



0022

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

ACT/015/019
#3

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February 2, 1987

TO: John Whitehead, Permit Supervisor
FROM: Tom Munson, Reclamation Hydrologist *TM*
RE: Wilberg Mine Mid-Term Review, Utah Power and Light Company, Wilberg Mine, ACT/015/019, Folder #3, Emery County, Utah

Following assessment of the information submitted December 23, 1986 by Utah Power and Light Company, it was determined that a meeting should be held to decide input regarding Utah Power and Light Company's monitoring program for East Mountain. I have attached a table describing which springs Utah Power and Light is currently monitoring for water quality and regressive studies.

They are not monitoring any springs for more than two water quality samples per year, and as it states in their annual report, all of the springs are sampled in July for water quality and some representative ones again in October. Our current guidelines state four water quality samples per year at monthly intervals with one of those samples taken during the low flow period. I think possibly this frequency of sampling during operational monitoring is not necessary when you take into account variation in water quality over that four month period.

djh
Attachment
cc: R. Smith
9486R/17

TABLE 19A: EAST MOUNTAIN SPRINGS DISCHARGE

Spring	Type of Measurement	Date Sampled	Flow (GPM)	Temperature F°	Date Sampled	Flow (GPM)	Temperature F°	Seasonal Net Change %
Sheba	2	7-10-85	14.4	41°	10-09-85	2.4	43°	-83
Eik Spring	1	7-10-85	390.5	39°	10-09-85	90.0	39°	-77
Burnt Tree	2	7-15-85	26.1	42°	10-10-85	15.0	42°	-43
Jerk Water	2	7-12-85	2.5	40°	10-10-85	1.9	40°	-24
Pine Springs	2	7-11-85	3.9	46°	10-09-85	0.5	44°	-87
Pine Springs Trough	2	7-11-85	7.5	43°	10-09-85	0.2	42°	-97
Ted's Tub	3	7-12-85	39.1	41°	10-10-85	16.2	39°	-59
79-1	3	7-11-85	48.0	40°	10-09-85	12.0	39°	-75
79-2	2	7-15-85	5.5	42°	10-10-85	2.6	41°	-53
79-3	2	7-15-85	4.6	41°	10-10-85	0.5	40°	-89
79-4	2	7-10-85	1.4	41°				
79-5	2	7-10-85	3.0	52°				
79-6	2	7-10-85	damp	—				
79-7	2	7-10-85	0.8	45°				
79-8	2	7-10-85	2.0	45°				
79-9	2	7-10-85	5.2	43°				
79-10	2	7-10-85	33.3	42°	10-09-85	1.3	42°	-75
79-11	2	7-10-85	4.1	41°	10-09-85	9.8	42°	-71
79-12*	2	7-12-85	3.4	57°				
79-13	2	7-12-85	13.0	49°				
79-14	2	7-12-85	damp	—				
79-15	2	7-12-85	18.2	40°	10-09-85	6.3	41°	-65
79-16	2	7-11-83	4.3	44°				
79-17	2	7-11-85	3.7	39°	10-09-85	0.7	39°	-82
79-18	2	7-10-85	5.1	40°	10-09-85	dry		
79-19	2	7-10-85	23.1	41°	10-09-85	6.9	41°	-83
79-20	2	7-10-85	2.6	42°	10-09-85	0.5	42°	-81
79-21	2	7-15-85	dry	—				
79-22	2	7-15-85	damp	—				
79-23	2	7-15-85	6.8	49°				
79-24	2	7-15-85	5.0	51°				
79-25	2	7-10-85	14.0	47°				
79-26	2	7-10-85	10.9	44°	10-10-85	1.9	41°	-83
79-27	2	7-10-85	8.0	51°	10-10-85	2.2	47°	-73
79-28	2	7-10-85	8.6	41°	10-10-85	5.4	40°	-37
79-29	2	7-10-85	6.0	40°	10-10-85	3.8	42°	-37
79-30	2	7-10-85	5.0	48°				
79-31	2	7-10-85	1.0	59°				
79-32	2	7-10-85	2.7	52°	10-10-85	0.8	48°	-70
79-33	2	7-10-85	4.1	44°				
79-34	3	7-12-85	18.5	40°	10-09-85	2.0	41°	-89
79-35	2	7-10-85	10.5	40°	10-09-85	3.2	40°	-69
79-36	2	7-12-85	8.1	39°				
37	2	7-12-85	0.3	48°				

TABLE 19B: EAST MOUNTAIN SPRINGS DISCHARGE (Continued)

Spring	Type of Measurement	Date Sampled	Flow (GPM)	Temperature F°	Date Sampled	Flow (GPM)	Temperature F°	Seasonal Net Change %
79-38	2	7-12-85	4.7	44°				
79-39	2	7-15-85	damp	—				
79-40	2	7-16-85	5.6	40°				
80-41	2	7-16-85	5.8	39°				
80-42	2	7-15-85	damp	—°				
80-43	2	7-15-85	6.6	43°	10-10-85	seep	33°	
80-44	2	7-16-85	5.5	40°	10-10-85	0.8	41°	-85
80-45	2	7-16-85	0.5	45°				
80-46	2	7-15-85	18.2	42°	10-10-85	7.1	42°	-61
80-47	2	7-15-85	12.5	40°	10-10-85	8.0	41°	-36
80-48	2	7-11-85	10.4	42°				
80-49	3	7-12-85	26.8	42°	10-09-85	inaccessible		
80-50	2	7-08-85	2.8	45°				
82-51	2	7-15-85	3.8	47°	10-10-85	12.0	40°	-63
82-52	3	7-12-85	32.1	39°				
84-53 *	2	7-10-85	16.0	40°				
84-54	2	7-10-85	3.8	40°				
84-55	2	7-16-85	2.7	40°				
84-56	2	7-15-85	4.7	41°	10-10-85	4.3	40°	-5
84-57	2	7-08-85	0.4	67°				

Type of Measurement:

- 1 = Parshall Flume
- 2 = Pipe and 1-gallon bucket, stopwatch
- 3 = Pipe and 5-gallon bucket, stopwatch

*No place for an accurate temperature measurement

- WATER QUALITY OCTOBER
- WATER QUALITY JULY
- RECESSIION CURVE STUDY
- * OUTSIDE CURRENT FIVE YR. MINE PLAN AREA
- ⊙ DIRECTLY ADJACENT TO FIVE YR. MINE PLAN AREA