

APPENDIX A

Geologic Logs and
Well Construction Diagrams

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: OW-4 PROJECT NO: NY1394CH01 PAGE: 1 of 1

SITE LOCATION: Croton-on-Hudson DRILLING STARTED: 3/9/88 DRILLING COMPLETED: 3/9/88

TOTAL DEPTH DRILLED: 82 FT HOLE DIAMETER: 3 IN. TYPE OF SAMPLE/CORING DEVICE: Wash

LENGTH & DIAMETER OF CORING DEVICE: 2-1/2 IN WASH BORING SAMPLING INTERVAL: 7 FT

LAND-SURFACE ELEVATION: () SURVEYED () ESTIMATED DATUM: Land Surface

DRILLING FLUID USED: Water (Croton River) DRILLING METHOD: Wash Boring

DRILLING CONTRACTOR: D.L. Maher DRILLER: Joe HELPER: Dan

PREPARED BY: Gilroy/Eby HAMMER WEIGHT: 500 LB HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	15			Fill, around Pump House for Well 3; DTW approx. 12 ft.
15	20			Sand, medium to coarse, tan, brown, grey, with some brown silt from approximately 15 to 19 ft.
	20			Loose gravel, lost water.
21	28			Sand, coarse to very coarse, with occasional small pebbles, grey, subangular, poorly sorted.
28	35			Sand, coarse to very coarse, numerous small to medium pebbles, subangular, poorly sorted.
35	42			Sand, coarse to very coarse, with occasional small pebbles, subangular, trace silt/clay.
42	49			Sand, coarse to very coarse, with some medium (approx. 5 percent), occasional small to medium pebbles.
49	54			Same.
54	56			Silty sand, medium to fine with traces of coarse, brownish grey, poorly sorted; not taking water.
56	63			Same as 54 to 56, somewhat less silty.
63	70			Sand, medium to coarse, traces of silt, subangular grey/brown.
70	77			Same.
77	82			Silty sand, medium to coarse with brown silt, not taking water. Rejection at 82 ft.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: OW-5 PROJECT NO: NY1394CH01 PAGE: 1 of 2

SITE LOCATION: Croton-on-Hudson DRILLING STARTED: 3/10/88 DRILLING COMPLETED: 3/14/88

TOTAL DEPTH DRILLED: 77 FT HOLE DIAMETER: 3 IN. TYPE OF SAMPLE/CORING DEVICE: Wash

LENGTH & DIAMETER OF CORING DEVICE: 2-1/2 IN WASH BORING SAMPLING INTERVAL: 7 FT

LAND-SURFACE ELEVATION: () SURVEYED () ESTIMATED DATUM: Land Surface

DRILLING FLUID USED: Water (Croton River) DRILLING METHOD: Wash Boring

DRILLING CONTRACTOR: D.L. Maher DRILLER: Joe HELPER: Dan

PREPARED BY: R. Eby HAMMER WEIGHT: 500 LB HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	3		Excav.	Sand, medium to coarse with occasional pebbles and cobbles.
3	7		Excav.	Sand, coarse to very coarse with abundant cobbles to 1 ft diameter. DTW approx. 6 ft.
7	15			Sand, medium to coarse with small to medium pebbles, grey, poorly sorted. Cobbles to 10 ft.
15	21			Sand, medium, grey, well sorted.
21	28			Silty sand, fine to very fine, grey, well sorted, cohesive.
28	32			Same.
32	35			Sand, fine with some coarse to very coarse, grey.
35	42	5		Sand, medium to fine with silt, grey to light brown, well sorted.
42	43			Same.
43	49	2		Gravelly sand, coarse to very coarse, abundant small to large pebbles with some cobbles, poorly sorted, clean.
49	56	.5		Same (pushed rock at 56 ft, very little plug).
56	63	.5		Sand, coarse to very coarse, some fine sand, occasional small to medium pebbles, light grey, poorly sorted, clean. (Pushed rock, poor recovery)
63	66	.5		Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: OW-6 PROJECT NO: NY1394CH01 PAGE: 1 of 1
 SITE LOCATION: Croton-on-Hudson DRILLING STARTED: 3/11/88 DRILLING COMPLETED: 3/14/88
 TOTAL DEPTH DRILLED: 71 FT HOLE DIAMETER: 3 IN. TYPE OF SAMPLE/CORING DEVICE: Wash
 LENGTH & DIAMETER OF CORING DEVICE: 2-1/2 IN WASH BORING SAMPLING INTERVAL: 7 FT
 LAND-SURFACE ELEVATION: _____ DATUM: Land Surface
 DRILLING FLUID USED: Water (Croton River) DRILLING METHOD: Wash Boring
 DRILLING CONTRACTOR: D.L. Maher DRILLER: Joe HELPER: Dan
 PREPARED BY: R. Eby HAMMER WEIGHT: 500 LB HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	3		Excav.	Sand, fine to medium, well sorted, greyish brown.
3	7		Excav.	Sand, coarse to very coarse with gravel and large cobbles. Water table at 4 ft.
7	14			Sand, medium to very coarse, numerous small to large pebbles. Cobbles to a depth of 11 ft.
14	21	3		Gravelly sand, coarse to very coarse pebbles up to 2 in. diameter, greyish brown, rounded to subangular, poorly sorted, clean.
21	28	3		Same, with some finer sand.
28	35			Gravelly sand, fine to very coarse with pebbles to 2 in. diameter, trace silt, rounded to subangular, poorly sorted, clean.
35	42	3		Same, no silt.
42	49	3		Gravelly sand, medium to very coarse with trace fine, pebbles up to 2 in., rounded to subangular, poorly sorted, grey, clean.
49	56	2		Same.
56	63	.5		Gravelly sand, fine to very coarse, numerous pebbles and cobbles, poorly sorted, clean (pushed rock which resulted in poor recovery).
63	70	.5		Gravelly sand, fine to very coarse with pebbles, and grey and brown silt.
70	71			Same. Rejection at 71 ft.

SAMPLE/CORE LOG

BORING/WELL: OW-7 PROJECT NO: NY1394CH01 PAGE: 1 of 2

SITE LOCATION: Croton-on-Hudson DRILLING STARTED: 3/15/88 DRILLING COMPLETED: 3/16/88

TOTAL DEPTH DRILLED: 52.5 FT HOLE DIAMETER: 3 IN TYPE OF SAMPLE/CORING DEVICE: WASH

LENGTH & DIAMETER OF CORING DEVICE: 2-1/2 IN WASH BORING SAMPLING INTERVAL: 7 FT

LAND-SURFACE ELEVATION: () SURVEYED
() ESTIMATED DATUM: Land Surface

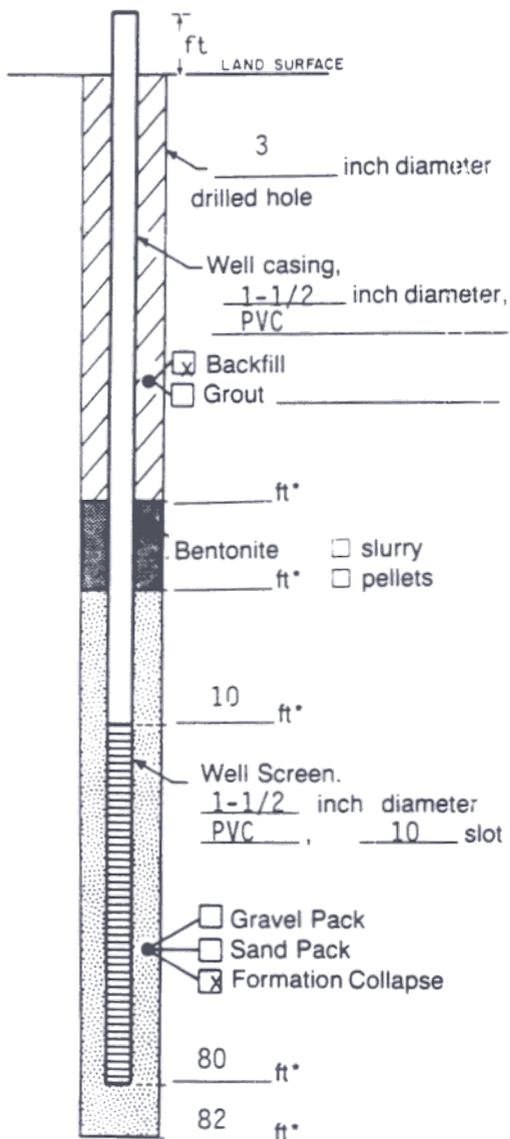
DRILLING FLUID USED: Water (Croton River) DRILLING METHOD: Wash Boring

DRILLING CONTRACTOR: D.L. Maher DRILLER: Joe HELPER: Dan

PREPARED BY: R. Eby HAMMER WEIGHT HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	1			Sand, fine to medium, well sorted, greyish brown.
1	6	1		Sand, coarse to very coarse with gravel and medium cobbles. Water table at 2.6 ft.
6	14	1		Sand, medium to very coarse with numerous small to medium pebbles, rounded to subangular, greyish brown, poorly sorted.
14	19			Same.
19	21	2.5		Sand, medium to fine, some coarse, reasonably well sorted, grey.
21	25			Same as 19 to 21 ft.
25	28	5		Silty sand, medium to very coarse with some fine gravel, greyish borwn with tan silt, subangular, poorly sorted.
28	32			Same as 25 to 28 ft.
32	35	4.5		Silty sand, coarse to very coarse with some fine to medium gravel, very silty, tan silt, greyish brown sand and gravel, subrounded, poorly sorted, dirty.
35	42	3.5		Gravelly sand, coarse to very coarse with small to medium pebbles, brownish grey with some tan silt, subrounded to subangular, poorly sorted, dirty.
42	49	2		Clayey sand, medium to coarse with some fine gravel, brown to orange clayey silt, poorly sorted, drives very hard.

WELL CONSTRUCTION LOG
(UNCONSOLIDATED)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

*Depth Below Land Surface

Project NY1394CH01 Well OW-4
Town/City _____
County Westchester State New York
Permit No. _____
Land-Surface Elevation
and Datum 49.8 feet Surveyed
 Estimated
Installation Date(s) 3-15-88
Drilling Method 2-1/2 in. wash boring
Drilling Contractor D.L. Maher
Drilling Fluid Water

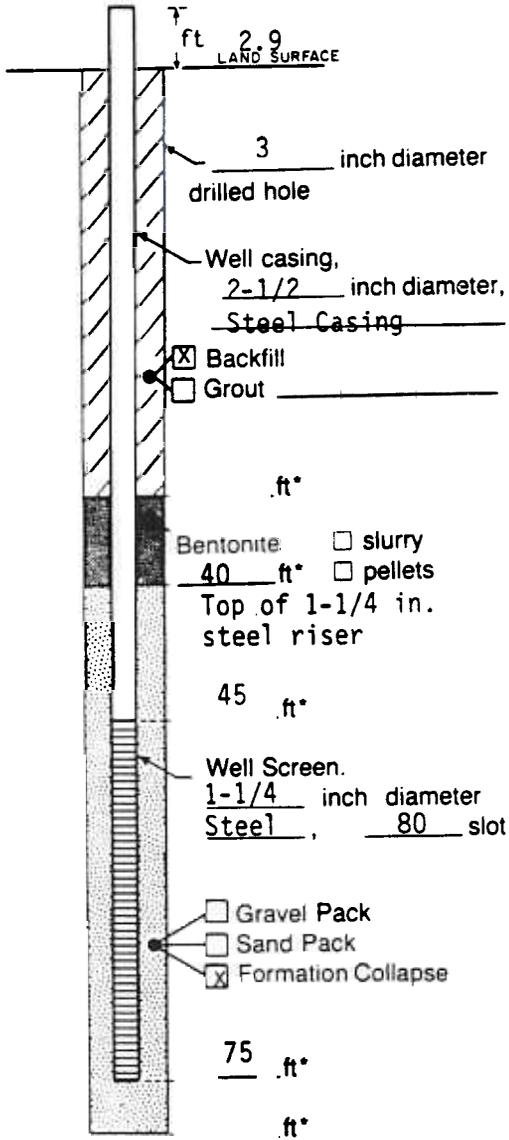
Development Technique(s) and Date(s)
Pumped with centrifugal pump 3-16-88.

Fluid Loss During Drilling _____ gallons
Water Removed During Development 450 gallons
Static Depth to Water 12 feet below LS
Pumping Depth to Water _____ feet below M.P.
Pumping Duration 1 hours
Yield 7 to 8 gpm Date 3-16-88
Specific Capacity _____ gpm/ft
Well Purpose Monitoring

Remarks Flush mounted in curb box.

Prepared by R. Eby

WELL CONSTRUCTION LOG
(UNCONSOLIDATED)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

*Depth Below Land Surface

Project NY1394CH01 Well OW-5

Town/City _____

County _____ State New York

Permit No. _____

Land-Surface Elevation
and Datum 46.2 feet Surveyed
 Estimated

Installation Date(s) 3-14-88
2-1/2 in. wash boring

Drilling Method _____

Drilling Contractor D.L. Maher

Drilling Fluid Water

Development Technique(s) and Date(s)

Pumped approximately 3 hours on 3-14-88 through 3-15-88

Fluid Loss During Drilling _____ gallons

Water Removed During Development approx. 3,000 gallons

Static Depth to Water 6.1 feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration 2-1/2 hours

Yield 60 gpm Date 3-15-88

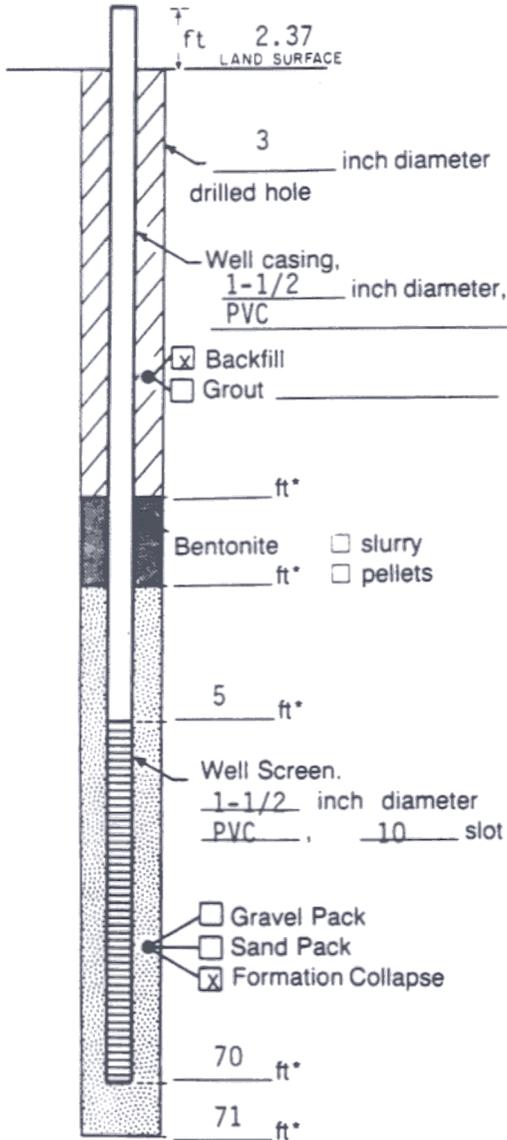
Specific Capacity _____ gpm/ft

Well Purpose Monitoring

Remarks Driller felt this work should have produced more water. It produced 60 gpm with 21 inch vacuum.

Prepared by R. Eby

WELL CONSTRUCTION LOG
(UNCONSOLIDATED)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted

*Depth Below Land Surface

Project NY1394CH01 Well OW-6
Town/City Croton-on-Hudson
County Westchester State New York

Permit No. _____

Land-Surface Elevation
and Datum 43.5 feet Surveyed
 Estimated

Installation Date(s) 3-16-88

Drilling Method 2-1/2 in. wash boring

Drilling Contractor D.L. Maher

Drilling Fluid Water

Development Technique(s) and Date(s)
Pumped with centrifugal pump 3-16-88.

Fluid Loss During Drilling _____ gallons

Water Removed During Development 550 gallons

Static Depth to Water _____ feet below M.S.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration 1 hours

Yield approx. 9 gpm Date 3-16-88

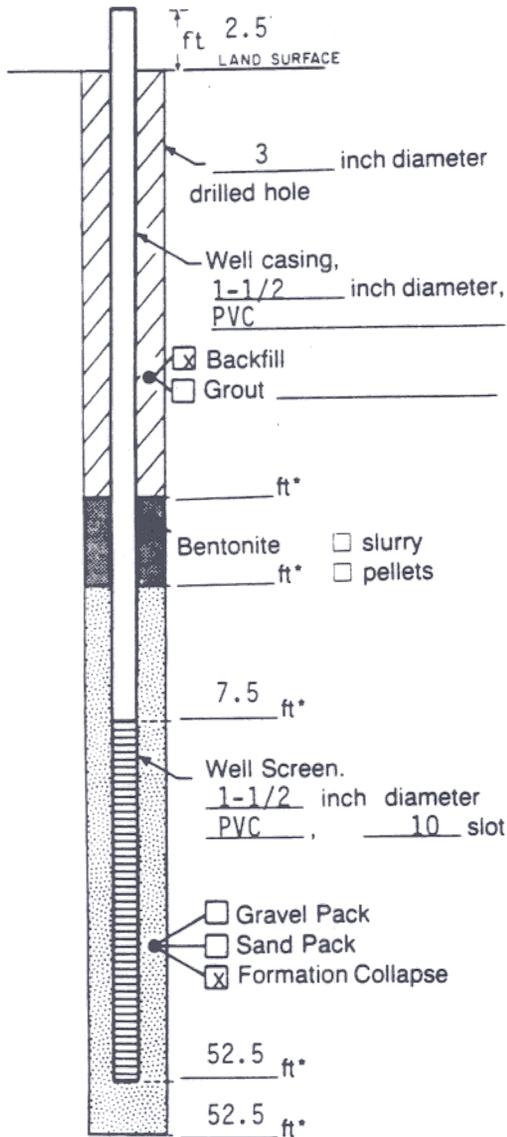
Specific Capacity _____ gpm/ft

Well Purpose Monitoring

Remarks Finished with steel protective casing
locked with Master #0464).

Prepared by R. Eby

WELL CONSTRUCTION LOG
(UNCONSOLIDATED)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

*Depth Below Land Surface

Project NY1394CH01 Well OW-7
Town/City Croton-on-Hudson
County Westchester State New York
Permit No. _____

Land-Surface Elevation
and Datum 40.8 feet Surveyed
 Estimated

Installation Date(s) 3-16-88
Drilling Method 2-1/2 in. wash boring
Drilling Contractor D.L. Maher
Drilling Fluid Water

Development Technique(s) and Date(s)
Pumped with centrifugal pump 3-16-88.

Fluid Loss During Drilling _____ gallons
Water Removed During Development approx. 600 gallons
Static Depth to Water 2.5 feet below ^{L.S.P.} M.P.
Pumping Depth to Water _____ feet below M.P.
Pumping Duration 1 hours
Yield 10 to 11 gpm Date 3-16-88
Specific Capacity _____ gpm/ft
Well Purpose Monitoring well

Remarks Finished with steel protective casing
(locked with Master #0464).

Prepared by R. Eby