DOWN
Construction
Preliminary Data
NASA on Merritt Island

Aquifer System Monitor Wells:
Floridan BR-1748

Abandoned:
Floridan BR-1672

SJRWMD Program No. 31-58200

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

May 11, 2001

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

Table of Contents

General Information

Site: NASA on Merritt Island

Service Request: Bill Osburn Division of Ground Water Programs

Purpose: District Observation Well Network (Potentiometric Map Upper Floridan)
Replaces Floridan Monitor Well BR-1672

Work:

Monitor Well Construction:
SJRWMD

Well Abandonment:
SJRWMD

Laboratory Analysis:
SJRWMD

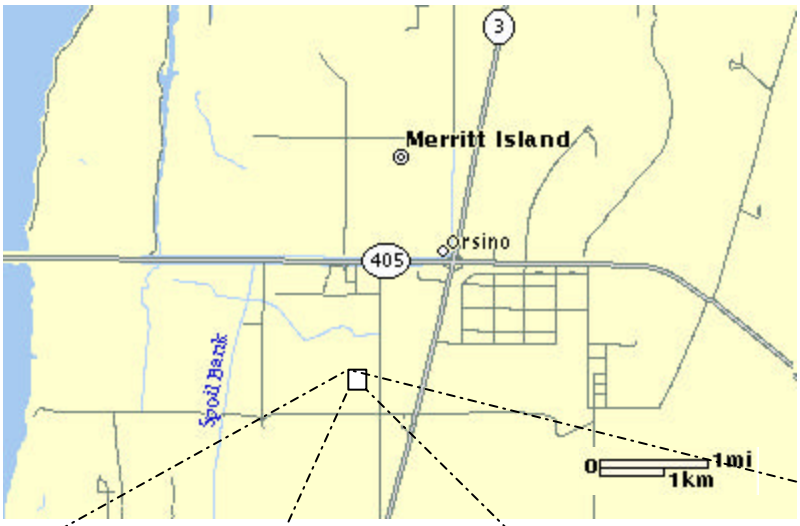
Geophysical Logging:
SJRWMD

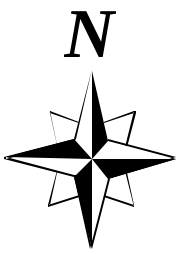
Report: Robert Brooks and John Lombardi

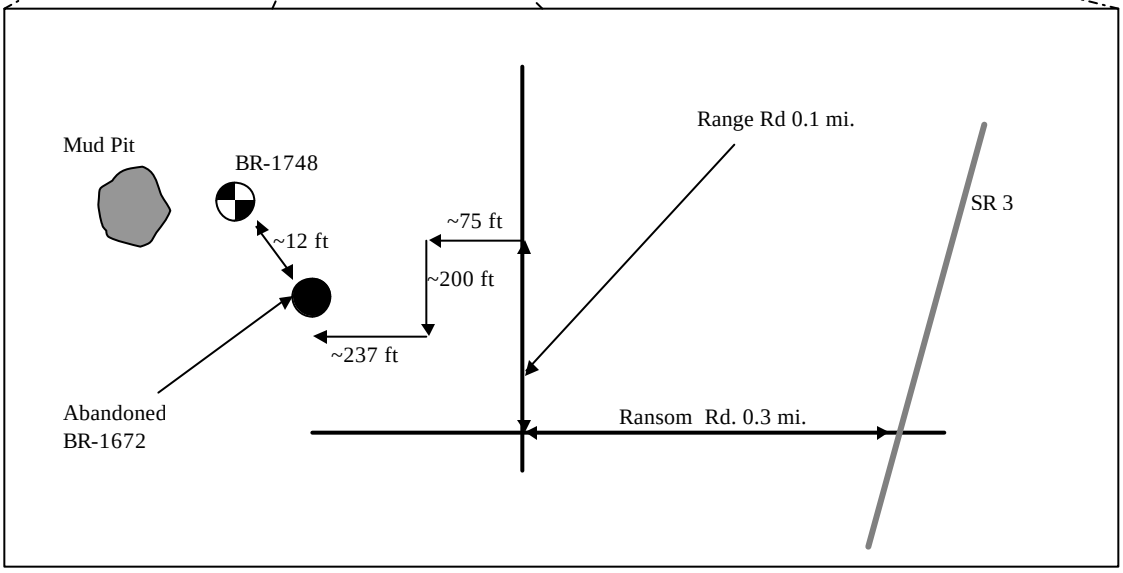
Notes:

BR-1748 (Floridan)
11/02/00, Well completed; constructed using mud rotary drilling method and developed with reverse air

BR-1672 (Floridan)
11/01/00, Well abandoned from bottom to top with grout.







Not To Scale

Project:	NASA on Merritt Island
GPS Lat/Long:	283028/804035
TRS:	23s 36e sec12
Topo:	Orsino
Site Elevation:	~5 ft NGVD
Project No:	58200

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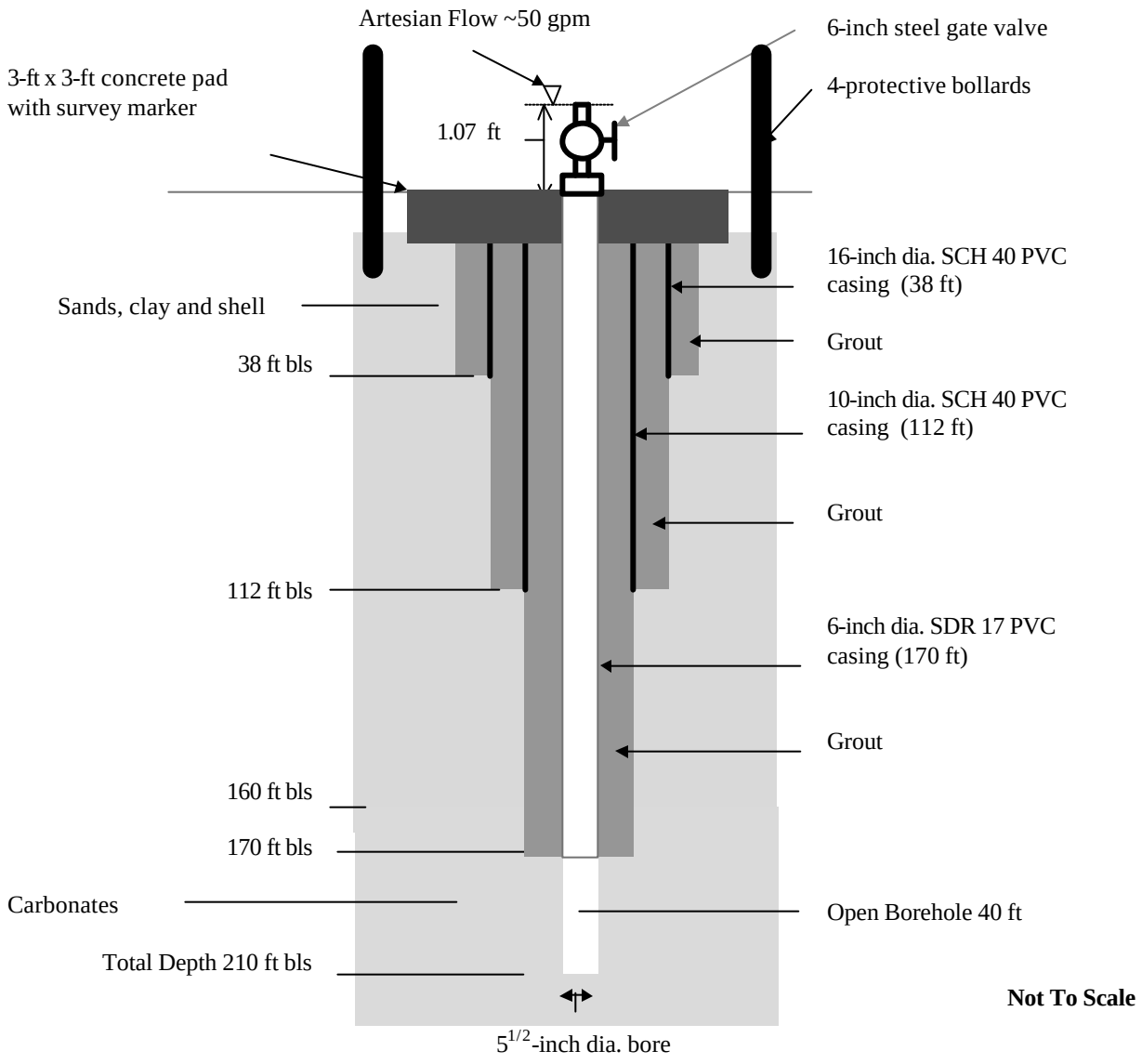
Figure 1. Site Map



Site:	NASA on Merritt Island
Driller:	SJRWMD
Well Completed:	November 2, 2000

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Figure 2. Floridan Monitor Well BR-1748

Table 1. **Groundwater Levels and Drilling Data**

Site: NASA on Merritt Island **Well ID:** BR-1748

Water Levels				Borehole		Drilling Data					
Static ✓	Date/Time (yymmdd/hhmm)	Casing (ft, bls)	Rod (ft, bls)	Total Depth (ft, bls)	Open Hole (ft)	Method Mud/RA	Bit Size (inch)	From (ft, bls)	To (ft, bls)	Time (min)	Rate (ft/hr)
	001018/1330	-	-	0	25	Mud	22	0	25	30	50
	001018/1454	-	-	25	40	Mud	22	25	40	32	28
	001023/1337	-	-	32	52	Mud	15	32	52	12	100
	001023/1405	-	-	52	72	Mud	15	52	72	44	27
	001023/1502	-	-	72	92	Mud	15	72	92	42	28
	0010231550	-	-	92	112	Mud	15	92	112	12	100
	001030/1326	-	-	110	130	Mud	9 7/8	110	130	29	41
	001030/1408	-	-	130	150	Mud	9 7/8	130	150	32	37
	001030/1451	-	-	150	170	Mud	9 7/8	150	170	14	86
	001101/0905	-	-	170	180	Mud	9 7/8	170	180	4	300
	001101/0913	-	-	180	200	Mud	9 7/8	180	200	14	86
	001101/0940	-	-	200	210	Mud	9 7/8	200	210	5	120

Table 2. **Groundwater Quality**

Site: NASA on Merritt Island **Well Number:** BR-1748

Hydrologist: John Lombardi

LAB ✓	Date/Time (yy:mm:dd/hh:mm)	Sample Depth (ft, bls)	Open Hole (ft)	Temp (Deg C)	Chlorides (mg/L)	Specific Conductivity (us/cm)
✓	001101/1120	210	40	24.9	1426	4713

Comments: Developed with reverse air for 1-hour prior to sampling (gpm not recorded).
Water quality of make-up water (10/17/00) chlorides 840 mg/L and conductivity 3905 us/cm.

Table 3. **Laboratory Analysis**

Site: NASA on Merritt Island **Well ID:** BR-1748

Collect Date/Time yymmdd/hhmm	Alk mg/L	Cl mg/L	Cond umhos/cm	F mg/L	SO_4 mg/L	Si-T mg/L	TDS mg/L	Ba-T ug/L	Ca-T mg/L	Fe-T ug/L	K-T mg/L	Mg-T mg/L	Na-T mg/L	Sr-T ug/L
001101/1120	151.321	1,430.060	4,730.000	0.491	78.198	10.472	2850.000	246.840	539.993	2,170.995	13.989	114.533	655.050	6,081.344
Casing depth 170 ft bls Open hole 40 ft														

Table 4. **Grout Data**

Site: NASA on Merritt Island **Well ID:** BR-1748

DATE	TAG DEPTH (ft)	ANNULUS/ BORE (inch)	QUANITY (yds/bags)	MATERIAL	COMMENTS
10/18/00	38	A-22	15 bags	P-94	Set 38-ft of 16-inch dia. PVC casing; Grout through tremie pipe
10/19/00	12	A-22	14 bags		Grout through tremie pipe to land surface
10/23/00	112	A-15	15 bags	P-94	Set 112-ft of 10-inch dia. PVC casing; Grout through tremie pipe
10/24/00	76	A-15	25 bags	P-94	Grout through tremie pipe to land surface
10/30/00	170	A-9 7/8	30 bags	P-94	Set 170-ft of 6-inch dia. PVC casing; Grout through tremie pipe
11/1/00	6	A-9 7/8	2 bags	P-94	Casing grouted to surface

Table 5. **Grout Data**

Site: NASA on Merritt Island **Well ID:** BR-1672

DATE	TAG DEPTH (ft)	ANNULUS/ BORE (inch)	QUANITY (yds/bags)	MATERIAL	COMMENTS
11/1/00	105	B-3	12 bags	P-94	Abandoned well; grout through tremie pipe to surface

Lithologic Description

Site: NASA on Merritt Island **Well ID:** BR-1748

Samples Described By: John Lombardi

From (ft)	To (ft)	Lithology
0	5	Sand, dark brown, very fine
5	10	Sand, dark brown, very fine with light yellow clay inclusion
10	15	Clay, light yellow, coarse with sand inclusion
15	20	Shell, very fine, with phosphate and sand inclusion
20	25	Shell, fine and medium, with phosphate and sand inclusion
25	30	Shell, fine with phosphate and grayish green clay inclusion
30	35	Shell, fine with grayish green clay
35	40	Shell, medium with grayish green clay
40	45	Shell, medium with grayish green inclusion
45	50	Shell, fine with sand inclusion
50	55	Shell, fine with sandstone inclusion
55	60	Sandstone, fine with shell inclusion
60	65	Sandstone, fine with shell inclusion
65	70	Clay, green with medium size pieces of sandstone
70	75	Clay, green with small size shell inclusion
75	80	Clay, green
80	85	Clay, green with small size shells
85	90	Sandstone, medium size gray pieces with green clay
90	95	Sandstone, gray with clay inclusion
95	100	Sandstone, medium with clay inclusion
100	105	Sandstone, gray with small size shell inclusion
105	110	Sandstone, medium with shell inclusion
110	115	Sandstone, gray with medium size shell 80/20 mix
115	120	Sandstone, very fine and fine containing shell fragments
120	125	Clay, olive, sandstone and shell inclusion
125	130	Clay, olive with shell and sandstone inclusion
130	135	Clay, olive with shell and sandstone inclusion 90/10 mix
135	140	Clay, olive with fine phosphate inclusion
140	145	Clay, olive with fine phosphate inclusion
145	150	Clay, olive with very fine phosphate inclusion
150	155	Clay, olive with very fine phosphate inclusion
155	160	Clay, olive with limestone inclusion
160	165	Limestone, tan and fine with clay inclusion
165	170	Limestone, yellowish white, fine to medium
170	180	Limestone, yellowish white, fine with a small amount of fossils
180	190	Limestone, tan, fine to medium with an abundance of fossils

Lithologic Description

Site: NASA on Merritt Island **Well ID:** BR-1748

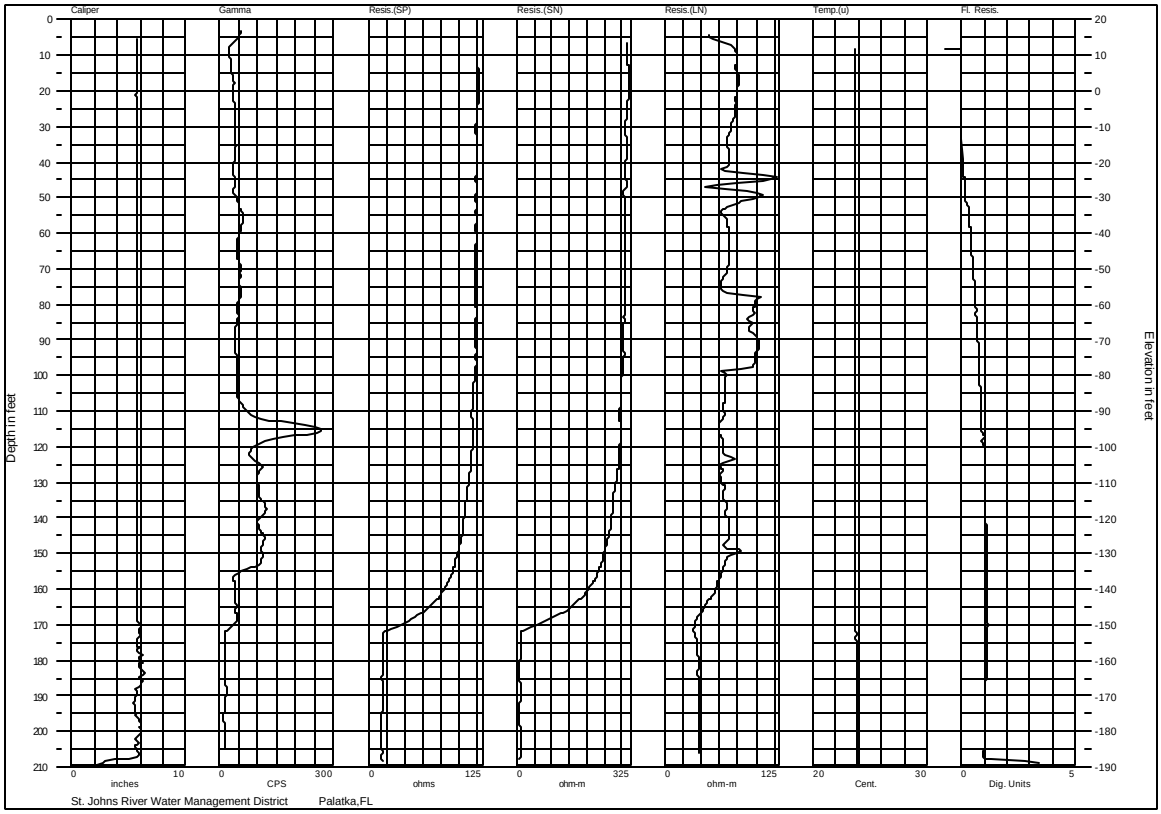
Samples Described By: John Lombardi

From (ft)	To (ft)	Lithology
190	200	Limestone, tan, fine with fossil and shell inclusion
200	210	Limestone, yellowish white with a small amount of fossils

Geophysical Logs

Site: NASA on Merritt Island **Well ID:** BR-1748

Logger: SJRWMD **Date:** 12/19/2000



Geophysical Logs

Site: NASA on Merritt Island **Well ID:** BR-1672

Logger: SJRWMD **Date:** 7/05/2000