

**DOWN
Construction
Preliminary Data
Campbell Ranch Site**

**Aquifer System Monitor Wells:
Surficial OS-0228
Floridan OS-0231
Intermediate OS-0232**

SJRWMD PROGRAM NO. 31-52800

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

October 5, 1999

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

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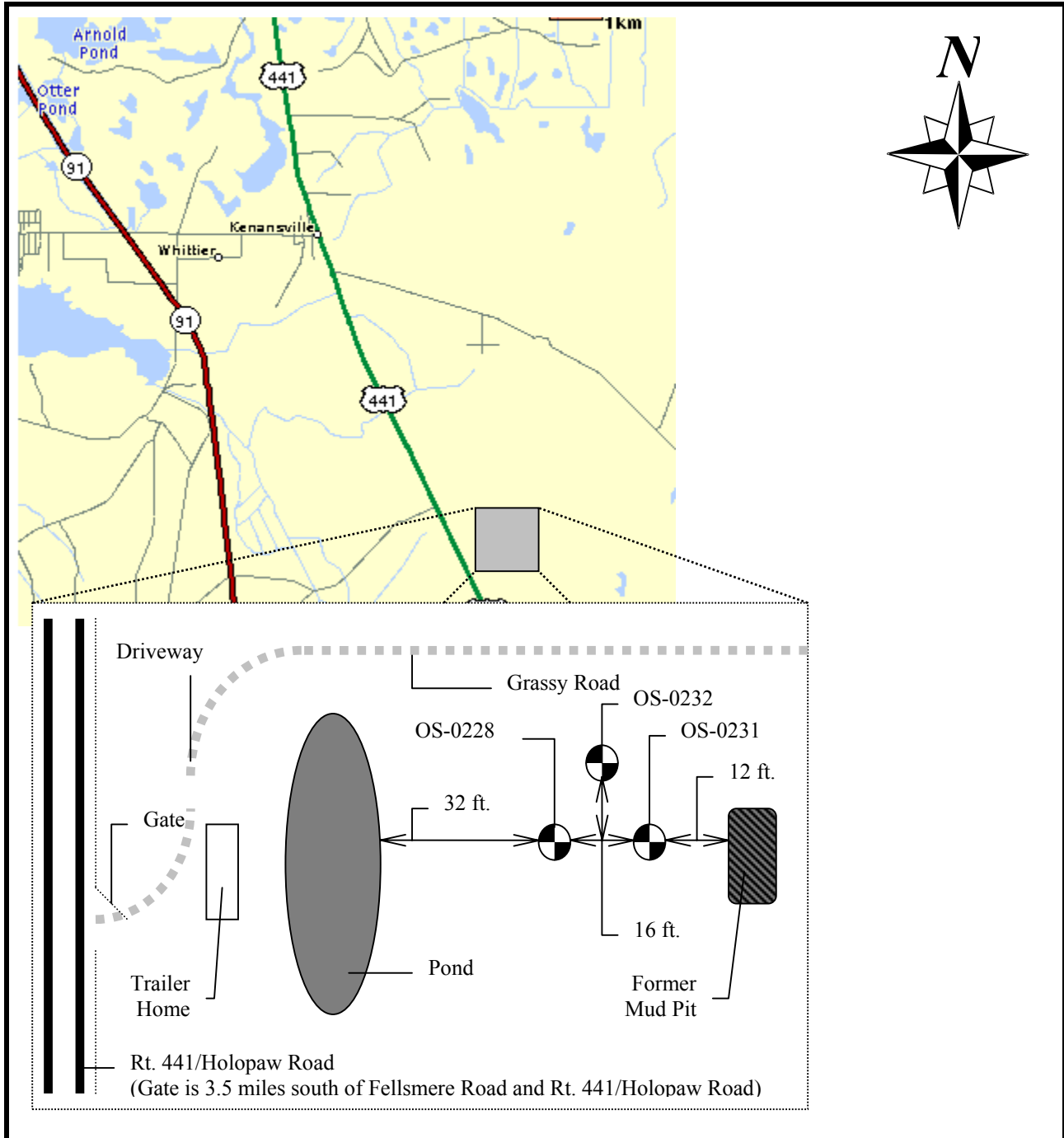
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Ground Water Levels

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Grout Tables

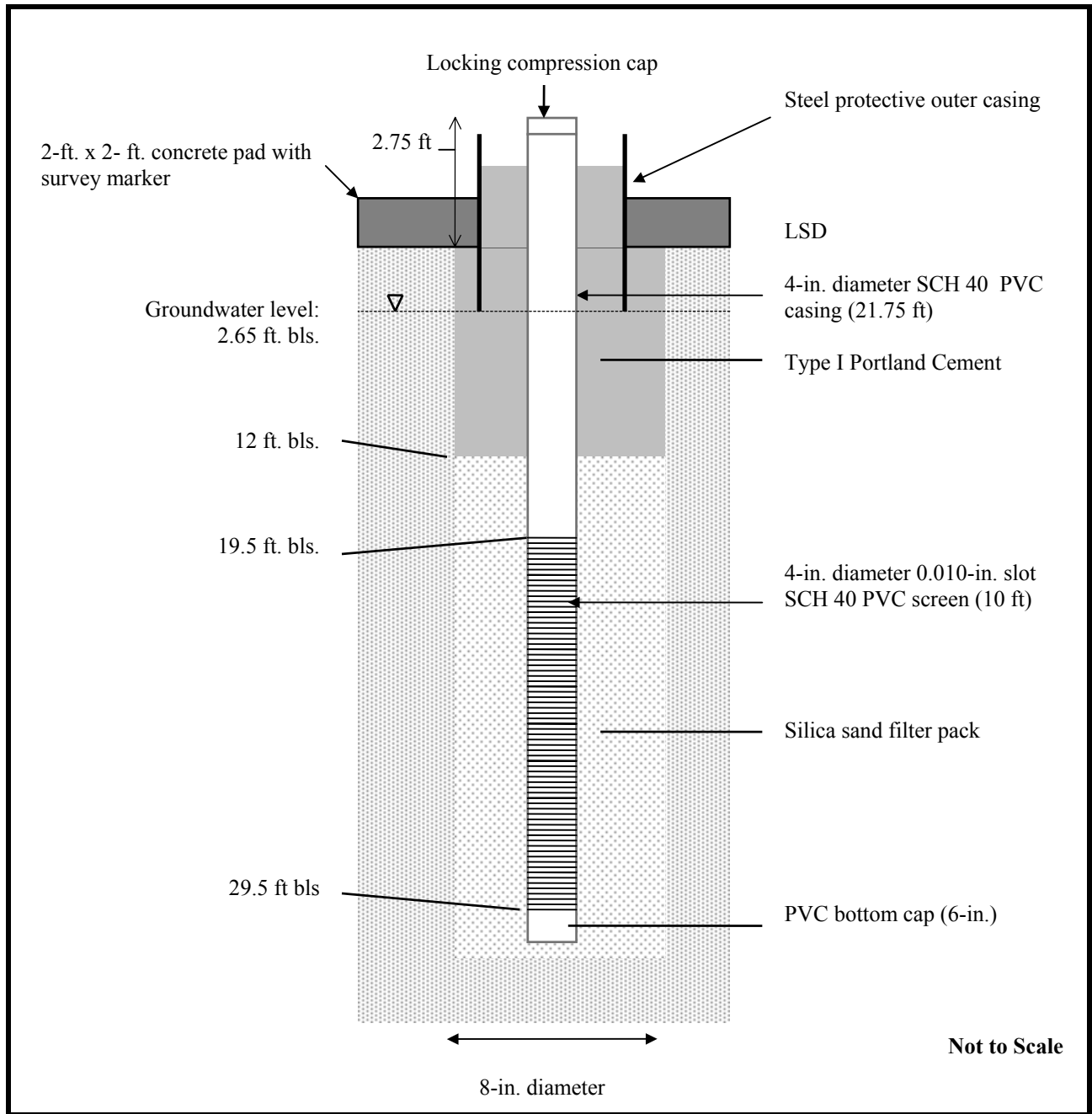
Lithologic Description



Site: Cambell Ranch Site
Lat/Long: 274946/805735
TRS: 30S 34E 31
Topo: Kenansville
Site Elevation: ~72 ft NGVD
Project No: 031-58200

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Figure 1. Site Map



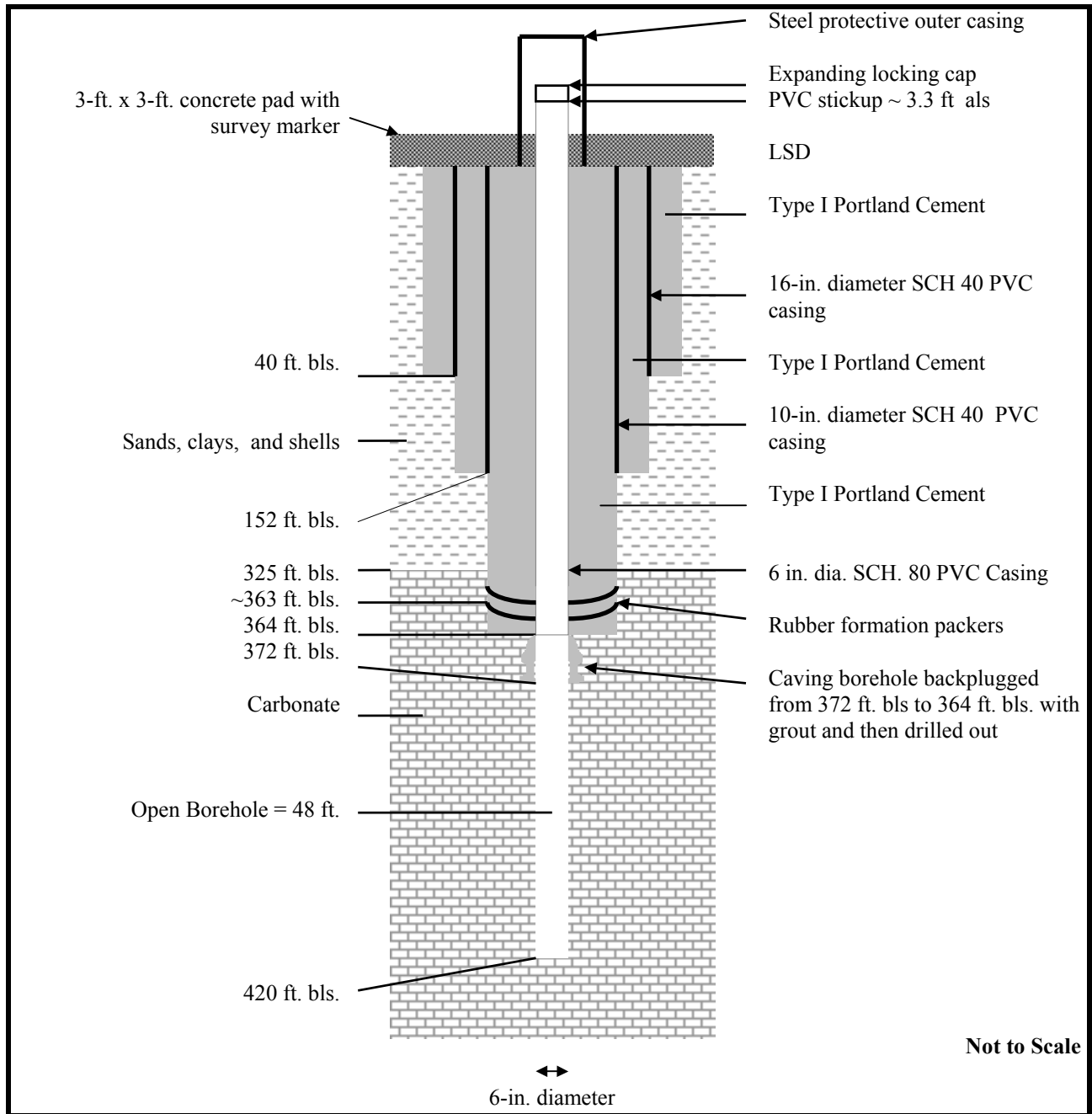
Site: Campbell Ranch

Driller: Florida Geological Survey

Well Completed: July 24, 1997

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**Figure 2. Surficial Monitor Well:
OS-0228**



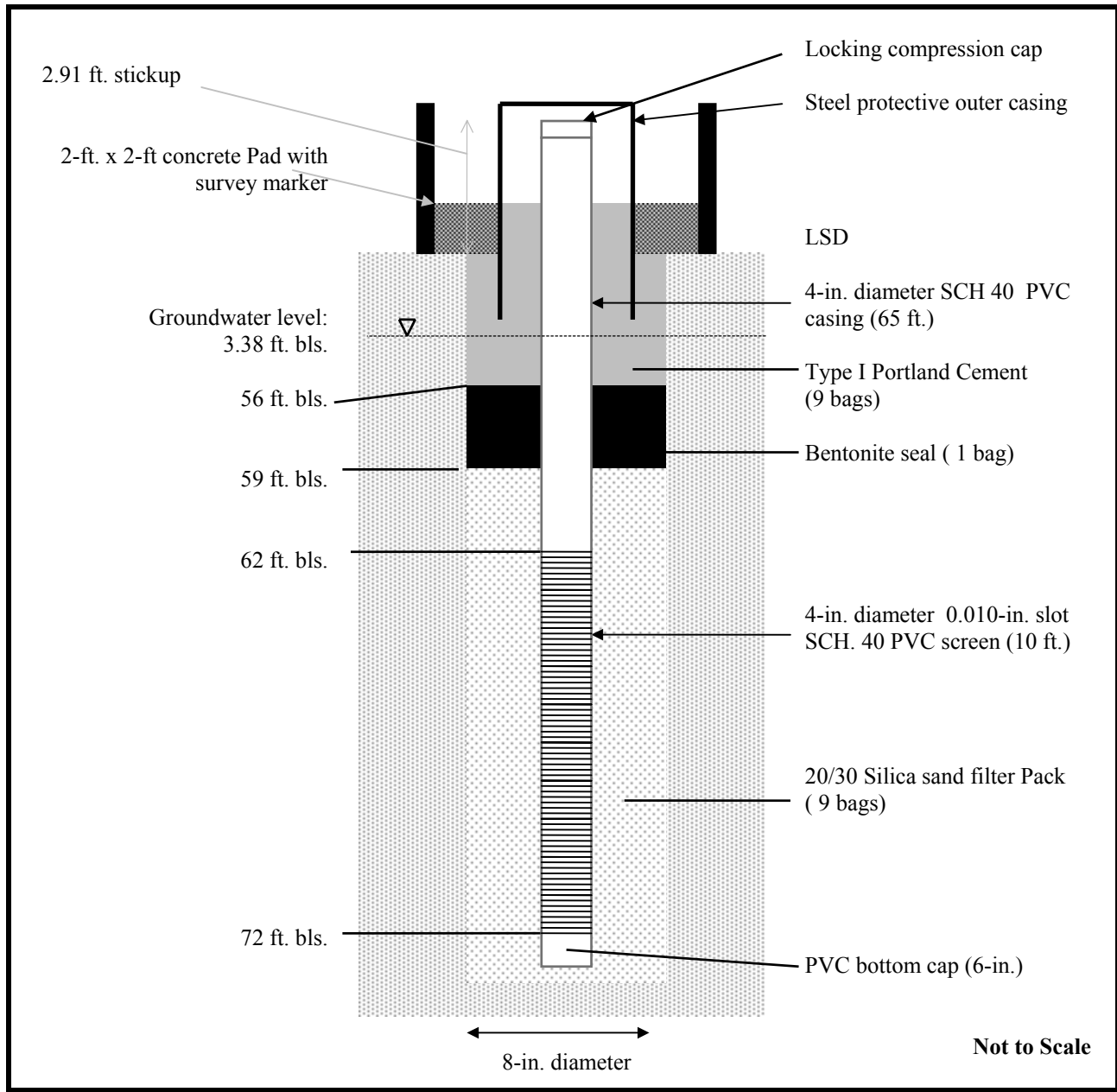
Site: Campbell Ranch

Driller: DOWN

Well Completed: July 7, 1995

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**Figure 3. Floridan Monitor Well:
OS-0231**



Site: Campbell Ranch Site

Driller: Huss Drilling, Inc.

Well Completed: March 31, 1998

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Figure 4. Intermediate Monitor Well: OS-0232

Table 1. Static Groundwater Levels

Site: Campbell Ranch

Water Levels			
Well No.	Date/Time (yy:mm:dd/hh:mm)	DTW (ft, TOC)	TOC Stick Up (ft.)
OS-0228	970724-NR	5.4	2.75
OS-0231	980210-NR	28.6	3.25
OS-0232	980331-1500	6.29	2.91

Table 2. Groundwater Levels During Drilling

Site: Campbell Ranch

Well ID: OS-0230

Water Levels			Borehole	
Date/Time (yy:mm:dd/hh:mm)	Casing (ft, bls)	Rod (ft, bls)	Total Depth (ft, bls)	Open Hole (ft)
980204-1457	28.43	NR	420	48
980205-0908	34.06	NR	420	48

Table 3. Drilling Data

Site: Campbell Ranch

Well ID: OS-0230

From (ft, bls)	To (ft, bls)	Bit Size (in.)	Time (min)	Rate (ft/hr)
372	380	5 1/2	5	96
380	400	5 1/2	5	120
400	420	5 1/2	20	30

Table 4. Groundwater Quality

Site: Campbell Ranch

LAB ✓	Well No.	Date/Time (yy:mm:dd/hh:mm)	Sample Depth (ft, bls)	Open Hole (ft, bls)	Temp (Deg C)	Chlorides (mg/L)	Conductivity (us/cm)
✓	OS-0231	950204-1600	420	48	23	25.4	442
✓	OS-0232	980331-1410	72	62-72	24	NA	622

Note: OS-0228 water quality data not available.

Table 5. Grout Data: Monitor Well: OS-0231

DATE	TAG DEPTH (ft. bls.)	ANNULUS/ BORE (in. dia.)	VOLUME (YARDS/BAGS)	GROUT/ MATERIAL	COMMENTS
1-13-98	40	20-A	30 bgs	Type I Portland	Grout 16 in. dia. SCH. 40 PVC casing in place from 40 ft. bls. to LSD
1-14-98	40	20-A	2 bgs	Type I Portland	Grout 16 in. dia. SCH. 40 PVC casing in place from 40 ft. bls. to LSD
1-14-98	152	14-A	20 bgs	Type I Portland	Grout 10 in. dia. SCH. 40 PVC casing in place from 152 ft. bls.
1-15-98	97	14-A	31 bgs	Type I Portland	Tremie grout 10 in. dia. SCH. 40 PVC casing to LSD
1-28-98	364	10-A	11 bgs	Type I Portland	Grout 6 in. dia. SCH. 80 PVC casing in place from 364 ft. bls.
1-29-98	364	10-A	58 bgs	Type I Portland	Tremie grout 6 in. dia. SCH. 80 PVC
2-3-98	372	10-B	12 bgs	Type I Portland	Back plug caving borehole from 372 ft. bls.
2-4-98	310	10-B	NA	Type I Portland	Tag grout at 310 ft. bls. Inside of casing, drill out grout/rock to 410 ft. bls.
2-4-98	23	10-A	6 bgs	Type I Portland	Tremie grout 6 in. dia. SCH. 80 PVC casing to LSD

Lithologic Description

Site: Campbell Ranch

Well ID: OS-0228

Samples Described By: Florida Geological Survey

From (ft)	To (ft)	Lithology
0	15.2	Sand, brown, medium, with clay
3	36.5	Sand, light brown, medium
10	50.5	Sand, light brown, medium-fine, with clay blebs
50.5	50.75	Sand, green, coarse, with shell and clay

Lithologic Description

Site: Campbell Ranch

Well ID: OS-0231

Samples Described By: A. Story

From (ft)	To (ft)	Lithology
0	3	Sand, white, med-fine.
3	10	Sand, light brown, med-fine.
10	20	Sand, tan, fine, trace clay, tan.
20	30	Sand, tan, very fine.
30	40	Sand, tan, fine, with clay
40	60	Sand, light brown, very fine, with trace clay, light brown.
60	80	Shell, with trace clay, dark green.
80	97	Shell, with trace clay, gray.
97	110	Shell, with trace clay, gray and sandstone, tan.
110	120	Shell, with trace clay gray.
120	140	Shell, with trace clay, green and phosphate.
140	180	Clay, green, with trace shell.
180	190	Clay, green, with chert, black, and shell fragments.
190	215	Clay, green, with shell fragments.
215	253	Limestone, light tan, phosphatic, with trace peat and chert, black.
253	273	Clay, green, phosphatic.
273	290	Limestone, white, phosphatic.
290	298	Chert, black/brown, phosphatic.
298	330	Clay, green, phosphatic.
330	325	Chert, black/brown, phosphatic.
325	340	Limestone, white, phosphatic.
340	345	Limestone, white, phosphatic, with trace clay, green.
345	352	Limestone, white, phosphatic, with shell and trace clay, white.
352	362	Limestone, light tan, with trace peat.
362	368	Limestone, tan-brown.
368	405	Limestone, light tan, fossiliferous (<i>lepidocyclina</i>).
405	415	Limestone, white.
415	420	Limestone, light tan, fossiliferous (<i>lepidocyclina</i>).

Lithologic Description

Site: Campbell Ranch

Well ID: OS-0232

Samples Described By: J. Segó

From (ft)	To (ft)	Hammer Blow Count	Lithology
0	59	NA	No samples collected
59	61	4/4/4/5	Shell, with med-fine sand and clay, gray, and heavy minerals
64	66	8/15/8/17	Shell, with med-fine sand, gray, and heavy minerals
69	71	7/13/15/18	SAA
74	76	4/6/9/12	Shell, with fine sand, silt, and clay, gray, indurated zones, trace hardpan
79	81	4/6/8/12	Shell, with fine sand, silt, and trace clay, gray