DOWN
Construction
Preliminary Data
Econ River

Aquifer System Monitor Wells:
Surficial S-1300
Intermediate S-1301
Floridan S-1201
Floridan S-1200

SJRWMD Program No. 31-58200

Division of Ground Water Programs,
Department of Resource Management
St. Johns River Water Management District
Palatka, Florida

December 5, 2000

All data, figures, tables and information are provisional and generated for the Division of Ground Water Program's use.

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General Information

Site: Econ River

Service Request: Brian McGurk Division of Ground Water Programs

Purpose: Ground water model data for Division of Needs And Sources

Work:

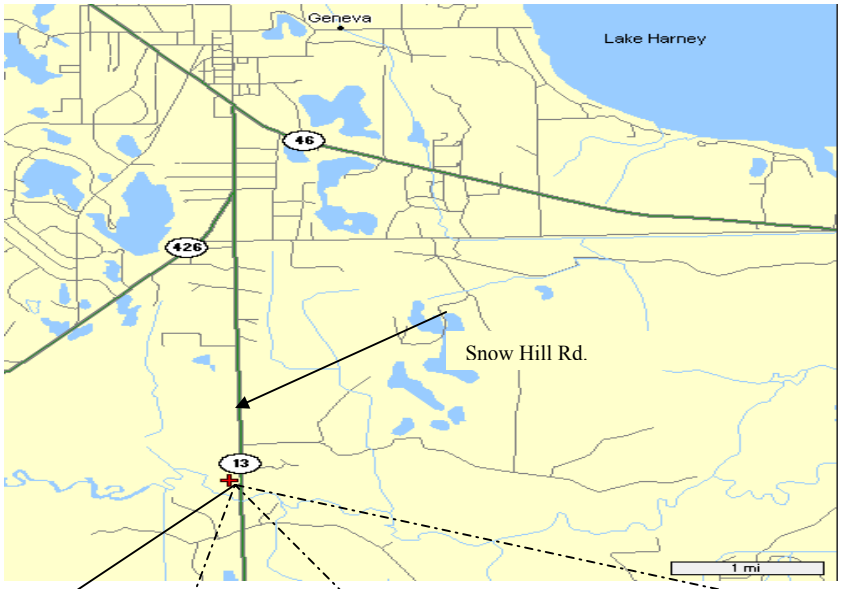
Monitor Well Construction
SJRWMD
Huss Drilling Inc.

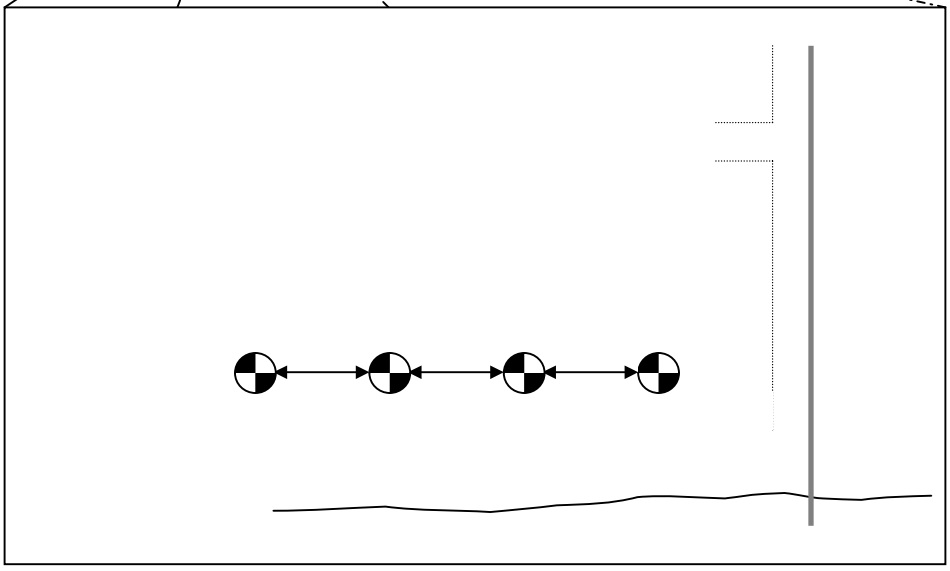
Geophysical Logging:
SJRWMD

Report: Robert Brooks

Notes:

S-1300 (Surficial)
5/01/96, Well completed; constructed using mud rotary drilling method.
S-1301 (Intermediate)
5/01/96, Well completed; constructed using mud rotary drilling method.
S-1201 (Floridan)
6/13/96, Well completed; constructed using mud rotary and reverse air drilling methods.
S-1200 (Floridan)
6/01/95, Lost 80-ft of 1-inch steel tremie pipe at ~ 419-ft during grouting process.
6/13/96, Well completed; constructed using mud rotary and reverse air drilling methods.
5/30/00, Tool box and survey umbrellas stolen from site. Window in Peterbuilt broken; incident report filed with Seminole Co. Sheriffs Office.
12/02/00, Confusion with I.D. tags and depths of S-1200 and S-1201; Jim Robbirds and Bill Osburns e-mail following page.
12/07/00, Wells sounded. S-1200 and S-1201 were originally mistagged. Well tags corrected. Site map reflects corrections.





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Not To Scale

Site:	Econ River
Lat/Long:	284050/810653
TRS:	213209
Topo:	Geneva
Site Elevation:	20 ft NGVD
Project No:	31-58200

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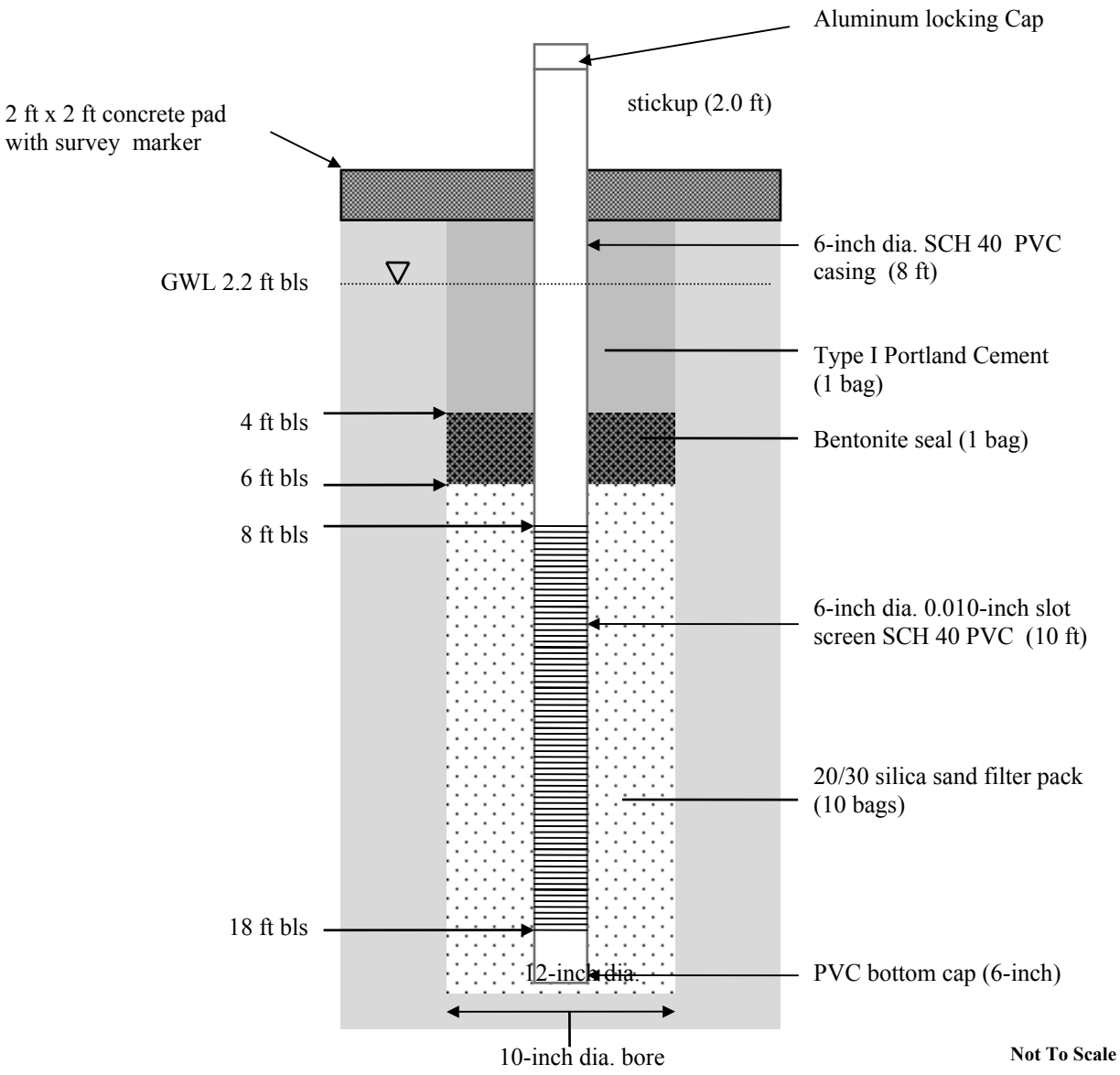
Figure 1. Site Map



Site:	Econ River
Driller:	Huss Drilling Inc.
Well Completed:	May 1, 1996

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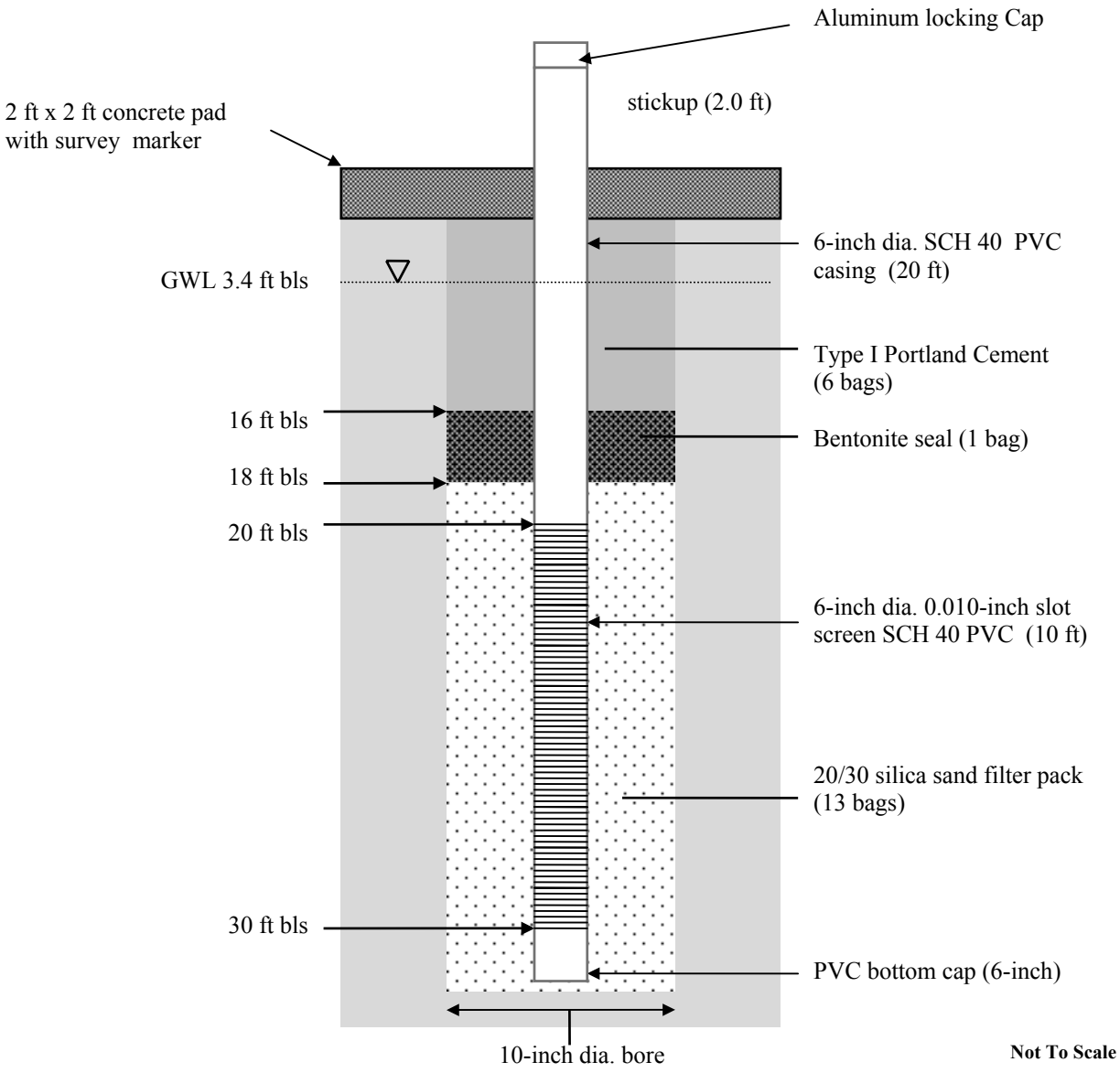
Figure 2. Surficial Monitor Well S-1300



Site:	Econ River
Driller:	Huss Drilling Inc.
Well Completed:	May 1, 1996

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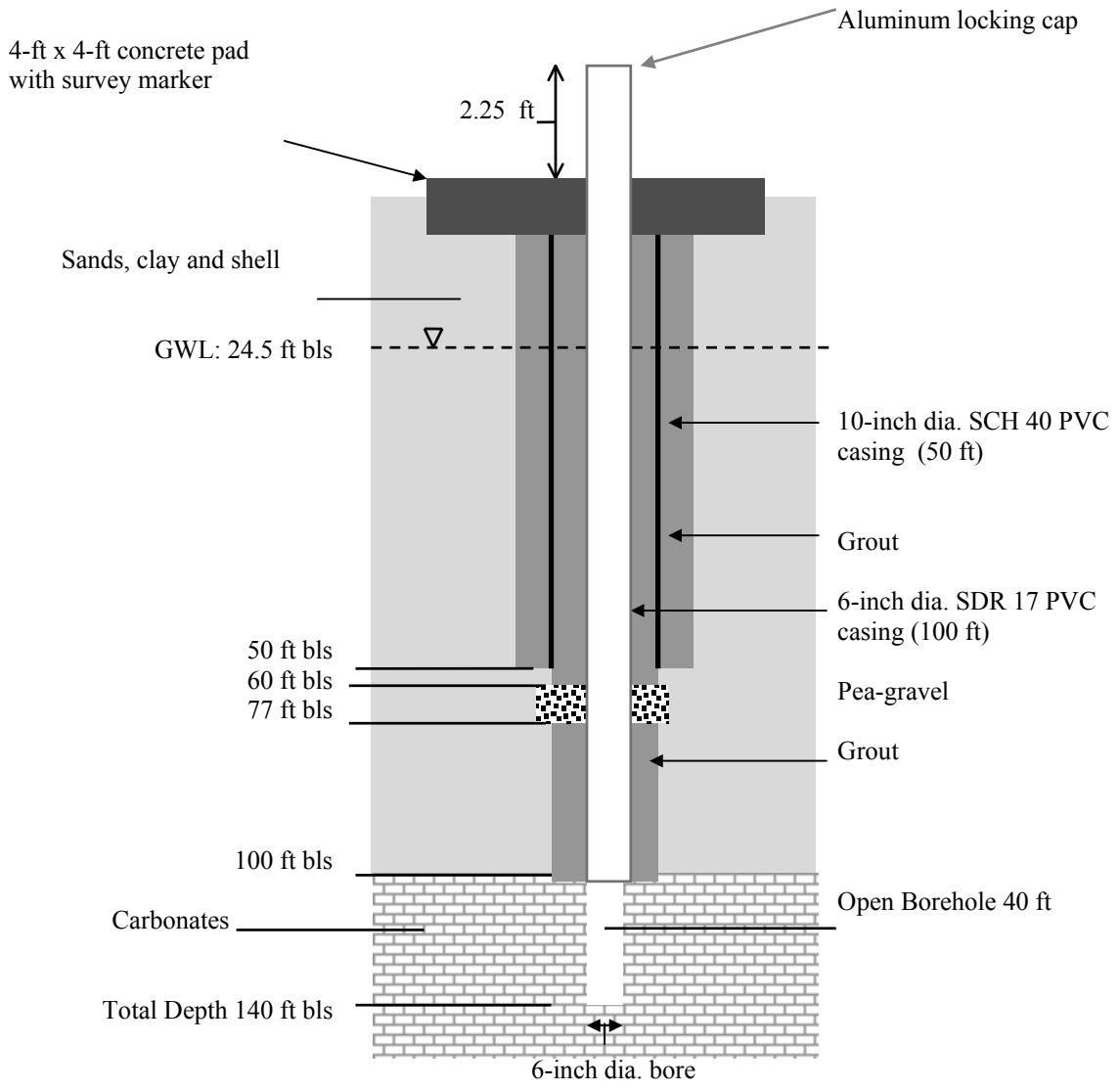
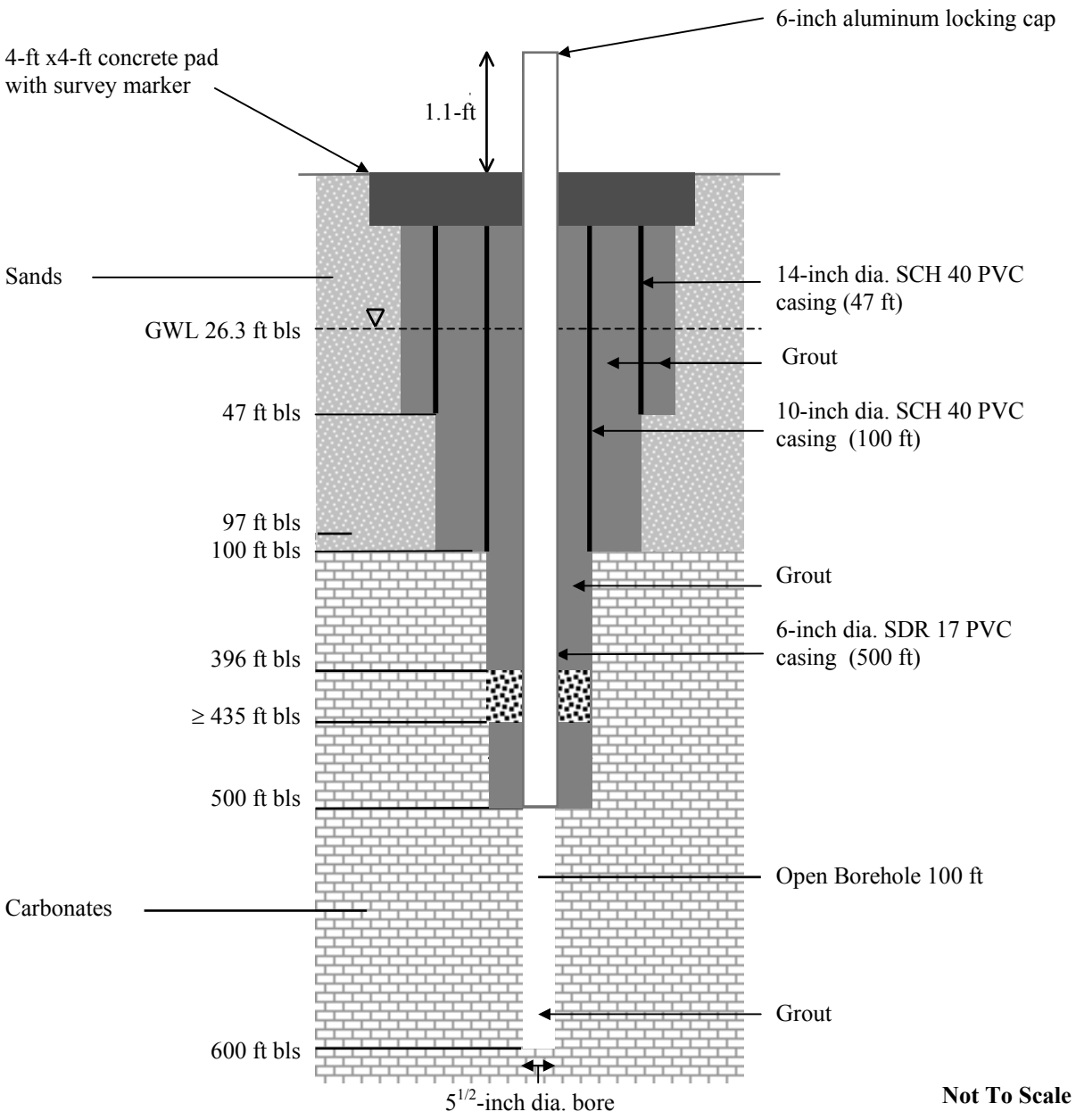
Figure 3. Intermediate Monitor Well S-1301



Site:	Econ River
Driller:	SJRWMD
Well Completed:	June 27, 1995

SJRWMD

Figure 3. Floridan Monitor Well S-1201



Site:	Econ River
Driller:	SJRWMD
Well Completed:	June 13, 1995

SJRWMD

Figure 5. Floridan Monitor Well S-1200

Table 1. **Ground Water Levels**

Site: Econ River **Well Number:** S-1200

Field Representative: Alan Story

Water Levels			Well Borehole Characteristics	
Date/Time (yymmdd/hhmm)	Casing (ft bls)	Rod (ft bls)	Total Depth (ft bls)	Open Hole (ft)
950426/1021	4.7	-	140	40
950426/1120	4.4	-	160	60
950426/1232	3.7	-	180	80
950426/1335	3.5	-	200	100
950426/1430	3.1	2.4	220	120
950426/1526	3.0	2.4	240	140
950427/0700	1.4	-	245	145
950427/0915	0.8	2.0	260	160
950427/1030	2.1	2.3	280	180
950427/1130	2.0	2.6	300	200
950427/1230	2.0	2.9	320	220
950501/1225	1.2	1.2	340	240
950501/1405	2.4	3.0	360	260
950501/1515	2.2	2.8	380	280
950502/0705	1.4	1.0	395	295
950502/1225	1.1	1.2	400	300
950503/0705	0.7	0.3	420	320
950503/1330	1.7	1.3	440	340
950504/0705	1.1	0.7	460	360
950508/1000	0.7	0.5	466	366
950509/0700	0.9	0.8	480	380
950523/0915	1.3	0.8	495	395
950524/0700	1.3	-	500	400
950608/1210	3.7	3.2	520	420
950612/1100	1.9	-0.6	535	435
950612/1230	2.0	2.7	540	440
950612/1530	1.8	2.3	560	460
950613/0745	1.8	2.0	580	480
950613/1240	2.1	-	600	500

Table 2. **Groundwater Quality And Development**

Site: Econ River **Field Representative**: Alan Story

LAB ✓	Well ID	Date (yymmdd/hhmm)	Rate (gpm)	Pumping GWL (ft bls)	Static GWL (ft bls)	∑ Vol (gal)	Temp (Deg C)	pH	Conductivity (us/cm)
✓	S-1300	960430/1515	2.5	NR	4.15	150	21.0	5.7	131
✓	S-1301	960501/0950	20	NR	5.08	2400	22.5	6.9	742

Comments: 1. Mud rotary drilling method used for construction.
2. Barifos added prior to development.
3. Wells developed by surging and pumping with centrifugal pump.

Table 3. **Groundwater Quality**

Site: Econ River **Well Number:** S-1201

Field Representative: Alan Story

LAB ✓	Date/Time (yymmdd/hhmm)	Sample Depth (ft bls)	Open Hole (ft)	Temp (Deg C)	Chlorides (mg/L)	Specific Conductivity (us/cm)
	950627/0940	120	20	27.0	1660	4654
	950627/1035	140	40	28.0	1680	5317

Comments: Well developed with reverse air for 65-minutes, gpm not recorded.

Table 4. **Groundwater Quality**

Site: Econ River **Well Number:** S-1200

Field Representative: Alan Story

LAB ✓	Date/Time (yymmdd/hhmm)	Sample Depth (ft, bls)	Open Hole (ft)	Temp (Deg C)	Chlorides (mg/L)	Specific Conductivity (us/cm)
✓	950426/0941	140	40	28.0	1720	5459
✓	950426/1054	160	60	28.0	1760	6171
✓	950426/1205	180	80	25.0	2180	6868
	950426/1305	200	100	24.5	1990	6631
	950426/1410	220	120	24.0	1770	6696
✓	950426/1550	240	140	24.0	1530	6490
✓	950427/0840	260	160	24.5	1420	6223
	950427/1010	280	180	25.5	1320	6099
	950427/1110	300	200	26.0	1360	6087
	950427/1210	320	220	26.0	1380	6087
	950427/1315	340	240	26.5	1260	5976
	950501/1350	360	260	27.0	1270	5818
	950501/1445	380	280	27.0	1280	5672
✓	950502/0820	400	300	25.0	1270	5252
	950502/1540	420	320	27.0	1400	5090
	950503/1255	440	340	27.0	1710	6399
✓	950503/1540	460	360	27.0	1800	6884
	950508/1120	480	380	26.5	1340	6662
✓	950523/1235	500	400	27.0	1780	6012
✓	950608/1132	520	20	28.0	3400	9700
	950612/1200	540	40	27.0	3850	13090
✓	950612/1355	560	60	28.0	4250	12342
	950613/0745	580	80	26.0	4120	12070
✓	950613/0930	600	100	26.5	4020	12442

Comments: Well developed with reverse air for 75-minutes, gpm not recorded.

Table 5. **Grout Data**

Site: Econ River **Well Number**: S-1201

DATE	TAG DEPTH (ft bls)	ANNULUS/ BORE (inch dia.)	VOLUME (yards/bags)	GROUT/ MATERIAL	COMMENTS
6/14/95	50	14-A	18 bags	Grout	Set 50-ft of 10-inch dia. SCH 40 PVC casing; Grout through tremie pipe
6/15/95	30	14-A	15 bags	Grout	Grout through tremie pipe, with return
6/20/95	100	10-A	34 bags	Grout	Set 100-ft of 6-inch dia. SCH 40 PVC casing; Grout through tremie pipe
6/21/95	78	10-A	19 bags	Grout	Grout through tremie pipe
6/22/95	77	10-A	3 yards	Pea-gravel	Gravel used to fill voids
6/26/95	60	10-A	36 bags	Grout	Grout through tremie pipe with return

Table 6. **Grout Data**

Site: Econ River **Well Number**: S-1200

DATE	TAG DEPTH (ft bls)	ANNULUS/ BORE (inch dia.)	VOLUME (yards/bags)	GROUT/ MATERIAL	COMMENTS
4/18/95	47	18-A	14 bags	Grout	Set 47-ft of 14-inch dia. SCH 40 PVC casing; grout through tremie pipe
4/25/95	100	14-A	17 bags	Grout	Pressure grout 100-ft of 10-inch dia. SCH 40 PVC casing
4/25/95	No Tag	14-A	32 bags	Grout	Grout through tremie pipe, no return
4/26/95	90	10-B	-	-	Grout tag inside10-inch dia. casing
5/11/95	480	10-B	19 bags	Grout	Backplug dredging zone
5/15/95	460	10-B	18 bags	Grout	Backplug dredging zone
5/16/95	460	10-B	18 bags	Grout	Backplug dredging zone
5/17/95	460	10-B	3 yards	Grout	Backplug dredging zone
5/18/95	460	10-B	3 yards	Grout	Backplug dredging zone
5/22/95	460	10-B	-	-	Drill out
5/24/95	500	10-B	20 bags	Grout	Pressure grout 500-ft of 6-inch dia. SCH 40 PVC casing
5/25/95	No Tag	10-B	3 yards	Grout	Tremie stops at 435-ft, no hard tag on grout
5/30/95	No Tag	10-B	-	-	Tremie stops at 435-ft, no hard tag on grout
5/31/95	No Tag	10-B	5 yards	Pea-gravel	Gravel used to fill voids
5/31/95	396	10-B	3 yards	Grout	Grout through tremie pipe
6/01/95	319	10-B	3 yards	Grout	Grout through tremie pipe
6/05/95	239	10-B	3 yards	Grout	Grout through tremie pipe
6/06/95	159	10-B	3 yards	Grout	Grout through tremie pipe
6/07/95	95	10-B	3 yards	Grout	Grout through tremie pipe wit return

Lithologic Description

Site: Econ River **Well ID:** S-1300

Samples Described By: Alan Story

From (ft)	To (ft)	Lithology
0	5	Clay, gray, sandy
9	11	Sand, light gray
14	16	Sand, brown, silty
19	21	Clay, greenish blue, solid, 5% shell
24	26	Shell and sand, fine, light green
29	31	Clay, gray, sandy, minor shell

Lithologic Description

Site: Econ River **Well ID:** S-1200

Samples Described By: R. Brooks

From (ft)	To (ft)	Lithology
0	5	Sand, pale yellowish brown, fine to medium
5	20	Sand, pale yellowish brown, silty
20	30	Clay, light olive gray, some shell
30	40	Shells with minor clay, yellowish gray
40	45	Shell bed
45	50	Shells with minor clay, yellowish gray
50	60	Shell bed
60	65	Limestone, yellowish gray
65	70	Limestone, pale olive, echinoids
70	75	Shells and sand, yellowish gray
75	79	Limestone, yellowish gray
79	81	Clay, grayish olive
81	85	Limestone, yellowish gray, sandy
85	100	Limestone, yellowish gray, pelletal
100	110	Limestone, yellowish gray, minor sand
110	180	Limestone, yellowish gray, pelletal
180	200	Limestone, yellowish gray, echinoids
200	215	Limestone, yellowish gray, hard
215	230	Limestone, yellowish gray, pelletal
230	240	Limestone, yellowish gray, *dictyconus*
240	260	Limestone, pale orange
260	300	Limestone, pale orange, minor dolomite
300	310	Limestone, yellowish gray
310	320	Limestone, yellowish gray, shell casts
320	340	Limestone, yellowish gray
340	350	Limestone, yellowish gray, branching corals
350	370	Limestone, yellowish gray, echinoids and shell casts
395	400	Dolomite, light olive gray
400	470	Dolomite, light olive gray, hard
470	480	Dolomite, pale yellowish brown, pin point porosity, sucrosic
480	500	Dolomite, pale yellowish brown, some peat, pin point porosity, sucrosic
500	520	Limestone, very pale orange, and dolomite, dark gray
520	550	Dolomite, pale yellowish brown, some peat, pin point porosity, sucrosic
550	600	Dolomite, moderate yellowish brown, vuggy

Geophysical Logs

Site: Econ River **Well ID:** S-1200

Logger: SJRWMD **Date:** 5/23/95