Barite Hill Gold Mine
IWP-242
McCormick County

NEVADA GOLDFIELDS INC.

BARITE HILL PROJECT

Highway 221 & State Road 33-162
P.O. Box 1510
McCormick, South Carolina 29835
Phone 803/465-3321 Fax 803/465-4308

September 14, 1994

Mr. Frank Wacht
Bureau of Solid & Hazardous Waste
SCDHEC
2600 Bull Street
Columbia, SC 29201

RECEIVED
SEP 14 1994
HYDROGEOLOGY

Dear Mr. Wacht:

Enclosed please find two copies of the Groundwater Monitoring results for the third quarter of 1994. The lab analysis and a collated version of the data has been included.

Well A, an upgradient well, had a nitrate reading again within limits after being slightly out last quarter.

The zinc level in Well O was back down to 0.087 ppm after being high last quarter.

Well F3, an upgradient well, had a TOC level of 4.5 ppm when the statistical tolerance level is 3.8. This will be watched closely next quarter. This Well also had mercury levels slightly out this quarter. The tolerance level is 0.0006 ppm and the quarterly sample read 0.00066 ppm.

If you have any questions or comments, please feel free to contact me at 443-2222.

Sincerely,

Jean V. Whisnant

Jean V. Whisnant

RECEIVED
SEP 14 1994
HYDROGEOLOGY

DHEC MONITOR WELLS
QUARTERLY REPORTS

A3 UPGRADIENT

LOCATION 20242.910, 6753.730

COLLAR ELEVATION - 486.100
DEPTH OF WELL - 70ft

DATE	8/28/91	9/12/91	2/27/92	5/14/92	8/25/92	11/23/92	2/24/93	5/19/93	8/17/93	11/15/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	46.27	46.18	50.82	52.21	52.65	49.89	46.06	43.14	44.22	46.91	48.06	49.08	50.93
WATER ELEVATION	439.83	439.92	435.28	433.89	433.45	436.21	440.04	442.96	441.88	439.19	438.04	437.02	435.17
Silver	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010
Aluminum	51	71	16.6	1.9	2.6	2.63	1.16	1.19	0.236	0.501	0.247	4.04	8.17
Barium	0.53	0.11	0.23	0.11	0.10	0.098	0.129	0.149	0.100	0.130	0.144	0.197	0.274
Calcium	4		0.6	<1	<1	0.272				0.262			
Cadmium	0.006	<0.005	<0.005	<0.005	<0.005	<0.001	<0.00100	<0.00100	<0.001	<0.001	<0.0050	<0.0050	<0.0050
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<0.0020	<0.0020	<0.002	<0.002	<0.010	<0.010	<0.010
Copper	1	0.06	0.28	0.07	0.04	0.060	0.042	0.042	0.016	0.034	0.091	0.101	0.245
Copper (Dissolved)													0.015
Iron	128	95	28.2	5.9	3.0	5.13	2.29	2.11	0.425	1.57	0.609	8.25	20.9
Potassium	3	<2	2	<2	<2	<0.40				<0.4			
Magnesium	1	50	0.38	<1	<1	<0.20				<0.2			
Manganese	0.31	3	0.06	0.02	0.01	0.018				0.009			
Sodium	9	24	8	9	10	11.3				5.45			
Nickel	<0.02	0.10	<0.02	<0.02	<0.02	<0.0040	<0.0040	<0.0040	0.017	<0.004	<0.020	<0.020	<0.020
Zinc	0.34	0.38	0.09	0.06	<0.02	0.021	0.020	0.038	0.086	0.027	0.056	0.044	0.061
Mercury	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic	<0.005	<0.024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Lead	0.076	0.013	0.020	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0089	0.0148
Selenium	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
TOC	1	<1	1	2	1	3	1	3	3	1.4	1.6	3.6	2.1
Alkalinity	14	128	11	12	7.4	11.6				2.8			
Chloride	5	45	5	5	5	5	5	5	5	4.1	4.0	3.6	3.6
Fluoride	0.20	0.60		0.1	<0.1	0.1				0.15			
pH (Lab)	5.64	7.08	5.40	5.46	5.75				5.4	5.3	5.0	5.1	5.3
pH (Field)			5.40	5.56	5.17	5.27	4.64	4.54	4.81	4.94	4.6	5.16	4.77
Sulfate	7	<12	4	5	4	4	<3	<3	4	<3.0	<3.0	<15	<12
Spec. Cond.	40	310	50	53	61	65	43	41	45	45	46	36	17
Temperature	21	8	16.1	18.9	18	16	15	18	19	19.3	16.3	16.4	18.4
Ammonia N	0.1	0.35	<0.1	<0.1	0.2	<0.1				<0.10			
Nitrite N	<0.05	<0.05	<0.05				<0.05						
Nitrate N	0.30	0.23	0.25	0.28	0.27	0.29	0.32	0.34	0.27	0.293	0.308	0.485	0.279
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	<0.006	<0.006	<0.005	<0.005	<0.0050	<0.0050	<0.0050
TDS	116	38	56	42	58	33	17	57	24	32	29	27	50
TSS													1160

B2

LOCATION 18992.210, 6023.290

COLLAR ELEVATION - 446.500
DEPTH OF WELL - 121ft

DATE	8/14/91	8/22/91	2/28/92	5/14/92	8/26/92	11/23/92	2/24/93	duplicate 2/24/93	5/18/93	8/17/93	11/15/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	22.25	22.59	23	23	26.8	26.19	21.16		18.31	22.35	24.14	22.1	20.16	21.6
WATER ELEVATION	424.25	423.91	423.5	423.5	419.7	420.31	425.34		428.19	424.15	422.36	424.4	426.34	424.9
Silver	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010
Aluminum	2.0	7	0.2	0.7	0.6	0.669	0.480	0.671	0.639	0.239	0.973	0.880	0.458	1.02
Barium	0.20	0.25	0.15	0.18	0.20	0.203	0.182	0.184	0.190	0.166	0.181	0.188	0.182	0.187
Calcium	34.9	40	31.7	31	38	36.1					30.6			
Cadmium	<0.005	0.007	<0.005	<0.005	<0.005	<0.001	<0.00100	<0.00100	<0.0050	<0.001	<0.001	<0.0050	<0.0050	<0.0050
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0020	<0.0020	<0.0020	<0.010	<0.002	0.002	<0.010	<0.010	<0.010
Copper	0.02	0.05	<0.02	0.01	0.01	0.009	0.007	0.009	<0.020	0.007	0.021	0.022	0.015	0.021
Copper (Dissolved)														<0.002
Iron	11.9	40	0.61	7.7	6.2	7.06	6.10	7.75	7.04	2.51	15.6	13.9	6.93	12.4
Potassium	3	2	<2	<2	<2	1.30					1.28			
Magnesium	6.29	8	5.16	5	6	5.84					5.37			
Manganese	0.62	2	0.34	0.59	0.60	0.617					0.821			
Sodium	14	15	11	12	13	13.1					11.3			
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.0040	<0.0040	<0.0040	<0.020	0.006	<0.004	<0.020	<0.020	<0.020
Zinc	0.31	<0.09	0.04	0.12	0.11	0.094	0.130	0.101	0.153	0.075	0.211	0.201	0.108	0.190
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020
Arsenic	0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Lead	0.195	0.39	0.009	0.038	0.088	0.094	0.103	0.126	0.070	0.062	0.161	0.165	0.082	0.137
Selenium X	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
TOC	<1	8	1	2	1	6	1	2	1	2	1.2	1.3	1.5	1.2
Alkalinity	31	114	124	119	133	126					136			
Chloride	7	7	8	9	18	15	12	12	10	10	9.9	10.1	9.6	9.8
Fluoride	0.2	0.2	0.2	0.1	0.1	0.2					0.32			
pH (Lab)	7.1	7.32	7.68	7.78	7.69					7.7	7.6	7.5	7.2	7.3
pH (Field)			7.64	7.54	7.75	6.83	7.16		7.18	7.43	6.21	6.37	6.72	7.61
Sulfate	9	10	9	8	9	9	11	11	10	8	19.7	12.1	11.4	12.6
Spec. Cond.	240	235	267	254	172	310	287		267	266	256	269	245	192
Temperature			15	17.8	18	15	15		18		18.9	18	19.6	18.4
Ammonia N	0.27	0.14	<0.1	<0.1	0.2	0.2					0.17			
Nitrite N	<0.05	<0.05					<0.05	<0.05						
Nitrate NN	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.050	<0.050	0.221	<0.050
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
TDS	158	14	200	189	220	179	175	173	164	172	192	182	174	161
TSS														54

GW-5

CATION 18774.200, 6890.800

LLAR ELEVATION - 432.600
PTH OF WELL - 37.8ft

DATE	3/27/91	6/28/91	9/19/91	12/19/91	2/27/92	duplicat 2/27/92	5/14/92	8/25/92	11/23/92	2/24/93	5/18/93	8/17/93	8/17/93 duplicate	11/15/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	12.89	12.6	13.69	15.22	13.37		13.99	13.92	12.6	10.39	10.86	13.32		13.67	10.98	12.37	12.79
WATER ELEVATION	419.71	420	418.91	417.38	419.23		418.61	418.68	420	422.21	421.74	419.28		418.93	421.62	420.23	419.81
Silver	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.020
Aluminum	6.8	4.3	3.1	125	58.1	120	26.3	43.4	63.1	26.8	34.2	20.0	19.7	17.0	53.2	37.4	34.1
Barium	<0.02	0.03	0.03	0.46	0.29	0.44	0.12	0.16	0.264	0.121	0.167	0.098	0.093	0.078	0.240	0.178	0.167
Calcium	13.0	27.8	28.1	64.7	45.7	74.7	34	40	51.0					30.0			
Cadmium	<0.002	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.0027	0.0014	<0.0050	<0.001	<0.001	<0.001	<0.0050	<0.0050	<0.0050
Chromium	<0.01	<0.01	<0.01	0.32	0.17	0.3	0.07	0.10	0.168	0.063	0.098	0.057	0.054	0.044	0.165	0.111	0.098
Copper	0.02	0.04	<0.02	0.22	0.11	0.2	0.05	0.07	0.125	0.046	0.081	0.040	0.044	0.038	0.141	0.095	0.086
Copper (Dissolved)																	0.004
Iron	8.64	5.23	3.76	185	92.6	162	39.8	56.6	99.1	33.6	51.4	26.0	28.5	24.8	90.6	61.1	54.0
Potassium	<2	<2	<2	6	3	6	2	2	2.85					1.08			
Magnesium	15.9	19.3	20.1	97.2	58.6	86.1	34	38	56.9					26.0			
Manganese	0.61	0.55	0.65	4.86	3.01	4.11	1.30	1.56	2.68					0.814			
Sodium	8	28	30	25	20	28	26	28	26.4					21.9			
Nickel	<0.02	0.03	<0.02	0.11	0.06	0.10	0.02	0.03	0.059	0.022	0.027	0.032	0.021	0.017	0.065	0.037	0.037
Zinc	0.12	0.15	<0.02	0.66	0.43	0.57	0.14	0.19	0.351	0.126	0.245	0.163	0.107	0.090	0.354	0.236	0.185
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020
Arsenic	<0.005	<0.02	<0.005	<0.025	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Lead	0.005	0.014	<0.005	<0.026	0.025	0.028	<0.005	0.015	0.016	0.022	0.010	0.006	0.006	<0.005	0.0122	0.0107	0.0086
Selenium	<0.005	<0.005	<0.005	<0.10	<0.025	<0.025	<0.005	<0.005	<0.005	<0.010	<0.025	<0.005	<0.005	<0.005	<0.005	<0.020	<0.0050
TOC	2	2	1	2	2	2	1	1	3	2	1	1	2	1.2	1.3	1.8	1.5
Alkalinity	65.1	173.3	173	165	168	170	153	154	152					156			
Chloride	4	41	41	60	38	44	38	36	35	38	43	45	45	44.9	44.1	44.8	44.1
Fluoride					0.2	2.5	1	0.2	0.7					0.44			
pH (Lab)	6.7	6.73	6.85	6.47	6.94	6.87	6.72	6.85				7.0	7.1	7.0	6.5	6.9	6.8
pH (Field)					6.89	6.88	6.82	6.10	6.64	6.35	6.62	6.66		6.42	6.33	6.54	6.50
Sulfate	22	<12	3	<30	6	<3	<30	<3	<30	<30	<30	<12	<12	<6.0	<15	<15	<30
Spec. Cond.	180	395	355	407	374	376	376	399	399	424	424	411		408	447	427	240
Temperature	23	22.5		19	15.5	15.5	17.8	18	18	15	17	17		19.6	17.2	17.8	18.5
Ammonia N	0.38	0.34		0.15	0.13	<0.1	<0.1	0.2	0.1					0.21			
Nitrite N			<0.05	<0.05						<0.05							
Nitrate N	<0.05	<0.05	0.09	0.11	<0.05	<0.05	0.11	0.08	0.14	<0.05	0.11	0.09	0.11	<0.050	<0.10	0.258	0.125
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
TDS	185	251	154	237	264	264	257	265	234	256	334	261	246	219	267	248	244
TSS																	1240

D3

LOCATION 19506.650, 7924.42

COLLAR ELEVATION - 470.391
DEPTH OF WELL - 79ft

DATE	8/28/91	9/12/91	2/27/92	5/14/92	8/25/92	11/23/92	2/24/93	5/19/93	8/17/93	11/16/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	37.54	37.6	41.06	40.24	41.11	39.8	36.72	34.5	36.88	39.05	38.15	37.08	38.39
WATER ELEVATION	432.851	432.791	429.391	430.151	429.281	430.591	433.671	435.891	433.511	431.341	432.241	433.311	432.001
Silver	0.014	0.061	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010
Aluminum	158	62	4.1	1.0	1.6	0.509	0.438	0.351	0.091	0.360	0.926	0.811	2.54
Barium	0.21	0.42	<0.02	<0.02	<0.02	0.004	0.007	<0.0040	<0.004	0.008	<0.020	<0.020	<0.020
Calcium	85.0		36.2	33	35	33.5				32.7			
Cadmium	0.007	<0.005	<0.005	<0.005	<0.005	<0.00100	<0.00100	<0.00100	<0.001	<0.001	<0.0050	<0.0050	<0.0050
Chromium	0.04	<0.01	<0.01	<0.01	<0.01	<0.0020	<0.0020	<0.0020	<0.002	<0.002	<0.010	<0.010	<0.010
Copper	0.13	0.81	<0.02	<0.01	<0.02	<0.0040	<0.0040	<0.0040	<0.004	<0.004	<0.020	<0.010	0.008
Copper (Dissolved)													<0.002
Iron	209	81	5.94	1.2	2.4	0.723	0.638	0.491	0.194	0.830	1.35	1.18	4.05
Potassium	6	3	<2	<2	<2	0.454				<0.4			
Magnesium	87	0.85	15.2	13	14	12.9				13.2			
Manganese	7	0.18	0.53	0.24	0.41	0.202				0.108			
Sodium	18	10	19	20	21	20.4				20.1			
Nickel	0.19	<0.02	0.04	<0.02	0.03	0.023	0.020	0.015	0.021	0.015	0.020	<0.020	0.090
Zinc	0.81	0.29	0.04	<0.02	<0.02	0.010	0.014	0.076	0.042	0.019	0.021	<0.020	0.059
Mercury	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020
Arsenic	<0.020	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Lead	0.025	0.094	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Selenium	<0.10	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
TOC	1	2	1	1	<1	3	2	2	3	1.9	5.8	3.0	3.3
Alkalinity	127	11	129	123	124	127				132			
Chloride	44	5	51	49	47	46	46	46	48	50.9	52.1	50.2	50.1
Fluoride	0.75	0.2	1.2	<0.1	0.1	0.1				0.16			
pH (Lab)	6.85	5.91	6.64	6.67	6.68				6.8	6.8	6.7	6.8	6.8
pH (Field)			6.68	6.54	5.89	6.60	6.71	6.45	6.43	6.49	6.22		6.34
Sulfate	<3	<15	<3	3	<3	<3	<3	<3	<3	<3.0	5.0	4.2	<3.0
Spec. Cond.	350	45	348.5	354	394	391	376	384	386	400	400	391	219
Temperature	21	7	16	18.3	18	16	13.5	17	16	17.8	16.6	18.7	17.4
Ammonia N	1.4	0.35	0.27	<0.1	0.2	<0.1				<0.10			
Nitrite N	<0.05	<0.05					<0.05						
Nitrate N	0.15	0.08	0.06	0.14	0.12	0.14	<0.05	0.33	0.13	0.138	0.141	0.331	0.143
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
TDS	116	260	259	260	274	224	236	525	230	241	252	231	200
TSS													88

GW-6

LOCATION 18937.500, 6179.100

COLLAR ELEVATION - 425.900
DEPTH OF WELL - 28.4ft

DATE	3/27/91	6/28/91	9/19/91	12/19/91	2/28/92	5/14/92	8/25/92	11/23/92	2/24/93	5/18/93	8/17/93	11/15/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	2.6	2.4	4.79	6.42	5.33	6.29	4.97	3.96	2.54	2.42	2.95	3.39	2.6	19.08	3.19
WATER ELEVATION	423.3	423.5	421.11	419.48	420.57	419.61	420.93	421.94	423.36	423.48	422.95	422.51	423.3	406.82	422.71
Silver	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010
Aluminum	1.2	1.8	1.5	0.6	2.6	1.8	0.5	2.16	0.655	0.911	0.296	1.20	0.824	0.199	0.282
Barium	0.03	0.03	0.05	0.04	0.03	0.05	0.04	0.055	0.026	0.035	0.041	0.049	0.032	0.021	0.039
Calcium	18.1	21.7	21.6	22.5	18.7	22	22	20.3				17.4			
Cadmium	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0011	<0.00100	<0.00100	<0.001	<0.001	0.0050	<0.0050	<0.0050
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003	<0.0020	0.002	<0.002	<0.002	<0.010	<0.010	<0.010
Copper	<0.02	0.02	0.03	<0.01	0.02	<0.01	<0.02	0.007	<0.0040	0.004	<0.004	0.006	<0.020	<0.010	0.006
Copper (Dissolved)															<0.002
Iron	1.02	1.59	1.06	0.59	2.23	1.2	0.4	2.12	0.558	0.892	0.311	1.51	1.29	0.171	0.405
Potassium	<2	2	<2	<2	<2	<2	<2	1.35				1.18			
Magnesium	10.2	11.5	11.8	11.9	10.1	12	12	10.9				9.93			
Manganese	0.22	0.32	1.38	0.96	0.53	1.16	1.21	1.11				1.41			
Sodium	26	29	31	30	22	27	30	28.4				26.0			
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.0040	<0.0040	<0.0040	0.005	<0.004	<0.020	<0.020	<0.020
Zinc	<0.02	0.11	0.08	<0.02	0.02	<0.02	<0.02	0.019	0.008	0.038	0.043	0.090	0.042	0.035	<0.020
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020
Arsenic	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Lead	0.017	0.015	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
TOC	5	8	2	1	1	1	2	3	1	2	1	1.9	1.3	1.4	2.1
Alkalinity	87.15	86.1	122	118	89	90	107	101				103			
Chloride		49	44	41	43	42	39	39	39	37	34	37.4	38.5	38.2	35.8
Fluoride					0.5	0.2	0.2	0.2				0.23			
pH (Lab)	7.0	6.55	6.70	6.27	6.51	6.54	6.68				6.9	6.8	6.6	6.5	7.0
pH (Field)					6.61	6.59	6.92	6.83	6.40	6.27	6.27	6.47	6.16	6.52	6.13
Sulfate	12	14	16	13	12	11	12	13	14	11	9	11.2	11.4	11.8	10.5
Spec. Cond.	290	320	320	316	312.5	349.8	194	339	313	311	296	314	296	285	144
Temperature	23	22.5		20	14.7	15.6	18	17	12	15	21	19.9	12.3	19.5	17.4
Ammonia N	0.19	0.24		<0.1	<0.1	0.1	0.3	0.3				<0.10			
Nitrite N			<0.05	<0.05					<0.05						
Nitrate N	0.06	<0.05	<0.05	0.19	0.10	<0.05	<0.05	0.13	0.08	<0.05	<0.05	0.058	0.122	0.269	0.055
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
TDS	272	220	162	216	234	235	245	210	197	219	201	196	203	182	212
TSS															20

F9 UPGRADIENT

LOCATION 19505.880, 5619.790

COLLAR ELEVATION - 482.263
DEPTH OF WELL - 75ft

DATE	8/14/91	8/22/91	2/27/92	5/14/92	8/25/92	duplicate 8/25/92	11/23/92	2/24/93	5/19/93	8/17/93	11/16/93	duplicate 11/16/93	2/14/94	5/9/94	9/8/94
DEPTH TO WATER	38.61	38.82	45.18	53.96	53.19		51.66	48.67	47.22	48.15	47.98		47.45	49.36	48.12
WATER ELEVATION	443.653	443.443	437.083	428.303	429.073		430.603	433.593	435.043	434.113	434.283		434.813	432.903	434.143
Silver	<0.010	<0.010	<0.010	0.04	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminum	18.2	15	10.9	23.0	20.4	7.1	23.8	8.7	3.74	2.72	2.70	2.09	14.8	7.1	2.84
Barium	0.17	0.17	0.15	0.29	0.22	0.13	0.238	0.141	0.115	0.106	0.118	0.117	0.199	0.133	0.110
Calcium	8.4	13	5.9	11	11	11	17.4				3.41	1.87			
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0021	0.0011	<0.00200	<0.001	<0.0010	<0.001	<0.0050	<0.0050	<0.0050
Chromium	<0.01	0.01	<0.01	0.01	<0.01	<0.01	0.011	0.007	0.002	0.009	0.002	<0.002	0.011	<0.010	<0.010
Copper	0.14	0.11	0.08	0.28	0.12	0.08	0.193	0.085	0.035	0.026	0.042	0.040	0.395	0.071	0.050
Copper (Dissolved)															0.003
Iron	22.9	28	17.4	78.30	35.0	20.8	51.6	22.1	8.94	5.25	9.27	8.24	76.5	18.5	10.6
Potassium	3	<2	<2	<2	<2	<2	0.965				0.409	0.455			
Magnesium	1.24	2	1.23	2	2	2	1.71				1.12	1.06			
Manganese	0.05	0.07	0.04	0.08	0.06	0.05	0.059				0.025	0.024			
Sodium	19	15	9	12	13	13	14.6				6.78	6.56			
Nickel	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	0.004	<0.0040	<0.0040	0.005	<0.0040	<0.004	<0.020	<0.020	<0.020
Zinc	0.21	0.12	0.08	0.12	0.08	0.06	0.082	0.058	0.112	0.052	0.034	0.045	0.097	0.055	0.043
Mercury	<0.0002	<0.0002	0.0002	0.0009	0.0009	0.0005	0.0003	0.0003	<0.0002	<0.0002	0.00076	0.00083	0.00083	0.00073	0.00066
Arsenic	<0.005	0.012	<0.005	<0.005	<0.005	<0.003	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Lead	0.026	0.038	0.018	0.12	0.079	0.033	0.079	0.040	0.007	0.015	0.0198	<0.0050	0.0327	0.0169	0.0061
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TOC	2	<1	2	1	<1	<1	3	3	4	2	5.4	9.6	2.4	1.4	4.5
Alkalinity	47	53	21	24	47	26	47.2				9.9	11.0			
Chloride	7	6	7	7	7	7	8	7	8	7	5.9	6.0	5.9	5.4	7.4
Fluoride	0.2	<0.1		0.3	0.2	0.2	0.3				<0.10	0.11			
pH (Lab)	6.3	6.19		6.01	6.36	6.16				5.9	6.0	5.9	5.6	5.9	6.2
pH (Field)			5.62	5.82	5.47	5.47	5.65	5.58	5.26	5.45	5.44		5.28	6.57	5.22
Sulfate X	12	16	10	<12	<12	8	<12	8	9	8	4.7	5.9	<15	7.4	<15
Spec. Cond.	155	110	83	85	121	121	118	94	101	71	63		68	65	37
Temperature			15.5	20	18	18	16	15	17	22	19.2		16.2	20.5	17.8
Ammonia N	0.25	0.13	0.13	<0.1	0.3	0.1	<0.1				<0.10	<0.10			
Nitrite N	<0.05	<0.05	<0.05					<0.05							
Nitrate N	0.12	0.17	0.15	0.17	0.15	0.17	0.17	0.18	0.19	0.19	0.183	0.189	0.127	0.334	0.190
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TDS	246	20	88	86	113	106	100	51	74	57	48	36	59	40	60
TSS															892

N

LOCATION 18757.420, 6358.792

COLLAR ELEVATION - 433.935
DEPTH OF WELL - 27.07

DATE	1/14/92	1/22/92	2/27/92	5/14/92	8/25/92	11/23/92	2/24/93	5/18/93	8/17/03	11/15/99	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	16.43	16.14	15.07	15.39	15.4	14.09	12.17	16.53	14.3	14.46	12.44	13.28	13.70
WATER ELEVATION	417.505	417.795	418.865	418.545	418.535	419.845	421.765	417.405	419.635	419.475	421.495	420.655	420.235
Silver	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.020
Aluminum	35.1	48.1	38.8	24.0	25.1	19.9	24.5	33.3	53.1	18.4	17.7	38.2	36.6
Barium	0.09	0.11	0.11	0.07	0.05	0.045	0.049	0.086	0.120	0.047	0.047	0.096	0.087
Calcium	36.8	31.4	31.0	30	31	29.6				26.9			
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00100	<0.00100	<0.0050	<0.001	0.0014	<0.0050	<0.0050	<0.0050
Chromium	0.04	0.04	0.05	0.02	0.03	0.017	0.024	0.034	0.037	0.016	0.026	0.045	0.047
Copper	0.03	0.03	0.05	0.02	<0.02	0.015	0.016	0.038	0.043	0.020	0.024	0.053	0.038
Copper (Dissolved)													0.003
Iron	45.8	61.4	41.2	27	29.4	20.3	24.2	39.5	56.9	21.7	23.3	47.8	47.8
Potassium	7	4	5	2	2	2.90				1.57			
Magnesium	42.0	48.1	34.0	34	34	31.4				31.1			
Manganese	2.01	2.74	2.60	1.58	1.27	0.833				1.27			
Sodium	48	44	36.00	45.00	50.00	49.8				44.2			
Nickel	0.02	0.02	0.02	<0.02	<0.02	0.007	0.007	0.085	0.031	0.009	<0.020	<0.020	0.02
Zinc	0.33	0.44	0.30	0.20	0.17	0.165	0.154	1.44	0.544	0.157	0.168	0.344	0.305
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Lead	0.019	0.006	0.010	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	0.0068	0.0114
Selenium	<0.005	<0.025	<0.025	<0.020	<0.005	<0.005	<0.005	<0.040	<0.005	<0.0050	<0.0050	<0.020	<0.0050
TOC	2	2	2	1	1	5	2	2	2	2.2	1.6	1.8	2.2
Alkalinity	201	206	214	196	204	205				196			
Chloride	50	65	51	55	58	53	59	69	68	62.0	64.3	66.5	68.4
Fluoride	0.4	0.8		0.3	0.4	0.4				0.87		0.9	0.52
pH (Lab)	7.28	7.35	7.23	7.07	7.07				6.9	7.0	6.8	6.9	6.7
pH (Field)			7.31	6.95	7.04	7.01	6.9	7.01	6.75	6.41	6.27	6.52	6.61
Sulfate X	<12	<75	8	<12	<12	<6	<12	7	<30	<15	<12	<60	<30
Spec. Cond.	500	247	468	528	554	543	548	619	581	539	530	514	539
Temperature		13	15	15.6	18	17	12	20	18	19.8	13.6	16.9	20.5
Ammonia N	0.25	0.14	0.15	0.3	0.2	0.1				<0.10			
Nitrite N	<0.05	<0.10	<0.05				<0.05						
Nitrate N	<0.10	<0.10	<0.2	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.25	<0.050	<0.050	0.055
Cyanide (total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
TDS	289	274	1152	299	336	286	366	234	337	302	306	300	314
TSS													1270

Well O

LOCATION 18758.548, 6704.178

COLLAR ELEVATION - 442.445
DEPTH OF WELL - 28.62

DATE	1/22/92	2/28/92	5/14/92	8/25/92	11/23/92	2/24/93	5/18/93	8/17/93	11/15/93	2/14/94	5/9/94	8/8/94
DEPTH TO WATER	26.42	23.16	23.25	23.32	22.34	20.03	20.05	21.16	22.56	20.56	21.16	21.59
WATER ELEVATION	416.025	419.285	419.195	419.125	420.105	422.415	422.395	421.285	419.885	421.885	421.285	420.855
Silver	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010
Aluminum	0.9	1.2	1.4	2.8	12.5	15.4	21.2	17.1	11.5	15.4	10.1	2.54
Barium	0.03	0.02	0.03	0.03	0.079	0.099	0.325	0.093	0.083	0.148	0.089	<0.020
Calcium	33.9	29.5	28	31	36.0				33.9			
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.00100	0.0011	<0.00100	<0.001	0.0010	<0.0050	<0.0050	<0.0050
Chromium	<0.01	<0.01	<0.01	<0.01	0.007	0.008	0.009	0.009	0.006	0.012	<0.010	<0.010
Copper	<0.02	<0.02	<0.01	<0.02	0.0040	<0.0040	0.023	0.009	0.008	<0.020	0.013	0.012
Copper (Dissolved)												0.009
Iron	1.18	1.48	2.1	3.6	18.7	19.5	10.0	23.6	18.9	24.9	13.8	16.6
Potassium	4	2	2	<2	2.62				2.17			
Magnesium	15.1	15.4	16	18	24.0				24.1			
Manganese	0.10	0.08	0.06	0.11	0.612				0.664			
Sodium	26	24	26.00	26	26.9				24.7			
Nickel	<0.02	<0.02	<0.02	<0.02	0.006	0.006	0.004	0.012	0.007	<0.020	<0.020	<0.020
Zinc	0.02	<0.02	0.02	0.04	0.092	0.098	0.094	0.181	0.111		0.356	0.087
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Lead	0.013	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	<0.005	<0.005	<0.0050	<0.010	<0.0050	<0.0050
TOC		2	1	2	3	2	5	2	2.1	2.2	2.4	2.8
Alkalinity		129	134	140	140				141			
Chloride	60	60	58	57	55	60	62	60	59.1	61.9	61.7	60.4
Fluoride	0.2	0.5	0.2	0.2	0.3				0.29			
pH (Lab)	7.27	7.14	6.92	6.94				6.8	6.7	6.4	6.8	6.9
pH (Field)		6.93	6.83	7.24	7.04	6.56	6.44	6.64	6.26	6.23	6.53	6.39
Sulfate X	11	3	<3	<3	<6	<3	<6	<3	<6.0	<6.0	<12	<15
Spec. Cond.	201	493	440	253	451	443	467	448	446	439	439	257
Temperature	13	15.5	16.7	18	16	14	17	17	19.6	15.6	18.4	19.5
Ammonia N		0.13	<0.1	0.2	0.4				<0.10			
Nitrite N	<0.05					<0.05						
Nitrate N		0.35	0.37	0.41	0.44	0.31	0.27	0.26	0.200	0.174	0.257	0.350
Cyanide (total)		<0.005	<0.005	<0.005	<0.010	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
TDS	222	258	267	294	252	269	303	297	275	268	258	267
TSS												875

Well L2

LOCATION 19275.589, 7092.098

COLLAR ELEVATION - 462.221
DEPTH OF WELL - 81.91

DATE	8/7/92	8/25/92	11/23/92	duplicate 11/23/92	2/24/93	5/18/93	duplicate 5/18/93	8/17/93	11/15/93	2/14/94	duplicat 2/14/94	5/9/94	duplicat 5/9/94	8/8/94
DEPTH TO WATER	38	37.51	36.33		39.62	31.95		33.96	35.43	34.51		33.78		34.68
WATER ELEVATION	424.221	424.711	425.891		428.601	430.271		428.261	426.791	427.711		428.441		427.541
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminum	209	88.6	36.5	32.0	13.1	9.65	5.74	4.91	1.14	1.02	1.14	2.74	4.36	6.44
Barium	0.30	0.17	0.079	0.069	0.026	0.027	<0.020	0.022	0.006	<0.020	<0.020	<0.020	0.025	0.026
Calcium	67	57	50.0	49.2					43.5					
Cadmium	0.006	<0.005	0.0015	0.0011	<0.00100	<0.0050	<0.0050	<0.001	<0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	0.07	0.19	0.018	0.018	0.020	0.013	0.015	0.028	0.010	<0.010	<0.010	<0.010	0.012	<0.010
Copper	0.25	0.15	0.066	0.056	0.022	<0.020	0.021	0.017	0.005	<0.020	<0.020	0.014	0.023	0.030
Copper (Dissolved)														0.003
Iron	160	91.7	43.4	39.2	13.1	7.65	6.08	7.19	2.02	1.69	1.78	3.32	7.57	7.9
Potassium	4	<2	1.18	0.963					<0.4					
Magnesium	38	29	22.0	21.4					16.6					
Manganese	12.70	7.35	3.57	3.10					0.106					
Sodium	24	29	22.2	22.3					20.9					
Nickel	0.06	0.05	0.028	0.023	0.011	<0.020	<0.020	0.016	0.011	<0.020	<0.020	<0.020	0.040	<0.020
Zinc	0.23	0.18	0.074	0.061	0.028	0.073	0.123	0.051	0.017	0.105	0.073	0.021	0.151	0.029
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Lead	0.028	0.028	0.009	0.008	<0.005	0.006	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TOC	2	<1	2	7	1	1	2	2	2.4	1.5	1.2	1.5	1.2	1.2
Alkalinity	146	138	138	139					146					
Chloride	73	77	75	75	80	81	81	79	81.0	81.9	80.2	80.6	80.7	74.2
Fluoride	0.9	0.5	0.2	0.2					0.18					
pH (Lab)	6.96	6.81						6.9	6.9	6.6	6.5	6.7	6.7	6.9
pH (Field)	6.84	6.12	6.79		6.32	6.46		6.67	6.25	6.35		6.59		6.47
Sulfate	<60	<30	<12	<6	<6	<6	<3		3.4	3.5	4.0	5.6	14	<6.0
Spec. Cond.	493	504	510		511	504		496	498	515		470		628
Temperature	17	18	16		13	20		18	18.8	17.2		19.1		19.5
Ammonia N	0.40	0.3	<0.1	0.1					0.20					
Nitrite N					<0.05									
Nitrate N	0.29	0.37	0.42	0.43	0.36	0.38	0.37	0.34	0.363	0.380	0.375	0.359	0.558	0.341
Cyanide (total)	<0.005	<0.005	<0.050	<0.100	<0.006	<0.006	<0.006	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TDS	657	485	481	488	363	326	377	363	325	314	304	295	292	350
TSS														171