### DOWN Construction Preliminary Data Merritt Island National Wildlife Refuge Forest, Volusia County

Aquifer System Monitor Wells: Intermediate V-0841 Floridan V-0840

SJRWMD Program No. 31-58200

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

February 11, 1999

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

i:data/gwpcom/../Prelim/Volusia/V0840P.DOC. JSEGO 12/9/2002

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### **Table 1. Groundwater Quality**

Site: Merrit Is. Nat'l Wildlife RefugeWell Number: V-0840Hydrologist: J. SegoCasing Depth: 145 ft bls

LAB ✓	Date/Time (yy:mm:dd/hh:mm)	Sample Depth (ft, bls)	Open Borehole (ft, bls)	Temp (Deg C)	Chlorides (mg/L)	Conductivity (us/cm)
	980625-1317	195	145-195	NR	NR	60000
	980625-420	195	145-195	NR	NR	70000
	980625-430	195	145-195	NR	20000	NR
	980625-1515	195	145-195	NR	NR	NR
$\checkmark$	980626-1522	195	145-195	NR	NR	NR

#### Table 2. Groundwater Quality

Site: <u>Merrit Is. Nat'l Wildlife Refuge</u>

Well Number: <u>V-0841</u>

Hydrologist: J. Sego

Casing Depth: \_\_Screened 69 ft to 89 ft bls

LAB ✓	Date/Time (yy:mm:dd/hh:mm)	Sample Depth (ft. bls)	Screened Interval (ft. bls)	Temp (Deg C)	Chlorides (mg/L)	Conductivity (us/cm)
	980626-1320	89	69-89	NR	4600	7830
	980626-1352	89	69-89	NR	NR	9890
$\checkmark$	980626-1420	89	69-89	26.7	6120	14000

#### Table 3. Grout Data

Site: <u>Merrit Is. Nat'l Wildlife Refuge</u>

Well ID: <u>V-0840</u>

DATE	TAG	ANNULUS/	QUANTITY	MATERIAL	COMMENTS
	DEPTH	BORE	(yds/bgs)		
	(ft)	(in.)			
06/23/98	60	14- A	5 bgs	Bentonite	Set 10-in. casing to 60
					ft. bls.
06/24/98	145	10- A	40 bgs	Type I	Set 6-in. casing from
				Portland	145 ft bls to +3-ft

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## **Lithologic Description**

## Site: Merrit Is. Nat'l Wildlife Refuge

## Well Number: <u>V-0840</u>

# Hydrologist: J. Sego

From	То	Hammer	Lithology
(ft)	(ft)	<b>Blow Counts</b>	
0	58	NA	No samples collected
58-60	60	Shelby Tube	Sand and clay, gray
64-66	66	1/3/3/3	Clay, sandy, gray-green, with shell to 65 ft. bls, shell bed with clay to 66 ft. bls.
69-71	71	2/4/6/7	Clay, sandy, gray-green to 70 ft. bls., sand, medium fine, and shell, with some clay to 71 ft. bls.
74-76	76	2/4/5/7	Sand, fine, gray-green, with silt and some shell
79-81	81	3/6/9/5	Sand, fine, gray-green, with shell fragments
84-86	86	2/4/5/7	Sand, fine, gray-green, with shell fragments to 85 ft. bls., shell bed (lost mud circulation)
89-91	91	2/2/2/2	Sand, fine, gray-green, with some clay
94-96	96	2/2/2/1	Sand, fine, gray-green, with some clay
99-101	101	2/5/5/3	Shell, and clay, green to 100 ft. bls., gray clay and
			phosphatic shell to 101 ft. bls.
104-106	106	6/5/7/20	Shell fragments (> 0.5 in. thick) with sand medium fine, gray, calcareous, with some silt, phosphate, and
			lenses of green clay and sand (lost mud circulation)
109-111	111	1/1/3/9	Sand and clay, olive green, phosphatic, with shell
113-119	119	Core Barrel	Silt, light green, well indurated, distinct bedding,
		Sample	phosphatic, with chert to 114 ft. bls., phosphatic green
		(3 ft. of return)	clay and poorly indurated silt to 115.5 ft. bls, sand and
			clay, dark green, phosphatic, with phosphate intraclasts
			(1 in. dia.), and indurated green silt, fracture noted
			from 115. 5 to 116 ft. bls.
119-120	120	Core Barrel	Sand, fine and clay, light green, well indurated,
		Sample	phosphatic
		(1 ft. of return)	
120-132	132	NA	Sand, fine and clay, light green, well indurated,
			phosphatic
132-135	135		Indurated, dolomitized brown, phosphatic limestone to
			135 ft. bls.
135 - 195	195	NA	Limestone, creme colored, fossiliferous (numulites,
			lepidocyclina), dolomitic @ 170 ft. bls, trace clay,
			white at 185 ft. bls., voids noted from 179-195 ft. bls.