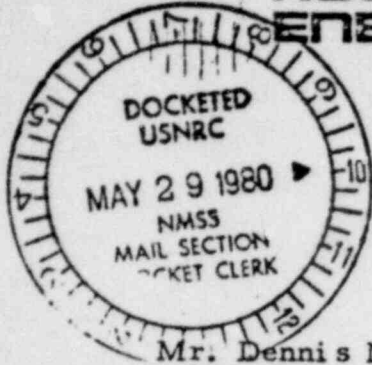


ROCKY MOUNTAIN ENERGY COMPANY



May 14, 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 sample results from the April 1st and April 16th sampling of Pattern III monitor wells. You should have received all values for the April 1st sampling, except those for uranium, arsenic, and selenium, which are reported here. Well M-40 is now back within baseline range for all parameters except uranium which is less than 0.2 mg/l. Well M-43 still shows uranium and vanadium levels above baseline; however, both levels are less than 1.0 mg/l and appear to be dropping.

The April 1st sampling of Well M-41 indicated that calcium, magnesium, and vanadium values were abnormally high. In order to affirm this, the Well was sampled again on April 3rd. The April 3rd sampling results indicated that the well was within the upper control limits (UCL) for the excursion parameters (pH, conductivity, sulfate, and uranium), although calcium, magnesium, and vanadium levels were slightly elevated. This would indicate that one of two things occurred: 1) that we were beginning to see the leading edge of an excursion which was quickly reversed when injection was stopped on April 1st, or 2) that the April 1st sample was inadvertently contaminated or biased. M-41 will be resampled next week, and you will be advised of any new developments.

Pattern III production continues at 5 gpm from the upper and lower ore zones with no injection. The net flow of 10 gpm is being routed through the ion exchange columns to the lime treatment circuit, and barium chloride precipitation step where the overflow is discharged to the new pond (Reservoir B) with the underflow reporting to the old pond.

FEE EXEMPT 16446

add info

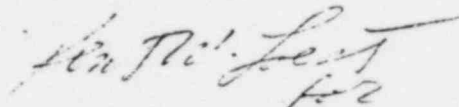
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Mr. Dennis Morrow
May 14, 1980
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As we discussed on the phone Monday, May 12th, future status reports on Pattern III will be filed on a monthly basis now that injection has stopped and values for the excursion control parameters are stabilizing.

If you have any questions, please give me a call at your convenience.

Sincerely,



M. R. Neumann
Field Environmental Coordinator

MRN/ph
Attachments

cc: Margery Hulburt (DEQ)
Jack Rothfleisch (NRC)
NRC - Region IV
Rick Iwanicke
Kent Loest
Pat Spieles

Sample Date	Sample Description	pH	Eh	EMF	Cond	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-232
		MV	MV	umhos	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	pCi/l	pCi/l	pCi/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	12.7	52.1	2.1
M-42	4/1/80	7.1			2100					88	42	476	8.3	0.3	1127	30	<0.1	1240		4.001	.002	(.32)						
M-42	4/16/80	6.7			2500					73	(52)	454	9.2	0.4%	1025	22.5	0.2	1900		.003	.012	(.054)						

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

Sample Date	Sample Description	pH	Fh EMF MV	Cond umhos	Alk	Hard	CC ₃	HCC ₃	Ca	Mg	Na	K	Fe	SO ₄	Cl	V	TDS	Mn	As	Sc	U ₃ O ₈	Gross A	Gross B	Pb-210	Po-210	Ra-226	Th-232	
					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	pCi/l	pCi/l	pCi/l	pCi/l
M-43	UCL	6.4*		3300					94	49	544	14	0.93	1266	43	0.29	2375		0.05	0.02	0.035			8.2	24.0	70.9	3.1	
4/11/80	M-43	6.7		2450					(120)	(54)	485	10.1	0.4	(1309)	33.5	(0.6)	2160		.001	.004	(.77)							
4/16/80	M-43	6.9		2600					93	(54)	474	8.0	0.38	1222	41.0	(0.5)	2040		.003	.008	(.815)							

*Value given is the LCL (Lower Control Limit)

16443