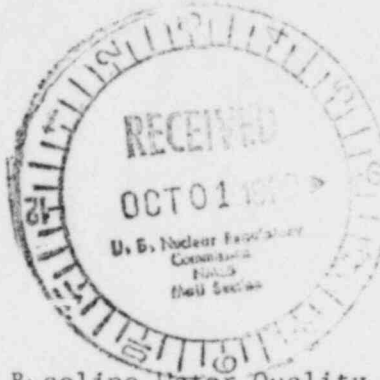


# ROCKY MOUNTAIN ENERGY COMPANY

September 19, 1980

Mr. Jack E. Rothfleisch  
U.S. NUCLEAR REGULATORY COMMISSION  
Uranium Recovery Licensing Branch  
Willste Building  
7915 Eastern Avenue  
Silver Springs, MD 20910



Dear Mr. Rothfleisch:

RE: Reno Creek Baseline Water Quality,  
Pattern I

Pursuant to your request of September 12, 1980, enclosed is Table V-B (Revision 2) with the calculated Lower Control Limits (LCL's) for pH values in the Pattern I monitor wells. The LCLs were calculated from the baseline sample data following outlier removal according to Chauvenet's Criteria. Outside laboratory results were also discarded, as only field measurements of pH are valid. The procedure used to calculate the LCLs was that approved for Pattern II at Reno Creek, namely:

$$LCL = 0.9 (\bar{x} - 2S)$$

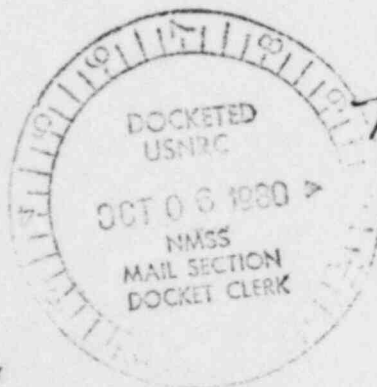
The values shown in brackets are the respective LCLs as determined by subtracting 2 pH units from the well averages ( $\bar{x}$ ) which was the procedure originally approved for Pattern I.

If you have any questions concerning this data, please give me a call.

Sincerely,

*Mike Neumann*  
by PRS

M. R. Neumann  
Field Environmental Coordinator



MRN/ph  
Attachment

- cc: NRC, Region IV
- Margery Hulburt (DEQ)
- Glen Mooney (DEQ)
- K. W. Loest
- P. R. Spieles
- R. E. Iwanicki

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TABLE V-B (REVISION 2)  
 RENO CREEK  
 PATTERN I MONITOR WELLS  
EXCURSION CONTROL PARAMETERS<sup>1</sup>

September 19, 1980

Well No	Value	Conductivity	Calcium	Sulfate	Uranium	pH
M-1	R	1220 - 1570	79 - 99	486 - 776	0.023 - 0.102	7.8 - 8.3
	$\bar{x}$	1381	89	636	0.067	8.05
	S	122	6.4	79	0.029	0.16
	UCL	1788	112	873	0.138	6.95 (6.05) <sup>2</sup>
	N	16	13	15	7	8
M-2	R	1250 - 1760	88 - 119	640 - 860	0.007 - 0.027	7.9 - 8.2
	$\bar{x}$	1475	101	742	0.015	8.03
	S	153	9.2	70.0	0.007	0.13
	UCL	1959	131	971	0.032	6.99 (6.03) <sup>2</sup>
	N	19	16	17	9	8
M-3	R	1300 - 2000	72 - 113	625 - 907	0.205 - 0.750	8.17 - 10.8
	$\bar{x}$	1580	97	754	0.430	9.54
	S	219	11.5	72	0.170	1.01
	UCL	2200	132	988	0.847	6.77 (7.54) <sup>2</sup>
	N	16	16	16	9	7
M-4	R	1220 - 1900	90 - 117	670 - 953	0.270 - 0.550	7.8 - 9.0
	$\bar{x}$	1501	107	800	0.406	8.49
	S	206	8.3	84	0.123	0.426
	UCL	2104	136	1064	0.717	6.22 (6.49) <sup>2</sup>
	N	17	15	15	7	7
USM-1	R	300 - 500	10 - 31	11 - 76	0.001 - 0.014	7.9 - 8.7
	$\bar{x}$	430	19.3	35.1	0.006	8.29
	S	78	6.7	21.5	0.005	0.241
	UCL	645	36.0	85.9	0.018	7.03 (6.29) <sup>2</sup>
	N	13	12	10	6	8
LSM-1	R	1840 - 3050	114 - 203	25 - 99	0.001 - 0.003	11.7 - 12.2
	$\bar{x}$	2376	155	55	0.002	11.89
	S	401	28	29	0.001	0.167
	UCL	3496	232	124	0.004	10.40 (9.89) <sup>2</sup>
	N	16	14	8	6	8

R = Range of Values

$\bar{x}$  = Mean

S = Standard Deviation

Upper Control Limit =  $1.1 (\bar{x} + 2S)$

N = Number of samples

<sup>1</sup> Calculated 8/8/80, except pH; pH calculated 9/16/80.

<sup>2</sup> Values in brackets equal  $\bar{x} - 2$  pH units.

\* For pH values, the Lower Control Limit (LCL) is given.

LCL =  $0.9 (\bar{x} - 2S)$