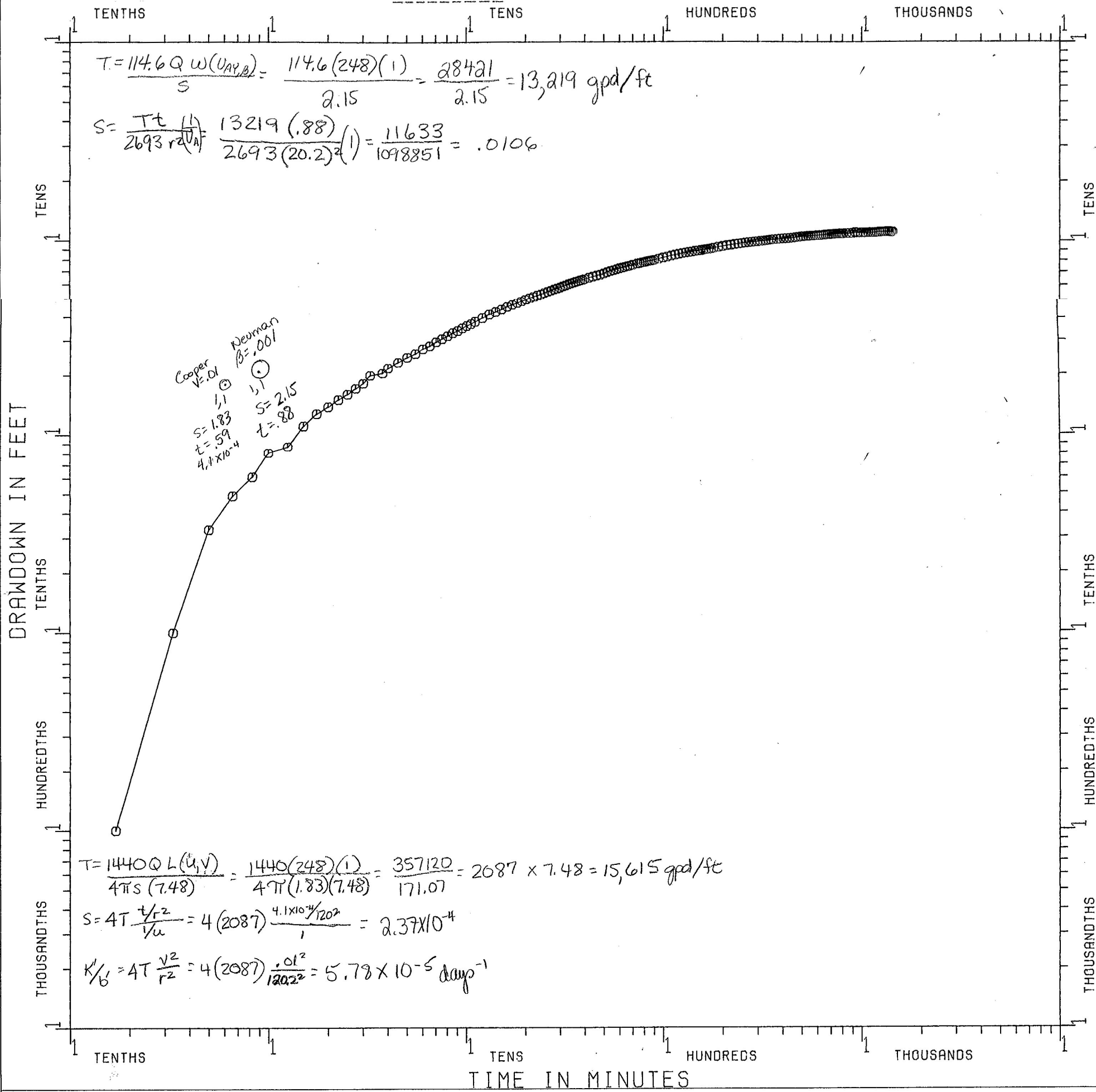


OBSERVATION WELL : BTW-4OBS

R=20.2 Q= 248





AQUIFER PUMPING TEST OBSERVATION WELL #4

PROJECT FPL MARTIN CC/C6 JOB No. 19720-016

TEST TYPE CONSTANT RATE DATE TEST BEGUN 4/27/89 - 4/28/89
 PUMPING WELL BTW-4 DIST. TO PPG WELL 1
 SCREEN DEPTH () : PPG WELL () OBS. WELL BTW-4obs
 FLOW MEAS. METHOD 4" x 6" ORIFICE PUMP VERTICAL TURBINE
 PUMPING RATE / HISTORY 248 gpm

REFERENCE POINT Top of 1" Nacrom tube 1.93' above S = PUMPING PERIOD 0830 4/27/89
top of 8" PVC pipe ELEVATION 24 412.5
 LOCATION TOP OF 8" PVC PIPE OBSERVER _____

BACKUP MEASUREMENTS OBTAINED WITH DATA LOGGING Sheet 1 of 3

4/27/89

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
8:27		7.76	8'		8:43	13	33.00	25.24	
8:29		7.76	<i>DEPTH TO WATER</i>			13 1/2	33.03	25.27	
8:30	15.25	15.64	23.4		8:44	14	33.15	25.39	
	30.50	20.04	27.8			14 1/2	33.17	25.41	
	50.83	20.69	28.45		8:45	15	33.23	25.47	
	1 1/2 15	21.06	28.82			15 1/2	33.31	25.55	
8:32	2 M.W	20.57	28.33	1 1/2 248 gpm	8:46	16	33.34	25.58	
	2-10 21.7	20.98	28.74			16 1/2	33.37	25.61	
	2 1/2	21.54	29.30		8:47	17	33.44	25.68	
8:33	3	22.14	29.90			17 1/2	33.49	25.73	
	3 1/2	22.79	30.55		8:48	18	33.57	25.75	
	4	22.95	30.71			18 1/2	33.56	25.80	
	4 1/2	23.09	30.85		8:49	19	33.58	25.82	
9:35	5	23.30	31.06			19 1/2	33.62	25.86	
	5 1/2	23.47	31.23		8:50	20	33.66	25.90	
	6	23.66	31.42		8:51	21	33.74	25.98	
	6 1/2	23.84	31.60		8:52	22	33.81	26.05	
	7	23.95	31.71		8:53	23	33.89	26.13	
	7 1/2	24.11	31.87		8:54	24	33.96	26.20	
	8	24.29	32.05		8:55	25	34.02	26.26	
	8 1/2	24.42	32.18		8:56	26	34.12	26.36	
	9	24.51	32.27		8:57	27	34.18	26.42	APM
	9 1/2	24.63	32.39		8:58	28	34.04	26.28	VALUE
8:40	10	24.76	32.52		8:59	29	34.02	26.26	
	10 1/2	24.82	32.58		9:00	30	34.53	26.77	
8:41	11	24.97	32.73		9:01	31	34.66	26.90	
	11 1/2	25.04	32.80		9:02	32	34.66	26.90	
8:42	12	25.11	32.87		9:03	33	34.71	26.95	
	12 1/2	25.16	32.92		9:04	34	34.74	26.98	

AQUIFER PUMPING TEST OBSERVATION WELL BFW-4
 PROJECT FPL MAZMA CC/CG JOB No. 19720-016

TEST TYPE CONSTANT RATE DATE TEST BEGUN 4/20/89
 PUMPING WELL BFW-4 DIST. TO PPG WELL — ()

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
9:05	35	34.80	27.04		10:00	90	36.48	28.72	↑ VALUE RPM ADS.
9:06	36	34.82	27.06		10:05	95	37.02	29.26	
9:07	37	34.83	27.07		10:10	100	37.11	29.35	
9:08	38	34.89	27.13		10:15	105	37.17	29.41	
9:09	39	34.97	27.21		10:20	110	37.26	29.50	
9:10	40	35.00	27.24		10:25	115	37.39	29.63	
9:11	41	35.04	27.28		10:30	120	37.43	29.67	
9:12	42	35.06	27.30		10:35	125	37.43	29.67	
9:13	43	35.01	27.25		10:40	130	37.43	29.67	
9:14	44	35.03	27.27		10:45	135	37.48	29.72	
9:15	45	35.14	27.38		10:50	140	37.48	29.72	
9:16	46	35.17	27.41		10:55	145	37.53	29.77	
9:17	47	35.17	27.41		11:00	150	37.48	29.72	
9:18	48	35.17	27.41		11:05	155	37.69	29.93	RPM VALUE
9:19	49	35.22	27.46		11:10	160	37.50	29.74	
9:20	50	35.21	27.45		11:15	165	37.67	29.91	↑ VALUE RPM.
9:22	52	35.76	28.00		11:22	172	37.78	30.02	
9:24	54	35.94	28.18		11:25	175	37.72	29.96	
9:26	56	36.02	28.26		11:30	180	37.92	30.16	RPM
9:28	58	36.07	28.31		11:40	190	38.16	30.30	
9:30	60	36.08	28.32		11:50	200	38.24	30.58	
9:32	62	36.14	28.38		12:00	210	38.27	30.41	
9:34	64	36.14	28.38		12:10	220	38.35	30.48	
9:36	66	36.22	28.46		12:20	230	38.37	30.50	
9:38	68	36.24	28.48		12:30	240	38.41	30.54	
9:40	70	36.26	28.50		12:40	250	38.41	30.54	
9:42	72	36.32	28.56		12:50	260	38.65	30.68	
9:44	74	36.34	28.58		13:00	270	38.63	30.66	
9:46	76	36.36	28.60		13:10	280	38.63	30.66	
9:48	78	36.43	28.67		13:20	290	38.63	30.66	
9:50	80	36.43	28.67		13:30	300	38.54	30.57	↑ VALUE
9:52	82	36.46	28.70		13:40	310	38.78	30.71	
9:54	84	36.47	28.71		13:50	320	38.78	30.71	
9:56	86	36.47	28.71		14:00	330	38.80	30.73	↑ VALUE
9:58	88	36.47	28.71		14:10	340	38.96	30.89	

↑ Value
 RPM
 ↑
 9:20

↑ Value

AQUIFER PUMPING TEST OBSERVATION WELL RTW #2
 PROJECT F1P6 MANZITH CC/CC JOB No. 19720-016

TEST TYPE CONSTANT RATE DATE TEST BEGUN 4/27/86-9/28/87
 PUMPING WELL RTW-4 DIST. TO PPG WELL ✓ ()

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE (gpm)	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
14:20	350	38.95	31.19			930	39.95	32.19	
14:30	360	38.93	31.17	valve 0		960	39.98	32.22	X
14:45	375	38.99	31.23			990	40.03	32.27	
15:00	390	39.00	31.24			1020	40.10	32.59	
15:15	405	38.98	31.22			1050	40.00	32.27	
15:30	420	39.02	31.26			1080	39.95	32.19	
15:45	435	39.02	31.26			1110	40.00	32.29	
16:00	450	39.04	31.28			1140	39.95	32.19	
16:15	465	39.37	31.61			1170	40.05	32.26	
16:30	480	39.38	31.62			1200	40.08	32.29	
16:45	495	39.47	31.71			1230	40.18	32.39	
17:00	510	39.48	31.72			1260	40.22	32.43	
17:15	525	39.51	31.75			1290	40.18	32.39	
17:30	540	39.42	31.66			1320	40.25	32.46	
17:45	555	39.53	31.77			1350	40.25	32.46	
18:00	570	39.57	31.81			1380	40.22	32.43	
18:15	585	39.54	31.78			1410	40.04	32.25	
18:30	600	39.56	31.80			1430	39.88	32.09	?
19:45	615	39.52	31.81						
19:00	630	39.57	31.81						
19:15	645	39.52	31.81						
19:30	660	39.63	31.87						
19:45	675	39.70	31.94						
20:00	690	39.87	32.11						
20:15	705	39.62	31.86						
20:30	720	39.75	31.99						
20:45	735	39.85	32.13						
21:00	750	39.80	32.18						
21:15	765	39.85	32.23						
21:30	780	39.85	32.23						
21:45	795	39.80	32.18						
22:00	810	39.80	32.18						
22:30	840	39.92	32.16						
23:00	870	39.94	32.18						
23:30	900	39.90	32.14						

RPM

valve 1/2
Turn down
valve
down 1/2
valve
down 1/2
valve
down 1/2
down 1/2



CALCULATION SHEET

BEP-3706 Rev. 6/86 (ED-49)

JOB NO. F7L MATHUW 01/16 TN 19700-016	CALC. NO.	REV. NO.	SHEET NO.
ORIGINATOR PUMPING TEST ISW-4	DATE	CHECKED 4" x 6" ORIFICE READINGS	DATE

WANT
14-14.5

DATE/TIME	IN. ORIFICE	ADJUST	FLOW	DATE/TIME	IN. ORIFICE	ADJUST	FLOW
4/2/89 0830				1205	19.5		
8:31	14			1745	14 1/2		
8:32	14			1815	19 1/2		
8:33	14 1/2			1839	19 1/2		
8:34	14 1/2			1909	14 1/2		
8:35	14 1/2			1920	17 1/2		
8:36	14 1/2	275	248 RPM	1945	14 1/2 15	↓ 1/2 Turn	
8:37	14 1/2			2001	14 3/4	↓ 1/2 Turn	
8:38	14 1/2			2020	14 1/2		
8:39	14 1/2			2046	14 3/4	↓ 1/2 Turn	
8:40	14 1/2			2101	14 3/4	↓ 1/4 Turn	
8:42	14 1/2			2116	14 3/4	↓ 1/4 Turn	
8:44	14 1/2			2132	14 1/2		
8:46	14 1/2			2146	14 1/2		
8:48	14 1/2			2201	14 1/2		
8:50	14 1/2			2231	14 1/2		
8:52	14 1/2			2301	14 1/2		
8:54	14 1/2	↑ valve		2331	14 1/2		
8:56	14 1/2	↑		2340 0	14 1/2		
8:59	14 1/2	RPM		031	14 1/2		
9:00	14 1/2			1101	14 1/2		
9:05	14 1/2			1132	14 1/2		
9:40	14 1/2			2101	14 1/2		
10:10	14 1/2			2131	14 1/2		
10:36	14 1/2			3101	14 1/2		
10:57	14 1/4 - 14 1/2			3132	14 1/2		
1057-4	14 1/2	Adj		4101	14 1/2		
1121-22	14 1/2	ADJ UP 4 RPM	248	4131	14 1/2		
1127-29	14 1/2	ADJ UP RPM 8		5101	14 1/2		
1130	14 3/8 - 14 1/2	ADJ UP RPM	240	5131	14 1/2		
1150	14 1/2	↓		6101	14 1/2		
1240	14 1/2	ADJ UP SILENTLY		6131	14 1/2		
1335	14 1/2			7100	14 1/2		
1445	14 1/2			7140	14 1/2		
1600	14 3/8 to 14 1/2	ADJ UP 4 RPM	ADJ Engine to 14 1/2	8:56	14 1/4	↑ 1/2 Turn	

BECHTEL	AQUIFER RECOVERY TEST	OBSERVATION WELL <u>BTW-4</u>
	PROJECT <u>FPL MARTIN CL/C6</u>	JOB NO. <u>19720-016</u>

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL BTW#4
 MEASURING POINT Top of Casin REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) 2.76 AVG. PUMPING RATE (GPM) 248
 PUMPING PERIOD (MIN.) 1440

4/12/89

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT) 5'	TIME SINCE PUMPING STOPPED † (MIN)	RATIO 1/1'	REMARKS <i>Calc Recovery</i>
8:26	1436	40.02	32.23			
8:28	1438	40.02	32.23			
		35.00	27.24	.04 (0.07)	20,572	9.97
	30	21.62	13.86	.30 (0.5)	2881	18.37
8:31	1439	20.45	12.69	1.00	1491	19.59
		20.09	12.33	1.10 (1.17)	1232	19.76
		19.64	11.88	1.20 (1.33)	1084	20.35
		19.43	11.67	1.30 (1.50)	961	20.56
		19.20	11.44	1.40 (1.67)	863	20.79
		19.03	11.27	1.50 (1.83)	788	20.96
8:32	1442	18.88	11.12	2.00	721	21.11
		18.69	10.93	2.10 (2.17)	665	21.30
		18.51	10.75	2.20 (2.33)	619	21.48
		18.39	10.63	2.30 (2.5)	577	21.60
		18.28	10.52	2.40 (2.67)	540	21.71
		18.12	10.36	2.50 (2.83)	510	21.87
8:33	1443	18.00	10.24	3.00	481	21.99
		17.71	9.95	3.30 (3.5)	412	22.28
8:34	1444	17.42	9.66	4:00	361	22.57
		17.17	9.41	4:30 (4.5)	321	22.82
8:35	1145	16.96	9.20	5.00	289	23.03
		16.73	8.97	5:30 (5.5)	263	23.26
8:36	1446	16.54	8.78	6:00	241	23.45
		16.36	8.60	6:30 (6.5)	223	23.63
8:37	1447	16.21	8.45	7.00	207	23.75
		16.07	8.31	7:30 (7.5)	193	23.92
8:38	1448	15.93	8.17	8:00	181	24.06
		15.82	8.06	8:30 (8.5)	170	24.17
8:39	1449	15.67	7.91	9:00	161	24.32
		15.54	7.78	9:30 (9.5)	153	24.45
8:40	1450	15.43	7.67	10:00	145	24.56
		15.32	7.56	10:10 (10.4)	138	24.67

BECHTEL	AQUIFER RECOVERY TEST	OPERATION WELL BTW-4
	PROJECT <u>FPL MARSH CC/CG</u>	JOB NO. <u>19720-016</u>

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL RTW# 4
 MEASURING POINT Top of Casing REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) 7.76 AVG. PUMPING RATE (GPM) 248
 PUMPING PERIOD (MIN.) 1480

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT) S ₁	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO ↑/↑	REMARKS G & Rec
8:41	1451	15.21	7.45	11	132	24.78
		15.12	7.36	11½	126	24.87
8:42	1452	15.04	7.28	12	121	24.95
		14.93	7.17	12½	116	25.06
8:43	1453	14.84	7.08	13	112	25.15
		14.73	6.97	13½	108	25.26
8:44	1454	14.66	6.90	14	104	25.37
		14.58	6.82	14½	100	25.41
8:45	1455	14.52	6.76	15	97	25.47
		14.44	6.68	15½	94	25.55
8:46	1456	14.37	6.61	16	91	25.62
		14.29	6.53	16½	88	25.70
8:47	1457	14.23	6.47	17	86	25.76
		—	—	17½	—	—
8:48	1458	14.12	6.36	18	81	25.87
		14.04	6.28	18½	79	25.95
8:49	1459	13.98	6.22	19	77	26.01
		13.93	6.17	19½	75	26.07
8:50	1460	13.87	6.11	20	73	26.13
8:51	1461	13.76	6.00	21	70	26.24
8:52	1462	13.66	5.90	22	66	26.34
8:53	1463	13.54	5.78	23	64	26.46
8:54	1464	13.46	5.70	24	61	26.54
8:55	1465	13.37	5.61	25	59	26.63
8:56	1466	13.29	5.53	26	56	26.71
8:57	1467	13.22	5.46	27	54	26.78
8:58	1468	13.12	5.36	28	52	26.88
8:59	1469	13.05	5.29	29	51	26.95
9:00	1470	12.97	5.21	30	49	27.03
9:01	1471	12.91	5.15	31	47	27.09
9:02	1472	12.83	5.07	32	46	27.17
9:03	1473	12.76	5.00	33	45	27.24

RECHTEL **AQUIFER RECOVERY TEST** **OBSERVATION WELL RTW-4**
PROJECT FPL MARTIN CC/CG **JOB NO.** 19720-016

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL 13FW-4
 MEASURING POINT Top of casing REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) 7.76 AVG. PUMPING RATE (GPM) 248
 PUMPING PERIOD (MIN.) 1440

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT) 5'	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO 1/1'	REMARKS <i>Calc Rec</i>
9:04	1474	12.71	4.95	34	43	27.29
9:05	5	.64	4.88	35	42	27.36
:06	6	.57	4.81	36	41	27.43
:07	7	.52	4.76	37	40	27.48
:08	8	.47	4.71	38	39	27.53
:09	9	.42	4.66	39	38	27.58
9:10	1480	.37	4.61	40	37	27.63
:11	1	.31	4.55	41	36	27.69
:12	2	.26	4.50	42	35	27.74
:13	3	.21	4.45	43	34	27.79
:14	4	.16	4.40	44	33.7	27.84
9:15	5	.12	4.36	45	33	27.88
:16	6	.06	4.30	46	32.3	27.94
:17	7	12.03	4.27	47	31.6	27.97
:18	8	11.98	4.22	48	31	28.02
:19	9	.94	4.18	49	30.4	28.06
9:20	1490	.90	4.14	50	29.8	28.10
:21	1	.86	4.10	51	29.2	28.14
:22	2	.83	4.07	52	28.7	28.17
:23	3	.78	4.02	53	28.2	28.22
:24	4	.75	3.99	54	27.7	28.25
9:25	5	.72	3.96	55	27.2	28.28
:26	6	.68	3.92	56	26.7	28.32
:27	7	.64	3.88	57	26.3	28.36
:28	8	.60	3.84	58	25.8	28.41
:29	9	.57	3.81	59	25.4	28.44
9:30	1500	.54	3.78	60	25	28.47
:32	2	.46	3.70	62	24.2	28.55
:34	4	.41	3.65	64	23.5	28.60
:36	6	.35	3.59	66	22.8	28.66
:38	8	.30	3.54	68	22.2	28.71
9:40	1510	11.24	3.48	70	21.6	28.77

RECHTEL	AQUIFER RECOVERY TEST	OBSERVATION WELL <u>RTW-9</u>
	PROJECT <u>FPL MARTIN 11/66</u>	JOB NO. <u>1970-016</u>

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL 15FW-4
 MEASURING POINT _____ REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) 7.76 AVG. PUMPING RATE (GPM) 298
 PUMPING PERIOD (MIN.) _____

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT) s	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO ↑/↓	REMARKS Calc. Rec
9:42	1512	11.18	3.42	72	21	28.83
:44	14	.14	3.38	74	20.5	28.87
:46	16	.09	3.33	76	20.0	28.92
:48	18	11.03	3.27	78	19.5	28.98
9:50	20	10.99	3.23	80	19	29.02
:52	22	.94	3.18	82	18.6	29.07
:54	24	.90	3.14	84	18.1	29.11
:56	26	.86	3.10	86	17.7	29.15
:58	28	.82	3.06	88	17.4	29.19
10:00	30	.78	3.02	90	17	29.23
:05	35	.68	2.92	95	16.2	29.33
:10	40	.59	2.83	100	15.4	29.43
:15	45	.50	2.74	105	14.7	29.52
:20	50	.42	2.66	110	14.1	29.60
:25	55	.35	2.59	115	13.5	29.67
10:30	60	.27	2.51	120	13	29.75
:35	65	.22	2.46	125	12.5	29.80
:40	70	.14	2.38	130	12.1	29.88
:45	75	.08	2.32	135	11.7	29.95
10:50 10:50	80	10.03	2.27	140	11.3	30.00
10:55 10:55	85	9.97	2.21	145	10.9	30.06
11:00:00	90	.93	2.17	150	10.6	30.10
10:05 10:05	1595	.88	2.12	155	10.3	30.15
10:10 10:10	1600	.82	2.06	160	10	30.21
10:15 10:15	5	.77	2.01	165	9.7	30.26
10:20 10:20	10	.72	1.96	170	9.5	30.31
10:25 10:25	15	.68	1.92	175	9.2	30.36
11:30:00	20	.65	1.89	180	9	30.39
:40	30	.57	1.81	190	8.6	30.47
:50	40	.49	1.73	200	8.2	30.55
12:00	50	.43	1.67	210	7.9	30.62
12:10	1660	9.36	1.60	220	7.5	30.69

PROJECT FPL MARIANA CC/CCJOB No. 1972-016TEST TYPE CONSTANT RATEDATE TEST BEGUN 4/27/89PUMPING WELL B3W-4DIST. TO PPG WELL 120.2' ()

SCREEN DEPTH ()

PPG WELL () OBS. WELL ()

FLOW MEAS. METHOD 4" X 6" ORIFICEPUMP 8" VERT. TURBINEPUMPING RATE / HISTORY ~~4.5 GPM~~

PUMPING PERIOD ()

REFERENCE POINT MARK ON 2" PVC CASING 0.5' ABOVE G.E.

ELEVATION ()

LOCATION ()

OBSERVER ()

Sheet 1 of 3

Inst. N.W.

4/27/89

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
0828		5.87	↑		838	9.0	9.36	3.49	
0829		5.87			839 ³⁰	9.5	9.47	3.60	
0830	0	5.87			0840	10.0	9.56	3.69	
10	0.17	5.88	0.01		840 ³⁰	10.5	9.64	3.77	
20	0.33	5.97	0.10		841	11.0	9.74	3.87	
30	0.50	6.20	0.33		842	12.	9.90	4.03	
40	0.66	6.36	0.49		843	13.	10.07	4.20	
50	0.83	6.48	0.61		844	14	10.18	4.32	
831	1.0	6.68	0.81		845	15	10.32	4.45	
15	1.25	6.75	0.88		846	16	10.46	4.59	
30	1.50	6.99	1.12		847	17	10.57	4.70	
45	1.75	7.16	1.29		0848	18	10.68	4.81	
832	2.0	7.27	1.40		0849	19	10.79	4.92	
15	2.25	7.39	1.52		0850	20	10.90	5.03	
30	2.50	7.49	1.62		0851	21	10.99	5.13	
45	2.75	7.61	1.74		0852	22	11.07	5.20	
833	3.0	7.72	1.85		0853	23	11.16	5.29	
30	3.25	7.91	2.04		0854	24	11.23	5.36	
45	3.75	7.97	2.10		0855	25	11.32	5.45	
834	4.0	8.10	2.23		0856	26	11.40	5.53	
30	4.5	8.26	2.39		0857	27	11.47	5.60	
835	5.0	8.41	2.54	248 gpm	0858	28	11.55	5.68	↑
30	5.5	8.53	2.66		0859	29	11.61	5.74	↓
836	6.0	8.69	2.82		0860	30	11.67	5.80	
30	6.5	8.79	2.92		0901	31	11.76	5.89	
837	7.0	8.93	3.06		0902	32	11.82	5.95	
30	7.5	9.05	3.18		0903	33	11.90	6.03	
838	8.0	9.16	3.29		0904	34	11.95	6.08	
30	8.5	9.28	3.41		0905	35	12.01	6.14	

6

AQUIFER PUMPING TEST OBSERVATION WELL BTW-4063
 PROJECT F174 L MAZITINI CC/CC JOB No. 19720-016

TEST TYPE CONSTANT RATE DATE TEST BEGUN 7/27/09
 PUMPING WELL BTW-4 DIST. TO PPG WELL 120.00 FT. ()
 STATIC 5.87'

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
0906	36	12.06	6.19		1035	125	14.50	8.63	
0907	37	12.11	6.24		1040	130	14.56	8.69	
0908	38	12.17	6.30		1045	135	14.62	8.75	
0909	39	12.21	6.34		1050	140	14.66	8.79	
0910	40	12.26	6.39		1055	145	14.72	8.85	
0912	42	12.37	6.50		1100	150	14.76	8.89	ADJ 4
0914	44	12.45	6.58		1105	155	14.82	8.95	
0916	46	12.53	6.66		1110	160	14.86	8.99	
0918	48	12.60	6.73	ADJ	1115	165	14.90	9.03	P
0920	50	12.69	6.82	ADJ RPM. 1120	1120	170	14.93	9.06	ADJ 4
0922	52	12.80	6.93		1125	175	14.98	9.11	TO 14 1/2" ADJ 4 1/2"
0924	54	12.89	7.02		1130	180	15.04	9.17	ADJ 4
0926	56	12.96	7.09		1140	190	15.16	9.29	
0928	58	13.04	7.17		1150	200	15.24	9.37	
0930	60	13.11	7.24		1200	210	15.33	9.46	
0932	62	13.17	7.30		1210	220	15.38	9.51	
0934	64	13.24	7.37		1220	230	15.46	9.59	
0936	66	13.30	7.43		1230	240	15.50	9.63	
0938	68	13.34	7.47		1240	250	15.56	9.69	
0940	70	13.41	7.54		1250	260	15.62	9.75	
0944	74	13.52	7.65		1300	270	15.66	9.79	
0946	76	13.57	7.70		1310	280	15.71	9.84	
0948	78	13.62	7.75		1320	290	15.74	9.87	
0950	80	13.65	7.78		1330	300	15.76	9.89	
952	82	13.70	7.83		1340	310	15.80	9.93	
954	84	13.75	7.88		1350	320	15.84	9.97	
956	86	13.78	7.91		1400	325	15.88	10.01	
0958	88	13.80	7.93		1410	330	15.93	10.06	
1000	90	13.85	7.98	ALL RIZZ. 1120	1420	350	15.97	10.10	
1005	95	13.97	8.10		1430	360	15.99	10.12	
1010	100	14.08	8.21		1445	375	16.03	10.16	
1015	105	14.17	8.30		1500	390	16.07	10.20	
1020	110	14.27	8.40		1515	405	16.10	10.23	
1025	115	14.35	8.48		1530	420	16.13	10.26	
1030	120	14.43	8.56		1545	435	16.15	10.28	



AQUIFER PUMPING TEST OBSERVATION WELL *BW-401s*

PROJECT *FPL MHEM 6/16*

JOB No. *19720-016*

TEST TYPE: *CONSTANT RATE*

DATE TEST BEGUN *4/27/88 - 4/28/88*

PUMPING WELL *BW-4*

DIST. TO PPG WELL *120.2'* ()

STATIC 57.87

TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()	TIME (24 HR DAY)	TIME-AFTER PUMP ON ()	DEPTH TO WATER ()	DRAW DOWN ()	DISCHARGE ()
1600	450	16.18	10.31	<i>ADJ RPM UP</i>	3:30	1140	16.84	10.97	
1615	465	16.24	10.37		4:00	1170	16.85	10.98	
1630	480	16.28	10.41		4:30	1200	16.88	11.01	
1645	495	16.33	10.46		5:00	1230	16.91	11.04	
1700	510	16.37	10.50		5:30	1260	16.93	11.06	
1715	525	16.37	10.50		6:00	1290	16.94	11.07	
1730	540	16.40	10.53		6:30	1320	16.95	11.08	x
1745	555	16.41	10.54		7:00	1350	16.96	11.09	
1800	570	16.45	10.58		7:30	1380	16.96	11.09	
1814	586	16.46	10.59		8:00	1410	16.92	11.05	
1830	600	16.48	10.61		8:27	1437	16.91	11.04	↑
1845	615	16.50	10.63						
1900	630	16.51	10.64						
1915	645	16.53	10.66						
1930	660	16.56	10.69						
1945	675	16.58	10.71						
2000	690	16.62	10.75						
2015	705	16.62	10.75						
2030	720	16.62	10.75						
2045	735	16.65	10.78						
2100	750	16.67	10.80						
2115	765	16.68	10.81						
2130	780	16.69	10.82						
2145	795	16.69	10.82						
2200	800	16.70	10.83						
2230	840	16.72	10.85						
2300	870	16.74	10.87						
2330	900	16.78	10.88						
<i>4/28</i> 2000	930	16.78	10.91						
2030	960	16.80	10.93						
2100	990	16.82	10.95						
2130	1020	16.83	10.96						
2200	1050	16.83	10.96						
2230	1080	16.85	10.98						
300	1110	16.84	10.97						

RECHTEL **AQUIFER RECOVERY TEST** **OBSERVATION WELL BTW-4 of 5**
PROJECT FPL MARTIN C/CC **JOB NO. 19720-016**

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL BTW-4
 MEASURING POINT To 2nd Pie Pipe REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) 5.87 AVG. PUMPING RATE (GPM) 248
 PUMPING PERIOD (MIN.) 1440

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↓ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT)	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO 1/1'	REMARKS <i>Calc. Rec</i>
0829	1439	16.90	11.03			
0829 ⁴⁵	1439.75	16.81	11.04			
0830	1440	16.80	11.03	0		
15	1440.25	16.89	10.93	.25	5761	0.10
30	1440.50	16.61	10.74	.50	2881	0.29
46	1440.66	16.41	10.54	.66	2183	0.40
50	1440.83	16.29	10.42	.83	1736	0.61
0831	1441.0	16.13	10.26	1.0	1441	0.77
10	1441.17	15.98	10.11	1.17	1232	0.92
20	1441.33	15.85	9.98	1.33	1084	1.05
30	1441.50	15.78	9.91	1.50	961	1.12
40	1441.66	15.67	9.80	1.66	868	1.23
50	1441.83	15.55	9.68	1.83	788	1.35
0832	1442.0	15.47	9.60	2.0	721	1.43
15	1442.25	15.35	9.48	2.25	641	1.55
30	1442.50	15.23	9.36	2.50	577	1.67
45	1442.75	15.12	9.25	2.75	525	1.78
0833	1443.00	15.02	9.15	3.00	481	1.88
15	1443.26	14.94	9.07	3.25	444	1.96
30	1443.50	14.82	8.95	3.50	412	2.08
45	1443.75	14.73	8.86	3.75	385	2.17
0834	1444.0	14.65	8.78	4.0	361	2.25
30	1444.5	14.48	8.61	4.5	321	2.42
0835	1445.0	14.37	8.50	5.0	280	2.53
30	1445.5	14.20	8.33	5.5	263	2.70
0836	1446.0	14.07	8.20	6.0	241	2.83
30	1446.5	13.87	8.05	6.5	223	2.98
0837	1447.0	13.82	7.95	7.0	207	3.08
30	1447.5	13.69	7.82	7.5	193	3.21
0838	1448.0	13.60	7.73	8.0	181	3.30
30	1448.5	13.49	7.62	8.5	170	3.41
0839	1449.0	13.37	7.50	9.0	161	3.53

	AQUIFER RECOVERY TEST	OBSERVATION WELL B710-4063
	PROJECT FPL MARTIN CC/CC	JOB NO. 14720-016

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL B7W-4
 MEASURING POINT Top of PVC PIPE REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) _____ AVG. PUMPING RATE (GPM) _____
 PUMPING PERIOD (MIN.) 1440

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT)	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO 1/1'	REMARKS Calc. Rec.
0839 30	1449.5	13.29	7.42	9.5	153	3.61
0840	1450.0	13.19	7.32	10.0	145	3.71
0840 30	1450.5	13.12	7.25	10.5	138	3.78
0841	1451.0	13.02	7.15	11.0	132	3.88
30	1451.5	12.94	7.07	11.5	126	3.96
0842	1452.0	12.85	6.98	12.0	121	4.05
30	1452.5	12.79	6.92	12.5	116	4.11
0843	1453.0	12.71	6.84	13.0	112	4.19
30	1453.5	12.63	6.76	13.5	108	4.27
0844	1454.0	12.57	6.70	14.0	104	4.33
30	1454.5	12.49	6.62	14.5	100	4.41
0845	1455.0	12.43	6.56	15.0	97	4.47
30	1455.5	12.36	6.49	15.5	94	4.54
0846	1456.0	12.29	6.42	16.0	91	4.61
30	1456.5	12.23	6.36	16.5	89	4.67
0847	1457.0	12.18	6.31	17.0	86	4.72
30	1457.5	12.12	6.25	17.5	83	4.78
0848	1458.0	12.05	6.18	18.0	81	4.86
30	1458.5	12.00	6.13	18.5	79	4.91
0849	1459.0	11.94	6.07	19.0	77	4.97
0850	1460.0	11.85	5.98	20.0	73	5.06
0851	1461	11.75	5.88	21.0	70	5.16
0852	1462	11.66	5.79	22.0	66	5.25
0853	1463	11.56	5.69	23.0	64	5.35
0854	1464	11.48	5.61	24.0	61	5.43
0855	1465	11.40	5.53	25.0	59	5.51
0856	1466	11.31	5.44	26.0	56	5.60
0857	1467	11.24	5.37	27.0	57	5.67
0858	1468	11.17	5.30	28.0	52	5.71
0859	1469	11.08	5.21	29.0	51	5.87
0800	1470	11.02	5.15	30.0	49	5.89
0901	1471	10.94	5.07	31.0	47	5.97



AQUIFER RECOVERY TEST

OBSERVATION WELL BTW-4083

PROJECT FPL MARTIN CL/C6

JOB NO. 19720-016

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL BTW-4

MEASURING POINT _____ REFERENCE ELEV. (FT. AMSL) _____

STATIC WATER LEVEL (FT.) 5.87 AVG. PUMPING RATE (GPM) _____

PUMPING PERIOD (MIN.) 1440

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT)	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO ↑/↓	REMARKS Calc. Rec
0902	1472	10.89	5.02	32	46	6.02
0903	1473	10.83	4.96	33	45	6.08
0904	1474	10.76	4.89	34	43	6.15
0905	1475	10.71	4.84	35	42	6.20
0906	1476	10.64	4.77	36	41	6.27
0907	1477	10.60	4.73	37	40	6.31
0908	1478	10.53	4.66	38	39	6.38
0909	1479	10.47	4.60	39	38	6.44
0910	1480	10.44	4.57	40	37	6.47
0911	1481	10.39	4.52	41	36	6.52
0912	1482	10.35	4.48	42	35	6.56
0913	1483	10.29	4.42	43	34.5	6.62
0914	1484	10.25	4.38	44	33.7	6.66
0915	1485	10.20	4.33	45	33	6.71
0916	1486	10.14	4.27	46	32.3	6.77
0917	1487	10.12	4.25	47	31.6	6.79
0918	1488	10.08	4.21	48	31	6.83
0919	1489	10.03	4.16	49	30.4	6.88
0920	1490	9.98	4.11	50	29.8	6.93
0921	1491	9.93	4.06	51	29.2	6.98
0922	1492	9.91	4.04	52	28.7	7.00
0923	1493	9.87	4.00	53	28.2	7.07
0924	1494	9.85	3.98	54	27.7	7.07
0925	1495	9.81	3.94	55	27.2	7.11
0926	1496	9.77	3.90	56	26.7	7.15
0927	1497	9.74	3.87	57	26.3	7.15
0928	1498	9.70	3.83	58	25.8	7.22
0929	1499	9.67	3.80	59	25.4	7.25
0930	1500	9.62	3.75	60	25	7.30
0932	1502	9.58	3.71	62	24.2	7.34
0934	1504	9.50	3.65	64	23.5	7.40
0936	1506	9.46	3.59	66	22.8	7.46

cont
JV

	AQUIFER RECOVERY TEST	OBSERVATION WELL <i>B10-14</i>
	PROJECT <i>FPL MARTIN CC/CC</i>	JOB NO. <i>19720-016</i>

SCREENED INTERVAL (FT.) _____ TO _____ PUMPING WELL *B10W-4*
 MEASURING POINT _____ REFERENCE ELEV. (FT. AMSL) _____
 STATIC WATER LEVEL (FT.) *5.87* AVG. PUMPING RATE (GPM) *248*
 PUMPING PERIOD (MIN.) _____

DATE/TIME (24 hr DAY)	TIME AFTER PUMP ON ↑ (MIN)	DEPTH TO WATER (FT)	RESIDUAL DRAWDOWN (FT)	TIME SINCE PUMPING STOPPED ↑ (MIN)	RATIO ↑/↑	REMARKS <i>Calc Rec</i>
0938	1508	9.41	3.54	68	22.2	7.51
0940	1510	9.36	3.49	70	21.6	7.56
0942	1512	9.30	3.43	72	21	7.62
0944	1514	9.24	3.37	74	20.5	7.68
0946	1516	9.20	3.33	76	20.0	7.72
0948	1518	9.15	3.28	78	19.5	7.77
0950	1520	9.11	3.24	80	19	7.81
0952	1522	9.07	3.20	82	18.6	7.85
0954	1524	9.01	3.14	84	18.1	7.91
0956	1526	8.98	3.11	86	17.7	7.97
0958	1528	8.94	3.07	88	17.4	7.98
1000	1530	8.89	3.02	90	17	8.04
1005	1535	8.80	2.93	95	16.2	8.13
1010	1540	8.71	2.84	100	15.4	8.22
1015	1545	8.67	2.75	105	14.7	8.31
1020	1550	8.54	2.67	110	14.1	8.37
1025	1555	8.46	2.57	115	13.5	8.47
1030	1560	8.39	2.52	120	13	8.54
1035	1565	8.33	2.46	125	12.5	8.61
1040	1570	8.26	2.39	130	12.1	8.68
1045	1575	8.18	2.31	135	11.7	8.76
1050	1580	8.15	2.28	140	11.3	8.79
1055	1585	8.10	2.23	145	10.9	8.87
1100	1590	8.04	2.17	150	10.6	8.90
1105	1595	7.97	2.10	155	10.3	8.97
1110	1600	7.93	2.06	160	10	9.01
1115	1605	7.88	2.01	165	9.7	9.07
1120	1610	7.84	1.97	170	9.5	9.11
1125	1615	7.79	1.92	175	9.2	9.16
1130	1620	7.75	1.88	180	9	9.20
1140	1630	7.66	1.79	190	8.6	9.29
1150	1640	7.60	1.73	200	8.2	9.36

Sechtel Test Well 4 Florida Power and Light Indiantown Florida

" Terra8 Data Collection Report "

"Firmware Version 6.1/87"
 "Number of Bytes in Data Dump 11100"
 "User Supplied Comment "
 "Time Header Block Loaded 04/27 08:00:14.20 "
 "Time Data File Dumped 05/01 13:07:37.70 "
 "Remaining Memory 54436"
 "Number of Logs 911"
 "Type of Data Memory Memory Board"
 "Logs/Timestamp 1"
 "Power was OK During Data Collection Period"

" Terra8 Channel Setup: "
 "Number of Declared Analog Channels = 2"

Ch#	Description	Units	Delay	M	E
1	PUMPED WELL.....	FT.....	100	13.860	-0.000
2	OBS WELL.....	FT.....	100	4.620	-0.000

" Terra8 Channel Setup: "

"Number of Declared Digital Channels = 0"

Ch#	Description	Units	Delay	M	E
-----	-------------	-------	-------	---	---

"*Initial Scan at "4 27 8 0 13 80
 "*Next Scan at "4 27 8 0 13 80

Time	" Analog#01 "	Analog#02 "
	<i>BTW-4</i>	<i>BTW-4ols</i>
0.00	41.857	19.566
257.10	41.649	19.681
379.00	40.541	18.457
647.80	41.719	19.797
1842.50	41.580	19.727
1869.70	41.927	19.681
1901.20	41.788	19.496
1945.00	41.857	19.519
1947.80	41.927	19.543
1949.70	41.719	19.820
1951.50	41.857	19.519
1953.50	41.719	19.820
<i>Pump start</i> → 1955.60	41.511	19.681
1957.60	38.184	19.635
1959.60	34.442	19.704
<i>17m sec</i> 1961.60	31.393	19.543
1963.60	29.660	19.750

1965.60	27.651	19.473
1967.60	26.334	19.727
1969.60	25.988	19.704
1971.60	24.324	19.681
1973.60	23.631	19.473
1975.60	24.186	19.404
1977.60	23.008	19.358
1979.60	23.562	19.473
1981.60	22.176	19.335
1983.60	22.384	19.288
1985.60	22.315	19.265
1987.60	21.760	19.173
1989.60	21.344	19.358
1991.60	21.622	19.081
1993.60	21.691	19.312
1995.60	20.998	18.988
1997.60	21.137	19.173
1999.60	20.929	19.034
2001.60	21.206	19.150
2003.60	21.483	18.850
2005.50	21.344	18.988
2007.50	21.137	19.081
2009.50	21.622	18.757
2011.60	21.760	18.919
2013.50	22.176	18.688
2015.50	22.107	18.734
2017.50	22.245	18.942
2019.50	22.315	18.873
2021.50	22.245	18.619
2023.50	22.176	18.873
2025.50	21.830	18.873
2027.50	21.830	18.734
2029.60	22.176	18.642
2031.60	21.968	18.665
2033.70	21.691	18.526
2035.50	21.830	18.595
2037.60	21.483	18.665
2039.60	21.691	18.711
2041.60	21.691	18.688
2043.60	21.344	18.595
2045.60	21.622	18.642
2047.60	21.275	18.411
2049.60	21.483	18.595
2051.60	21.691	18.434
2053.60	21.206	18.364
2055.60	21.414	18.480
2057.60	21.206	18.295
2059.60	21.414	18.503
2061.50	21.414	18.341
2063.50	20.998	18.411
2065.50	21.344	18.341
2067.60	20.859	18.411
2069.50	21.206	18.364
2071.50	20.859	18.434
2073.50	20.929	18.110

2075.50	21.137	18.341
2077.50	20.998	18.064
2079.50	20.721	18.341
2081.50	20.859	18.041
2083.50	20.651	18.272
2085.50	20.790	18.157
2087.70	20.513	18.295
2089.50	20.582	17.972
2091.50	20.582	17.995
2093.60	20.097	18.087
2095.60	20.097	17.949
2097.60	20.444	17.972
2099.70	20.444	18.110
2101.60	20.305	17.879
2103.60	20.236	18.133
2105.60	20.236	17.856
2107.60	20.097	18.110
2109.60	19.958	17.902
2111.60	20.236	18.110
2113.60	20.097	17.856
2115.60	19.889	17.810
2117.50	19.958	17.856
2119.60	19.889	18.041
2121.60	20.028	17.856
2123.60	19.751	17.787
2125.50	19.958	17.787
2127.50	19.889	17.718
2129.50	19.473	17.833
2131.50	19.543	17.648
2133.50	19.543	17.648
2135.50	19.820	17.856
2137.50	19.335	17.718
2139.50	19.473	17.579
2141.70	19.127	17.579
2143.70	18.988	17.856
2145.70	19.265	17.879
2147.50	19.612	17.556
2149.60	18.919	17.556
2151.60	18.919	17.556
2153.60	19.335	17.533
2155.60	18.711	17.741
2157.60	19.127	17.510
2159.60	19.543	17.764
2161.60	19.543	17.695
2163.60	18.850	17.764
2165.60	19.473	17.440
2167.60	19.058	17.648
2169.60	19.335	17.394
2171.60	18.780	17.533
2173.60	19.127	17.464
2175.60	19.265	17.556
2177.60	19.265	17.671
2179.60	18.503	17.394
2181.60	19.058	17.602
2183.60	19.196	17.302

2185.60	18.434	17.533
2187.60	19.265	17.348
2189.50	18.572	17.302
2191.50	18.434	17.510
2193.50	18.365	17.325
2195.60	18.919	17.533
2197.50	18.572	17.417
2199.50	18.295	17.464
2201.50	18.850	17.209
2203.50	18.988	17.417
2205.50	18.503	17.209
2207.50	18.434	17.440
2209.50	18.850	17.464
2211.50	19.058	17.464
2213.50	18.503	17.186
2215.50	18.850	17.394
2217.50	18.850	17.325
2219.50	18.503	17.348
2221.50	18.642	17.117
2223.50	19.127	17.348
2225.50	18.157	17.117
2227.50	18.503	17.094
2229.70	18.157	17.071
2231.50	18.572	17.325
2233.50	18.988	17.209
2235.50	19.058	17.325
2237.60	18.018	17.186
2239.60	18.850	17.048
2241.60	18.087	17.209
2243.60	19.058	17.071
2345.50	17.810	16.817
2445.50	17.048	16.193
2545.50	16.424	16.078
2645.50	16.424	15.592
2745.50	16.147	15.546
2845.50	16.355	15.015
2945.50	15.731	14.969
3045.50	15.800	14.692
3145.50	16.008	14.437
3245.50	15.593	14.484
3345.50	15.315	14.461
3445.50	14.761	14.253
3545.50	15.315	13.860
3645.50	15.107	14.068
3745.50	14.345	13.906
3845.50	14.692	13.791
3945.50	14.345	13.583
4045.50	14.484	13.606
4145.50	14.345	13.513
4245.50	14.484	13.121
4345.50	14.553	13.075
4445.50	14.276	13.005
4545.50	14.345	13.144
4645.50	14.484	12.820
4745.50	14.276	13.051

4845.50	13.999	12.705
4945.50	13.999	12.636
5045.50	13.444	12.543
5145.50	13.444	12.497
5245.50	13.375	12.682
5275.50	13.028	12.474
5305.50	13.236	12.613
5335.50	13.167	12.474
5365.50	13.167	12.589
5395.50	13.167	12.566
5425.50	13.028	12.543
5455.50	13.236	12.335
5485.50	13.167	12.520
5515.50	13.028	12.451
5545.50	12.890	12.312
5575.50	13.028	12.220
5605.50	13.167	12.405
5635.50	12.890	12.382
5665.50	13.375	12.104
5695.50	13.375	12.197
5725.50	12.959	12.197
5755.50	13.098	12.358
5785.50	13.028	12.382
5815.50	13.167	12.197
5845.50	12.959	12.197
5875.50	13.028	12.174
5905.50	13.167	12.151
5935.50	13.098	12.127
5965.50	13.098	12.104
5995.50	13.028	12.104
6025.50	12.890	12.081
6055.50	12.821	12.081
6085.50	12.821	12.058
6115.50	13.098	12.058
6145.50	12.890	12.012
6175.50	12.821	12.035
6205.50	13.098	12.012
6235.50	12.959	12.012
6265.50	12.959	11.989
6295.50	13.028	11.943
6325.50	13.167	11.989
6355.50	13.028	11.966
6385.50	12.890	11.966
6415.50	12.959	11.943
6475.50	12.751	11.873
6535.50	12.959	11.850
6595.50	12.959	11.827
6655.50	12.890	11.850
6715.50	12.890	11.827
6775.50	12.821	11.781
6835.50	12.751	11.804
6895.50	12.682	11.781
6955.50	12.751	11.735
7015.50	12.682	11.712
7075.50	12.890	11.712

7135.50	12.890	11.665
7195.50	12.821	11.642
7255.50	12.682	11.642
7315.50	12.890	11.619
7375.50	12.682	11.596
7435.50	12.821	11.573
7495.50	12.335	11.596
7555.50	12.128	11.527
7615.50	12.266	11.504
7675.50	12.266	11.504
7735.50	12.335	11.434
7795.50	12.266	11.458
7855.50	12.197	11.434
7915.50	12.197	11.365
7975.50	12.058	11.342
8035.50	12.128	11.319
8095.50	12.128	11.365
8155.50	11.989	11.342
8455.50	12.058	11.227
8755.50	11.850	11.134
9055.50	11.989	11.088
9355.50	11.850	11.019
9655.50	11.781	10.903
9955.50	11.781	10.857
10255.50	11.781	10.834
10555.50	11.850	10.741
10855.50	11.712	10.718
11155.50	11.504	10.695
11455.50	11.850	10.649
12055.50	11.712	10.510
12655.50	11.504	10.487
13255.50	11.088	10.303
13855.50	10.880	10.210
14455.50	11.019	10.141
15355.50	10.880	10.048
16255.50	10.742	9.956
17155.50	10.672	9.910
18055.50	10.603	9.817
18955.50	10.742	9.771
19855.50	10.949	9.748
20755.50	10.672	9.656
21655.50	10.603	9.586
22555.50	10.326	9.494
23455.50	10.395	9.517
24355.50	10.256	9.448
25255.50	10.256	9.425
26155.50	10.256	9.379
27055.50	10.256	9.379
27955.50	10.187	9.286
28855.50	10.187	9.263
29755.50	9.841	9.240
30655.50	9.979	9.148
31555.50	10.049	9.171
32455.50	9.910	9.148
33355.50	10.118	9.078

34255.50	9.910	9.101
35155.50	9.910	9.055
36055.50	9.910	8.986
36955.50	9.841	9.032
37855.50	9.841	8.986
38755.50	9.563	8.986
39655.50	9.979	8.986
40555.50	9.563	8.963
41455.50	9.563	8.940
42355.50	9.771	8.870
43255.50	9.494	8.847
44155.50	9.702	8.870
45055.50	9.425	8.847
45955.50	9.563	8.824
46855.50	9.356	8.801
47755.50	9.148	8.778
48655.50	9.494	8.778
49555.50	9.494	8.778
50455.50	9.356	8.778
51355.50	9.286	8.755
52255.50	9.425	8.755
53155.50	9.563	8.732
54055.50	9.217	8.709
54955.50	9.425	8.709
55855.50	9.217	8.709
56755.50	9.356	8.686
57655.50	9.356	8.686
58555.50	9.356	8.686
59455.50	9.217	8.662
60355.50	9.425	8.639
61255.50	9.148	8.639
62155.50	9.356	8.639
63055.50	9.217	8.616
63955.50	9.217	8.616
64855.50	9.286	8.616
65755.50	9.286	8.639
66655.50	9.217	8.639
67555.50	9.425	8.616
68455.50	9.425	8.616
69355.50	9.425	8.616
70255.50	9.494	8.616
71155.50	9.356	8.616
72055.50	9.286	8.616
72955.50	9.286	8.593
73855.50	9.009	8.593
74755.50	9.286	8.570
75655.50	9.148	8.547
76555.50	9.078	8.547
77455.50	9.078	8.524
78355.50	9.078	8.501
79255.50	9.009	8.524
80155.50	9.078	8.524
81055.50	9.009	8.501
81955.50	9.148	8.524
82855.50	9.148	8.501

83755.50	8.801	8.478
84655.50	9.078	8.501
85555.50	9.217	8.501
86455.50	9.286	8.524
87355.50	9.425	8.524
88324.00	9.148	8.616
88327.00	9.633	8.431
88328.60	9.356	8.408
88330.60	9.563	8.455
88332.60	9.217	8.408
88334.60	9.286	8.662
88336.60	9.148	8.686
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88342.60	9.148	8.639
88344.60	9.217	8.593
88346.60	8.940	8.524
88348.60	9.078	8.616
88350.60	9.217	8.524
88352.60	9.286	8.662
88354.60	9.148	8.686
88356.60	9.286	8.686
88358.60	9.841	8.639
88360.60	13.860	8.431
88362.60	17.325	8.431
88364.60	20.444	8.524
88366.60	23.146	8.455
88368.60	25.087	8.616
88370.60	26.473	8.732
88372.60	26.750	8.778
88374.60	26.819	8.616
88376.60	26.681	8.732
88378.60	27.166	8.709
88380.60	27.096	8.686
88382.60	27.166	8.732
88384.60	27.096	8.986
88386.60	27.443	8.801
88388.60	27.374	9.078
88390.60	27.443	9.124
88392.60	27.859	8.940
88394.60	27.997	8.986
88396.60	27.789	9.194
88398.60	28.136	9.171
88400.60	27.997	9.148
88402.60	28.274	9.286
88404.60	28.205	9.194
88406.60	28.482	9.332
88408.60	28.690	9.263
88410.60	28.621	9.425
88412.60	28.760	9.425
88414.60	28.621	9.425
88416.60	28.967	9.240
88418.60	28.829	9.309
88420.60	28.829	9.448
88422.60	29.106	9.332

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88424.60	29.245	9.517
88426.60	29.106	9.586
88428.60	29.453	9.471
88430.60	29.175	9.540
88432.60	29.383	9.679
88434.60	29.453	9.702
88436.60	29.660	9.702
88438.60	29.660	9.702
88440.60	29.660	9.771
88442.60	29.799	9.794
88444.60	29.799	9.794
88446.60	29.730	9.817
88448.60	30.076	9.633
88450.60	30.076	9.702
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88454.60	30.007	9.910
88456.60	29.868	9.864
88458.60	30.146	9.910
88460.60	30.076	9.956
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88470.60	30.353	10.072
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88476.60	30.631	9.887
88478.60	30.561	10.095
88480.60	30.631	9.887
88482.60	30.700	10.095
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88486.60	30.839	10.072
88488.60	30.769	10.187
88490.60	30.561	10.187
88492.60	30.839	10.002
88494.60	30.908	10.187
88496.60	30.700	10.095
88498.60	30.977	10.048
88500.50	31.046	10.210
88502.60	30.839	10.326
88504.60	30.839	10.187
88506.60	31.116	10.118
88508.50	30.908	10.372
88510.60	30.839	10.233
88512.60	31.185	10.279
88514.60	31.185	10.164
88516.50	30.977	10.418
88518.50	30.908	10.395
88520.50	31.046	10.441
88522.50	31.185	10.233
88524.50	31.116	10.326
88526.50	31.393	10.233
88528.60	31.254	10.487
88530.60	31.254	10.279
88532.50	31.393	10.534

88534.50	31.254	10.557
88536.60	31.254	10.372
88538.60	31.532	10.464
88540.50	31.254	10.464
88542.50	31.601	10.395
88544.50	31.670	10.510
88546.50	31.601	10.395
88548.50	31.393	10.487
88550.50	31.393	10.487
88552.50	31.601	10.395
88554.50	31.393	10.626
88556.70	31.462	10.672
88558.50	31.809	10.510
88560.50	31.601	10.718
88562.50	31.601	10.765
88564.70	31.532	10.695
88566.50	31.809	10.510
88568.50	31.878	10.603
88570.50	31.601	10.649
88572.70	31.739	10.557
88574.50	31.878	10.765
88576.50	31.947	10.603
88578.50	31.878	10.788
88580.60	31.947	10.834
88582.70	31.739	10.741
88584.70	32.017	10.788
88586.50	31.739	10.765
88588.60	32.017	10.811
88590.60	32.017	10.649
88592.60	31.809	10.811
88594.60	32.155	10.788
88596.60	31.809	10.903
88598.60	32.225	10.765
88600.60	31.947	10.765
88602.60	32.155	10.903
88604.60	32.225	10.741
88606.60	32.294	10.788
88608.60	32.155	10.996
88610.60	32.017	10.996
88612.60	32.086	10.834
88614.60	32.294	10.926
88616.60	32.086	10.857
88618.60	32.086	10.857
88620.50	32.086	10.972
88622.60	32.432	10.926
88634.50	32.502	11.065
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88664.50	32.710	11.088
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88684.50	32.571	11.342
88694.50	32.640	11.250
88704.50	32.987	11.250
88714.50	32.918	11.504
88724.50	32.779	11.504

88734.50	32.987	11.411
88744.50	32.987	11.642
88754.50	32.987	11.619
88764.50	33.264	11.481
88774.50	33.472	11.573
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88794.50	33.195	11.804
88804.50	33.472	11.642
88814.50	33.611	11.689
88824.50	33.541	11.712
88834.50	33.472	11.989
88844.50	33.472	12.012
88854.50	33.541	11.873
88864.50	33.818	11.850
88874.50	33.611	12.012
88884.50	33.749	11.920
88894.50	34.026	12.035
88904.50	33.888	12.220
88914.50	33.818	12.312
88924.50	34.096	12.127
88954.50	34.096	12.127
88984.50	34.234	12.451
89014.50	34.442	12.474
89044.50	34.373	12.405
89074.50	34.650	12.474
89104.50	34.442	12.682
89134.50	34.789	12.820
89164.50	34.927	12.705
89194.50	34.858	13.005
89224.50	34.997	13.098
89254.50	34.858	13.028
89284.50	34.997	13.236
89314.50	35.066	13.075
89344.50	35.204	13.121
89374.50	35.412	13.144
89404.50	35.274	13.282
89434.50	35.551	13.282
89464.50	35.551	13.560
89494.50	35.551	13.375
89524.50	35.412	13.537
89554.50	35.828	13.629
89584.50	35.828	13.721
89614.50	35.551	13.744
89644.50	35.897	13.629
89674.50	36.036	13.837
89704.50	35.759	13.837
89734.50	35.828	14.022
89764.50	35.897	13.837
89794.50	36.036	14.114
89824.50	36.175	13.906
89854.50	35.967	14.068
89884.50	36.383	14.022
89914.50	36.383	14.183
89944.50	36.452	14.183
89974.50	36.105	14.322

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90004.50	36.244	14.391
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90064.50	36.452	14.461
90094.50	36.383	14.299
90154.50	36.313	14.484
90214.50	36.798	14.484
90274.50	36.868	14.645
90334.50	36.590	14.738
90394.50	36.868	14.830
90454.50	36.937	14.622
90514.50	36.798	14.946
90574.50	36.798	14.853
90634.50	37.145	15.015
90694.50	37.145	15.107
90754.50	36.937	15.084
90814.50	37.422	15.084
90874.50	37.145	15.269
90934.50	37.491	15.200
90994.50	37.491	15.084
91054.50	37.561	15.130
91114.50	37.283	15.431
91174.50	37.769	15.315
91234.50	37.353	15.477
91294.50	37.699	15.315
91354.50	37.422	15.616
91414.50	37.699	15.662
91474.50	37.699	15.454
91534.50	37.976	15.569
91594.50	37.699	15.800
91654.50	38.046	15.592
91714.50	37.838	15.847
91774.50	38.046	15.777
91834.50	38.115	15.662
92134.50	37.907	15.893
92434.50	38.323	15.939
92734.50	38.184	16.239
93034.50	38.323	16.447
93334.50	38.600	16.447
93634.50	38.739	16.563
93934.50	38.808	16.655
94234.50	38.947	16.771
94534.50	39.016	16.863
94834.50	39.085	16.932
95134.50	39.224	17.025
95734.50	39.362	17.163
96334.50	39.501	17.302
96934.50	39.640	17.417
97534.50	39.709	17.533
98134.50	39.848	17.625
99034.50	39.986	17.787
99934.50	40.125	17.902
100834.50	40.194	17.995
101734.50	40.333	18.110
102634.50	40.402	18.203
103534.50	40.471	18.272

104434.50	40.610	18.364
105334.50	40.610	18.434
106234.50	40.748	18.480
107134.50	40.748	18.549
108034.50	40.818	18.595
108934.50	40.887	18.642
109834.50	40.956	18.688
110734.50	41.026	18.734
111634.50	41.026	18.780
112534.50	41.095	18.803
113434.50	41.095	18.873
114334.50	41.234	18.873
115234.50	41.234	18.919
116134.50	41.234	18.965
117034.50	41.234	18.988
117934.50	41.303	19.011
118834.50	41.303	19.034
119734.50	41.372	19.057
120634.50	41.303	19.081
121534.50	41.441	19.104
122434.50	41.441	19.127
123334.50	41.441	19.127
124234.50	0.000	0.000
125134.50	0.000	0.000
126034.50	0.000	0.000
126934.50	0.000	0.000
127834.50	0.000	0.000
128734.50	0.000	0.000
129634.50	0.000	0.000
130534.50	0.000	0.000
131434.50	0.000	0.000
132334.50	0.000	0.000
133234.50	0.000	0.000
134134.50	0.000	0.000
135034.50	0.000	0.000
135934.50	0.000	0.000
136834.50	0.000	0.000
137734.50	0.000	0.000
138634.50	0.000	0.000
139534.50	0.000	0.000
140434.50	0.000	0.000
141334.50	0.000	0.000
142234.50	0.000	0.000
143134.50	0.000	0.000
144034.50	0.000	0.000
144934.50	0.000	0.000
145834.50	0.000	0.000
146734.50	0.000	0.000
147634.50	0.000	0.000
148534.50	0.000	0.000
149434.50	0.000	0.000
150334.50	0.000	0.000
151234.50	0.000	0.000
152134.50	0.000	0.000
153034.50	0.000	0.000