APPENDIX C

WELL DEVELOPMENT LOGS

Groundwater Well Development Log

Fort McClellan , Alabama

Project Number: 774645
Form Completed by: Oliver Allen
Well Developed by (firm): IT Corporation

Parcel No.: RNG-208-MW01
Well No.:
Date Started: 6-18-00

Monitoring Well Information

Development Method: Surge & Purge
Development Equipment: Grundfus Pump, Horiba Turbidity meter

Casing Diameter: 2" Stickup

Beginning Measurments
Depth to Water (ft): 85.13
Total depth of Well (ft): 93.28

PID: 0.0 1 WV = 1.3 GAL 5 x 1.3 GA = 6.6 GAL MIN TO Remove

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments	
0830	0	85.13	START						Surged	
08:35	1	86.55	6.79	.250	999+	3.84	19.3	Red-Brown Muddy	Surged	.2
08:40	2	86.94	6.74	.248	999+	3.72	19.5	"	Surged	.2
08:50	4	87.44	6.65	.239	999+	3.87	19.9	"	Surged	.2
09:00	6	87.79	6.64	.253	999+	4.36	20.0	"	Surged	.2
09:10	8	86.97	6.60	.278	999+	3.15	20.1	TAN Cloudy		.2
09:20	10.5	87.02	6.60	.271	999+	3.87	20.3	"		.25
09:30	13	86.98	6.57	.266	822	4.18	20.6	TAN	Pump @ 91.5'	.25
09:40	15.5	87.09	6.54	.261	406	4.18	20.5	Cloudy		.25

Parcel No.: RNG-208
Well ID: MW01
Date: 6-18-00

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)	
09:50	18	87.19	6.52	.258	195	4.12	20.4	cloudy		.25
10:00	21	87.22	6.51	.257	116	4.21	20.2	cloudy	clearing	.3 ~~.25~~
10:10	24	87.18	6.50	.255	61.2	4.77	20.3	clear		.3
10:20	27	87.18	6.49	.253	50.9	4.63	20.2	clear		.3
10:30	30	87.45	6.50	.254	76.4	4.23	20.3	"	Pump @ 88.9'	.3
10:40	33	87.47	6.51	.253	264	4.37	20.2	cloudy		.3
10:50	36	87.26	6.50	.251	106	4.22	20.3	cloudy		.3
11:00	39	87.25	6.52	.251	49.6	4.29	20.3	clear		.3
11:10	42	87.21	6.53	.250	22.5	4.26	20.3	clear		.3
11:20	45	87.19	6.53	.250	16.0	4.27	20.3	clear		.3
11:30	48	87.19	6.53	.251	9.3	4.39	20.3	clear		
:	Well Developed Photo sample taken @ QT JAR									
:										

Groundwater Well Development Log

Fort McClellan , Alabama

Project Number: 774645
Form Completed by: O. Allen
Well Developed by (person/firm): IT Corp

Parcel No.: RNG 208
Well No.: MW02
Date started: 4-29-00

Monitoring Well Information

Development Method: Purge & Surge
Development Equipment: GRUNDFOS Pump

Casing Diameter: 2" STICK UP

Beginning Measurments
Depth to Water (ft): 68.31
Total depth of Well (ft): 103.77

Time 24hr 0910	Purge Volume (gal)	Water Level (ft) (TOC) 68.31	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
09:50	3	71.65	6.95	.238	999+	1.49	22.9	Brown	surged (Pump Failure)
08:50	3	68.42	START						4-30-00
09:00	4.5	70.81	6.60	.246	999+	4.03	17.5	Brown Muddy	
09:10	7.5	70.85	7.02	.227	999+	1.83	20.8	"	
09:20	10.5	70.87	7.05	.231	995	2.11	21.9	"	.3 GPM Pump @ 85 FT
09:30	13.5	70.62	7.19	.216	999+	3.67	19.2	"	.3 GPM Lowered to 100 FT
09:40	16.5	71.10	7.19	.209	999+	3.28	21.0	"	.3 GPM @ 100'

surged numerous times

Parcel No.: RNG 208
Well ID: MW02
Date: 4-30-00

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
09:50	20.5	71.23	7.15	.201	999+	3.80	19.8	TAN	.4 cloudy 100'
10:00	24.5	71.23	7.12	.197	999+	3.68	19.7	TAN	.4 " "
10:10	27.5	71.20	7.14	.191	492	4.10	20.4	TAN	.3 clearing "
10:20	30.5	71.65	7.14	.191	295	4.35	19.9	cloudy	.3 " "
10:30	34.5	70.90	7.14	.188	334	3.81	19.7	"	.4 " "
10:40	38.5	71.25	7.14	.187	286	4.64	19.3	"	.4 " "
10:50	42.5	71.15	7.15	.186	191	4.05	19.3	"	.4 " "
11:00	46.5	71.27	7.15	.185	178	4.56	19.6	"	.4 " 98'
11:10	50.5	71.23	7.14	.186	999+	4.61	20.1	BROWN	.4 muddy "
11:20	54.5	71.42	7.15	.186	881	4.58	19.6	TAN	.4 clearing "
11:30	58.5	71.30	7.15	.184	655	4.63	19.2	cloudy	.4 " "
11:40	62.5	71.30	7.15	.187	295	4.66	19.6	"	.4 " "

Parcel No.: RNG -208
Well ID: MW02
Date: 4-30-00

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
11:50	66.5	71.40	7.17	.185	244	4.82	20.2	cloudy	.4 clearing 98'
12:00	70.5	71.45	7.13	.185	169	4.71	19.9	"	.4 " "
12:10	74.5	71.00	7.15	.185	999+	4.94	20.6	"	.4 cloudy 96'
12:20	78.5	71.25	7.17	.186	470	4.83	20.2	TAN	.4 " "
12:30	82.5	71.25	7.16	.186	350	4.79	20.0	cloudy	.4 clearing "
12:40	86.5	71.35	7.16	.187	195	4.71	19.9	clearing	.4 " 96'
12:50	90.5	71.15	7.07	.187	999+	4.59	19.9	BROWN	.4 Cloudy 93'
13:00	94.5	71.10	7.11	.187	221	3.84	19.9	Cloudy	.4 Clearing 93'
13:10	98.5	71.03	7.12	.189	508	5.57	20.0	TAN	.4 Cloudy 88'
13:20	102.5	71.00	7.16	.189	229	5.19	20.0	Cloudy	.4 clearing "
13:30	106.5	71.05	7.17	.188	132	4.24	19.9	clearing	.4 clearing "
13:40	110.5	71.11	7.18	.187	239	4.54	19.5	cloudy	.4 clearing 80'

Parcel No.: RNG 208
Well ID: MW02
Date: 4-30-00

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
13:50	114.5	71.20	7.17	.187	182	4.87	19.5	cloudy	.4 clearing 80'
14:00	118.5	71.05	7.18	.187	143	4.94	19.5	"	.4 " "
14:10	122.5	71.20	7.17	.188	106	4.91	19.6	cloudy	.4 " "
14:20	126.5	71.25	7.20	.187	70.7	4.93	19.5	"	.4 " "
14:30	130.5	71.20	7.21	.188	59.6	4.82	19.8	clear	.4 clearing "
14:40	134.5	71.03	7.22	.188	44.6	4.89	19.6	"	" " "
14:50	138.5	71.11	7.24	.188	42.4	4.77	19.6	"	" " "
15:00	142.5	71.24	7.24	.188	35.9	4.92	19.6	"	" " "
15:10	146.5	71.22	7.24	.188	32.2	5.14	19.5	"	" " "
15:30	154.5	71.17	7.24	.188	24.6	5.15	19.4	"	" " "
15:50	162.5	71.22	7.24	.188	21.0	4.92	19.4	"	.4 clear "
16:00	166.5	71.17	7.24	.188	20.2	4.95	19.4	"	" " "

Photo Sample Taken / Well Developed — OK