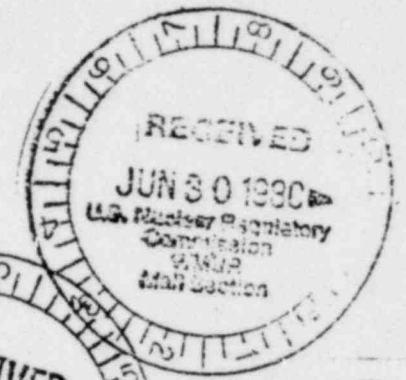


PDR 40-8380

ROCKY MOUNTAIN ENERGY COMPANY

June 26, 1980



Mr. Dennis Morrow, District Engineer
DEQ - Land Quality Division
District IV
30 East Grinnell Street
Sheridan, WY 82801

Dear Mr. Morrow:

Re: Pattern III Status Report

Enclosed are the available results for the May 5 and June 9, 1980 samplings of Pattern III monitor wells. There has been no significant change in well status since the last report. Monitor well M-40 excursion parameters are all below the respective upper control limits (UCL) with the exception of uranium which has remained below 0.2 mg/l over the last three samplings. Well M-43 continues to show elevated levels of uranium and vanadium although both are less than 1 mg/l. Well M-41 remains at essentially background levels for the excursion parameters and vanadium has also returned to baseline range.

There has been no change in pattern operation. Production continues at 5 gpm from both the upper and lower ore zones, with no injection. The production liquor is routed through the water treatment circuit to reservoir B with the lime underflow going to reservoir A.

If you have any questions, please let me know.

Sincerely,

Michael R. Neumann

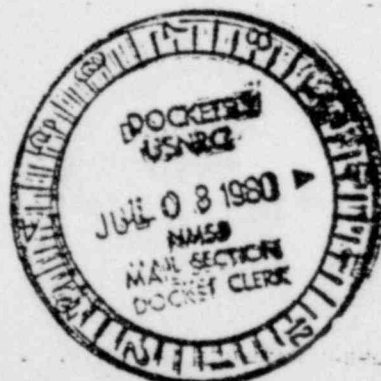
M. R. Neumann
Field Environmental Coordinator

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

MRN/je

Enclosures

- cc: Margery Hulburt (DEQ)
- Tom Mueller (DEQ)
- Tony Mancini (DEQ)
- Jack Rothfleisch (NRC)
- NRC - Region IV
- Rick Iwanicki
- Kent Coest



FEE EXEMPT

15703

8007160390

Sample Date	Sample Description	pH	Eh EMF MIV MIV	Cond umho	Al ₂ O ₃ mg/l	Hard mg/l	CO ₂ mg/l	HCO ₃ mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Fe mg/l	SO ₄ mg/l	Cl mg/l	V mg/l	TDS mg/l	Mn mg/l	As mg/l	Se mg/l	U ₃ O ₈ mg/l	Gross Count pCi/l	Net Count pCi/l	Sp. Act. pCi/l	
M-41	11/1/80	6.3		3700					91	48	536	14	0.99	1582	40	0.53	2929	0.57	0.4	0.4	0.07		249	17.4	150
M-41	11/1/80	6.2		2800					140	69	505	11.6	0.30	1332	36	4.1	2240		0.07	0.01	0.390				
M-41	4/3/80	6.45		2600					93	50	474	9.0	0.23	1198	27.3	0.7	2650		0.05	0.05	0.70				
M-41	5/5/80	6.8		2500					87	44	418	8.2	0.3	1116	30	0.57	1630		0.00	0.006	0.012				
M-41	6/9/80	6.8		2400					74	58	428	7.0	0.22	857	54	0.22	1380		-	-	0.51				

* Value given is the LCL (Lower Control Limit)

Sample Date	Sample Description	pH	Eh EMP MIV, MV	Cond umhos	Alk mg/l as CaCO ₃	Hard mg/l	CO ₃	HCO ₃	Ca	Mg	Na	K	Fe	SO ₄	Cl	V	TDS	Mn	As	Se	UO ₂	Gross α	Gross β	PO ₄ Pb	Pb	TA
					mg/l CaCO ₃	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
M-40	UCL	6.5		3110					157	85	615	16	1.4	2523	42	4.82	2787		0.04	0.05	0.55			324	17.2	116
M-40	4/1/80	7.6		2300					104	48	488	23.5	0.2	1165	41	0.1	2100		0.07	0.1	.20					
M-40	4/16/80	6.6		2600					82	54	510	19.8	0.04	1308	16.5	2.7	2060		0.04	0.001	.147					
M-40	5/5/80	6.8		2600					87	47	495	18.8	0.10	1212	43	0.5	1640		0.01	0.20	.105					
M-40	6/9/80	6.8		2700					88	64	512	14.2	0.07	1173	57	0.31	2160		--	--	.155					
M-40A	5/5/80	7.0		3200					138	70	571	19.1	0.5	1622	32	0.1					.648					
	6/9/80	7.1		3100					120					1502	57	0.6					.021					
M-40B	5/5/80	6.9		2800										1290		0.1					.136					
	6/9/80	7.0		2600										1253		0.6					.118					

* Value given is the LCL (Lower Control Limit)

Sample Date	Sample Description	pH	Eh MV	EMF MV	Cond umhos	Alk	Hard	CO ₃	HCO ₃	Ca	Mg	Na	K	Fe	SO ₄	Cl	V	TDS	Mn	As	Sc	U ₃ O ₈	Gross α	Gross β	Pb-210	Po-210	Ra-226	Th-230
						mg/l as CaCO ₃	mg/l as CaCO ₃	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pCi/l	pCi/l
M-42	UCL	6.4*			3000					80	51	545	14	2.1	1716	47	0.35	2245	0.31	.02	.02	.049			245	13.7	52.1	2.6
M-42	4/1/80	7.1			2100					88	42	476	8.3	0.3	1127	30	<0.1	1240		4.001	.002	.320						
M-42	4/16/80	6.7			2500					75	52	454	9.2	0.96	1065	29.5	0.2	1900		.003	.012	.054						
M-42	5/5/80	6.9			2500					80	43	444	7.9	0.7	1083	30	0.05	1720		.001	.005	.052						
M-42	6/9/80	6.8			2400					67	56	443	6.8	0.59	944	54	0.06	1420		-	-	.042						

*-Value given is the LCL (Lower Control Limit)

2203

Sample Date	Sample Description	pH	Eh MV	LMF MV	Cond umhos	Alk mg/l as CaCO ₃	Hard mg/l as CaCO ₃	CO ₂ mg/l	HCO ₃ mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Fe mg/l	SO ₄ mg/l	Cl mg/l	V mg/l	TDS mg/l	Mn mg/l	As mg/l	Se mg/l	U ₃ O ₈ mg/l		Ground	Gravel	Pb-	Po-	Ra-	Th-
																								2	3	210	210	225	235
																								pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l
M-43	UCL	6.4			3300					94	49	544	14	293	1266	43	0.29	2325		0.05	0.02	.035				5.2	24.0	70.9	3.8
4/1/80	M-43	6.7			2400					120	54	485	10.1	0.4	1309	335	0.6	2160		.001	.004	.770							
4/16/80	M-43	6.9			2600					93	54	474	8.0	0.38	1222	41.0	0.5	2440		.003	.005	.815							
5/5/80	M-43	7.0			2600					95	50	454	9.0	0.2	1183	31	0.18	2080		.001	.008	.433							
6/9/80	M-43	6.9			2500					90	60	481	7.4	0.21	1005	50	0.57	2020		-	-	.918							

*Value given is the LCL (Lower Control Limit)