

Results of the ECUA #8 Constant Rate Aquifer Test Sand-and-Gravel Aquifer, Escambia County Florida

May 2004

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INTRODUCTION

After PCE was detected in five downtown Pensacola municipal supply wells in June, 1986, NFWMD staff conducted an aquifer performance test in order to determine hydraulic properties of the Sand-and-Gravel Aquifer within this downtown area. On October 15, 1986, a two-day constant discharge test was begun. ECUA supply well #8 was pumped at an average discharge rate of 448 gallons per minute (gal/min). Drawdown levels, measured to 0.01 feet, were recorded in nine monitor and supply wells penetrating the main producing zone of the aquifer. Water levels were also monitored in 12 wells penetrating the surficial zone of the Sand-and-Gravel Aquifer. The aquifer test site and main producing zone well locations are depicted in Figure 1.

HYDROGEOLOGY

The Sand-and-Gravel Aquifer consists primarily of fine to medium quartz sand interbedded with varying amounts of clay. Throughout much of southern Escambia County, the Sand-and-Gravel Aquifer can be subdivided into three distinct zones based on hydraulic characteristics. The surficial zone is the uppermost portion of the Sand-and-Gravel Aquifer and consists of moderately well-sorted, medium sand. Ground water within this zone typically exists under unconfined conditions. Underlying the surficial zone is the low permeability zone which consists of poorly sorted sand and clay. The permeability of the low permeability zone is less than that of the overlying and underlying portions of the aquifer. It forms a leaky confining unit which serves to restrict the vertical movement of water within the aquifer. The lowermost zone within the aquifer is referred to as the main producing zone. This unit consists of moderate to well-sorted medium sand with minor amounts of interbedded clay. This is the most productive unit in the Sand-and-Gravel Aquifer and is the unit tapped by the major supply wells. Underlying the Sand-and-Gravel Aquifer is the Intermediate System which is a regionally extensive confining unit. Figure 2 shows a generalized cross-sectional view of the site hydrogeology.

Natural gamma ray and normal electric logs run were run on MW12D which is located immediately adjacent to the well used to stress the aquifer (ECUA #8). Natural gamma ray logs were also run on the deeper monitor wells constructed as part of the contamination investigation. The logs show the top of the low permeability zone and the top of the main producing zone. These logs are shown in Figure 3.

The thickness of the main producing zone and top of the underlying Intermediate System confining unit were established based on data from wells and borings which fully penetrate the Sand-and-Gravel Aquifer. This includes information regarding the construction of the ECUA production wells, and available driller and geophysical logs from borings located in the general vicinity of the test site.

At the ECUA #8 well the main producing zone is estimated to be 142 ft thick, extending from 98 ft to 240 ft below lsd. The low permeability zone consists of the interval from 53 ft to 98 ft below lsd. The

surficial zone includes the saturated sediments above the low permeability zone. The elevation of the well site is approximately 35 ft above mean sea level (msl).

AQUIFER TEST

ECUA #8 was used as the withdrawal well for this constant discharge test. It is a 26-inch diameter public supply well completed in the middle and lower portion of the main producing zone. This well was screened from 140 ft to 240 ft below lsd. Nine main producing zone observation wells were available for the test. The screened interval and radial distance of the main producing zone observation wells and the ECUA #8 are shown in Figure 2. Static water levels in these wells just prior to the start of the test ranged from approximately 15 to 26 ft msl. Six of the main producing zone observation well sites also had surficial zone wells. Prior to the start of the test the head difference between the six pairs of observation wells ranged from 1.29 ft to 5.55 ft. The gradient was downward at all sites. The non-stressed head difference for the pairs of observation wells are provided in the Table 1. Addition information regarding these wells is included in the appendix.

Table 1. Head difference between the surficial zone and the main producing zone.

Well Names (main prod zone / surficial zone)	Head difference; prior to start of test (surficial zone – main prod zone)
MW1D / MW1S	5.55 ft
MW2D / MW2S	4.09 ft
MW3D / MW3S	4.39 ft
MW4D / MW4S	1.29 ft
MW5D / MW5S	2.22 ft
MW12D / MW12S	2.25 ft

The aquifer performance test was initiated on October 15, 1986. District personnel monitored the discharge and verified a constant rate of 448 gal/min for the duration of the test. District personnel also measured drawdown in all wells. Mechanical float type continuous recorders were installed in several wells. Steel tapes were used in the remainder of the observation wells and were also used to verify the performance of the recorders. Ground water was discharged the ECUA sanitary sewer adjacent to the pump house. The duration of the test was roughly 48 hours (2878 minutes). The static water level and the change in water level during the test are provided in the Table 2.

Table 2. Summary of the water level response to the aquifer test.

Well name	Aquifer unit	Static water level (ft msl)	Water level drawdown (ft) (negative indicates aquifer recovery)
MW1D	main producing zone	20.39	1.67
MW2D	main producing zone	25.32	0.26
MW3D	main producing zone	17.78	2.51
MW4D	main producing zone	15.50	2.45
MW5D	main producing zone	17.67	1.10
MW12D	main producing zone	17.25	5.33
ECUA #6	main producing zone	14.99 *	2.06
ECUA #8	main producing zone	17.09 *	14.25

ECUA #9	main producing zone	26.29 *	0.53
ECUA EAST PLANT	main producing zone	17.76 *	0.45
MW1S	surficial zone	25.94	0.34
MW2S	surficial zone	29.41	-0.05
MW3S	surficial zone	22.17	-0.06
MW4S	surficial zone	16.79	-0.04
MW5S	surficial zone	19.89	0.01
MW6S	surficial zone	23.57	-0.07
MW7S	surficial zone	22.60	-0.06
MW8S	surficial zone	22.41	-0.05
MW9S	surficial zone	23.34	-0.05
MW10S	surficial zone	23.24	-0.06
MW11S	surficial zone	25.51	0.11
MW12S	surficial zone	19.51	-0.07

* estimated: reference point elevation not surveyed

TEST ANALYSIS

The aquifer test data were analyzed using AquiferWin32 software which was developed by Environmental Simulations, Inc. Drawdown data from the observation wells were compared to type curves generated by an analytical model which was consistent with the test procedures and the conceptualization of the Sand-and-Gravel Aquifer as a leaky confined aquifer. Type curves were generated for numerous combinations of parameters in order to assess and obtain the combination of parameters which provided the best match with the observed data.

The nine main producing zone observation wells were analyzed using the Hantush (1964) analytical model. The Hantush (1964) solution simulates the response to pumping an aquifer overlain by a leaky confining unit which is in turn overlain by a constant head source bed. The model also incorporates the effect of partially penetrating wells and variable vertical to horizontal anisotropy ratios (K_z/K_r). In addition, the model assumes:

- well discharge is constant
- well is of infinitesimal diameter
- no release of water from storage in the confining bed
- flow of water through the confining unit is vertical
- the initial potentiometric surface of the aquifer and the water table are horizontal and extend infinitely in the radial direction

This analytical model is consistent with the conceptualization of the Sand-and-Gravel Aquifer as a leaky confined aquifer and is consistent with the procedures utilized in the test. As shown in Table 2, the head in surficial zone was essentially unchanged during the test. Most of the surficial zone wells exhibited a head rise of less than 0.07 ft during the test period while two wells record lowering of head during the test of 0.11 ft and 0.34 ft. The surficial zone well closest to the pumped well (MW12S) showed a 0.07 ft head increase during the 48 hour test. There was no consistent head trend or response within the surficial zone during the test. The surficial zone heads essentially remained constant throughout the two-day duration of the test pumping.

Although the analytical method included the effect of partially penetrating wells, the type curves representing the relative penetration of the various wells was generally insensitive to the anisotropy ratio. Therefore, an anisotropy ratio was not established by this analysis and was set to 0.10.

The analysis of an individual well was sensitive to the leakage factor (B), where $B = \sqrt{\frac{Tb'}{k'}}$. As B increases, r/B decreases and the type curve becomes progressively more similar to a confined type curve. Comparison of data from a specific well to type curves representing progressively higher values of B (lower r/B) results in a higher value of transmissivity and a lower value for leakance. Although data from an individual observation well could be reasonably well fitted to a range of r/B type curves representing significantly different values of B, a single value of B was selected and used to generate the r/B type curves to which the nine observation wells were compared. A single value of B was applied based on the relative homogeneity of the aquifer across the test site as indicated by known yields from public supply wells and geophysical logs. The actual value of B was selected by considering the fit of all of the observation wells to their respective r/B type curve and assessing the reasonableness of the transmissivity and leakance values generated.

Figure 4 through Figure 12 shows the response of the individual observation wells and the r/B type curve applied to the analysis. Table 3 provides a summary of the test results. Figure 13 shows the observed water level drawdown and the predicted response generated using the parameter values specified in Table 3.

Table 3. Summary of the ECUA #8 aquifer performance test results.

Well Name	Transmissivity (ft ² /d)	Storativity (dimension-less)	Aquitard leakance k'/b' (1/d)	r/B (dimension-less)	r (ft)	B (ft)
MW1D	8,700	0.00039	0.00111	0.433	1,212	2,800
MW2D	10,900	0.00094	0.00139	1.357	3,800	2,800
MW3D	8,700	0.00042	0.00110	0.238	667	2,800
MW4D	8,200	0.00035	0.00104	0.281	788	2,800
MW5D	7,500	0.00042	0.00096	0.762	2,133	2,800
MW12D	8,800	0.00056	0.00112	0.037	104	2,800
ECUA #6	8,300	0.00040	0.00106	0.346	968	2,800
ECUA #9	8,600	0.00133	0.00110	1.070	2,997	2,800
ECUA EAST PLANT	10,300	0.00057	0.00131	1.179	3,300	2,800
mean value	8,900	0.00060	0.00113			

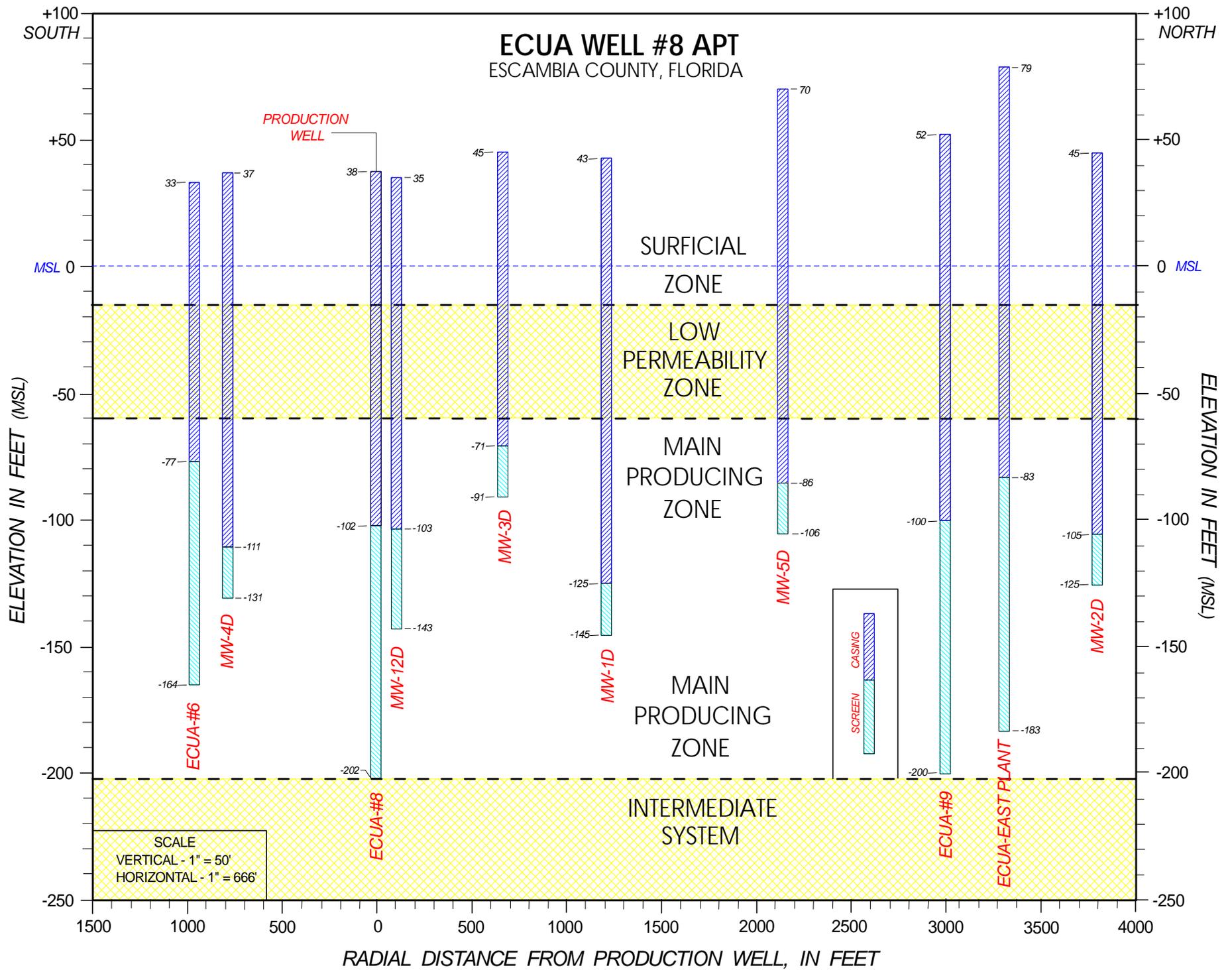


FIGURE 2. GENERALIZED SITE HYDROGEOLOGY.

GEOPHYSICAL LOGS - ECUA #8 APT SITE

SOUTH

NORTH

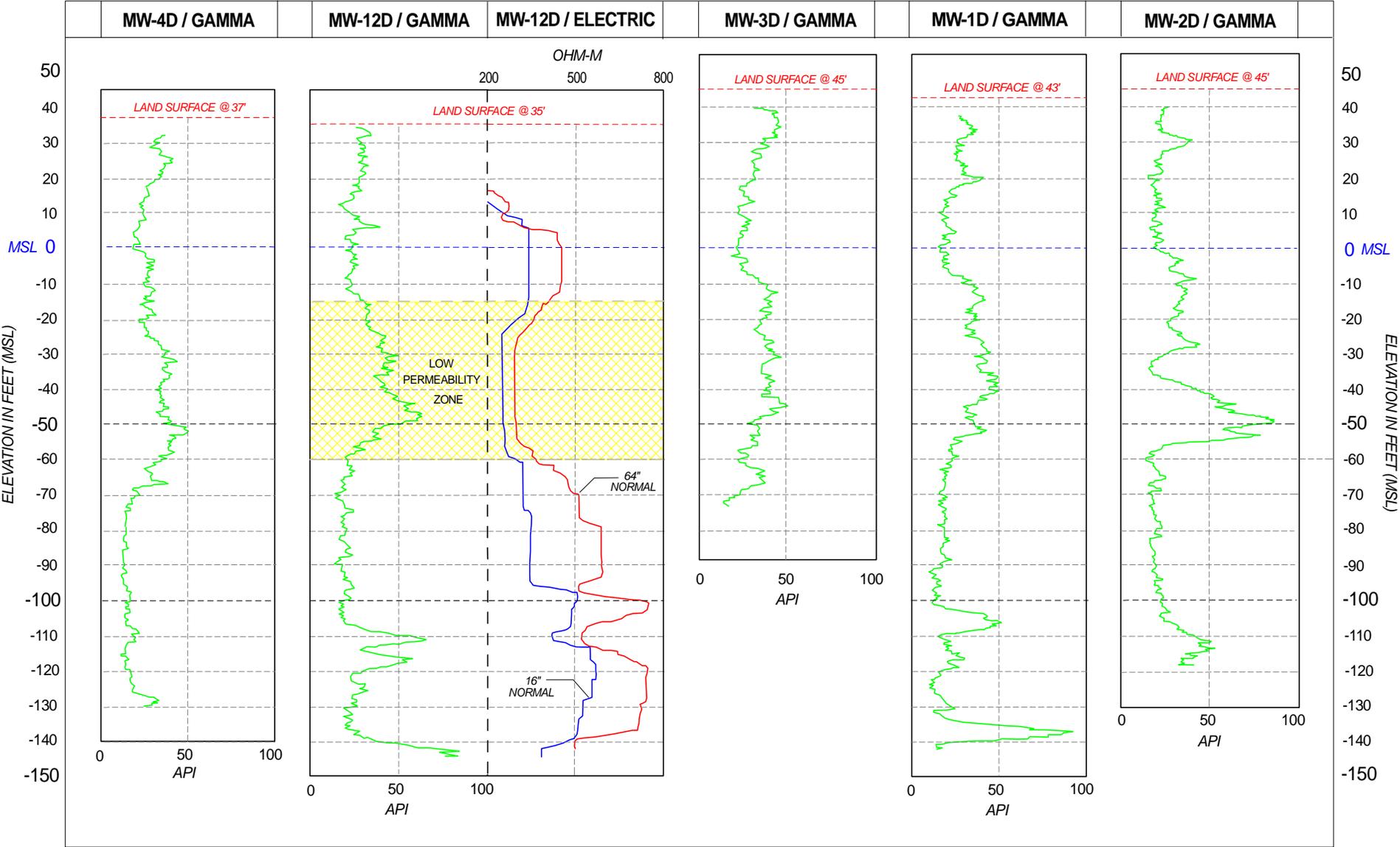


FIGURE 3. GEOPHYSICAL LOGS ACROSS THE ECUA #8 AQUIFER PERFORMANCE TEST SITE.

Figure 4. Aquifer Response and Type Curves for MW1D.

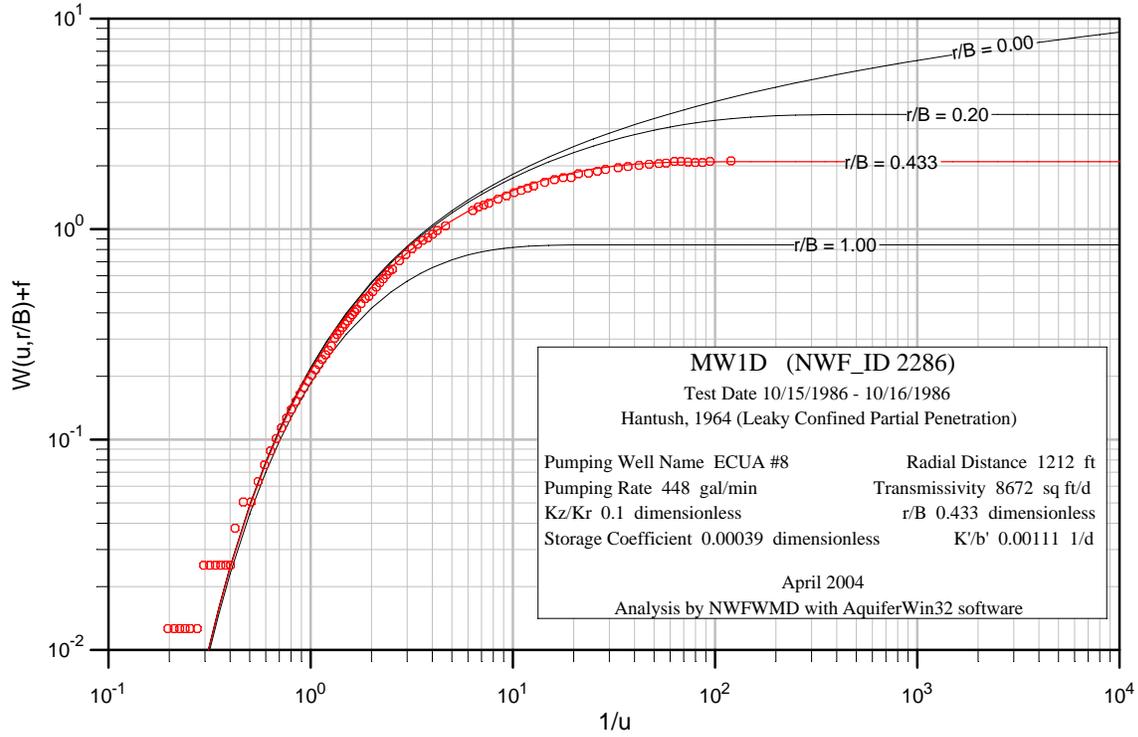


Figure 5. Aquifer Response and Type Curves for MW2D.

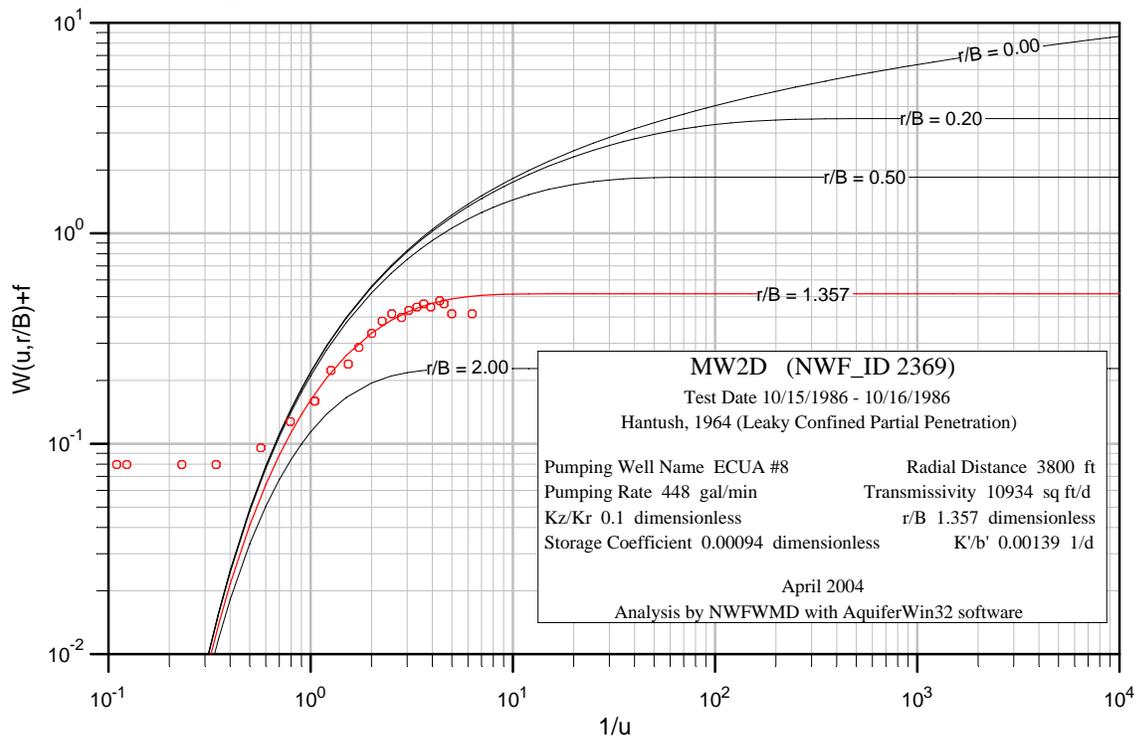


Figure 6. Aquifer Response and Type Curves for MW3D.

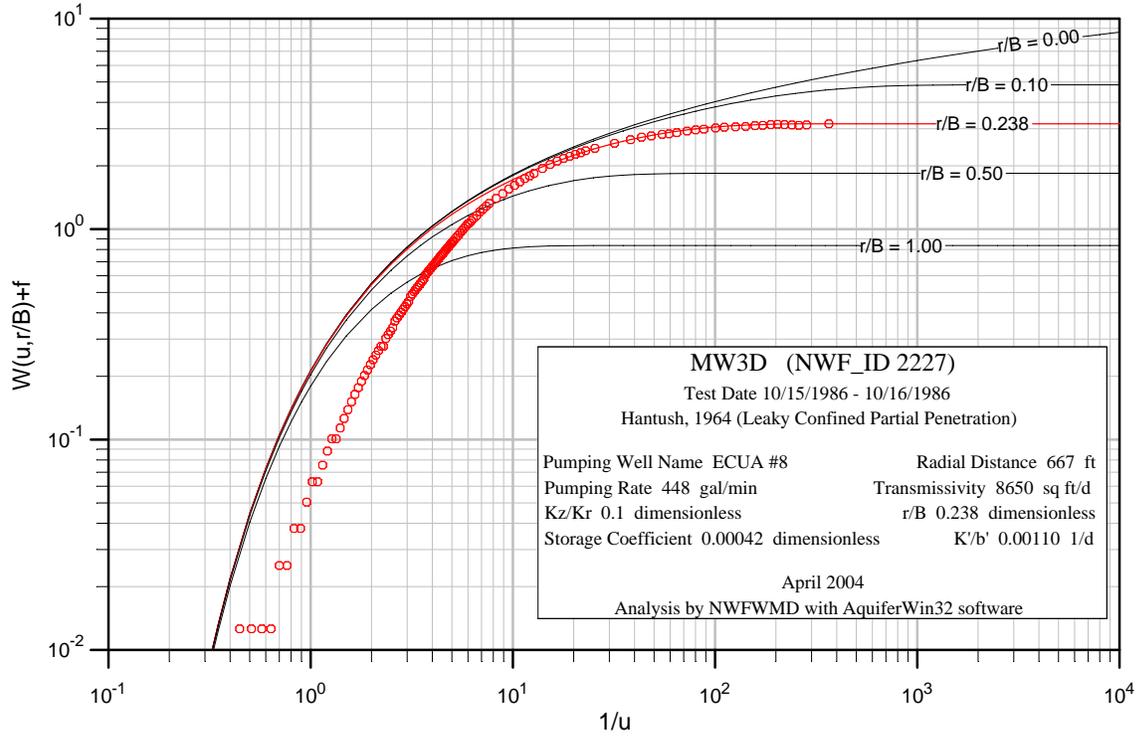


Figure 7. Aquifer Response and Type Curves for MW4D.

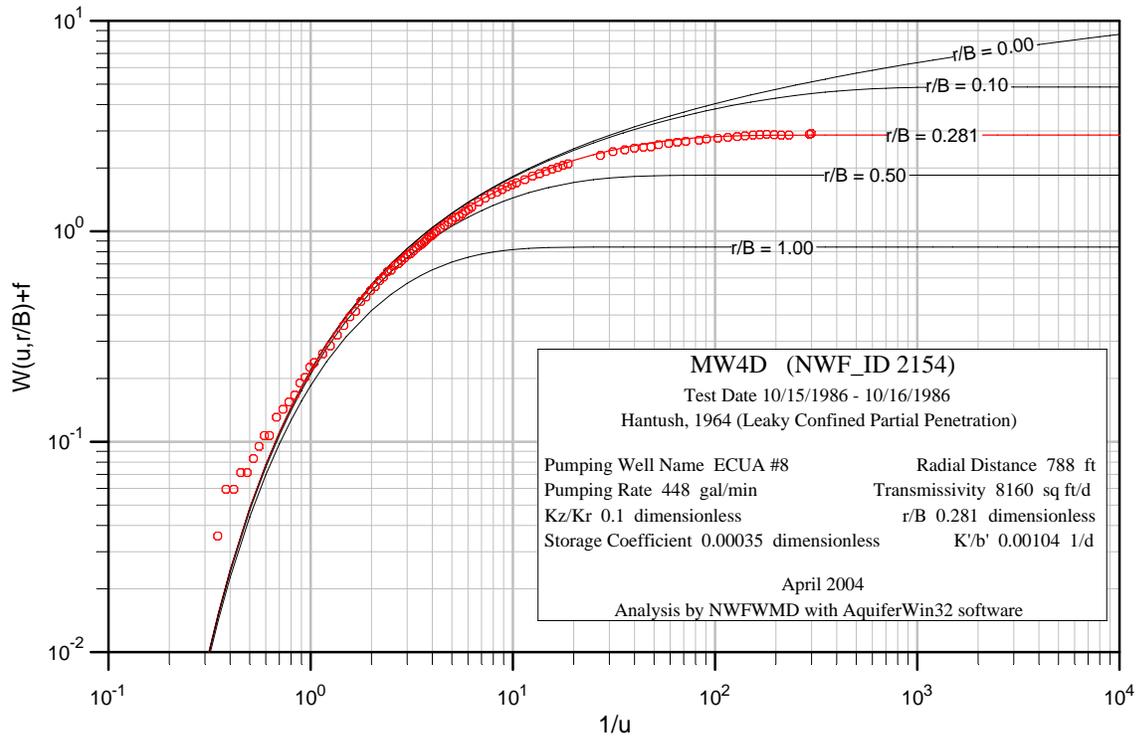


Figure 8. Aquifer Response and Type Curves for MW5D.

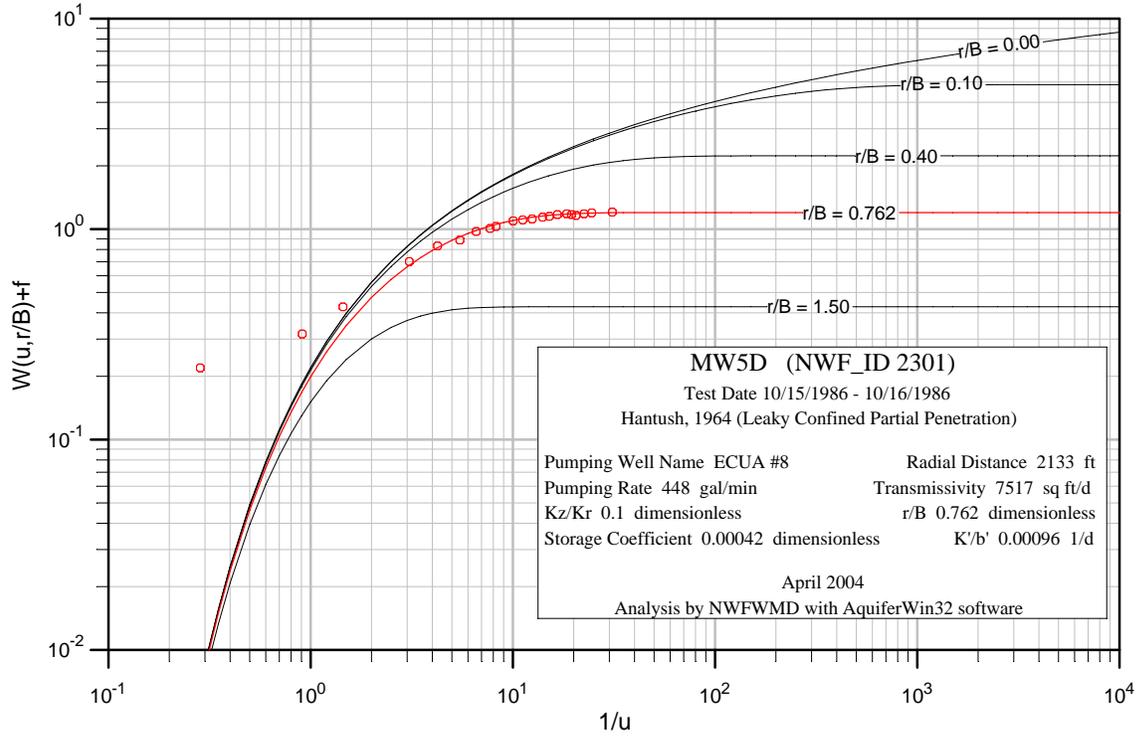


Figure 9. Aquifer Response and Type Curves for MW12D.

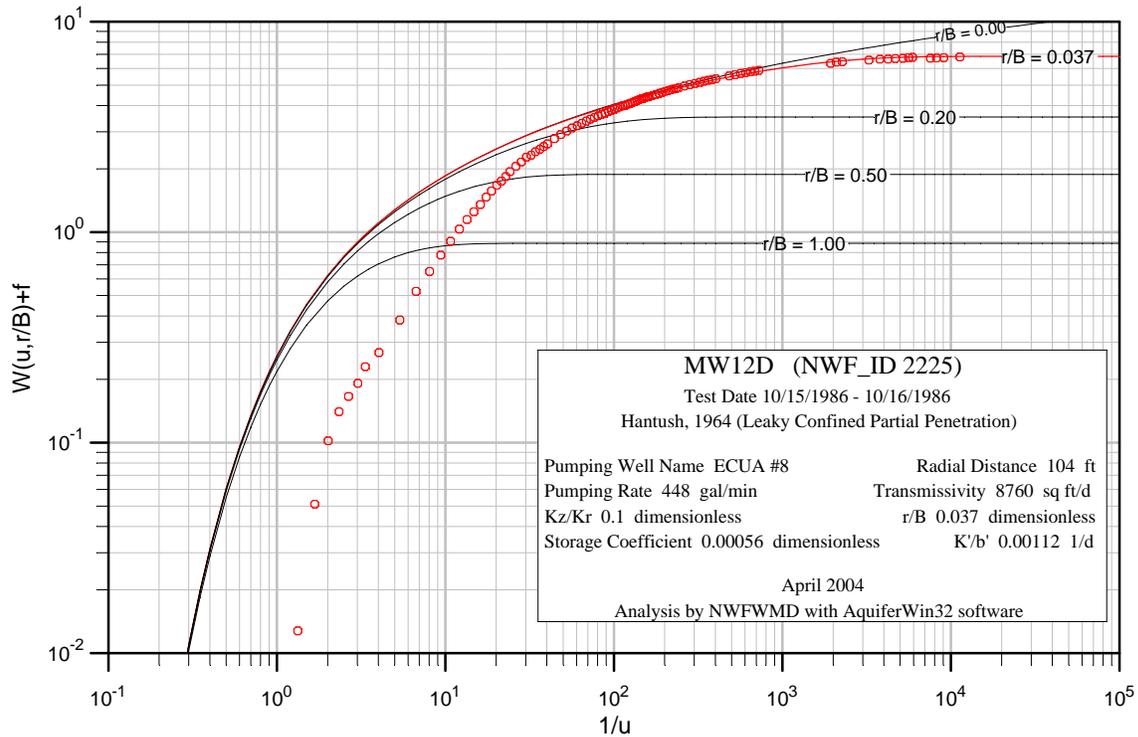


Figure 10. Aquifer Response and Type Curves for ECUA #6.

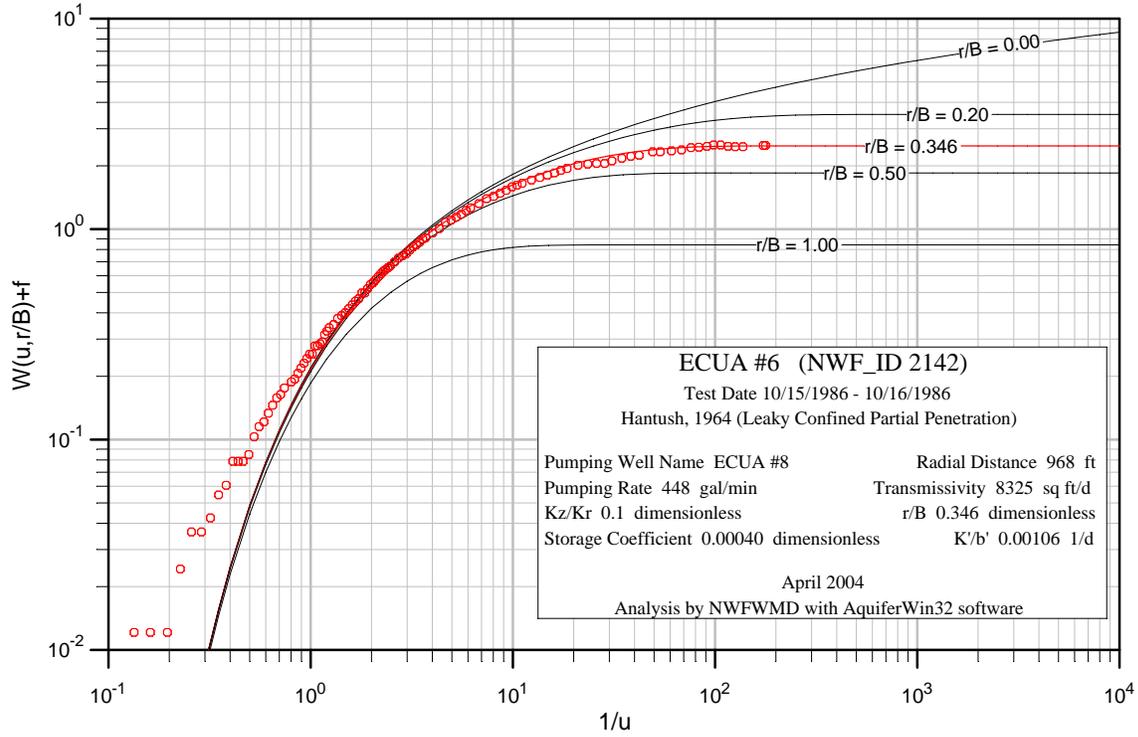


Figure 11. Aquifer Response and Type Curves for ECUA #9.

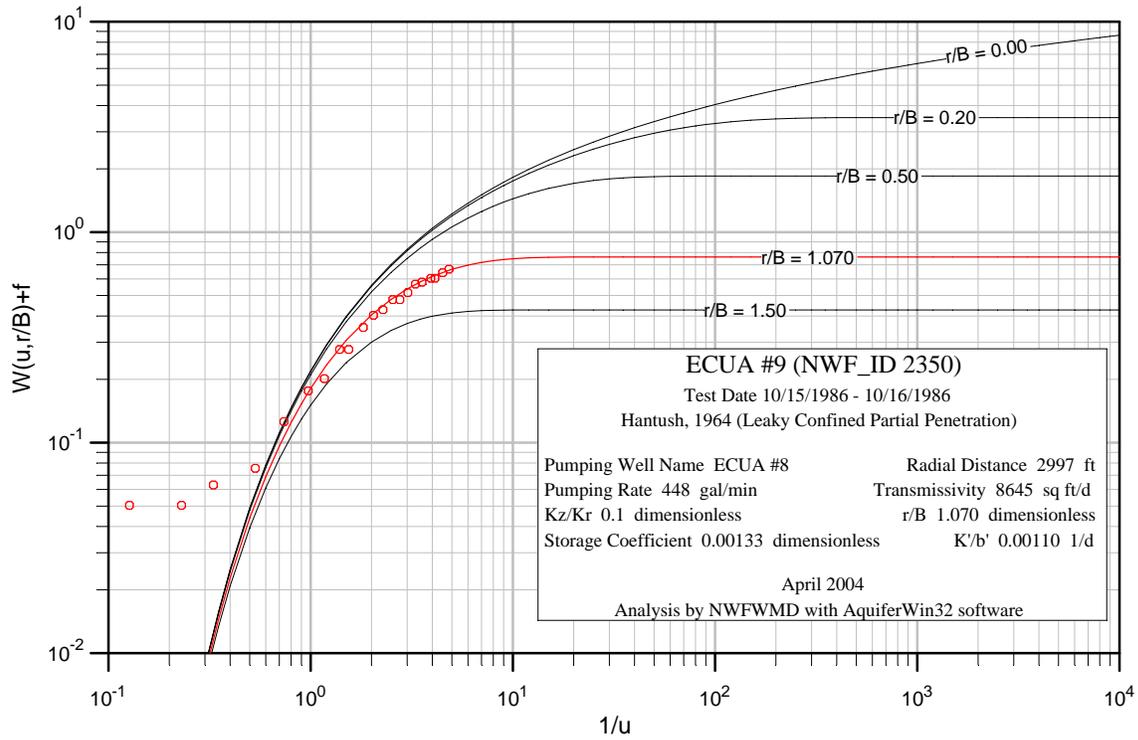


Figure 12. Aquifer Response and Type Curves for ECUA EAST PLANT.

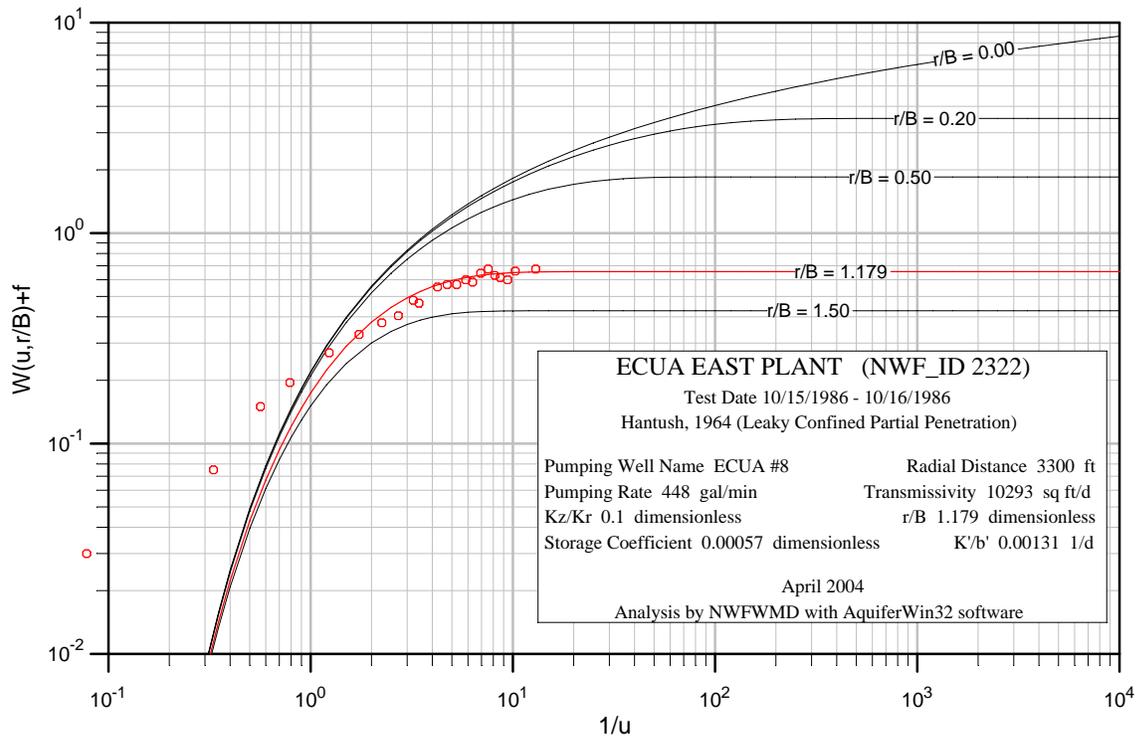
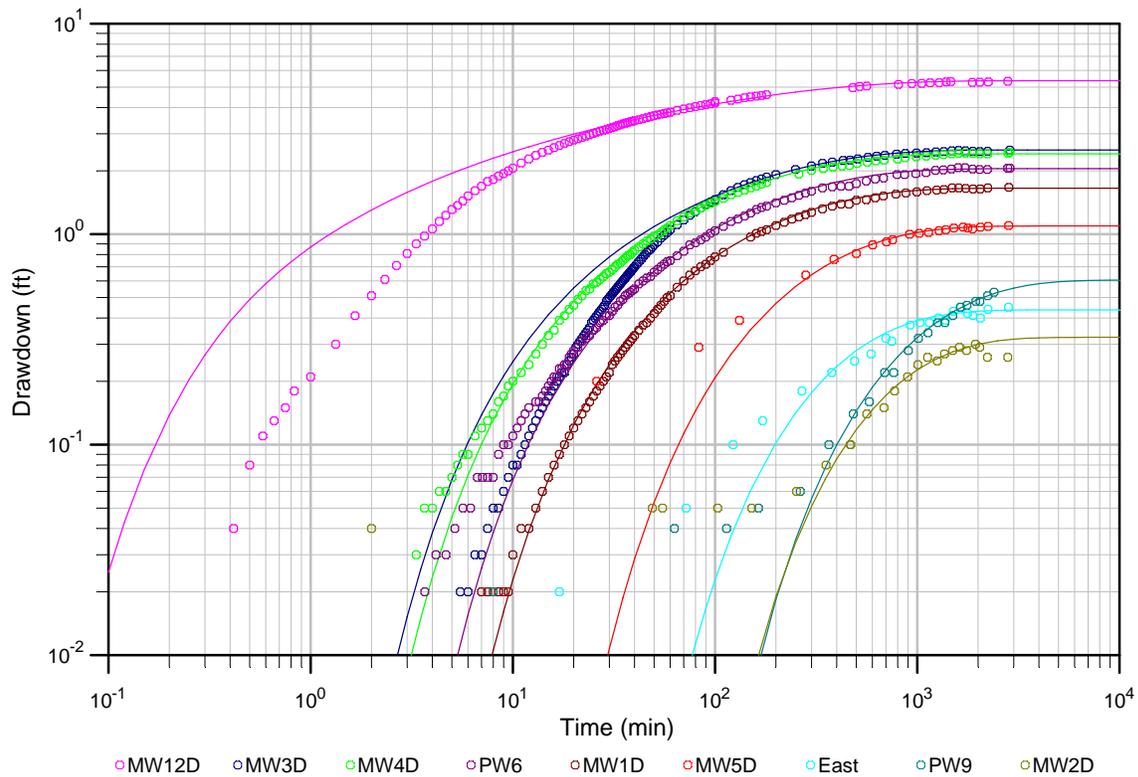


Figure 13. Aquifer Response and Predicted Drawdown for all Observation Wells.



Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWFMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2286
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,838 min	Radial distance: 1,212 ft

MW1D (NWF_ID 2286)

ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)
4.66	0.01	32	0.25	240	1.18
5	0.01	33	0.26	260	1.21
5.33	0.01	34	0.27	280	1.24
5.66	0.01	35	0.28	300	1.27
6	0.01	36	0.29	340	1.32
6.5	0.01	37	0.30	380	1.36
7	0.02	38	0.31	420	1.39
7.5	0.02	39	0.32	460	1.39
8	0.02	40	0.33	500	1.45
8.5	0.02	42	0.35	560	1.46
9	0.02	44	0.37	620	1.49
9.5	0.02	46	0.38	680	1.52
10	0.03	48	0.40	785	1.55
11	0.03	50	0.42	878	1.57
12	0.04	52	0.44	996	1.59
13	0.05	54	0.46	1117	1.61
14	0.06	56	0.48	1248	1.62
15	0.07	58	0.50	1355	1.63
16	0.08	60	0.51	1490	1.66
17	0.09	65	0.56	1605	1.66
18	0.10	70	0.60	1738	1.65
19	0.11	75	0.64	1890	1.64
20	0.12	80	0.67	2050	1.64
21	0.13	85	0.70	2234	1.66
22	0.14	90	0.72	2838	1.67
23	0.15	95	0.75		
24	0.16	100	0.78		
25	0.17	110	0.82		
26	0.18	150	0.97		
27	0.19	160	1.01		
28	0.20	170	1.03		
29	0.21	180	1.05		
30	0.22	200	1.10		
31	0.24	220	1.14		

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2369
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,805 min	Radial distance: 3,800 ft

MW2D (NWF_ID 2369)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
2	0.04
49	0.05
55	0.05
103	0.05
152	0.05
253	0.06
354	0.08
466	0.10
469	0.10
563	0.14
685	0.15
773	0.18
896	0.21
1007	0.24
1125	0.26
1257	0.25
1365	0.27
1496	0.28
1617	0.29
1754	0.28
1941	0.30
2036	0.29
2225	0.26
2805	0.26

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2227
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,870 min	Radial distance: 667 ft

MW3D (NWF_ID 2227)

ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)
3.5	0.01	20.5	0.29	37.5	0.65
4	0.01	21	0.30	38	0.66
4.5	0.01	21.5	0.31	38.5	0.67
5	0.01	22	0.32	39	0.68
5.5	0.02	22.5	0.33	39.5	0.69
6	0.02	23	0.34	40	0.70
6.5	0.03	23.5	0.35	41	0.72
7	0.03	24	0.36	42	0.74
7.5	0.04	24.5	0.38	43	0.76
8	0.05	25	0.39	44	0.78
8.5	0.05	25.5	0.40	45	0.80
9	0.06	26	0.41	46	0.82
9.5	0.07	26.5	0.42	47	0.84
10	0.08	27	0.43	48	0.85
10.5	0.08	27.5	0.44	49	0.87
11	0.09	28	0.45	50	0.89
11.5	0.10	28.5	0.46	52	0.92
12	0.11	29	0.48	54	0.96
12.5	0.12	29.5	0.49	56	0.99
13	0.13	30	0.50	58	1.02
13.5	0.14	30.5	0.51	60	1.05
14	0.15	31	0.52	65	1.11
14.5	0.16	31.5	0.53	70	1.17
15	0.17	32	0.54	75	1.23
15.5	0.18	32.5	0.55	80	1.28
16	0.19	33	0.56	85	1.33
16.5	0.20	33.5	0.57	90	1.38
17	0.21	34	0.58	95	1.42
17.5	0.22	34.5	0.59	100	1.46
18	0.22	35	0.60	110	1.54
18.5	0.24	35.5	0.61	120	1.61
19	0.25	36	0.62	130	1.67
19.5	0.26	36.5	0.63	140	1.72
20	0.27	37	0.64	150	1.76

MW3D (continued)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
160	1.80
170	1.83
180	1.87
200	1.92
250	2.03
300	2.11
340	2.17
380	2.20
430	2.24
465	2.25
508	2.28
571	2.32
630	2.35
692	2.37
790	2.40
873	2.42
992	2.43
1112	2.44
1238	2.46
1352	2.47
1483	2.49
1600	2.50
1733	2.49
1886	2.48
2040	2.47
2229	2.48
2870	2.51

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2154
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,865 min	Radial distance: 788 ft

MW4D (NWF_ID 2154)

ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)
3.33	0.03	28	0.63	140	1.62
3.66	0.05	29	0.65	150	1.66
4	0.05	30	0.66	160	1.69
4.33	0.06	31	0.68	170	1.73
4.66	0.06	32	0.70	180	1.76
5	0.07	33	0.72	260	1.93
5.33	0.08	34	0.73	300	2.01
5.66	0.09	35	0.75	343	2.05
6	0.09	36	0.77	383	2.09
6.5	0.11	37	0.79	425	2.11
7	0.12	38	0.80	462	2.12
7.5	0.13	39	0.82	504	2.17
8	0.14	40	0.84	566	2.20
8.5	0.16	42	0.87	624	2.23
9	0.17	44	0.90	687	2.25
9.5	0.19	46	0.93	800	2.28
10	0.20	48	0.95	870	2.31
11	0.22	50	0.98	989	2.33
12	0.24	52	0.99	1109	2.35
13	0.27	54	1.02	1235	2.37
14	0.30	56	1.05	1350	2.39
15	0.33	58	1.07	1479	2.41
16	0.35	60	1.10	1598	2.42
17	0.39	65	1.16	1729	2.43
18	0.41	70	1.21	1883	2.42
19	0.44	75	1.26	2039	2.41
20	0.46	80	1.29	2227	2.41
21	0.49	85	1.33	2810	2.43
22	0.51	90	1.37	2865	2.45
23	0.54	95	1.40		
24	0.55	100	1.43		
25	0.58	110	1.48		
26	0.59	120	1.54		
27	0.61	130	1.58		

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2301
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,833 min	Radial distance: 2,133 ft

MW5D (NWF_ID 2301)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
26	0.20
83	0.29
132	0.39
281	0.64
388	0.76
500	0.81
602	0.89
705	0.92
755	0.94
918	1.00
1023	1.01
1138	1.02
1282	1.04
1385	1.05
1518	1.07
1687	1.08
1783	1.07
1879	1.06
2055	1.08
2242	1.09
2833	1.10

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWFMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2225
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,807 min	Radial distance: 104 ft

MW12D (NWF_ID 2225)

ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)
0.33	0.01	14	2.45	56	3.75
0.416	0.04	15	2.51	58	3.77
0.5	0.08	16	2.58	60	3.80
0.58	0.11	17	2.64	65	3.88
0.66	0.13	18	2.70	70	3.94
0.75	0.15	19	2.75	75	3.99
0.83	0.18	20	2.80	80	4.04
1	0.21	21	2.84	85	4.09
1.33	0.30	22	2.88	90	4.13
1.66	0.41	23	2.93	95	4.16
2	0.51	24	2.97	100	4.20
2.33	0.61	25	3.01	120	4.33
2.66	0.71	26	3.05	130	4.39
3	0.81	27	3.09	140	4.45
3.33	0.90	28	3.12	150	4.49
3.66	0.98	29	3.14	160	4.53
4	1.06	30	3.18	170	4.56
4.33	1.15	31	3.21	180	4.60
4.66	1.23	32	3.24	480	4.97
5	1.31	33	3.28	519	5.04
5.33	1.37	34	3.31	562	5.06
5.66	1.44	35	3.34	808	5.15
6	1.52	36	3.37	940	5.20
6.5	1.61	37	3.39	1052	5.21
7	1.69	38	3.42	1160	5.24
7.5	1.78	39	3.44	1286	5.25
8	1.82	40	3.46	1391	5.29
8.5	1.89	42	3.50	1468	5.31
9	1.94	44	3.54	1874	5.26
9.5	2.00	46	3.58	2037	5.27
10	2.06	48	3.62	2248	5.29
11	2.18	50	3.66	2807	5.33
12	2.28	52	3.69		
13	2.37	54	3.72		

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2142
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,878 min	Radial distance: 968 ft

ECUA #6 (NWF_ID 2142)

ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)	ELAPSED TIME (MIN)	DRAWDOWN (FT)
2.167	0.01	19.5	0.27	75	0.89
2.607	0.01	20	0.28	80	0.91
3.167	0.01	21	0.29	85	0.94
3.67	0.02	22	0.31	90	0.97
4.167	0.03	23	0.32	95	1.01
4.67	0.03	24	0.33	100	1.04
5.17	0.04	25	0.35	110	1.09
5.67	0.05	26	0.36	120	1.15
6.18	0.05	27	0.38	130	1.18
6.67	0.06	28	0.39	140	1.22
7.08	0.07	29	0.41	150	1.26
7.5	0.07	30	0.41	160.5	1.31
8	0.08	31	0.43	170	1.34
8.5	0.09	32	0.45	180	1.36
9	0.10	33	0.46	200	1.41
9.5	0.10	34	0.48	220	1.45
10	0.11	35	0.49	240	1.49
10.5	0.12	36	0.51	260	1.53
11	0.13	37	0.52	280	1.57
11.5	0.14	38	0.53	300	1.60
12	0.15	39	0.54	340	1.66
13	0.16	40	0.55	380	1.68
13.5	0.16	42	0.58	420	1.69
14	0.17	44	0.60	460	1.69
14.5	0.18	46	0.62	500	1.74
15	0.19	48	0.63	560	1.79
15.5	0.20	50	0.66	620	1.83
16	0.21	52	0.68	682	1.85
16.5	0.21	54	0.70	795	1.92
17	0.23	56	0.72	866	1.92
17.5	0.23	58	0.74	985	1.94
18	0.24	60	0.75	1105	1.96
18.5	0.24	65	0.79	1230	2.01
19	0.26	70	0.83	1346	2.02

ECUA #6 (continued)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
1476	2.04
1594	2.07
1724	2.07
1879	2.04
2035	2.03
2224	2.03
2804	2.06
2878	2.06

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2350
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,397 min	Radial distance: 2,997 ft

ECUA #9 (NWF_ID 2350)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
8	0.02
63	0.04
114	0.04
164	0.05
264	0.06
366	0.10
483	0.14
580	0.16
690	0.22
765	0.22
904	0.28
1014	0.32
1131	0.34
1264	0.38
1371	0.38
1501	0.41
1635	0.45
1762	0.46
1950	0.48
2044	0.48
2230	0.51
2397	0.53

Test Date: 10/15/1986 – 10/16/1986	Test conducted by: NFWWMD
Production well: NWF_ID 2205	Observation well: NWF_ID 2322
Aquifer tested: Sand and Gravel	Production rate: 448 gal/min
Test duration: 2,826 min	Radial distance: 3,300 ft

ECUA EAST PLANT (NWF_ID 2322)

ELAPSED TIME (MIN)	DRAWDOWN (FT)
17	0.02
72	0.05
123	0.10
172	0.13
269	0.18
378	0.22
490	0.25
591	0.27
700	0.32
748	0.31
923	0.37
1030	0.38
1149	0.38
1273	0.40
1378	0.39
1510	0.43
1645	0.45
1774	0.42
1886	0.41
2052	0.40
2238	0.44
2826	0.45

APPENDIX:

ADDITIONAL WELL INFORMATION



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302523087125601**

Site Type **G**

NWF ID **2142**

Well Name **ECUA #1-(#6)**

State ID **AAA6574**

Owner **ECUA**

Contact Person **BILL ELLIS**

Phone **904-476-5110**

Street **PO BOX 15311**

City **PENSACOLA**

State **FL**

Zip **32514-0311**

County **Escambia**

Latitude **302524.329**

Longitude **871255.792**

Datum **NAD83**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S019T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **33**

Datum **NGVD29**

Method

Accuracy

Source

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Withdrawal**

Water Use **Public Supply**

Depth Of Well **240**

Depth Of Casing **110**

MP Distance From LSD **.83**

Diameter **26**

Construction Data Source

Casing Material **Steel**

Finish **Screen**

Driller License Number **1008**

Date of Construction **01/01/1936**

Construction Method **Hydraulic Rotary**

Screen Length **90**

Screened Intervals **110 / 200**

Water Level **-23**

Measure Date

WL Source

WL Method

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **Turbine**

Power **Electric**

Horsepower **5**

Pump Intake

Normal Yield **2000**

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Temperature **22 on 6/25/1957 @ 00:00**

Discharge

pH

Specific Conductance **82.9999 on 7/27/1978 @ 00:00**

Chloride **9 on 7/7/1977 @ 00:00**

Consumptive Use Permit **19830083**

Construction Permit

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **74 61 24 36 46**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **H_TRAPP**

Date Visited **29/12/1970**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **12/09/2002**

Ambient Network

MP = VENT LINE @ 1-INCH MALE NIPPLE, well used as observation well for 10/1986 ECUA #8 APT, well at radial distance of 968 ft.



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302535087125701**

Site Type **G**

NWF ID **2205**

Well Name **ECUA #2-(#8)**

State ID

Owner **ECUA**

Contact Person

Phone **904-476-5110**

Street **PO BOX 15311**

City **PENSACOLA**

State **FL** Zip **32514**

County **Escambia**

Latitude **302533.34**

Longitude **871257.35**

Datum **NAD27**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S019T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **38**

Datum **NGVD29**

Method

Accuracy

Source

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Properly Abandoned**

Water Use **Public Supply**

Depth Of Well **240**

Depth Of Casing **140**

MP Distance From LSD

Diameter **26**

Construction Data Source **Reported**

Casing Material **Steel**

Finish **Screen**

Driller License Number **1008**

Date of Construction **01/01/1940**

Construction Method **Hydraulic Rotary**

Screen Length **100**

Screened Intervals **140 / 240**

Water Level **-30**

Measure Date

WL Source

WL Method **Reported**

Hydrogeologic Units **Sand & Gravel**

Lift **Centrifugal**

Power

Horsepower **250**

Pump Intake

Normal Yield **2000**

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown **50**

Hours Pumped

Spcap **40**

Field Water Quality

Temperature **23 on 6/25/1957 @ 00:00**

Discharge

pH

Specific Conductance **90 on 12/21/1978 @ 00:00**

Chloride **8.3 on 8/17/1977 @ 00:00**

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit **T200002576**

DEP Public Supply #

Project #'s **61 24 36**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **H_TRAPP**

Date Visited **29/12/1970**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **12/09/2002**

Ambient Network

JOE KNIGHT; APRIL 18,1996 NOTE; PER ECUA MR. SMITH THIS WELL IS ABANDON



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302602087130701**

Site Type **G**

NWF ID **2350**

Well Name **ECUA #3-(#9)**

State ID **AAA6575**

Owner **ECUA**

Contact Person **BILL ELLIS**

Phone **850-476-5110**

Street **PO BOX 15311**

City **PENSACOLA**

State **FL**

Zip **32514-0311**

County **Escambia**

Latitude **302602.597**

Longitude **871306.851**

Datum **NAD83**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S019T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **52**

Datum **NGVD29**

Method

Accuracy

Source

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Properly Abandoned**

Water Use **Public Supply**

Depth Of Well **252**

Depth Of Casing **152**

MP Distance From LSD **2.42**

Diameter **26**

Construction Data Source **Reported**

Casing Material **Steel**

Finish **Screen**

Driller License Number **1008**

Date of Construction **01/01/1945**

Construction Method **Hydraulic Rotary**

Screen Length **100**

Screened Intervals **152 / 252**

Water Level **-25.71**

Measure Date **15/10/1986**

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Centrifugal**

Power **Other**

Horsepower **250**

Pump Intake

Normal Yield **2000**

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown **60**

Hours Pumped

Spcap **33.33**

Field Water Quality

Temperature **22 on 11/4/1970 @ 00:00**

Discharge

pH

Specific Conductance **120 on 8/17/1977 @ 00:00**

Chloride **14 on 8/17/1977 @ 00:00**

Consumptive Use Permit **19830083**

Construction Permit

FL Geological Survey #

Abandonment Permit **T200002575**

DEP Public Supply #

Project #'s **61 24 36**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **H_TRAPP**

Date Visited **29/10/1970**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **12/09/2002**

Ambient Network

MP = VENT LINE @ 1.0-INCH MALE NIPPLE, well used as observation well for 10/1986 ECUA #8 APT, well at radial distance of 2,997 ft.



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302555087122702**

Site Type **G**

NWF ID **2322**

Well Name **ECUA #4-EAST PLANT**

State ID **AAA6573**

Owner **ECUA**

Contact Person **BILL ELLIS**

Phone **904-476-5110**

Street **PO BOX 15311**

City **PENSACOLA**

State **FL**

Zip **32514-0311**

County **Escambia**

Latitude **302555.048**

Longitude **871228.312**

Datum **NAD83**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S022T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **79**

Datum **NGVD29**

Method

Accuracy

Source

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Properly Abandoned**

Water Use **Public Supply**

Depth Of Well **270**

Depth Of Casing **151**

MP Distance From LSD **1.2**

Diameter **18**

Construction Data Source **Geologist**

Casing Material **Steel**

Finish **Screen**

Driller License Number **1008**

Date of Construction **01/01/1947**

Construction Method **Hydraulic Rotary**

Screen Length **100**

Screened Intervals **162 / 262**

Water Level **-67.86**

Measure Date **14/04/1971**

WL Source

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Turbine**

Power **Electric**

Horsepower **200**

Pump Intake

Normal Yield **2000**

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap **47.62**

Field Water Quality

Temperature **22.8 on 7/12/1973 @ 00:00**

Discharge

pH

Specific Conductance **130 on 5/24/1979 @ 00:00**

Chloride **13 on 8/15/1977 @ 00:00**

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit **T200002577**

DEP Public Supply #

Project #'s **61 36 46**

Geophysical Log # **79**

Depth Logged

Available LOG Data **Collar Caliper Gamma**

Visited By **H_TRAPP**

Date Visited **14/04/1971**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **12/09/2002**

Ambient Network

MP = VENT LINE @ 1.25-INCH MALE NIPPLE, well used as observation well for 10/1986 ECUA #8 APT, well at radial distance of 3,300 ft.



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302541087123001**

Site Type **G**

NWF ID **2265**

Well Name **ECUA PCE MW-10S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302541**

Longitude **871301**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NFWFMD**

Elevation **43.7**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **NFWFMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **37**

Depth Of Casing

MP Distance From LSD **1.35**

Diameter **4**

Construction Data Source **Logs**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/09/1986**

Construction Method **Hydraulic Rotary**

Screen Length

Screened Intervals

Water Level **-21.09**

Measure Date **17/09/1986**

WL Source **NFWFMD**

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25**

Geophysical Log # **76**

Depth Logged

Available LOG Data **Gamma**

Visited By **C.RICHARDS**

Date Visited **17/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 45.05 ft)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302545087130601**

Site Type **G**

NWF ID **2284**

Well Name **ECUA PCE MW-11S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302545**

Longitude **871306**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **48.66**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **NWFWMD**

Location Map **PENSACOLA, FL.**

GW Region **Woodville Karst Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **52**

Depth Of Casing

MP Distance From LSD **1.2**

Diameter **4**

Construction Data Source **Logs**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/09/1986**

Construction Method **Hydraulic Rotary**

Screen Length

Screened Intervals **35 / 55**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25**

Geophysical Log # **77**

Depth Logged

Available LOG Data **Gamma**

Visited By **C.RICHARDS**

Date Visited **17/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 49.86 ft)



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302538087125901**

Site Type **G**

NWF ID **2225**

Well Name **ECUA PCE MW-12D**

State ID

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302534**

Longitude **871257**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S023T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NFWFMD**

Elevation **35**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NFWFMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **178**

Depth Of Casing **138**

MP Distance From LSD

Diameter **4**

Construction Data Source **Other Government**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **18/09/1986**

Construction Method **Hydraulic Rotary**

Screen Length **30**

Screened Intervals **158 / 178 138 / 148**

Water Level

Measure Date

WL Source **NFWFMD**

WL Method **Steel Tape**

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25 87**

Geophysical Log # **78**

Depth Logged

Available LOG Data **Electric Gamma**

Visited By **C_RICHARDS**

Date Visited **18/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

03/31/2004, TRP, well used as observation well during APT of ECUA #8, conducted 10/16/1986 to 10/17/1986, this well was at a radial distance of 104 ft from ECUA #8. DEP report cites surveyed TOC elevation of 36.39 ft NGVD.



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302538087125902**

Site Type **G**

NWF ID **2226**

Well Name **ECUA PCE MW-12S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302534**

Longitude **871257**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S023T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **35**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **57**

Depth Of Casing **27**

MP Distance From LSD

Diameter **4**

Construction Data Source **Other Government**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **15/09/1986**

Construction Method **Hydraulic Rotary**

Screen Length

Screened Intervals **27 / 57**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **18/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 36.18 ft)



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302546087130101**

Site Type **G**

NWF ID **2286**

Well Name **ECUA PCE MW-1D**

State ID

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL**

Zip **32301**

County **Escambia**

Latitude **302546**

Longitude **871301**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source

Elevation **42.97**

Datum **NGVD29**

Method **Survey**

Accuracy

Source

Location Map **PENSACOLA**

GW Region

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **185**

Depth Of Casing **168**

MP Distance From LSD **1.72**

Diameter **4**

Construction Data Source **Logs**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **08/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **168 / 188**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198604555**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25 3 87**

Geophysical Log # **66**

Depth Logged

Available LOG Data **Electric Gamma**

Visited By **C.RICHARDS**

Date Visited **08/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

Top of casing elevation surveyed by DEP as 44.69 ft, stick up reported as 1.72 ft, by difference LSD = 42.97 ft NGVD, well used as observation well for 10/1986 APT, radial distance = 1,212 ft.



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302546087130103**

Site Type **G**

NWF ID **2288**

Well Name **ECUA PCE MW-1S**

State ID

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL**

Zip **32301**

County **Escambia**

Latitude **302546**

Longitude **871301**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source

Elevation **42.51**

Datum **NGVD29**

Method **Survey**

Accuracy

Source

Location Map **PENSACOLA,FL.**

GW Region

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **39**

Depth Of Casing **29**

MP Distance From LSD **.94**

Diameter **4**

Construction Data Source **Other Government**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **10/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **10**

Screened Intervals **28 / 38**

Water Level **-20.13**

Measure Date **01/07/1986**

WL Source **Other Government**

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198604554**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25 3**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **08/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

elevation surveyed by fdep: top of casing = 43.45



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302605087132301**

Site Type **G**

NWF ID **2369**

Well Name **ECUA PCE MW-2D**

State ID **AAA6968**

Owner **FDEP**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302604.24**

Longitude **871323.16**

Datum **NAD27**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S018T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source **NFWFMD**

Elevation **45.09**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **Other Government**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **168**

Depth Of Casing **148**

MP Distance From LSD **1.1**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **16/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **148 / 168**

Water Level **-20.58**

Measure Date **15/05/1990**

WL Source **NFWFMD**

WL Method **Steel Tape**

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **No Pump**

Power

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198604887**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **74 25 8 42 46 87**

Geophysical Log # **67**

Depth Logged **164**

Available LOG Data **Gamma**

Visited By **C.RICHARDS**

Date Visited **16/07/1986**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **06/04/2004**

Ambient Network **APVI**

PNV-9; MP = TOP OF 4" PVC CASING = 46.19, surveyed by DEP. Well used as obs. well for 1986 ECUA #8 APT, r = 3,800 ft.



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302605087132303**

Site Type **G**

NWF ID **2371**

Well Name **ECUA PCE MW-2S**

State ID **AAA6967**

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302604.26**

Longitude **871323.02**

Datum **NAD27**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S018T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **44.74**

Datum **NGVD29**

Method **Survey**

Accuracy

Source

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **38**

Depth Of Casing **28**

MP Distance From LSD **-.3**

Diameter **4**

Construction Data Source **Other Government**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **21/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **10**

Screened Intervals **28 / 38**

Water Level **-15.05**

Measure Date

WL Source

WL Method

Hydrogeologic Units **Surficial Zone (S&G)**

Lift **No Pump**

Power

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198604889**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **74 25 8 42 46**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **16/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network **APVI**

PNV-10; MP = TOP OF 4" PVC CASING = 44.44 EST (WELL IN MANHOLE)(c.richards 17 may 2004; elevation top of casing surveyed by fdep in 1987: 45.99 ft)**



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302538087130301**

Site Type **G**

NWF ID **2227**

Well Name **ECUA PCE MW-3D**

State ID **AAA9255**

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302538**

Longitude **871303**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source

Elevation **46**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **138**

Depth Of Casing **118**

MP Distance From LSD

Diameter **4**

Construction Data Source **Owner**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **24/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **116 / 136**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605139**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25 87**

Geophysical Log # **68**

Depth Logged

Available LOG Data **Gamma**

Visited By **C_RICHARDS**

Date Visited **30/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

Well used as observation well for 10/1986 ECUA #8 APT, well at radial distance of 667 ft. Elevation top of casing surveyed by fdep: 45.05 ft)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302538087130302**

Site Type **G**

NWF ID **2228**

Well Name **ECUA PCE MW-3S**

State ID **AAA9256**

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302538**

Longitude **871303**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source

Elevation **46**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA,FL.**

GW Region

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **37**

Depth Of Casing **27**

MP Distance From LSD

Diameter **4**

Construction Data Source **Owner**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **25/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **10**

Screened Intervals **26 / 36**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605137**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **30/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

Elevation top of casing surveyed by fdep: 44.69 ft.



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302526087130001**

Site Type **G**

NWF ID **2154**

Well Name **ECUA PCE MW-4D**

State ID

Owner **DER**

Contact Person

Phone **850-488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302526**

Longitude **871300**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S023T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **37**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **167**

Depth Of Casing **148**

MP Distance From LSD

Diameter **4**

Construction Data Source **Owner**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **29/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **148 / 168**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605327**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25 3 87**

Geophysical Log # **69**

Depth Logged

Available LOG Data **Gamma**

Visited By **C_RICHARDS**

Date Visited **30/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

well used as observation well for ECUA #8 APT, well at radial distance of 788 ft, TRP, 04/12/2004.**(c.richards 17 may 2004; elevation top of casing surveyed by fdep: 38.94 ft)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302526087130002**

Site Type **G**

NWF ID **2155**

Well Name **ECUA PCE MW-4S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302526**

Longitude **871300**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S023T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **37**

Datum **NGVD29**

Method **Survey**

Accuracy **1 < 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **36**

Depth Of Casing **26**

MP Distance From LSD

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **30/07/1986**

Construction Method **Hydraulic Rotary**

Screen Length

Screened Intervals **30 / 40**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605325**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **25**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **30/07/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep: 38.87 ft)



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302549087124001**

Site Type **G**

NWF ID **2301**

Well Name **ECUA PCE MW-5D**

State ID **AAA6993**

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302548.39**

Longitude **871240.32**

Datum **NAD27**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S019T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source

Elevation **70.21**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **Other Government**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **176**

Depth Of Casing **156**

MP Distance From LSD **1.2**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **13/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **156 / 176**

Water Level **-58.53**

Measure Date **13/08/1986**

WL Source **NFWFMD**

WL Method **Steel Tape**

Hydrogeologic Units **Main Producing Zone (S&G)**

Lift **No Pump**

Power

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605461**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **74 25 3 8 42 46 87**

Geophysical Log # **70**

Depth Logged **152**

Available LOG Data **Gamma**

Visited By **C.RICHARDS**

Date Visited **13/08/1986**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **04/04/2004**

Ambient Network **XPVI XBK**

GPS DATA ENTERED 2/95 FOR AMBIENT PROGRAM; MP = TOP OF 4" PVC CASING = 71.41, surveyed by DEP. (09-DEC=96,jmm) WELL REMOVED FROM AMBIENT NETWORK BECAUSE OF CONTAMINATION. Well used as observation well for 1986 ECUA #8 APT, r = 2,133 ft.



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302549087124002**

Site Type **G**

NWF ID **2302**

Well Name **ECUA PCE MW-5S**

State ID **AAA6983**

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302548.39**

Longitude **871240.32**

Datum **NAD27**

Loc Method **Global Positioning Satellite (GPS)**

Land Net **S019T02SR30W**

Loc Accuracy **0.3 < 3 meters**

Loc Source **NWFWMD**

Elevation **70.2**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **Other Government**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **75**

Depth Of Casing **65**

MP Distance From LSD **1.3**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **12/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **65 / 75**

Water Level **-50.97**

Measure Date **13/08/1986**

WL Source **NWFWMD**

WL Method **Steel Tape**

Hydrogeologic Units **Surficial Zone (S&G)**

Lift **No Pump**

Power

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605460**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **74 25 3 8 42 46**

Geophysical Log #

Depth Logged

Available LOG Data

Visited By **C.RICHARDS**

Date Visited **13/08/1986**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **04/04/2004**

Ambient Network **APVI**

PNV-11; MP = TOP OF 4" PVC CASING = 71.50 ft (surveyed by fdep)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302543087130701**

Site Type **G**

NWF ID **2279**

Well Name **ECUA PCE MW-6S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302543**

Longitude **871307**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **59.92**

Datum **NGVD29**

Method **Topo Map**

Accuracy **>= 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **62**

Depth Of Casing **42**

MP Distance From LSD **1.54**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **50 / 60**

Water Level **-37.61**

Measure Date **26/08/1986**

WL Source **Other Government**

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Temperature

Discharge

Specific Conductance

pH

Chloride

Consumptive Use Permit

Construction Permit **T198605895**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **3 25**

Geophysical Log # **72**

Depth Logged

Available LOG Data **Geologist Gamma**

Visited By **C.RICHARDS**

Date Visited **03/09/1986**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **04/04/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 61.46 ft)



NFWFMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302539087130601**

Site Type **G**

NWF ID **2239**

Well Name **ECUA PCE MW-7S**

State ID **AAA9253**

Owner **DER**

Contact Person

Phone **904/488/3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302539**

Longitude **871306**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source

Elevation **60.65**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **NFWFMD**

Location Map **PENSACOLA, FL**

GW Region

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **67**

Depth Of Casing **47**

MP Distance From LSD **1.11**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **45 / 65**

Water Level **-39.09**

Measure Date **26/08/1986**

WL Source **Other Government**

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605984**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **3 25**

Geophysical Log # **73**

Depth Logged

Available LOG Data **Geologist Gamma**

Visited By **C.RICHARDS**

Date Visited **03/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 61.79 ft)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302539087131001**

Site Type **G**

NWF ID **2240**

Well Name **ECUA PCE MW-8S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302539**

Longitude **871310**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **66.71**

Datum **NGVD29**

Method **Topo Map**

Accuracy **>= 5 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **72**

Depth Of Casing **52**

MP Distance From LSD **1.42**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **52 / 72**

Water Level **-44.97**

Measure Date **26/08/1986**

WL Source **Other Government**

WL Method **Steel Tape**

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spcap Discharge

Spcap Source

Spcap Discharge Method

Spcap Static Level

Spcap Pumping Level

Spcap Drawdown

Hours Pumped

Spcap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198605993**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **3 25**

Geophysical Log # **74**

Depth Logged

Available LOG Data **Geologist Gamma**

Visited By **C.RICHARDS**

Date Visited **03/09/1986**

Data Entered By

Date Entered

Last Updated By **T_PRATT**

Last Updated **04/04/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 68.13 ft.)



NWFWMD Well Inventory Database System Site Schedule

Printed: May 17, 2004 04:12

Site Id **302542087131001**

Site Type **G**

NWF ID **2272**

Well Name **ECUA PCE MW-9S**

State ID

Owner **DER**

Contact Person

Phone **850-488-3601**

Street **2600 BLAIR STONE ROAD**

City **TALLAHASSEE**

State **FL** Zip **32301**

County **Escambia**

Latitude **302542**

Longitude **871310**

Datum **NAD27**

Loc Method **Topographic Map**

Land Net **S026T02SR30W**

Loc Accuracy **>= 60 meters**

Loc Source **NWFWMD**

Elevation **68.11**

Datum **NGVD29**

Method **Survey**

Accuracy **< 0.1 feet**

Source **NWFWMD**

Location Map **PENSACOLA**

GW Region **Western Panhandle Embayment Region**

Site Use **Monitor / OBS**

Water Use **Monitor**

Depth Of Well **72**

Depth Of Casing **52**

MP Distance From LSD **1.45**

Diameter **4**

Construction Data Source **Driller**

Casing Material **PVC**

Finish **Screen**

Driller License Number **2338**

Date of Construction **01/08/1986**

Construction Method **Hydraulic Rotary**

Screen Length **20**

Screened Intervals **53 / 73**

Water Level

Measure Date

WL Source

WL Method

Hydrogeologic Units **Sand & Gravel**

Lift **Other**

Power **Other**

Horsepower

Pump Intake

Normal Yield

Spicap Discharge

Spicap Source

Spicap Discharge Method

Spicap Static Level

Spicap Pumping Level

Spicap Drawdown

Hours Pumped

Spicap

Field Water Quality

Discharge

Temperature

pH

Specific Conductance

Chloride

Consumptive Use Permit

Construction Permit **T198606119**

FL Geological Survey #

Abandonment Permit

DEP Public Supply #

Project #'s **3 25**

Geophysical Log # **75**

Depth Logged

Available LOG Data **Geologist Gamma**

Visited By **C.RICHARDS**

Date Visited **03/09/1986**

Data Entered By

Date Entered

Last Updated By **C_RICHARDS**

Last Updated **17/05/2004**

Ambient Network

(c.richards 17 may 2004; Elevation top of casing surveyed by fdep = 69.56 ft.)