, fine to coarse with trace of gravel, fine to coarse, trace of silt, few cobbles, micaceous. Brown, loose.	15 - 28
Sand, fine to coarse, with some gravel, fine to coarse, few cobbles, poorly sorted, subangular grains. Gray-brown, loose.	28 -56
Sand, very fine to coarse, with little gravel, fine to coarse, few cobbles, trace of silt, subangular grains, poorly sorted. Dark brown, loose.	56 -60
Gravel, fine to coarse, frequent cobbles, some sand, fine to coarse, few boulders, poorly sorted, subangular grains. Brown, loose.	60 -63
Sand, very fine to coarse with little gravel, fine to coarse, trace of silt, few cobbles, poorly sorted. Gray-brown, loose.	63 -68

#NJ09601-wpA/120591.app

APPENDIX B

SIEVE ANALYSES

SIEVE ANALYSES FOR

TEST BORING 8

GERAGHTY & MILLER, INC.

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

SPOON SAMPLES

Depth	40%	50%	70%	90%	UC
45-47	29	20	10	5	5.8
50-51	160	74	20	8	20.0
55-57	185	89	23	6	30.8
60-62	105	65	26	6	17.5
65-67	140	80	26	6	23.3
70-72	11	10	6	4	2.8
75-77	210	131	33	13	16.2

BAILER SAMPLES

Depth	40%	50%	70%	90%	UC
45-50	54	43	28	14	3.8
50-55	240	172	94	33	7.3
55-60	122	100	56	18	6.8
60-65	78	60	30	11	7.1
65-70	120	94	48	14	8.6
70-72	18	15	11	7	2.6
72-74	31	26	18	10	3.1
74-75	140	65	16	16	14.0
75-78	23	19	14	8	2.9

SAND ANALYSIS

Bailer

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

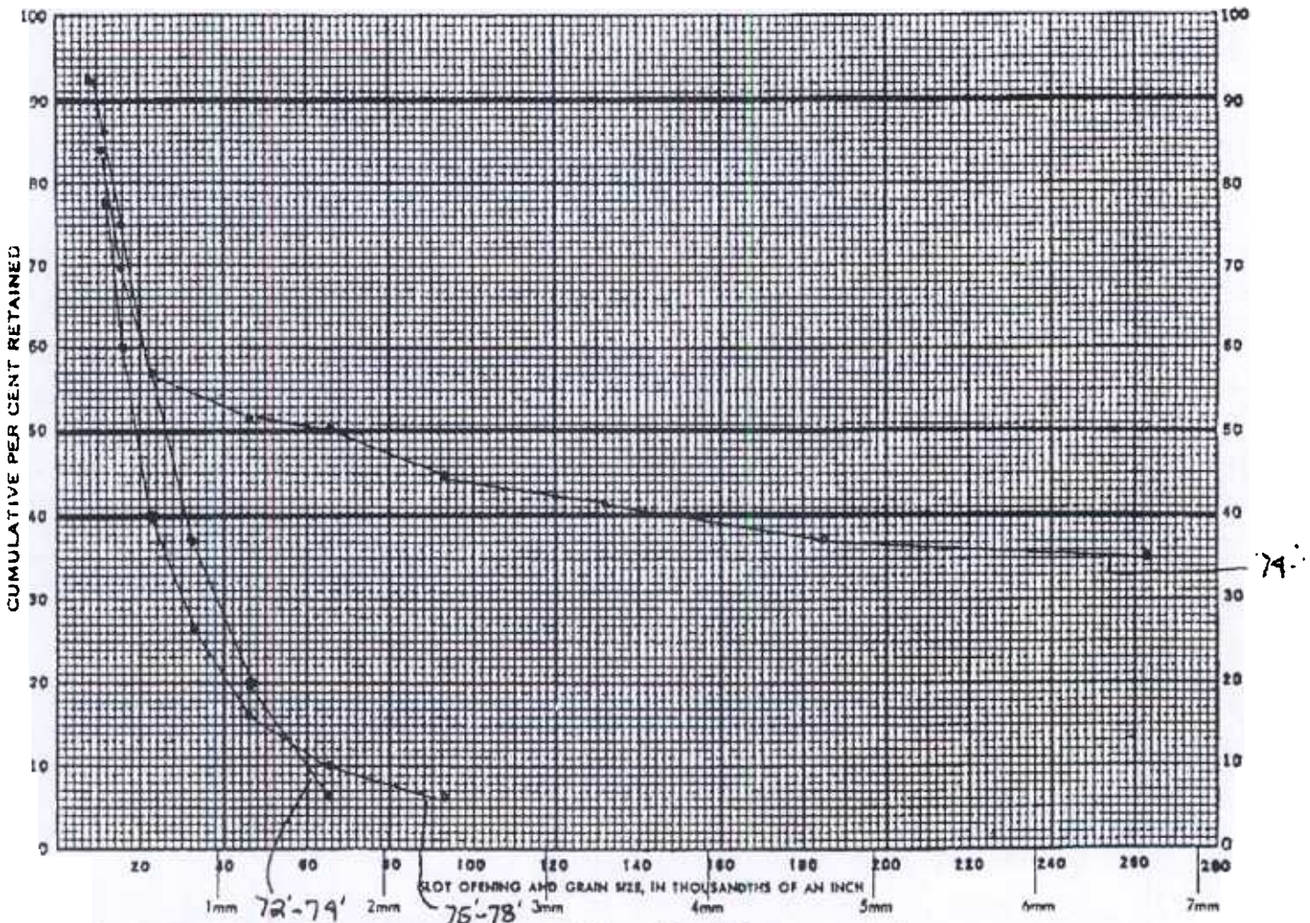
Town _____ State _____ Date _____

Well Location TW-8

Type of Well 8" Test Well

Depth of Sample 72'-74', 74'-75', 75'-78' (Bailer)

Sample taken by J. Gomez, R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	72-74.5	74-75	75-78
.263		35	
.185		77.5	1.2
.131		91.2	2.5
.092	1.2	45.6	6.2
.065	6.2	50.0	10.0
.046	20.0	51.2	16.2
.033	37.5	55	26.8
.023	57.5	57.5	40.0
.016	75.0	70	60.0
.012	86.2	83.8	77.5
.008	92.5	92.5	90.0
.006	95.0	96.2	93.9
.004			
Dust	100	100	100

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SAND ANALYSIS

Spoon

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

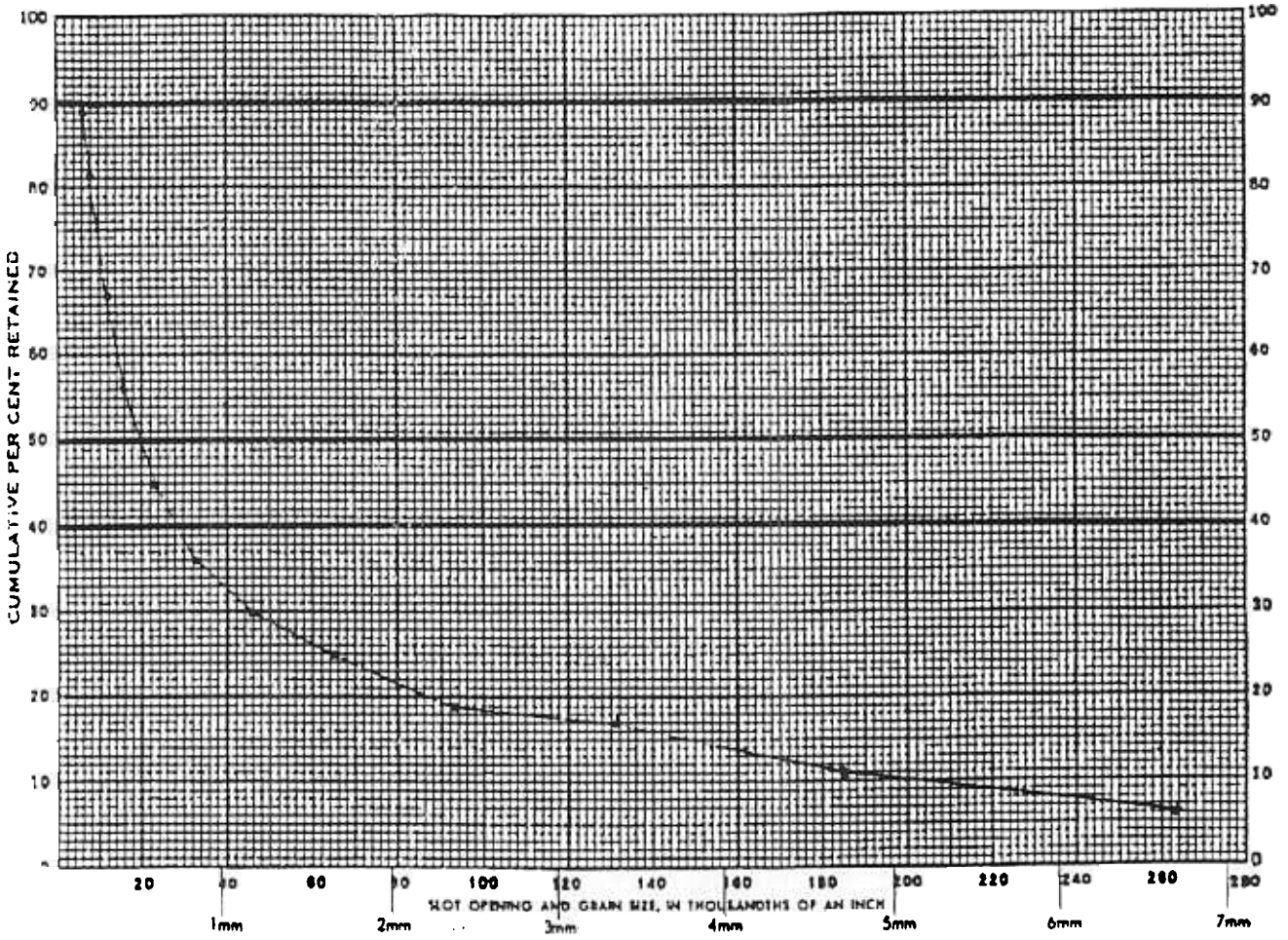
Town _____ State _____ Date _____

Well Location TW-8

Type of Well 8" Test Well

Depth of Sample 45' to 47' (spoon)

Sample taken by J. Gomez / R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	4'		45-47
.263			6.2
.185			10.9
.131			15.6
.093			18.8
.065			25.0
.046			29.7
.033			35.9
.023			45.3
.016			56.2
.012			67.2
.008			81.8
.006			89.1
.004			
Dust			100

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SAND ANALYSIS

Spoons

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

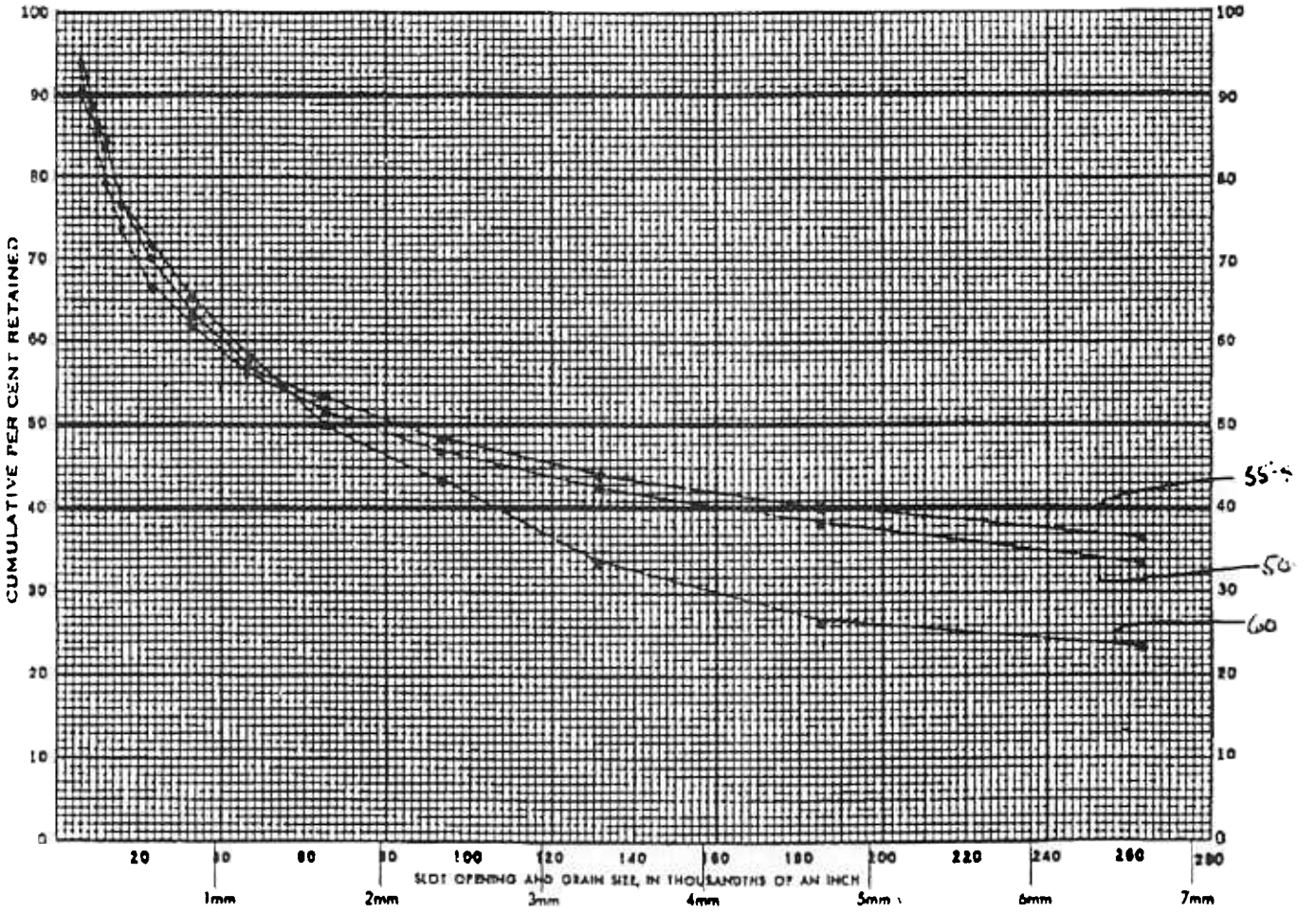
Town _____ State _____ Date _____

Well Location YW-8

Type of Well 8" Test Well

Depth of Sample 55' to 57', 50' to 51', 60' to 62' (Spoons)

Sample taken by J. Gomez / R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	50-51	55-57	60-62
.263	33.8	36.7	23.3
.185	38.2	40.0	26.7
.131	42.6	43.3	33.3
.093	47.0	48.3	43.3
.065	51.6	53.3	50.0
.046	55.9	56.7	58.3
.033	61.8	63.3	65.0
.023	66.2	70.0	71.7
.016	73.5	76.7	76.7
.012	79.4	83.3	83.3
.008	91.2	86.7	86.7
.006	94.1	90.0	90.0
.004			
Dust	100	100	100

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SAND ANALYSIS

Spoons

R.E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

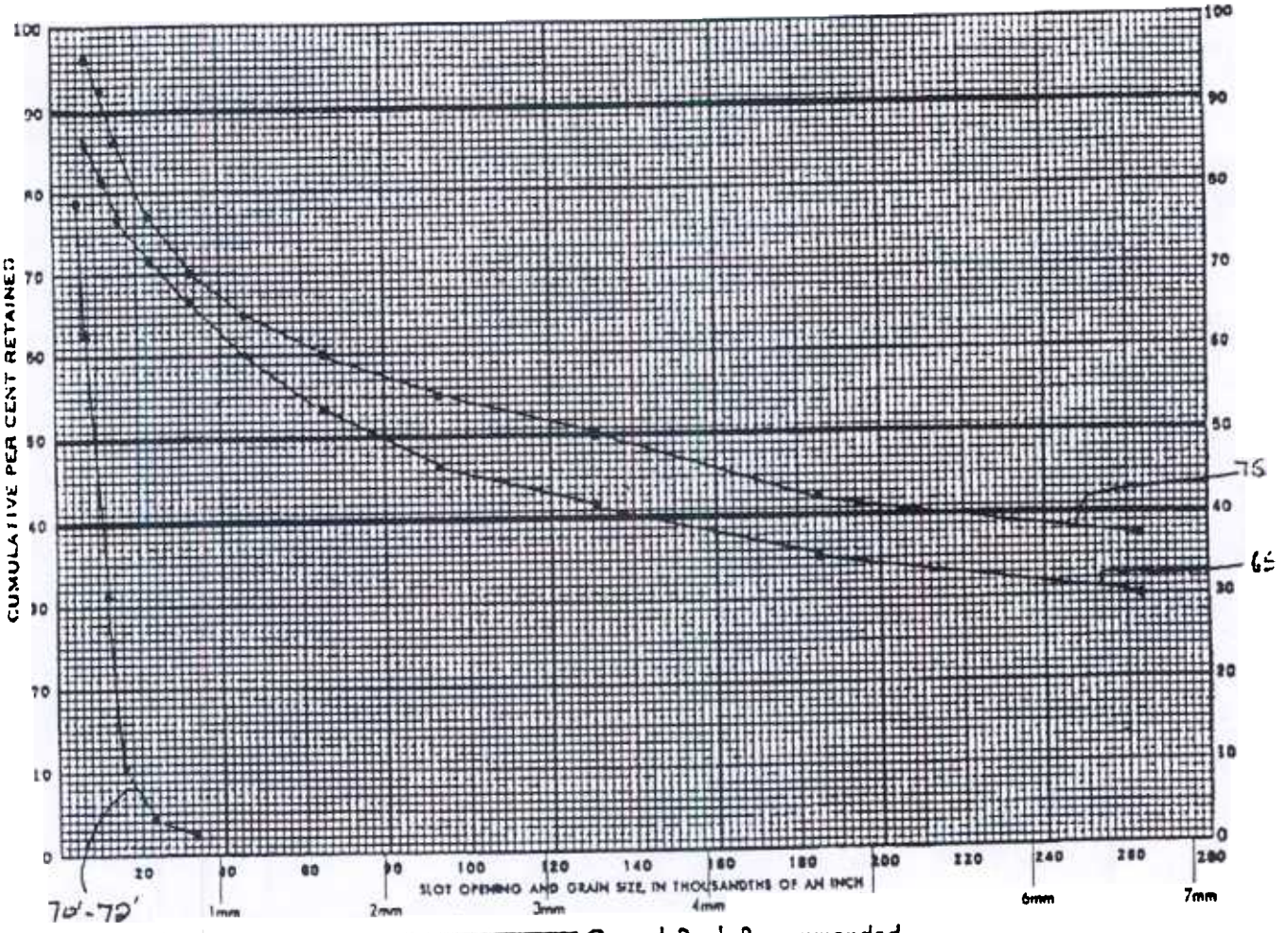
Town _____ State _____ Date _____

Well Location tw-8

Type of Well 8" Test Well

Depth of Sample 65' to 67', 70' to 72', 75' to 77' (Spoons)

Sample taken by J. Gomez / R. Sullivan



Sieve Openings	Cumulative Per Cent Retained 65-67	70-72	75-77
.263	30		38.5
.185	35		42.5
.131	41.7		50.0
.093	46.7		55.0
.065	53.3		60.0
.046	60.0		65.0
.033	66.7	2.1	70.0
.023	71.7	4.2	77.5
.016	76.7	10.4	86.2
.012	81.7	31.2	92.5
.008	86.7	62.5	96.1
.006	90.0	79.2	98.8
.004			

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SAND ANALYSIS

Bailer

R.E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

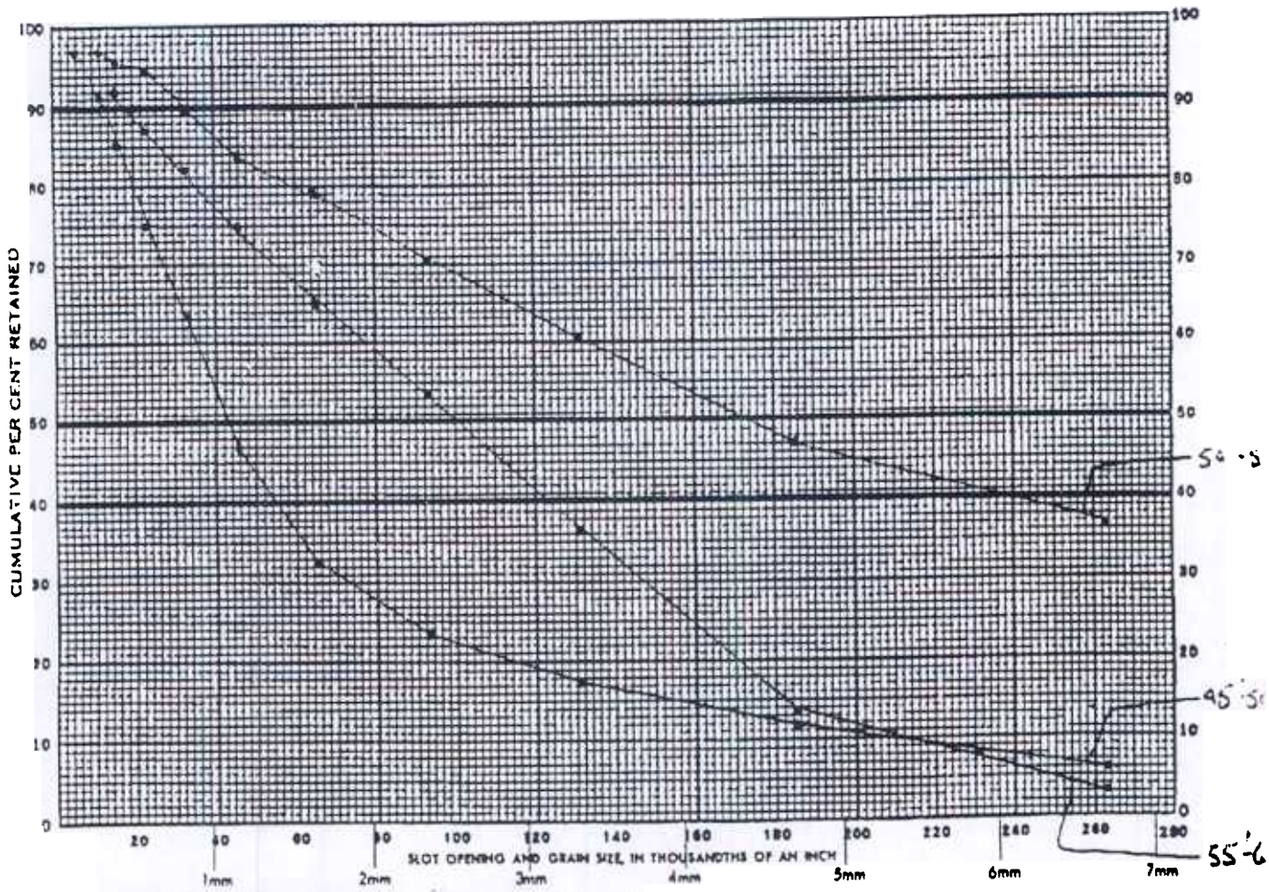
Town _____ State _____ Date _____

Well Location tw-8

Type of Well 8" Test Well

Depth of Sample 45-50, 50-55, 55-60 (Bailer)

Sample taken by J. Gomez / R. Sullivan



Sieve Openings	Cumulative Per Cent Retained 45-50	50-55	55-60
.263	5.9	36.8	3.3
.185	11.8	47.6	13.2
.131	17.6	60.3	36.7
.093	23.5	70.6	53.3
.065	32.4	79.4	65.0
.046	47.0	83.8	75.0
.033	63.2	88.7	81.7
.023	75.0	93.1	86.7
.016	85.3	95.6	91.7
.012	91.2	97.0	93.3
.008	93.1	98.5	96.7
.006	97.0	99.3	98.3
.004			
Dust	100	100	100

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SAND ANALYSIS

Bailer

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

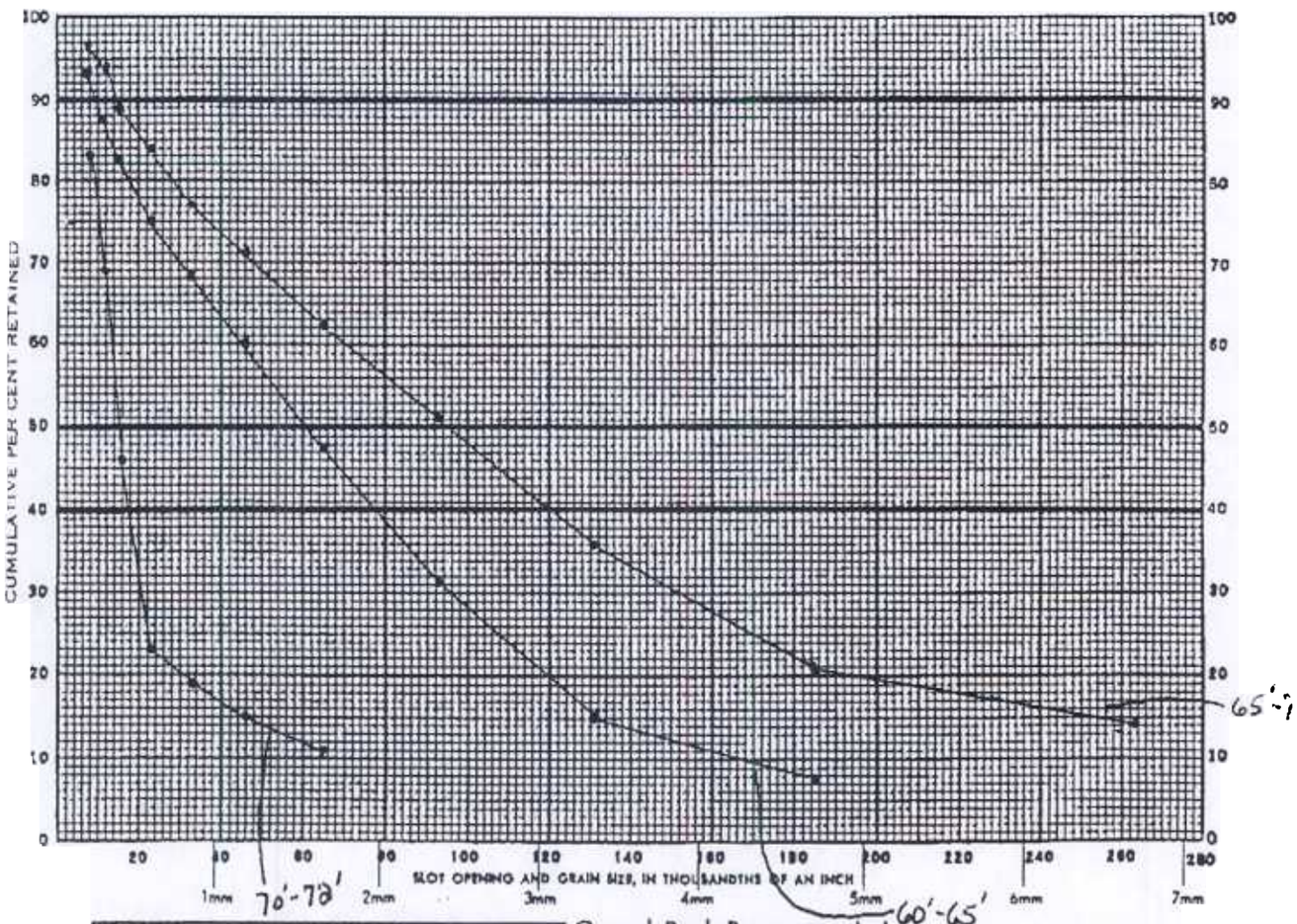
Town _____ State NY Date _____

Well Location Tw-3

Type of Well 8" Test Well

Depth of Sample 60'-65', 65'-70', 70'-72' (Bailer)

Sample taken by J. Gomez / R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	70-72 B	65-70	60-65
.263	1.8	13.8	3.15
.185	3.8	31.2	7.50
.131	5.8	36.2	15.0
.093	9.5	51.2	31.2
.065	11.5	62.5	47.5
.046	15.4	71.2	60.0
.033	19.2	77.5	68.8
.023	23.1	83.8	75.0
.016	46.2	88.8	82.5
.012	69.2	93.8	87.4
.008	82.7	96.2	93.8
.006	92.3	97.8	96.2

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.

Type Screen _____ Metal _____

By _____

SIEVE ANALYSES FOR

TEST BORING 9
(WELL 4)

GERAGHTY & MILLER, INC.

Croton-on-Hudson | Gravel-Packed Well | September 9, 1991

SUMMARY OF SIEVE ANALYSES

8-INCH TEST WELL No. 2

Depth	40%	50%	70%	90%	UC*
33-36	280+	200	70	18	15+
36-40	120	80	38	16	8
40-43	190	120	46	16	12
43-48	164	120	50	14	12
48-53	185	131	60	20	9
53-58	263	160	74	20	13
58-63	230	172	93	28	8
63-68	152	124	80	40	4
68-70	110	86	52	23	5

* UC: Coefficient of Uniformity = 40%/90

SAND ANALYSIS

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson

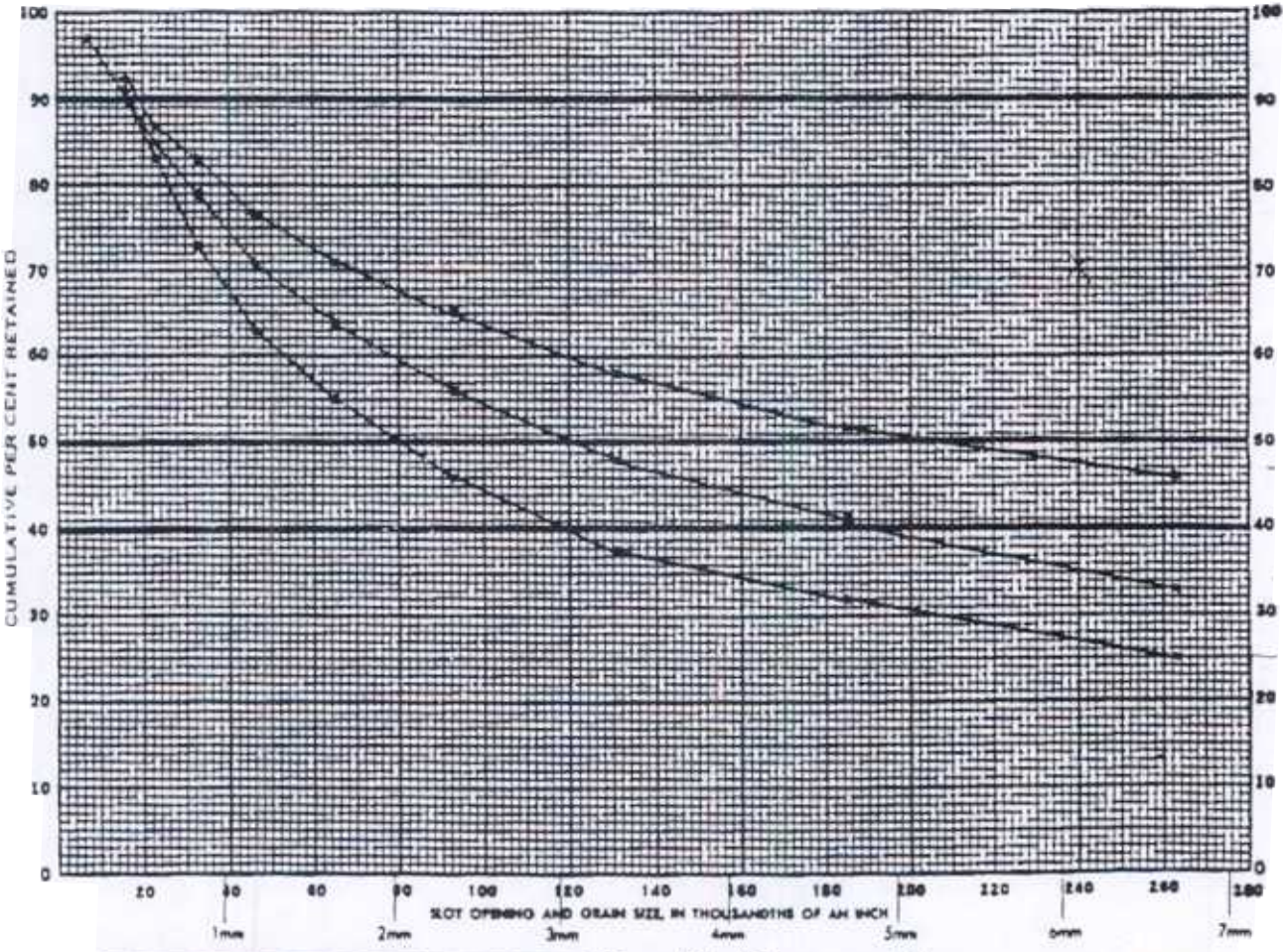
Town Croton-on-Hudson State NY Date 9/9/91

Well Location 8" Well No. 2

Type of Well 8-inch test well

Depth of Sample 33'-36', 36'-40', 40'-43'

Sample taken by R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	33-36	36-40	40-43
.263	46	25	33
.185	52	32	41
.131	58	38	48
.093	65	46	56
.065	71	55	64
.046	77	63	71
.033	83	73	79
.023	87	83	85
.016	93	91	91
.012	95	95	95
.008	96	97	97
.006	98	99	98
.004			
Dust	[illegible]	100	100

Gravel Pack Recommended

Slot Opening Recommended

Recommended Screen Dia. ___ in. Length ___ ft.

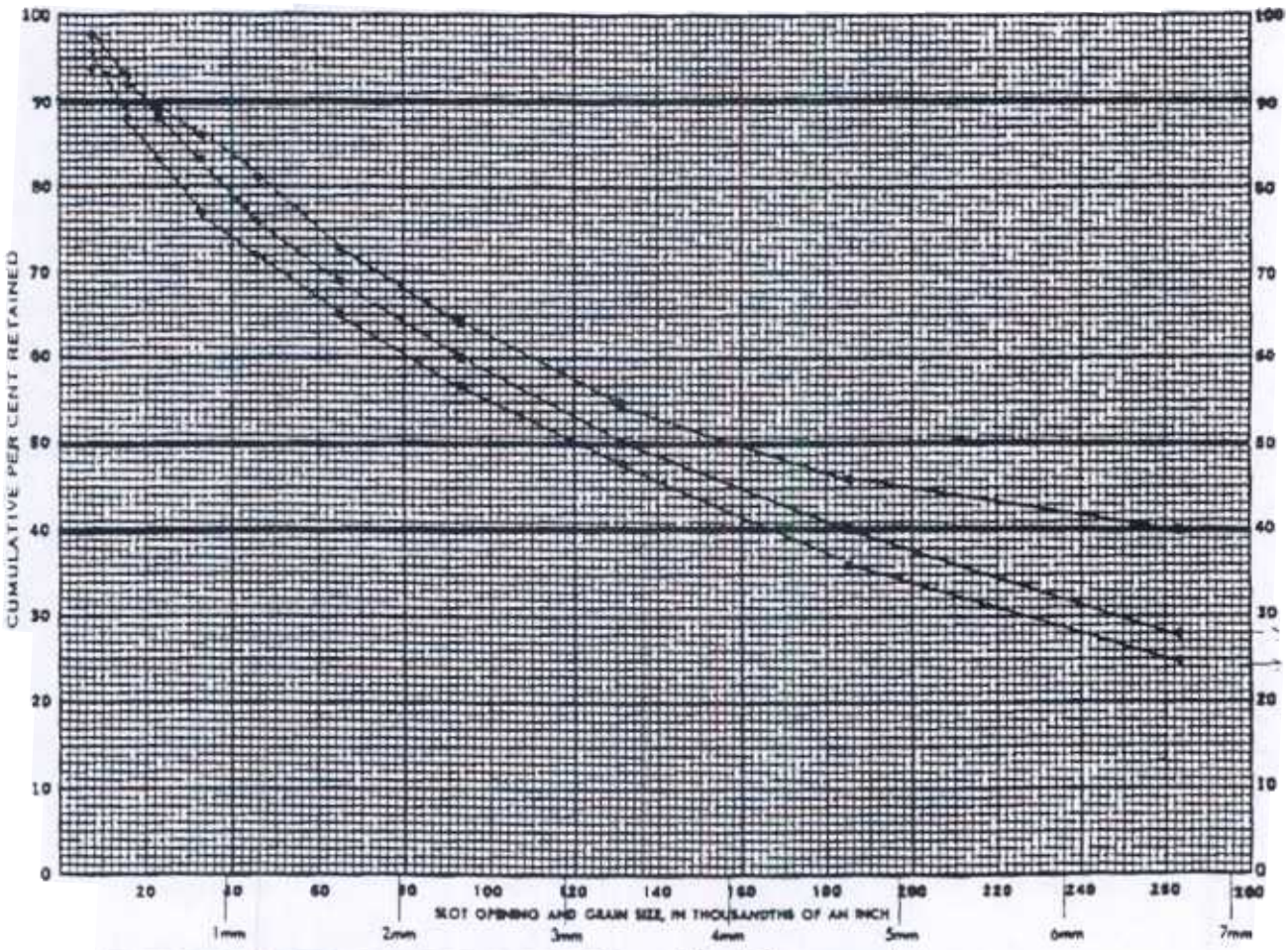
Type Screen ___ Metal ___

By A. Chapman

SAND ANALYSIS

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton-on-Hudson
Town Croton-on-Hudson State NY Date 9/9/91
Well Location 8" Well No. 2
Type of Well 8-inch test well
Depth of Sample 43'-48', 48'-53', 53'-58'
Sample taken by R. Sullivan



Sieve Openings	Cumulative Per Cent Retained 43-48	48-53	53-58
.263	25	28	40
.185	36	40	46
.131	48	50	55
.093	57	60	64
.065	65	69	73
.046	72	76	81
.033	77	83	86
.023	83	88	89
.016	88	93	93
.012	94	96	95
.008	96	98	94
.006	98	99	96
.004			
Dust	100	100	100

Gravel Pack Recommended _____

Slot Opening Recommended _____

Recommended Screen Dia. ____ in. Length ____ ft.
Type Screen _____ Metal _____
By A. Chapman

SAND ANALYSIS

R. E. CHAPMAN CO.
30 North Main St.
Oakdale, Mass. 01539

Customer's Name Croton on Hudson

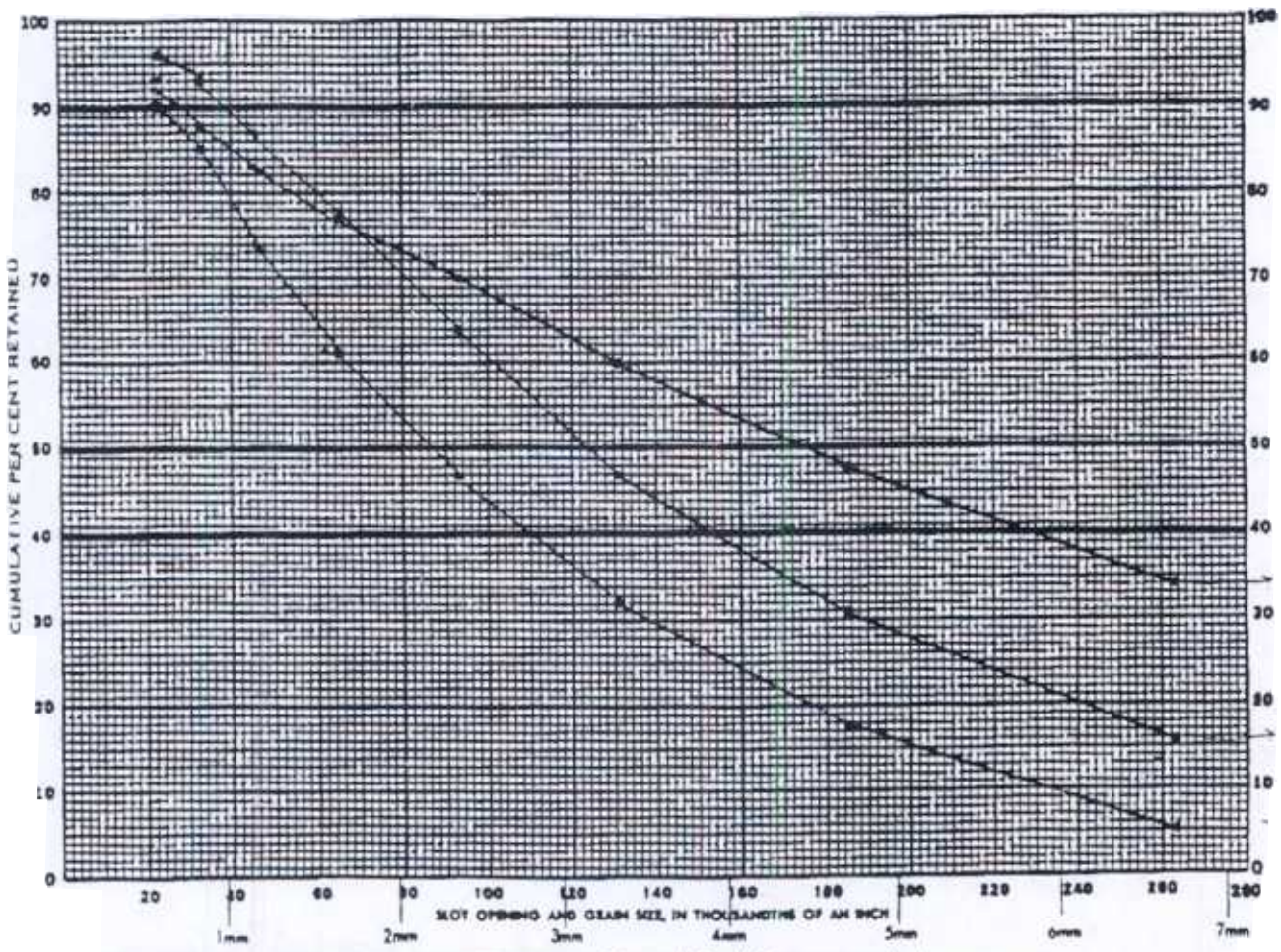
Town Croton-on-Hudson State NY Date 9/9/91

Well Location 8" Well No 2

Type of Well 8-inch test well

Depth of Sample 58'-63', 63'-68', 68'-70'

Sample taken by R. Sullivan



Sieve Openings	Cumulative Per Cent Retained		
	58-63	63-68	68-70
.263	34	16	5
.185	48	31	17.5
.131	60	47	30.5
.093	70	64	47.5
.065	77	78	61.25
.046	83	87	74
.033	88	93	85
.023	92	96	90
.016	94	98	94
.012	96	99	95
.008	98	99	96
.006	99	99	97
.004			
Dust	100	100	100

Gravel Pack Recommended _____

Slot Opening Recommended _____

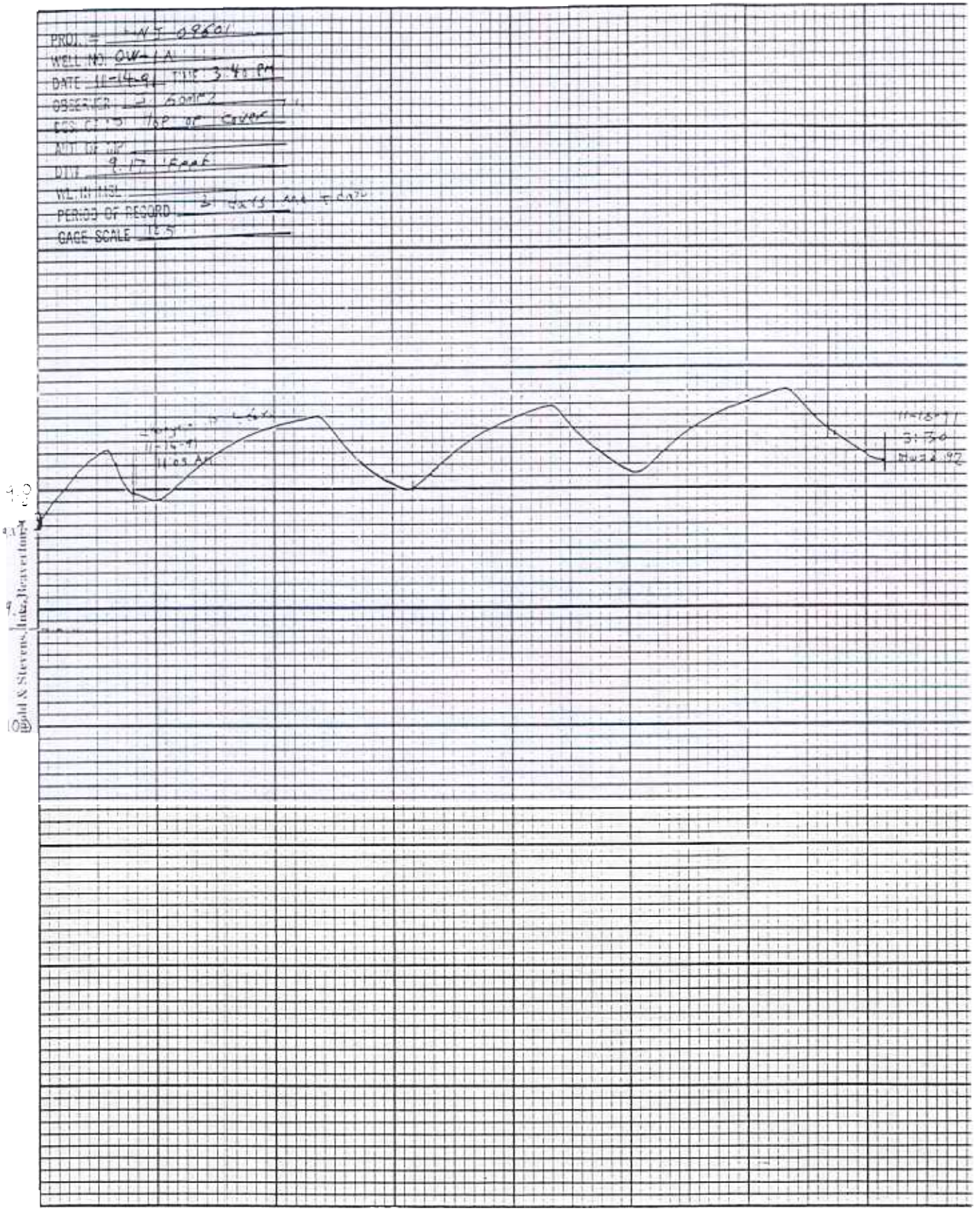
Recommended Screen Dia. ____ in. Length ____ ft.

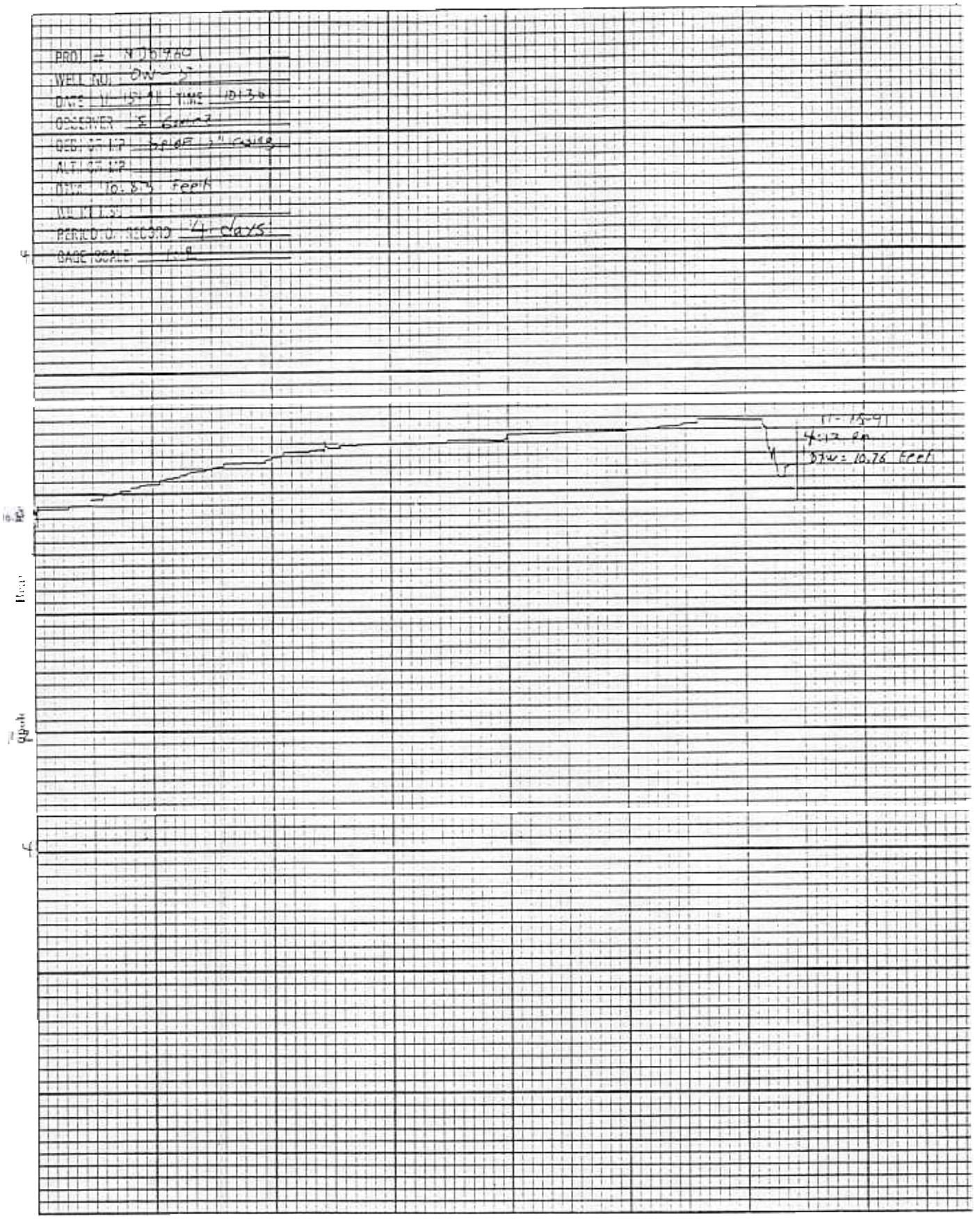
Type Screen _____ Metal _____

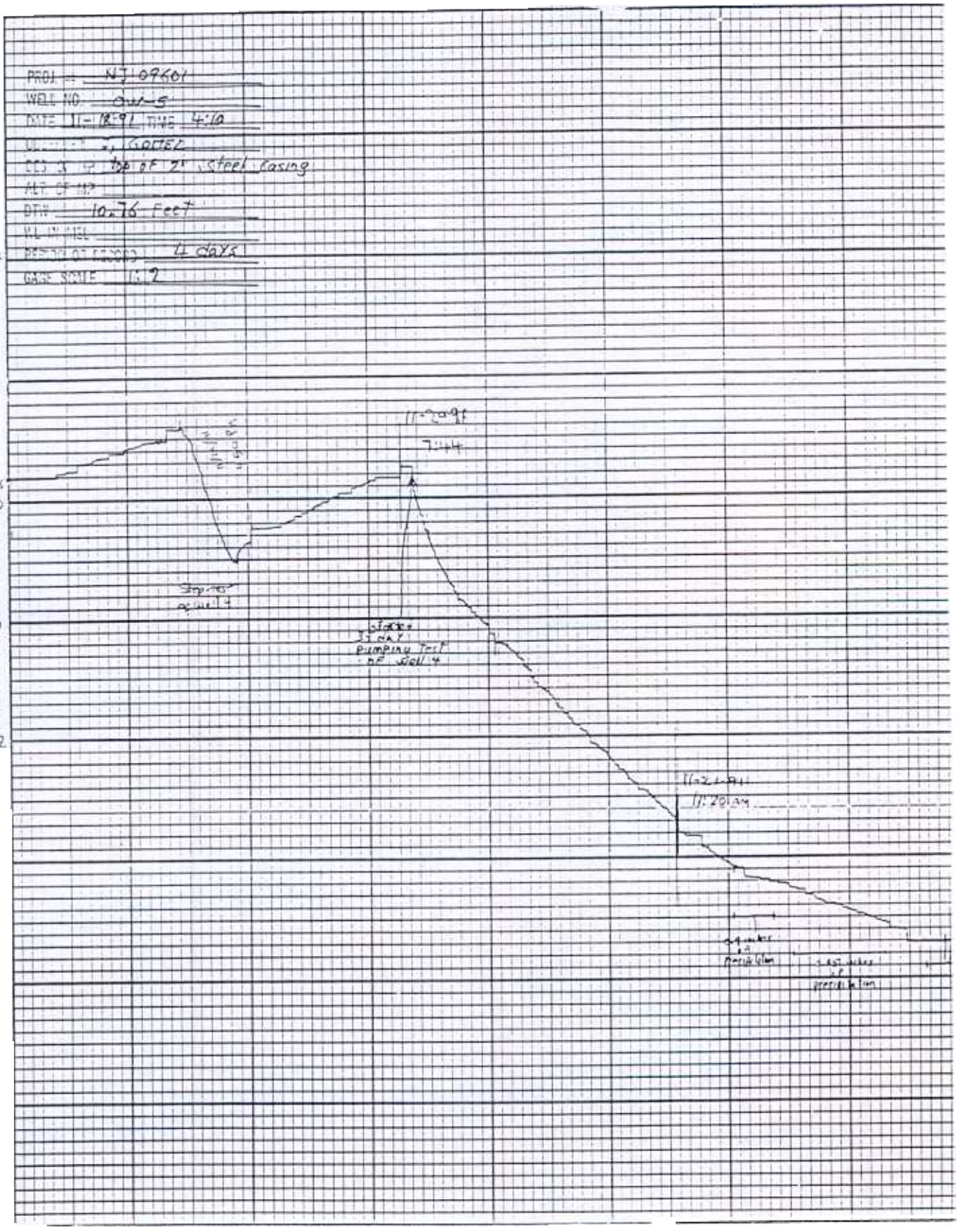
By A. Chapman

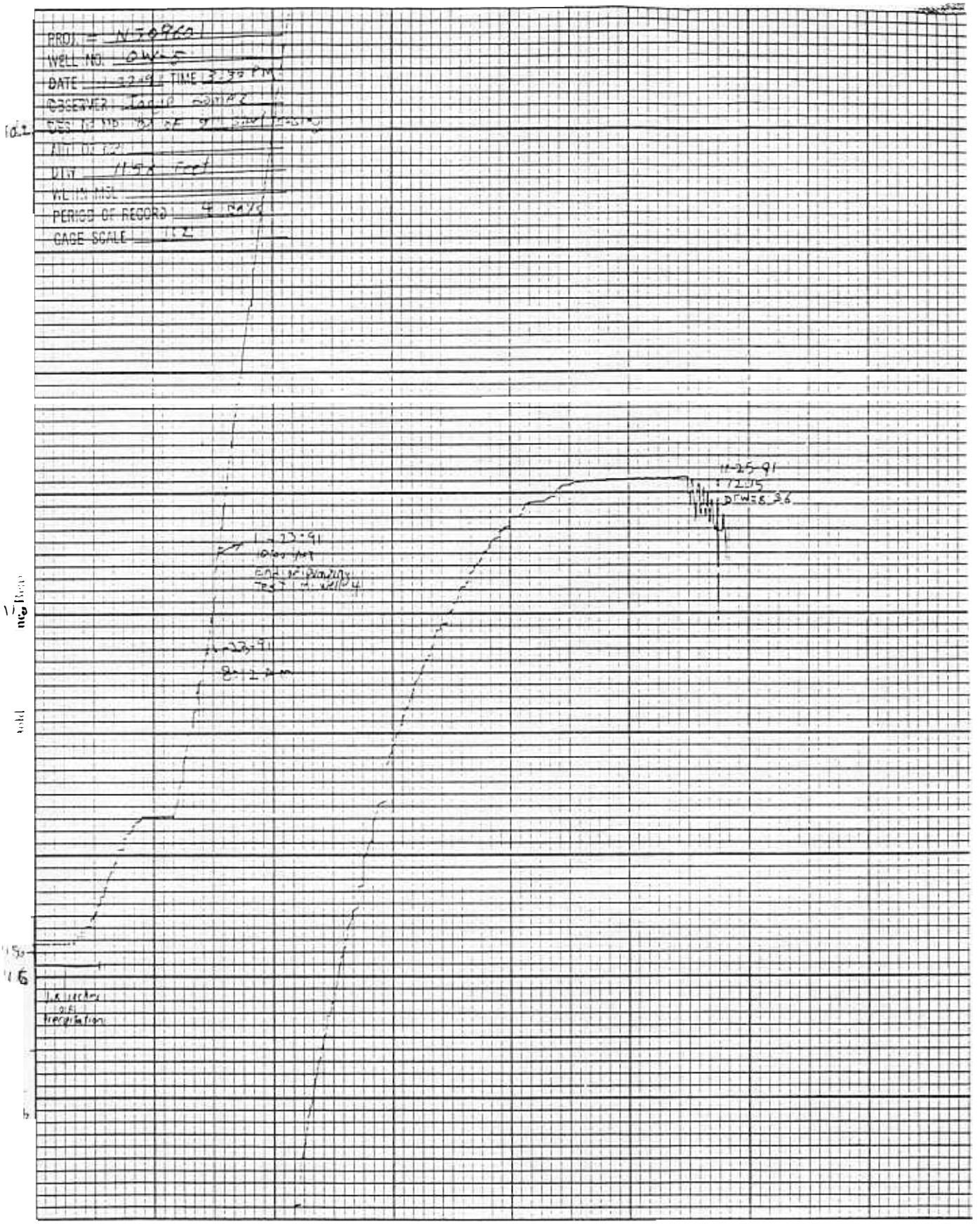
APPENDIX C

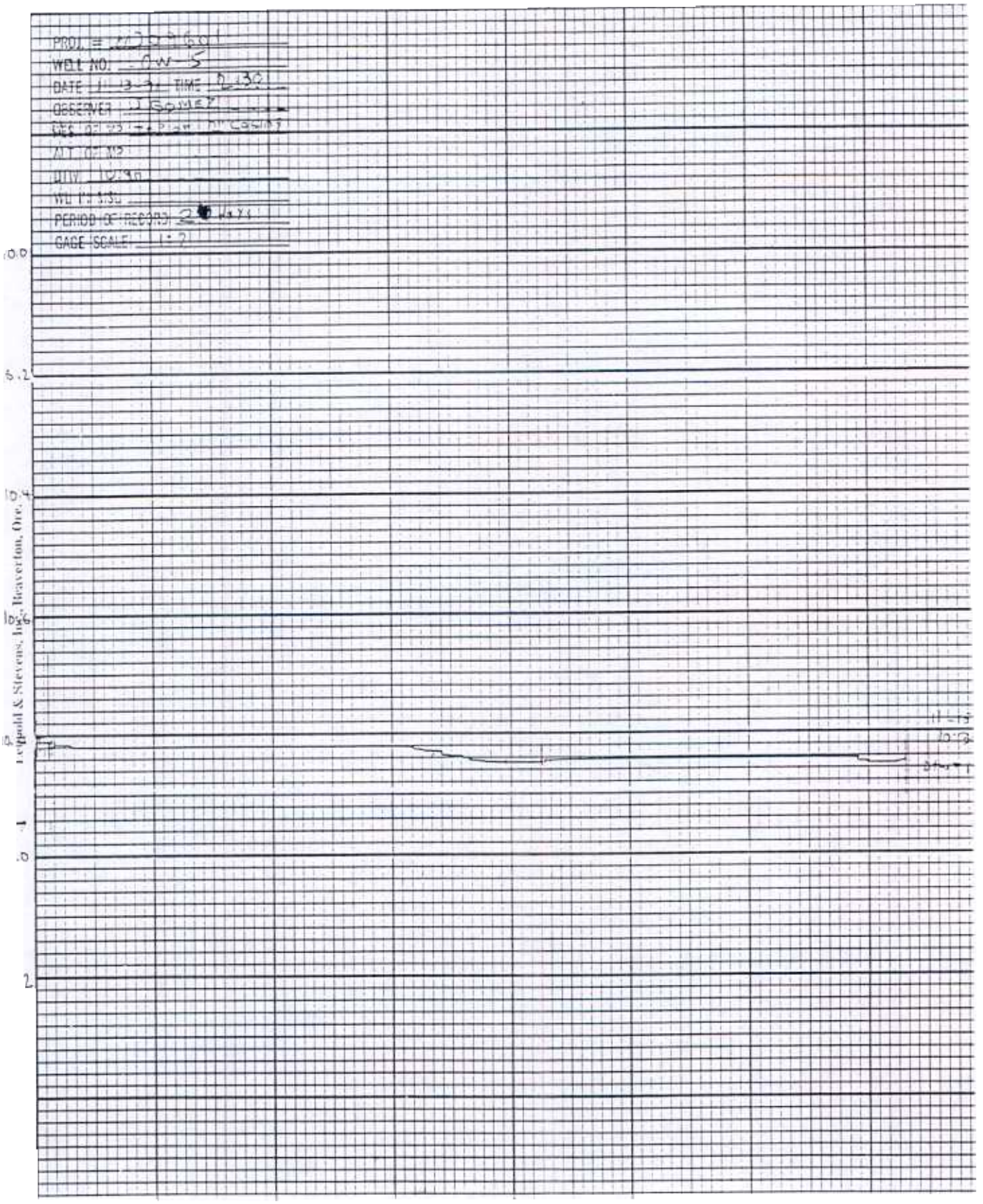
CONTINUOUS WATER-LEVEL RECORDER CHARTS

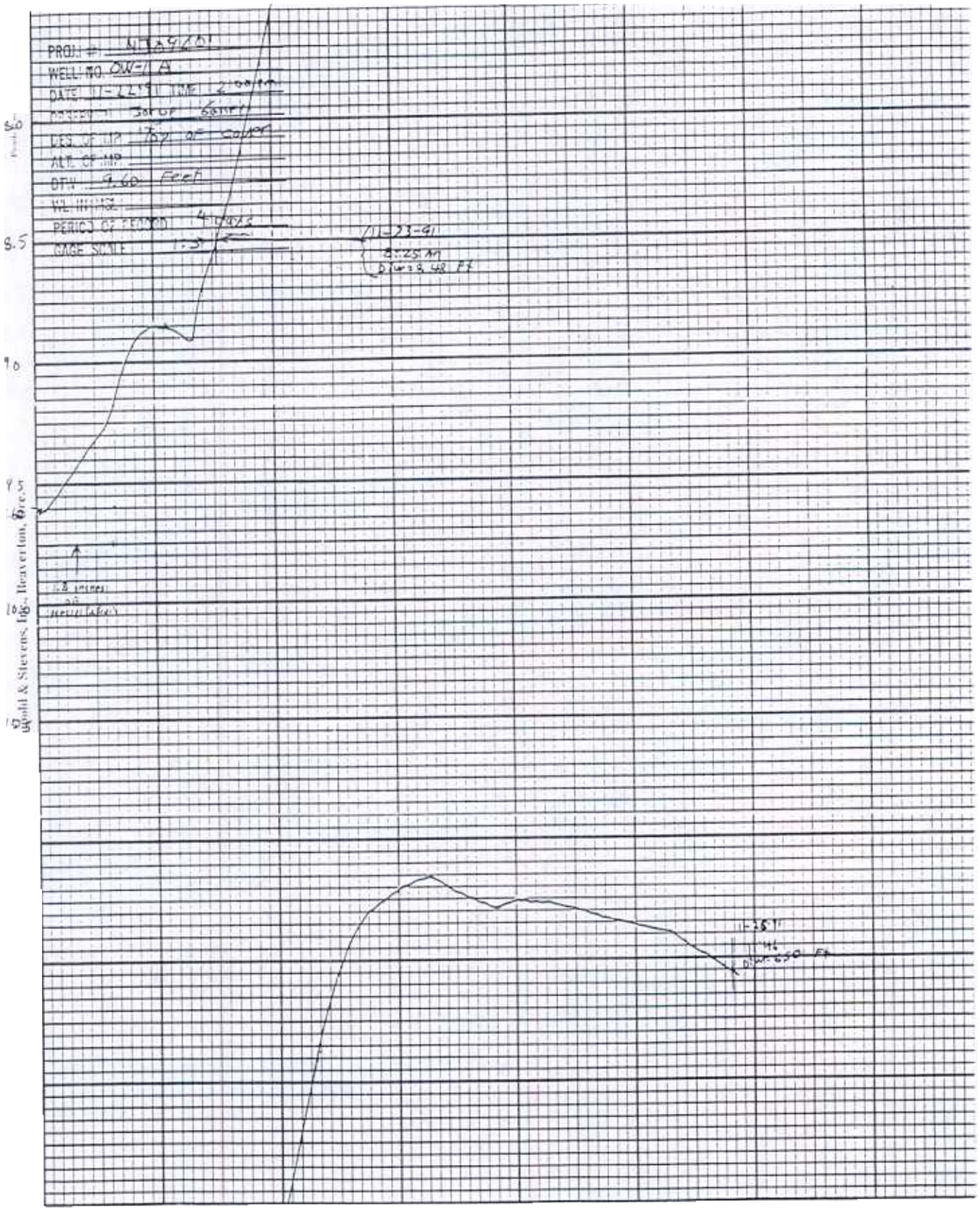

PROJ. # WI 09601
WELL NO. OW-1A
DATE 11-14-91 TIME 3:40 PM
OBSERVER
DIV. 9.17 feet
WL IN MSL
PERIOD OF RECORD
GAGE SCALE 12.5
11-14-91
11:05 AM
11-18-91
3:30
Hwy 2 92
9.0
9.1
9.2
10.0
Gold & Stevens, Inc., Beaverton

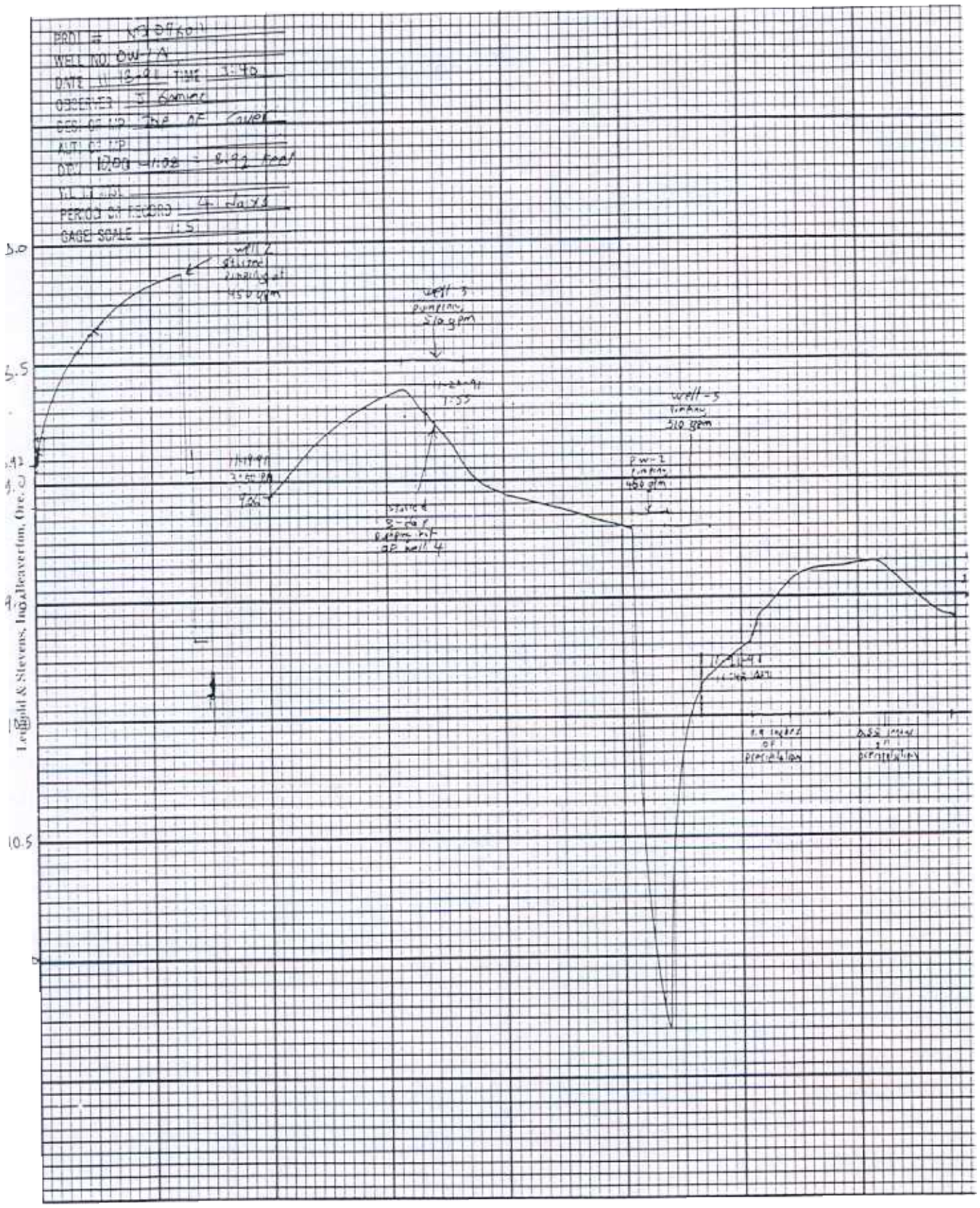

PROJ # NJ51960
WELL NO. OW-5
DATE 11-15-91 TIME 10:30
OBSERVER E. Gomez
DEB. OF MP
ALT. OF MP
DTW 10.83 feet
PERIOD OF RECORD 4 days
GAGE SCALE
11-15-91
4:12 pm
DTW = 10.76 feet

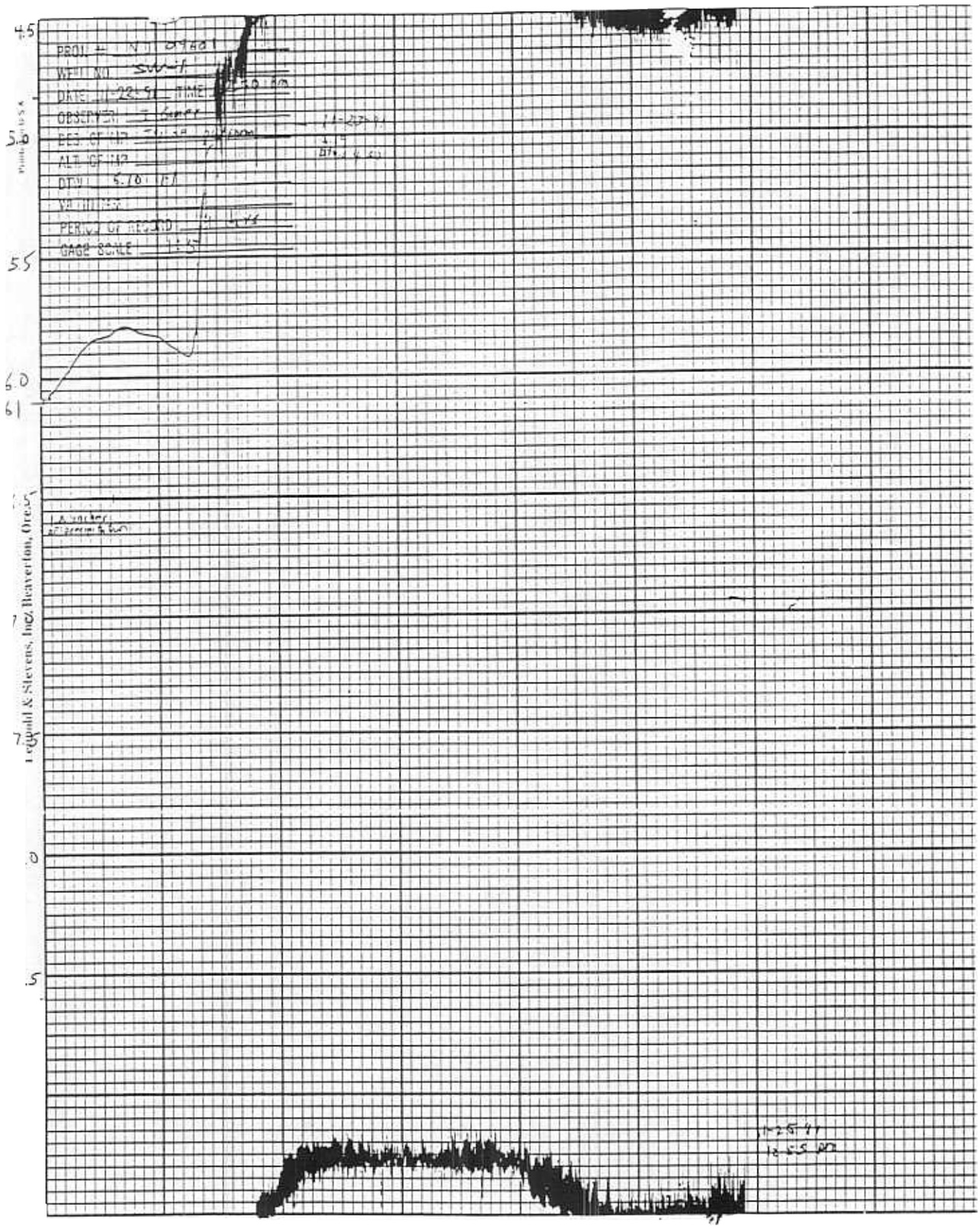

PROJ. NJ 09601
WELL NO. OW-5
DATE 11-18-91 TIME 4:10
DES. OF MP top of 2" steel casing
ALT. OF MP
DTW 10.76 Feet
WL IN MSL
PERIOD OF RECORD 4 days
GAGE SCALE 1:2
11-20-91
7:44
11-21-91
11:20 AM
Stopped
Pumping Test
of Well 4
Stopped
of Well 4
Precipitation
Precipitation

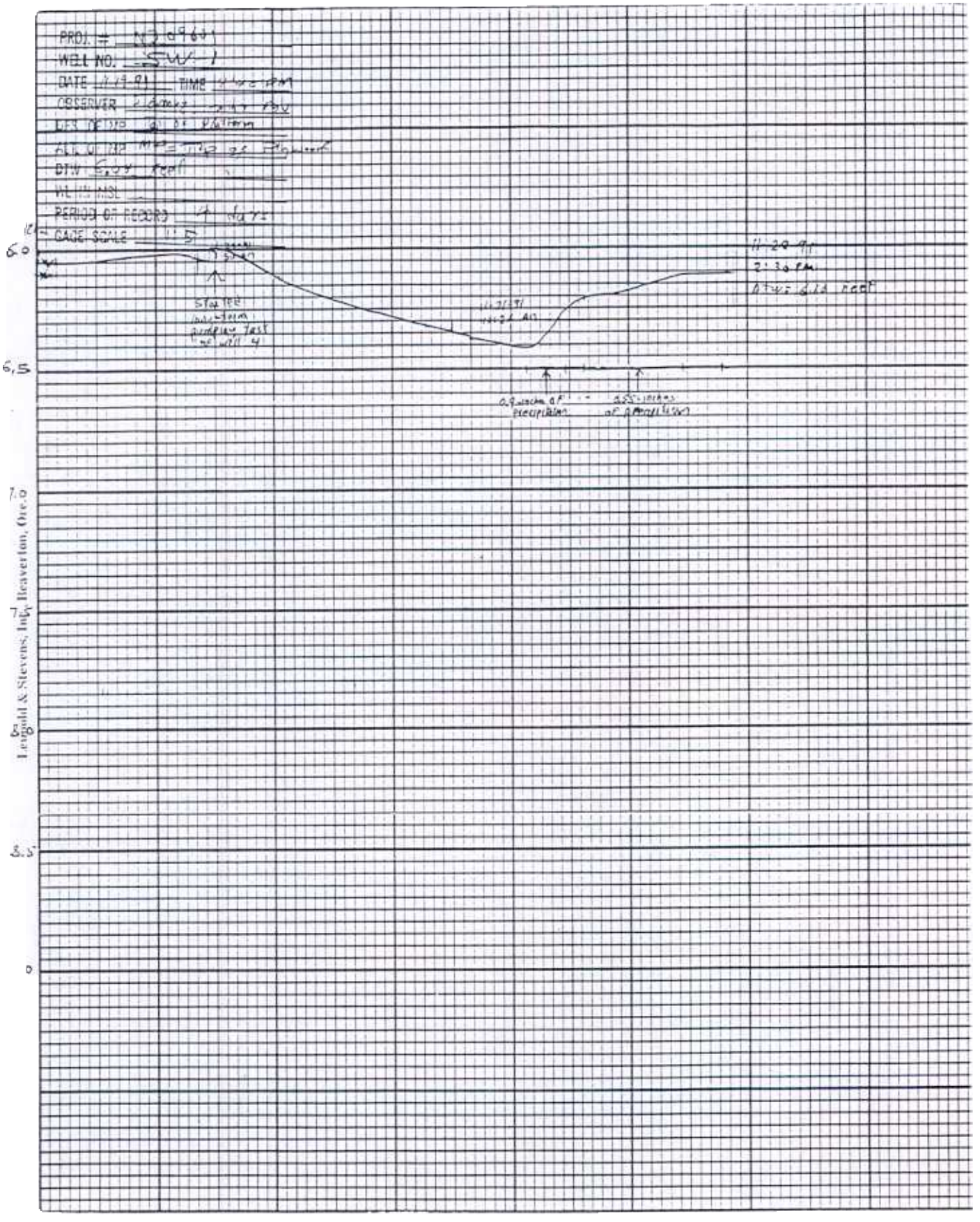

PROJ. # N-30960
WELL NO. OW-5
DATE 1-22-91 TIME 3:30 PM
OBSERVER
DTW 11.58 Feet
WL IN MSL
PERIOD OF RECORD 4 days
GAGE SCALE 1:2
1-23-91
1-23-91
8:12 AM
11-25-91
DTW=8.36


PROJ. #
WELL NO. OW-5
DATE 1-13-3
TIME 2:30
OBSERVER J. GOMEZ
DES. OF MP
ALT. OF MP
DTW 10.90
WL IN MSL
PERIOD OF RECORD 2 Days
GAGE SCALE 1:2
10.0
10.2
10.4
10.6
10.8
11-13
10:30
Leopold & Stevens, Inc., Beaverton, Ore.


PROJ. #
WELL NO. OW-1 A
DATE 11-22-91 TIME 2:00 pm
DES. OF MP
ALT. OF MP
DTW 9.60 Feet
WL INTAKE
PERIOD OF RECORD 4 days
GAGE SCALE 1:5
11-23-91
8:25 AM
DTW = 8.48 Ft
8.5
9.0
9.5
10.0
11-25-91
11:46
DTW = 6.50 Ft
Gold & Stevens, Inc., Beaverton, Ore.


PROJ # NS 07 601
WELL NO. OW-1A
DATE 11-18-91 TIME 3:40
OBSERVER J. Gamine
DESC OF MP Top of Cover
AUTO OF MP
DTW 10.00 - 1.08 = 8.92 feet
PERIOD OF RECORD 4 days
GAGE SCALE 1:5
5.0
5.5
10.5
well 2 started pumping at 450 gpm
well 3 pumping 510 gpm
well-3 pumping 510 gpm
PW-2 pumping 450 gpm
started 3-day pump out of well 4
Leopold & Stevens, Inc. Beaverton, Ore.


4.5
5.0
5.5
6.0
6.1
7.5
7.0
.5
PROJ. #
WELL NO.
DATE
TIME
OBSERVER
DEG. OF IMP.
ALT. OF IMP.
DTW
PERIOD OF RECORD
GAGE SCALE
Leopold & Stevens, Inc. Beaverton, Ore.


PROJ. #
WELL NO. SW-1
DATE
TIME
OBSERVER
DTW
WL IN MSL
PERIOD OF RECORD
GAGE SCALE
6.0
6.5
7.0
8.0
8.5
0
Leopold & Stevens, Inc., Beaverton, Ore.
11-20-91
2:30 PM
DTW = 6.14 feet
0.9 inches of precipitation

APPENDIX D

ANALYTICAL LABORATORY REPORT

GERAGHTY & MILLER, INC.

WESTCHESTER COUNTY

DEPARTMENT OF LABORATORIES & RESEARCH
HAMMOND HOUSE ROAD
VALHALLA, N.Y. 10595

ENVIRONMENTAL LABORATORIES
NYS ELAP NO: 10108
914-524-5575

ANALYTICAL CHEMISTRY REPORT

SAMPLE IDENTIFICATION

LAB NUMBER: 9132608584

COLLECTED: 11/22/91 TIME: 1200P
COLLECTOR: J. GOMEZ
AGENCY : CROTON-ON-HUDSON, VILLAGE OF

RECEIVED ON: 11/22/91 TIME: 12:45
RECEIVED BY: PAMELA HENRY

SAMPLE LOC: VILLAGE OF CROTON
NEW PRODUCTION WELL
CROTON NY

SAMPLING PT: DISCHARGE LINE
SAMPLE TYPE: POTABLE

BOTTLE NUMBERS: A0501 C1585 D0380

RESULTS OF ANALYSIS

PARAMETER:	RESULT:	UNITS	METHOD:
INORGANIC CHEMISTRY			
COLOR	[<1]	Units	EPA 1979 (110.2)
TURBIDITY	[.11]	NTU	EPA 1979 (180.1)
CONDUCTIVITY	[240]	umhos	EPA 1979 (120.1)
CHLORIDES	[23]	mg/L	EPA 1979 (325.3)
FLUORIDE	[<.1]	mg/L	EPA 1979 (340.2)
NITROGEN, NITRATE-N	[0.2]	mg/L	EPA 1979 (353.2)
NITROGEN, NITRITE-N	[<.01]	mg/L	EPA 1979 (354.1)
SULFATE	[13]	mg/L	EPA 1979 (375.4)
ARSENIC	[<20]	ug/L	EPA 1979 (206.2)
BARIUM	[<200]	ug/L	EPA 1979 (208.2,208.1)
CADMIUM	[<2]	ug/L	EPA 1979 (213.2,213.1)
CHROMIUM, TOTAL	[<10]	ug/L	EPA 1979 (218.2,218.1)
COPPER	[<10]	ug/L	EPA 1979 (220.1,220.2)
IRON	[20]	ug/L	EPA 1979 (236.1,236.2)
LEAD	[<1.0]	ug/L	EPA 1979 (239.2,239.1)
MANGANESE	[35]	ug/L	EPA 1979 (243.1,243.2)
MERCURY	[<.4]	ug/L	EPA 1979 (245.1)
SILVER	[<10]	ug/L	EPA 1979 (272.2)
SODIUM	[15000]	ug/L	EPA 1979 (273.3)
ZINC	[29]	ug/L	EPA 1979 (289.1)

LT = LESS THAN NA = NOT ANALYZED ND = NOT DETECTED LA = LAB ACCIDENT

WESTCHESTER COUNTY

DEPARTMENT OF LABORATORIES & RESEARCH
HAMMOND HOUSE ROAD
VALHALLA,N.Y. 10595

ENVIRONMENTAL LABORATORIES
NYS ELAP NO: 10108
914-524-5575

LAB NUMBER:9132608584

==========

COMMENTS:

REPORTED BY: DONNA POPP DATE: 12/09/91

LT = LESS THAN NA = NOT ANALYZED ND = NOT DETECTED LA = LAB ACCIDENT

WESTCHESTER COUNTY

DEPARTMENT OF LABORATORIES & RESEARCH
HAMMOND HOUSE ROAD
VALHALLA, N.Y. 10595

ENVIRONMENTAL LABORATORIES
NYS ELAP NO: 10108
914-524-5575

ANALYTICAL CHEMISTRY REPORT

SAMPLE IDENTIFICATION

LAB NUMBER: 9132608585

COLLECTED: 11/22/91 TIME: 1200P
COLLECTOR: J. GOMEZ
AGENCY : CROTON-ON-HUDSON, VILLAGE OF

RECEIVED ON: 11/22/91 TIME: 12:51
RECEIVED BY: SALLY TEDRICK

SAMPLE LOC: VILLAGE OF CROTON
NEW PRODUCTION WELL
CROTON NY

SAMPLING PT: DISCHARGE LINE
SAMPLE TYPE: POTABLE

BOTTLE NUMBERS: K L I

RESULTS OF ANALYSIS

PARAMETER:	RESULT:	UNITS	METHOD:
ORGANIC CHEMISTRY			
ENDRIN	[LT 0.05]	ug/L	SM509A
LINDANE	[LT 0.05]	ug/L	SM509A
METHOXYCHLOR	[LT 0.05]	ug/L	SM509A
TOXAPHENE	[LT 1.0]	ug/L	SM509A
OTHER PESTICIDE(S)	[NA]	ug/L	SM509A
UNKNOWN(S)	[NA]	ug/L	SM509A
2,4-D	[LT 0.05]	ug/L	SM509B
2,4,5-TP	[LT 0.05]	ug/L	SM509B
OTHER HERBICIDE(S)	[NA]	ug/L	SM509B
UNKNOWN(S)	[NA]	ug/L	SM509B
BROMOFORM	[LT 2.0]	ug/L	EPA 524
BROMODICHLOROMETHANE	[LT 0.5]	ug/L	EPA 524
CHLOROFORM	[LT 0.5]	ug/L	EPA 524
DIBROMOCHLOROMETHANE	[LT 2.0]	ug/L	EPA 524
BROMOCHLOROMETHANE	[LT 0.5]	ug/L	EPA 524
BROMOMETHANE	[LT 0.5]	ug/L	EPA 524
CARBON TETRACHLORIDE	[LT 0.5]	ug/L	EPA 524
CHLOROETHANE	[LT 0.5]	ug/L	EPA 524
CHLOROMETHANE	[LT 0.5]	ug/L	EPA 524
DIBROMOMETHANE	[LT 0.5]	ug/L	EPA 524
DICHLORODIFLUOROMETHANE	[LT 0.5]	ug/L	EPA 524
1,1-DICHLOROETHANE	[LT 0.5]	ug/L	EPA 524

LT = LESS THAN NA = NOT ANALYZED ND = NOT DETECTED LA = LAB ACCIDENT

WESTCHESTER COUNTY

DEPARTMENT OF LABORATORIES & RESEARCH
HAMMOND HOUSE ROAD
VALHALLA, N.Y. 10595

ENVIRONMENTAL LABORATORIES
NYS ELAP NO: 10108
914-524-5575

LAB NUMBER: 9132608585 PAGE : 2

RESULTS OF ANALYSIS

PARAMETER:	RESULT:	UNITS	METHOD:
1,2-DICHLOROETHANE	[LT 0.5]	ug/L	EPA 524
1,1-DICHLOROETHENE	[LT 0.5]	ug/L	EPA 524
CIS-1,2-DICHLOROETHENE	[LT 0.5]	ug/L	EPA 524
TRANS-1,2-DICHLOROETHENE	[LT 0.5]	ug/L	EPA 524
1,2-DICHLOROPROPANE	[LT 0.5]	ug/L	EPA 524
1,3-DICHLOROPROPANE	[LT 0.5]	ug/L	EPA 524
2,2-DICHLOROPROPANE	[LT 0.5]	ug/L	EPA 524
1,1-DICHLOROPROPENE	[LT 0.5]	ug/L	EPA 524
CIS-1,3-DICHLOROPROPENE	[LT 0.5]	ug/L	EPA 524
TRANS-1,3-DICHLOROPROPENE	[LT 0.5]	ug/L	EPA 524
METHYLENE CHLORIDE	[LT 0.5]	ug/L	EPA 524
1,1,1,2-TETRACHLOROETHANE	[LT 0.5]	ug/L	EPA 524
1,1,2,2-TETRACHLOROETHANE	[LT 0.5]	ug/L	EPA 524
TETRACHLOROETHENE	[LT 0.5]	ug/L	EPA 524
1,1,1-TRICHLOROETHANE	[LT 0.5]	ug/L	EPA 524
1,1,2-TRICHLOROETHANE	[LT 0.5]	ug/L	EPA 524
TRICHLOROETHENE	[LT 0.5]	ug/L	EPA 524
TRICHLOROFLUOROMETHANE	[LT 0.5]	ug/L	EPA 524
1,2,3-TRICHLOROPROPANE	[LT 0.5]	ug/L	EPA 524
VINYL CHLORIDE	[LT 0.5]	ug/L	EPA 524
BENZENE	[LT 0.5]	ug/L	EPA 524
BROMOBENZENE	[LT 0.5]	ug/L	EPA 524
N-BUTYLBENZENE	[LT 0.5]	ug/L	EPA 524
SEC-BUTYLBENZENE	[LT 0.5]	ug/L	EPA 524
TERT-BUTYLBENZENE	[LT 0.5]	ug/L	EPA 524
CHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
2-CHLOROTOLUENE	[LT 0.5]	ug/L	EPA 524
4-CHLOROTOLUENE	[LT 0.5]	ug/L	EPA 524
1,2-DICHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
1,3-DICHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
1,4-DICHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
ETHYL BENZENE	[LT 0.5]	ug/L	EPA 524
HEXACHLOROBUTADIENE	[LT 0.5]	ug/L	EPA 524
ISOPROPYLBENZENE	[LT 0.5]	ug/L	EPA 524
P-ISOPROPYLTOLUENE	[LT 0.5]	ug/L	EPA 524
NAPHTHALENE	[LT 1.0]	ug/L	EPA 524
N-PROPYLBENZENE	[LT 0.5]	ug/L	EPA 524
STYRENE	[LT 0.5]	ug/L	EPA 524
TOLUENE	[LT 0.5]	ug/L	EPA 524
1,2,3-TRICHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
1,2,4-TRICHLOROBENZENE	[LT 0.5]	ug/L	EPA 524
1,2,4-TRIMETHYLBENZENE	[LT 0.5]	ug/L	EPA 524

LT = LESS THAN NA = NOT ANALYZED ND = NOT DETECTED LA = LAB ACCIDENT

WESTCHESTER COUNTY

DEPARTMENT OF LABORATORIES & RESEARCH
HAMMOND HOUSE ROAD
VALHALLA, N.Y. 10595

ENVIRONMENTAL LABORATORIES
NYS ELAP NO: 10108
914-524-5575

LAB NUMBER: 9132608585 PAGE : 3

RESULTS OF ANALYSIS

PARAMETER:	RESULT:	UNITS	METHOD:
1,3,5-TRIMETHYLBENZENE	[LT 0.5]	ug/L	EPA 524
M-XYLENE	[LT 0.5]	ug/L	EPA 524
O-XYLENE	[LT 0.5]	ug/L	EPA 524
P-XYLENE	[LT 0.5]	ug/L	EPA 524
1,2-DIBROMOETHANE	[NA]	ug/L	EPA 524
1,2-DIBROMO-3-CHLOROPROPANE	[NA]	ug/L	EPA 524
METHYL TERT BUTYL ETHER	[LT 1.0]	ug/L	EPA 524
GASOLINE	[ND]	ug/L	EPA 524
OTHER VOLATILE COMPOUND(S)	[ND]	ug/L	EPA 524
UNKNOWN(S)	[ND]	ug/L	EPA 524

==========

COMMENTS:

REPORTED BY: DAVID VINCI DATE: 1/15/92

LT = LESS THAN NA = NOT ANALYZED ND = NOT DETECTED LA = LAB ACCIDENT

NYS ELAP #10108

COUNTY OF WESTCHESTER
DEPARTMENT OF LABORATORIES AND RESEARCH
VALHALLA, NEW YORK 10545

E11- Rev 91

BACTERIAL EXAMINATION OF DRINKING AND TREATED WATERS

Lab No. W _____ Bottle No. A 6150

Lab No. Ent 018062 Date Coll'd. 11-25-91 Time 12:35 PM

Time Set _____ Time Submitted _____

Tests (circle): SPC, Coliform P/A, Coliform MPN, Fecal, Other _____

Coll'd By [illegible] Agency Coll'd For [illegible] Hudson

Coll'd From: (Name) [illegible] production well
(Last) (First)

Address [illegible] HUDSON
(Street) (City, Town, Village) (Zip Code) (County)

Identification of Source [illegible] production well

Sampling Point within Premises [illegible] Refrigerated? _____

Chlorinated? Yes ___ No X Free _____ mg/1 Total _____ mg/1 pH _____

RESULTS OF EXAMINATION OF WATER

P/A/100 ml
Total Coliform ABSENT
E. Coli _____

Standard Plate Count
Bacteria Per ml (48 Hr) 3

MPN/100 ml
Total Coliform _____
Fecal Coliform _____
Other _____

These results indicate sample (was, was not) of satisfactory quality when sample was collected.

Reported by: Ann-Marie Bury

Date: 11/27/91

APPENDIX E

PROCEDURES FOR MONITORING WATER LEVELS AND FOR MEASURING SPECIFIC CAPACITY OF WELLS

APPENDIX E

PROCEDURES FOR MONITORING WATER LEVELS AND FOR MEASURING SPECIFIC CAPACITIES OF WELLS

PROCEDURES FOR MONITORING WATER TABLE FLUCTUATIONS

Once a week, the depth to water should be measured in Observation Well OW-5. Observation Well OW-5 is a good location to measure static water levels because it is located within the upper part of the well field and should not be significantly impacted by pumping the production wells, which are all are located within the lower part of the well field. An M-scope should be used to take the measurement. The measurement should be taken from the top of the 1.5-inch diameter steel casing, and the accuracy of the water-level measurement should be determined to the nearest hundredth of a foot (0.01 ft). The date, time, and depth-to-water measurement should be recorded in a bound field notebook dedicated for this purpose.

PROCEDURES FOR MEASURING THE SPECIFIC CAPACITIES OF PRODUCTION WELLS

The purpose of routinely measuring the specific capacities of the production wells is to collect data that will indicate when a well is losing efficiency and may require redevelopment. Each operational production well should be tested every 6 months. The procedures for measuring specific capacity are provided below for use by the Village of Croton-on-Hudson Water Department. The measurements and calculations should be recorded in a designated bound field notebook. The Water Department should continue to record the pumping rates and operating schedules for all wells.

GENERAL REQUIREMENTS FOR SETTING THE PUMPING RATE PRIOR TO TESTING

- Have an accurate measurement of the pumping rate

- Try to use approximately the same pumping rate every time a particular well is tested.

- Use a pumping rate that is towards the higher end of the pump capacity.

PROCEDURES FOR MEASURING THE SPECIFIC CAPACITY OF A WELL

- Measure the static depth-to-water, to the nearest 0.01 ft, in a production well that has not pumped for at least 1 day using an M-scope that is marked in tenths of a ft (not inches). Record the date, time, and depth-to-water measurement.

- Turn the pump on. Record the date, time that pumping started, and the pumping rate (in gpm).

- Measure the pumping water level in the well, from the same measuring point as in the static water level measurement, after 1 hour of pumping. Measure to the nearest 0.01 ft. Record the date, time, and depth-to-water measurement.

- Calculate the drawdown by subtracting the static water level from the pumping water level. For example, if the static water level is 9.83 ft below the top of the casing and the pumping water level is 33.35 ft below the top of the casing, the drawdown would be 33.35 - 9.83 = 23.52 ft.

- Calculate the specific capacity by dividing the pumping rate (in gpm) by the drawdown (in ft). For example, if the pumping rate is 485 gpm and the drawdown in 23.52 ft, the specific capacity of the well is 485 ÷ 23.52 = 20.6 gpm/ft at the time the measurements were taken.

#NJ09601-wpA/croton.rpt