

APPENDIX D

**Field Notes for Pumping Tests
(PSP Pumping Well Observations in Hard Copy /
RGC Raw Water Level Data Attached as CD)**

TEST DETAILS		CONSTANT		WELL ID		PW# 1	
WELL DEPTH	72.44 FT.	PACKER	UNABLE TO FINE	DISCHARGE L.	510 FT.	DATUM:	2.9 FT. TOP OF CASING WITH 3.8 IN. STICK UP
DIAMETER	8 IN.			ORIFICE	6 IN X 5 IN	PUMPSET:	60.62 FT.
						SCREEN L.	13.9 FT. - 19 FT. & 53.9 FT - 64.3 FT. BELOW TOP OF CASING
TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
10 SEPTEMBER 2005							PAGE 1 OF 2
11:25	0	7.94					STATIC
	0.5	10.42					
11:26	1	15.04					
	1.5	16.34					
11:27	2	16.78					
	2.5	16.93					
11:28	3	17.07					
	3.5	17.17	498.0				
11:29	4	17.26					
	4.5	17.38	498.0				
11:30	5	17.44					CLOUDY GREY
11:31	6	17.52	498.0			33	
11:32	7	17.61					
11:33	8	17.66	498.0			33	
11:34	9	17.69					CLOUDY DARK GREY ORGANIC MATTER SILT
11:35	10	17.71	498.0			33	
11:37	12	17.77					CLOUDY DARK GREY
11:39	14	17.81	498.0			33	
11:41	16	17.82					
11:43	18	17.84	498.0			33	
11:45	20	17.86					1/4 TSP FINE BLACK SILT & ORGANIC MATTER
11:50	25	17.92	498.0			33	CLOUDY DARK GREY ORGANIC MATTER, SILT
11:55	30	18.05					
12:00	35	18.13	498.0			33	DARK GREY WATER
12:05	40	18.22					
12:10	45	18.31	498.0			33	1/4 TSP SILT, ORGANIC MATTER
12:15	50	18.33					
12:25	60	18.44	498.0			33	
12:35	70	18.53					
12:45	80	18.59	498.0			33	
12:55	90	18.63					CLOUDY LIGHT GREY, SMALL ORGANIC MATTER
13:05	100	18.69	498.0			33	
13:25	120	18.80					
13:45	140	18.89	498.0			33	VALVE UP SLIGHTLY TO MAINTAIN 498 USGPM
14:05	160	19.09					
14:25	180	19.19	498.0			33	
14:45	200	19.25					WATER CLOUDY, GREY FINE SILT, ORGANIC MATTER
15:35	250	19.36	498.0			33	
16:25	300	19.44					WATER CLEARING SLIGHTLY
17:15	350	19.48	498.0			33	
18:05	400	19.67					FLOW IS STABLE
18:55	450	19.77	498.0			33	WATER CLOUDY, GREY FINE SILT, ORGANIC MATTER
19:45	500	19.85					
20:35	550	19.94	498.0			33	FLOW IS STABLE
21:25	600	20.03					
22:15	650	20.12	498.0			33	
23:05	700	19.98					WATER CLOUDY, FINE SILT MINIMAL
23:55	750	20.05	498.0			33	
0:45	800	20.09			11-Sep-05		
1:35	850	20.19	498.0			33	
2:25	900	20.22					WATER CLOUDY MINIMAL SILT
3:15	950	20.26	498.0			33	
4:05	1000	20.29					
4:55	1050	20.34	498.0			33	WATER CLOUDY 20 GRAINS FINE FINE SAND
5:45	1100	20.39					
6:35	1150	20.50	498.0			33	
7:25	1200	20.53					
8:15	1250	20.63	498.0			30	VALVE UP SLIGHTLY TO MAINTAIN 498 USGPM
9:05	1300	20.90					WATER SLIGHTLY CLOUDY 1/8 TSP SILT

TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
							PAGE 2 OF 2
9:55	1350	20.94	498.0			30	
10:45	1400	20.97					PARTLY SUNNY WITH CLOUDS
12:25	1500	21.11	498.0			30	
14:05	1600	21.46					WATER CLEARING, SLIGHT SILT & ORGANIC MATTER
15:45	1700	21.54	498.0			30	
17:25	1800	21.58					
19:05	1900	21.70	498.0			30	WATER CLEARING, MINIMAL SILT
20:45	2000	21.96					
22:25	2100	21.98	498.0			30	
0:05	2200	22.12			12-Sep-05		WATER CLEARING, MINIMAL FINES
1:45	2300	22.16	498.0			30	
3:25	2400	22.21					WATER SLIGHT CLOUDY, GETTING BETTER
5:05	2500	22.66	498.0			30	
6:45	2600	23.00					WATER CLOUDY, MINIMAL FINES
8:25	2700	23.26	498.0			30	
10:05	2800	23.27					
11:45	2900	23.47	498.0			27	VALVE UP SLIGHTLY TO MAINTAIN 498 USGPM
13:25	3000	23.80					WATER CLEARING SLIGHTLY, STILL SILT W/ ORGANIC MATTER
15:05	3100	24.09	498.0			24	VALVE UP SLIGHTLY TO MAINTAIN 498 USGPM
16:45	3200	23.94				18	VALVE UP SLIGHTLY TO MAINTAIN 498 USGPM
18:25	3300	22.04	490.0			10	FLOW RATE DROPPED, NO VALVE LEFT, LAURA IS OK WITH 490
19:12	3347	22.04					FLOW DROPPED FROM 490 TO 350 USGPM SHUT DOWN @ LAURA'S REQUEST
	3347.5	18.35					RECOVERY
19:13	3348	14.50					
	3348.5	8.55					
19:14	3349	13.91					
	3349.5	13.82					
19:15	3350	13.70					
	3350.5	13.64					
19:16	3351	13.58					
	3351.5	13.51					
19:17	3352	13.48					
19:18	3353	13.41					
19:19	3354	13.39					
19:20	3355	13.34					
19:21	3356	13.25					
19:22	3357	13.14					
19:24	3359	13.03					
19:26	3361	12.93					
19:28	3363	12.83					
19:30	3365	12.75					
19:32	3367	12.62					
19:37	3372	12.49					
19:42	3377	12.38					
19:47	3382	12.30					
19:52	3387	12.21					
19:57	3392	12.15					
20:02	3397	12.08					
20:12	3407	11.96					
20:22	3417	11.84					
20:32	3427	11.74					
20:42	3437	11.66					
20:52	3447	11.57					
21:12	3467	11.40					
21:32	3487	11.23					
21:52	3507	11.09					
22:12	3527	10.95					
23:22	3577	10.82					
0:22	3637	10.49			13-Sep-05		
1:18	3693	10.12					
1:52	3727	9.83					
2:42	3777	9.68					
3:32	3827	9.40					
4:22	3877	9.28					

TEST DETAILS		CONSTANT		WELL ID		PW #1	
WELL DEPTH	72.4 FT.	PACKER	WELDED	DISCHARGE L.	510 FT.	DATUM:	2.9 FT. WITH 2.6 IN. STICK UP
DIAMETER	8 IN.	SCREEN L.	15.5 FT.	ORIFICE	6 IN. X 3 IN.	PUMPSET:	
TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
14 SEPTEMBER 2005							PAGE 1 OF 3
11:50	0	7.80					VALVE DOWN
	0.5	11.99				88	
11:51	1	10.21					VALVE DOWN
	1.5	8.96	90.0			88	MINIMAL FINES
11:52	2	8.89					CLOUDY GREY
	2.5	8.86	90.0			88	
11:53	3	8.86					FEW SMALL ROCKS, FEW GRAINS OF SAND
	3.5	8.86	90.0			88	CLOUDY GREY
11:54	4	8.86					FEW SMALL ROCKS, FEW GRAINS OF SAND
	4.5	8.86	90.0			88	
11:55	5	8.87					FEW SMALL ROCKS, FEW GRAINS OF SAND
11:56	6	8.87	90.0			88	
11:57	7	8.88					
11:58	8	8.89	90.0			88	FEW SMALL ROCKS, FEW GRAINS OF SAND
11:59	9	8.90					
12:00	10	8.91	90.0			88	FEW SMALL ROCKS
12:02	12	8.92					
12:04	14	8.93	90.0			88	CLEAR 6 GRAINS FINE BLACK SAND
12:06	16	8.93					
12:08	18	8.95	90.0			88	CLEAR 3 MED. SIZED GRAINS OF SAND
12:10	20	8.96					
12:15	25	8.97	90.0			88	CLEAR 1 GRAIN OF SAND
12:20	30	8.98					
12:25	35	8.99	90.0			88	VALVE UP TO MAINTAIN 90 USGPM
12:30	40	8.93					12 GRAINS BLACK-ORANGE SAND PER 1/2 PAIL
12:35	45	8.95	90.0			88	
12:40	50	9.02					10 GRAINS FINE BLACK SAND PER 1/2 PAIL
12:50	60	9.08	90.0			88	12 GRAINS BLACK-ORANGE SAND PER 1/2 PAIL
13:00	70	9.10					5 GRAINS FINE BLACK SAND & 3 MEDIUM GRAINS
13:10	80	9.11	90.0			88	8 GRAINS FINE BLACK SAND & A MEDIUM GRAIN PER 1/2 PAIL
13:20	90	9.12					
13:30	100	9.19	90.0			88	VALVE UP TO MAINTAIN 90.0 USGPM
13:50	120	9.21					
14:10	140	9.23	90.0			88	
14:30	160	9.24					WATER CLEAR, 10 GRAINS FINE BLACK SAND
14:50	180	9.26	90.0			88	
15:10	200	9.28					WATER CLEAR, 10 GRAINS FINE BLACK SAND
16:00	250	9.28	90.0			88	
16:50	300	9.30					WATER CLEAR, 10 GRAINS FINE BLACK SAND
17:40	350	9.30	90.0			88	
18:30	400	9.31					FLOW STABLE, WATER CLEAR, NO FINES
19:20	450	9.31	90.0			88	WATER CLEAR, SMALL FINE BLACK SAND
20:10	500	9.32					WATER CLEAR, 14 GRAINS FINE BLACK SAND & 2 MEDIUM GRAINS
21:00	550	9.33	90.0			88	
21:50	600	9.35					FLOW STABLE, WATER CLEAR, NO FINES
22:40	650	9.36	90.0			88	WATER CLEAR, 12 GRAIN FINE BLACK SAND
23:30	700	9.36					
0:20	750	9.36	90.0		15-Sep-05	88	
1:10	800	9.36					
2:00	850	9.36	90.0			88	12 GRAIN SMALL BLACK SAND
2:50	900	9.37					4 LARGE GRAINS, 15 SMALLER GRAINS, WATER CLEAR

TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
							PAGE 2 OF 3
3:40	950	9.38	90.0			88	FLOW STABLE
4:30	1000	9.39					15 SMALL GRAINS BLACK SAND PER 1/4 PAIL
5:20	1050	9.39	90.0			88	10 MEDIUM GRAINS SAND PER 1/4 PAIL
6:10	1100	9.39					
7:00	1150	9.39	90.0			88	12 SMALL GRAINS SAND PER 1/4 PAIL
7:50	1200	9.40					
8:40	1250	9.40	90.0			88	
9:30	1300	9.40					
10:20	1350	9.40	90.0			88	2 MEDIUM, 10 SMALL GRAINS BLACK-ORANGE SAND
11:10	1400	9.40					
12:50	1500	9.40	90.0			88	
14:30	1600	9.40					WATER CLEAR, 12 GRAINS FINE BLACK-ORANGE SAND
16:10	1700	9.40	90.0			88	1 MEDIUM, 14 FINE GRAINS BLACK-ORANGE SAND
17:50	1800	9.40					
19:30	1900	9.40	90.0			88	
21:10	2000	9.40					
22:50	2100	9.40	90.0			88	WATER CLEAR, 10 GRAINS SAND
0:30	2200	9.40			16-Sep-05		
2:10	2300	9.40	90.0			88	
3:50	2400	9.40					FLOW STABLE, WATER CLEAR
5:30	2500	9.38	90.0			88	
7:10	2600	9.38					
8:50	2700	9.38	90.0			88	
10:30	2800	9.38					WATER CLEAR, 10 GRAINS FINE BLACK SAND
12:10	2900	9.39	90.0			88	CHRISTOPH WANTS TO STEP UP & RUN FOR ANOTHER 24 HRS.
							STEP 2
12:50	2940	9.39				88	VALVED UP
	2940.5						
12:51	2941	10.24					
	2941.5	10.28					
12:52	2942	10.31					
	2942.5	10.34				78	2 SMALL ROCK WITH 15 GRAINS FINE BLACK SAND
12:53	2943						
	2943.5						
12:54	2944		195.0			78	
	2944.5						
12:55	2945	10.45	195.0			78	20 GRAINS FINE BLACK SAND PER 1/2 BUCKET
12:56	2946						
12:57	2947		195.0			78	
12:58	2948	10.52					
12:59	2949	10.53	195.0			78	
13:00	2950	10.54					5 GRAINS FINE BLACK SAND PER 1/2 BUCKET
13:02	2952	10.57	195.0			78	
13:04	2954	10.60					
13:06	2956	10.62	195.0			78	
13:08	2958	10.65					
13:10	2960	10.66	195.0			78	2 GRAINS FINE BLACK SAND PER 1/2 BUCKET
13:15	2965	10.70					
13:20	2970	10.73	195.0			78	
13:25	2975	10.75	195.0			78	
13:30	2980	10.77					2 MEDIUM GRAINS, 5 FINE TRACE BLACK SAND
13:35	2985	10.88	195.0			78	
13:40	2990	10.82					3 MEDIUM GRAINS 10 FINE GRAINS BLACK SAND
13:45	2995	10.84	195.0			78	
13:50	3000	10.86					WATER CLEAR NO SILT

TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
							PAGE 3 OF 3
14:10	3020	10.91	195.0			78	
14:30	3040	10.96					
14:50	3060	11.03	195.0			78	WATER CLEAR, 10 GRAINS FINE BLACK SAND PER 1/2 BUCKET
15:10	3080	11.08					WATER CLEAR, 2 MEDIUM, 8 FINE BLACK SAND
15:30	3100	11.10	195.0			78	
16:20	3150	11.10					2 MEDIUM, 18 FINE GRAINS BLACK-ORANGE SAND
17:10	3200	11.11	195.0			78	
18:00	3250	11.14					
18:50	3300	11.14	195.0			78	CLOUDY SLIGHT DRIZZLE
19:40	3350	11.15					WATER CLEAR, 1 MEDIUM GRAIN & 10 GRAINS FINE BLACK SAND
20:30	3400	11.15	195.0			78	
21:20	3450	11.16					
22:10	3500	11.17	195.0			78	
23:00	3550	11.17					FEW SMALL SMALL ROCKS PER 5 GAL BUCKET
23:50	3600	11.17	195.0			78	
0:40	3650	11.17			17-Sep-05		WATER CLEAR, 8 SMALL GRAINS OF SAND PER BUCKET
1:30	3700	11.17	195.0			78	WATER CLEAR SMALL GRAINS OF SAND
2:20	3750	11.18					
3:10	3800	11.19	195.0			78	WATER CLEAR, 1 MEDIUM SIZED GRAIN FEW SMALL
4:00	3850	11.19					
4:50	3900	11.19	195.0			78	
5:40	3950	11.19					
6:30	4000	11.20	195.0			78	
7:20	4050	11.20					WATER CLEAR, 10 GRAINS FINE BLACK SAND
8:10	4100	11.19	195.0			78	
9:00	4150	11.20					
9:50	4200	11.20	195.0			78	
10:40	4250	11.20					WATER CLEAR, 10 GRAINS FINE BLACK SAND
11:30	4300	11.20	195.0			78	
12:20	4350	11.20					
13:10	4400	11.20	195.0			78	
14:00	4450	11.20					
14:50	4500	11.20	195.0			78	
16:30	4600	11.20					
18:10	4700	11.20	195.0			78	
19:50	4800	11.20					
21:30	4900	11.20	195.0			78	
23:10	5000	11.20					
0:50	5100	11.20	195.0		18-Sep-05	78	WATER CLEAR, 1 LARGE GRAIN, 15 SMALL GRAINS PER ?
2:30	5200	11.21					
4:10	5300	11.21	195.0			78	WATER CLEAR, 10 GRAINS FINE BLACK SAND
5:50	5400	11.21					
7:30	5500	11.21	195.0			78	WATER CLEAR, MINIMAL FINES
9:10	5600	11.21					SHUT DOWN
9:10	5600	11.21					RECOVERY
	5600.5	9.47					
9:11	5601	9.43					
	5601.5	9.39					
9:12	5602	9.34					
	5602.5	9.30					
9:13	5603	9.28					
	5603.5	9.25					
9:14	5604	9.23					
	5604.5	9.20					
9:15	5605	9.18					

TEST DETAILS		CONSTANT RATE		WELL ID	PW#2		
WELL DEPTH	58 FT.	PACKER	MULTIPLE	DISCHARGE L.	600 FT.	DATUM:	27 FT TOP OF CASING WITH 2.7 IN. STICK UP
DIAMETER	8 IN.	SCREEN L.	25 FT.	ORIFICE	6 IN. X 5 IN.	PUMPSET:	TOP OF PUMP @ 39.69
TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
7 SEPTEMBER 2005							PAGE 1 OF 2
10:35	0						
	0.5	13.54				10	VALVE UP
	1	13.79					
	1.5	13.94				10	
	2	14.26					
	2.5	14.45				10	
10:38	3	14.60					
	3.5	14.66				10	
10:39	4	14.74					
	4.5	14.85				10	
10:40	5	14.93					
	6	15.06				10	
	7	15.35					
	8	15.43				10	
	9	15.49					
10:45	10	15.70				10	
	12	15.79					
	14	15.90				10	
	16	15.99					VALVE DOWN
	18	16.11				10	
10:55	20	16.16	574.0				
11:00	25	16.36	597.0			10	
11:05	30	16.45					WATER CLEAR NO FINES
11:10	35	16.51	597.0			10	
11:15	40	16.59					
11:20	45	16.65	597.0			10	WATER CLEAR NO FINES
11:25	50	16.75					
11:35	60	16.79	597.0			10	WATER CLEAR NO FINES
11:45	70	16.87					
11:55	80	16.94	597.0			10	WATER CLEAR NO FINES
12:05	90	16.99					
12:15	100	17.04	597.0			10	
12:35	120	17.14					
12:55	140	17.19	597.0			10	WATER CLEAR NO FINES
13:15	160	17.27					
13:35	180	17.34	597.0			10	CLOUDY/OVERCAST, LIGHT SPRINKLES
13:55	200	17.40					
14:45	250	17.51	597.0			10	
15:35	300	17.61					
16:25	350	17.70	597.0			10	WATER CLEAR NO FINES
17:15	400	17.77					
18:05	450	17.83	597.0			10	CLOUDY PERIODS, SOME SUN
18:55	500	17.90					
19:45	550	17.98	597.0			10	WATER CLEAR NO FINES
20:35	600	18.02					
21:25	650	18.07	597.0			10	
22:15	700	18.12					

TIME	ELAPSED TIME MIN.	DEPTH TO WATER FT.	RATE USGPM	DRAWDOWN FEET		PSI	REMARKS
							PAGE 2 OF 2
23:05	750	18.17	597.0			10	
23:55	800	18.21					
0:45	850	18.25	597.0		08-Sep-05	10	
1:35	900	18.29					
2:25	950	18.33	597.0			10	
3:15	1000	18.37					
4:05	1050	18.41	597.0			10	
4:55	1100	18.44					WATER CLEAR NO FINES
5:45	1150	18.49	597.0			10	
6:35	1200	18.52					
7:25	1250	18.55	597.0			10	WATER CLEAR NO FINES
8:15	1300	18.58					
9:05	1350	18.61	597.0			10	
9:55	1400	18.64					WATER CLEAR NO FINES
10:35	1440	18.68	597.0				SHUT DOWN
10:35	1440	18.68	597.0			10	RECOVERY
	1440.5	16.94					
10:36	1441	16.65					
	1441.5	16.45					
10:37	1442	16.31					
	1442.5	16.18					
10:38	1443	16.16					
	1443.5	16.11					
10:39	1444	16.06					
	1444.5	16.01					
10:40	1445	15.98					
	1446	15.91					
10:42	1447	15.85					
	1448	15.78					
10:44	1449	15.73					
10:45	1450	15.69					
	1452	15.59					
	1454	15.49					
	1456	15.42					
	1458	15.33					
10:55	1460	15.28					
11:00	1465	15.11					
11:05	1470	14.96					
11:10	1475	14.83					
11:15	1480	14.72					
11:20	1485	14.61					
11:25	1490	14.48					
11:35	1500	14.20					
11:45	1510	14.06					
11:55	1520	13.96					
12:05	1530	13.83					
12:15	1540	13.67					
12:35	1560	13.46					
12:55	1580	13.27					
13:15	1600	13.16					
13:35	1620	13.06					
13:55	1640	13.01					
14:45	1690	12.96					