

CROW BUTTE RESOURCES, INC.

86 Crow Butte Road
P.O. Box 169
Crawford, Nebraska 69339-0169



(308) 665-2215
(308) 665-2341 – FAX

March 9, 2000

Mr. Thomas Essig, Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
Mail Stop T-7-J-8
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, Maryland 20850

Re: Source Materials License SUA-1534
Docket No. 40-8943
Monitor Well SM6-18 Upper Control Limit Exceedance

Dear Mr. Essig:

On March 6, 2000 during routine biweekly water sampling of Crow Butte Resources, Inc. (CBR) shallow monitor well SM6-18, the single parameter upper control limit (UCL) was exceeded for chloride. As required by SUA-1534, a second sample was collected within 48 hours and analyzed for the five excursion indicator parameters. The results of the second sample also exceeded the single UCL for chloride. Based upon these results, monitor well SM6-18 was placed on excursion status.

Mr. Doug Weaver of the NRC Operations Center was notified verbally at 0849 MST on March 8, 2000 of the confirmation of the exceedance. As required by License Condition 12.2, this letter provides written notification of the exceedance. Laboratory results for the analysis of both samples are attached. In addition, graphs are attached for the excursion monitoring for SM6-18 that covers the period from September 7, 1999 through March 9, 2000.

CBR believes that the exceedance of the chloride single UCL in SM6-18 is due to natural fluctuations in the chloride concentration and not due to impacts from mining solutions. The very low baseline chloride concentration for this well results in equally low UCLs. Small variations in the natural chloride concentration can result in the exceedance of these UCLs. CBR notes that a similar exceedance occurred in March 1998 for monitor well SM6-26, which is also in Mine Unit 6. That exceedance of the single UCL for chloride was also apparently due to natural fluctuations in groundwater quality. At that time, CBR requested a license amendment for the calculational method

NMSSO/Pdbk

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of determining Mine Unit 6 UCLs due to the low natural background concentrations of the excursion parameters. This request was withdrawn in August 1998 in response to an NRC request for additional information since SM6-26 was no longer on excursion status.

The conclusion that this UCL exceedance is not caused by a migration of mining solutions is further supported by the trends for the other four excursion parameters. As shown in the attached graphs, none of the other parameter concentrations exhibit an upward trend. If the exceedance were due to mining solutions, it is certain that some of the other parameter concentrations would be affected.

In accordance with License Condition 11.2, CBR will increase the sampling frequency for SM6-18 to weekly until three consecutive weekly samples are below the exceeded UCL. At that time, the well will be returned to normal status. If the data indicates that the exceedance in SM6-18 is due to inappropriately low chloride UCLs and not an excursion of mining solutions, CBR may propose new UCLs for Mine Unit 6 for approval by NRC.

If you have any questions or require any further information, please do not hesitate to call me at (308) 665-2215.

Sincerely,
CROW BUTTE RESOURCES, INC.

A handwritten signature in black ink, appearing to read 'M. Griffin', written over a circular stamp or seal.

Michael Griffin
Manager of Environmental and Regulatory Affairs

Enclosures: As Stated

cc: Mr. Steve Collings - CBR, Denver
Mr. William Ford - NRC, Washington D.C.

Crow Butte Project
Monitor Well Laboratory Report

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Sample Date: 03-06-2000
Analysis Date: 03-07-2000

Analyst: LG/HD

| Well Number | Sodium (mg/L) | Sulfate (mg/L) | Chloride (mg/L) | Conductivity (UMHOS) | Alkalinity (mg/L) |
|-------------|---------------|----------------|-----------------|----------------------|-------------------|
| SM2-1 | 118 | 47 | 17 | 550 | 198 |
| Multiple | 163 | 64 | 47 | 721 | 254 |
| Single | 196 | 77 | 56 | 865 | 305 |
| SM2-2 | 100 | 44 | 9.4 | 470 | 175 |
| Multiple | 148 | 53 | 53 | 1008 | 262 |
| Single | 177 | 63 | 63 | 1210 | 314 |
| SM2-3 | 119 | 51 | 12 | 550 | 210 |
| Multiple | 154 | 64 | 31 | 808 | 287 |
| Single | 184 | 76 | 37 | 969 | 344 |
| SM4-7 | 120 | 51 | 22 | 560 | 190 |
| Multiple | 208 | 126 | 88 | 1039 | 393 |
| Single | 257 | 170 | 127 | 1256 | 513 |
| SM4-9 | 156 | 51 | 12* | 690 | 290 |
| Multiple | 168 | 61 | 19 | 856 | 312 |
| Single | 202 | 73 | 23 | 1027 | 374 |
| SM4-11A | 161 | 52 | 12 | 720 | 295 |
| Multiple | 239 | 80 | 115 | 1224 | 462 |
| Single | 287 | 96 | 139 | 1469 | 554 |
| SM5-19 | 106 | 49 | 4.3 | 490 | 200 |
| Multiple | 131 | 62 | 10 | 631 | 238 |
| Single | 157 | 75 | 12 | 757 | 285 |
| SM6-18 | 122 | 52 | 20 | 580 | 200 |
| Multiple | 139 | 71 | 16 | 697 | 254 |
| Single | 167 | 85 | 19 | 837 | 305 |
| SM6-19 | 54 | 23 | 6.5 | 480 | 205 |
| Multiple | 66 | 27 | 10 | 582 | 247 |
| Single | 79 | 32 | 12 | 698 | 297 |
| SM7-1 | 107 | 46 | 6.5 | 510 | 190* |
| Multiple | 117 | 46 | 19 | 564 | 210 |
| Single | 141 | 55 | 22 | 677 | 252 |
| SM7-2 | 88 | 31 | 5.1* | 420 | 170 |
| Multiple | 113 | 39 | 29 | 551 | 216 |
| Single | 136 | 47 | 34 | 661 | 259 |
| SM7-3 | 94 | 38 | 5.4 | 450 | 180 |
| Multiple | 119 | 45 | 24 | 583 | 214 |
| Single | 143 | 54 | 28 | 700 | 256 |
| SM7-4 | 88 | 29* | 6.2 | 420 | 165 |
| Multiple | 113 | 37 | 18 | 559 | 212 |
| Single | 136 | 45 | 21 | 671 | 255 |
| CM4-1 | 399 | 329 | 183 | 1870 | 310 |
| Multiple | 452 | 425 | 209 | 2375 | 362 |
| Single | 543 | 510 | 251 | 2850 | 435 |

* - Denotes 5% change from previous sample.

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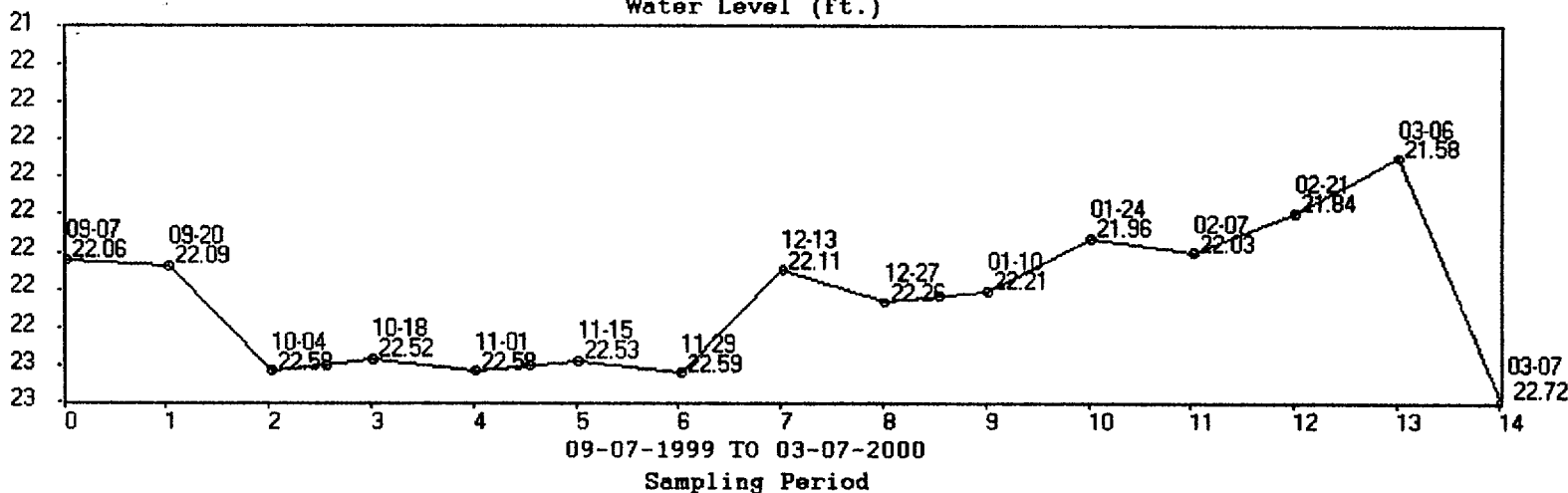
Sample Date: 03-07-2000
Analysis Date: 03-08-2000

Analyst: LG/HD

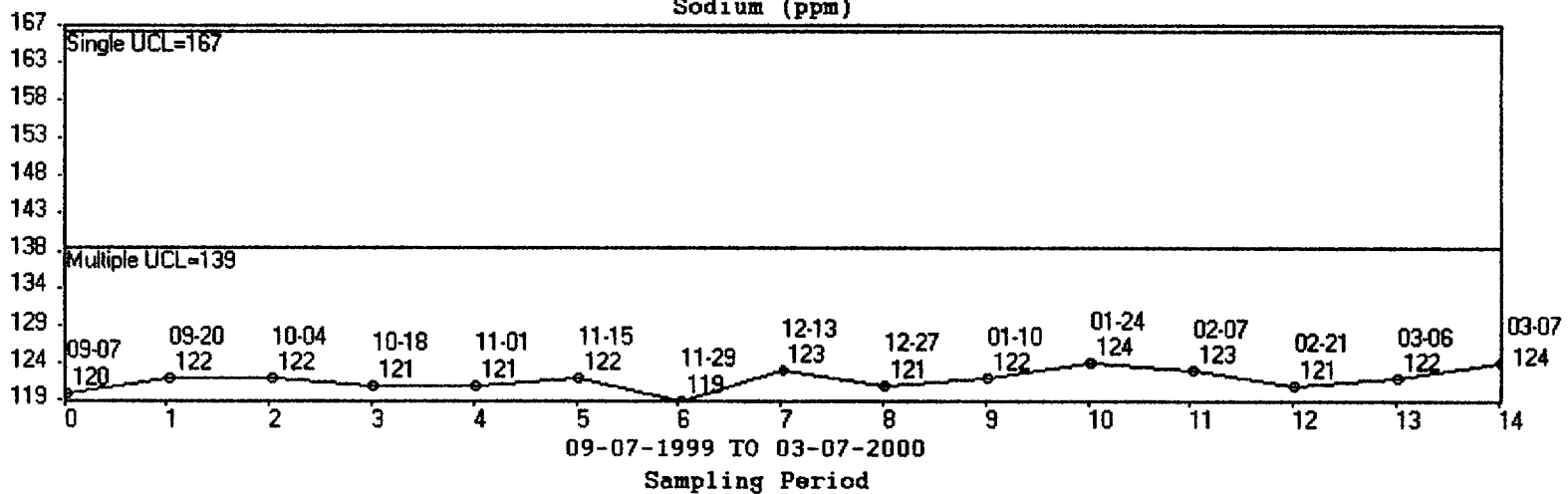
| Well Number | Sodium (mg/L) | Sulfate (mg/L) | Chloride (mg/L) | Conductivity (UMHOS) | Alkalinity (mg/L) |
|---------------------|---------------|----------------|-----------------|----------------------|-------------------|
| SM2-1 Multiple | 163 | 64 | 47 | 721 | 254 |
| Single | 196 | 77 | 56 | 865 | 305 |
| SM2-2 Multiple | 148 | 53 | 53 | 1008 | 262 |
| Single | 177 | 63 | 63 | 1210 | 314 |
| SM2-3 Multiple | 154 | 64 | 31 | 808 | 287 |
| Single | 184 | 76 | 37 | 969 | 344 |
| SM4-7 Multiple | 208 | 126 | 88 | 1039 | 393 |
| Single | 257 | 170 | 127 | 1256 | 513 |
| SM4-9 Multiple | 168 | 61 | 19 | 856 | 312 |
| Single | 202 | 73 | 23 | 1027 | 374 |
| SM4-11A Multiple | 239 | 80 | 115 | 1224 | 462 |
| Single | 287 | 96 | 139 | 1469 | 554 |
| SM5-19 Multiple | 131 | 62 | 10 | 631 | 238 |
| Single | 157 | 75 | 12 | 757 | 285 |
| SM6-18 Multiple | 124 | 53 | 20 | 580 | 200 |
| Single | 139 | 71 | 16 | 697 | 254 |
| Single | 167 | 85 | 19 | 837 | 305 |
| SM6-19 Multiple | 66 | 27 | 10 | 582 | 247 |
| Single | 79 | 32 | 12 | 698 | 297 |
| SM7-1 Multiple | 117 | 46 | 19 | 564 | 210 |
| Single | 141 | 55 | 22 | 677 | 252 |
| SM7-2 Multiple | 113 | 39 | 29 | 551 | 216 |
| Single | 136 | 47 | 34 | 661 | 259 |
| SM7-3 Multiple | 119 | 45 | 24 | 583 | 214 |
| Single | 143 | 54 | 28 | 700 | 256 |
| SM7-4 Multiple | 113 | 37 | 18 | 559 | 212 |
| Single | 136 | 45 | 21 | 671 | 255 |
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* - Denotes 5% change from previous sample.

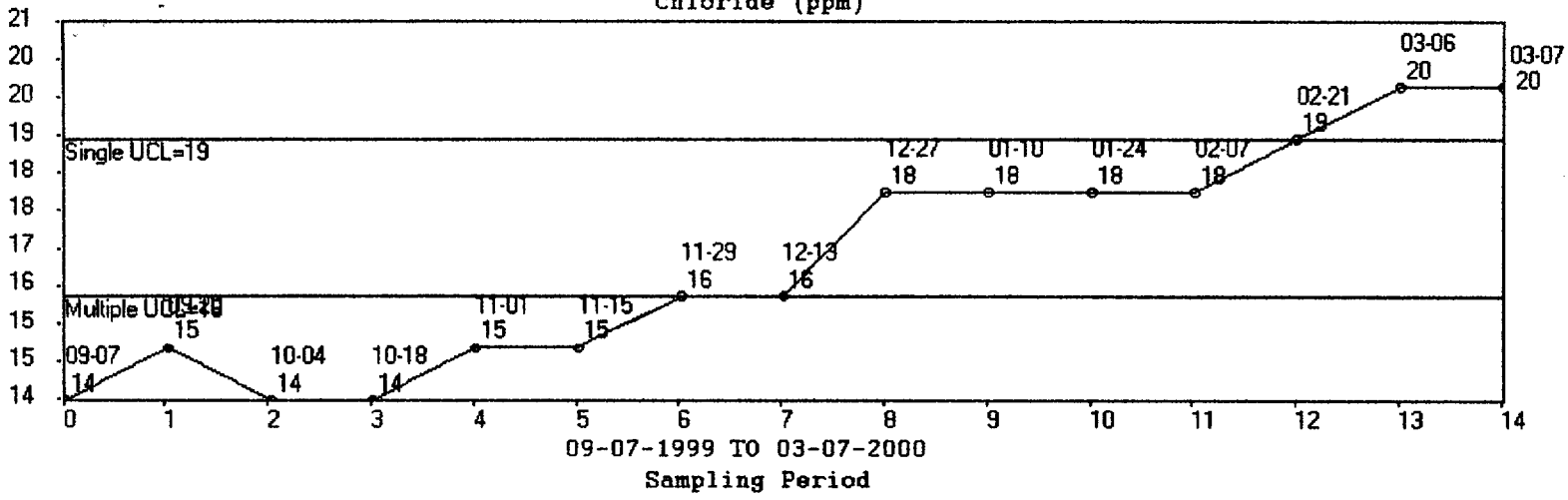
SM6-18
Water Level (ft.)



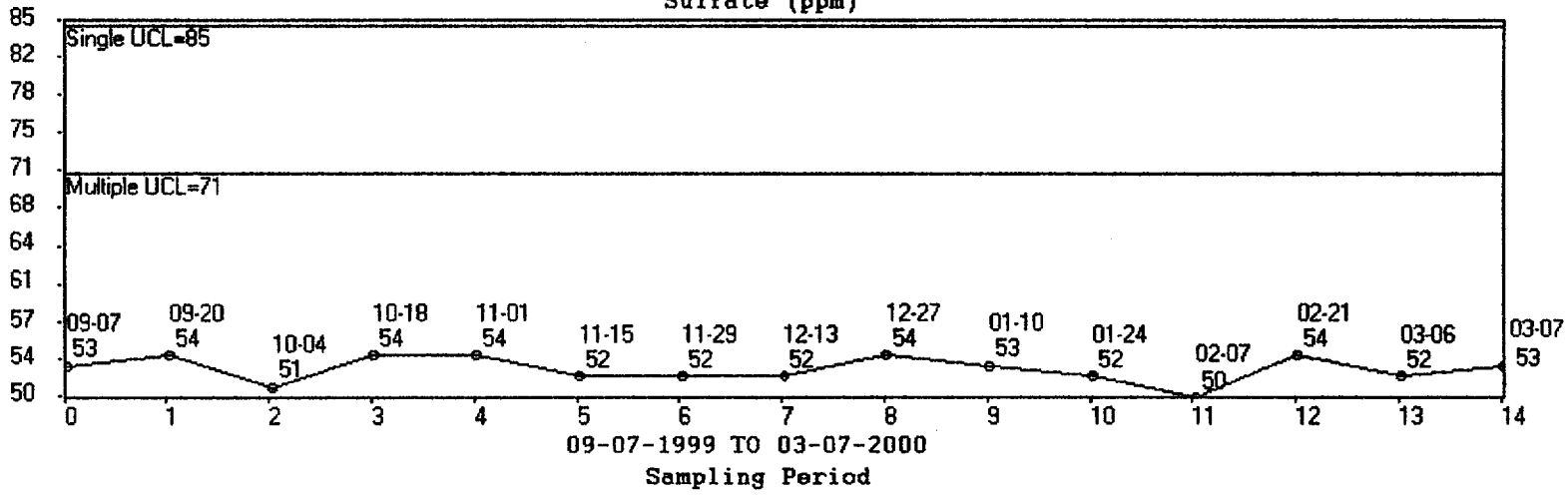
SM6-18
Sodium (ppm)



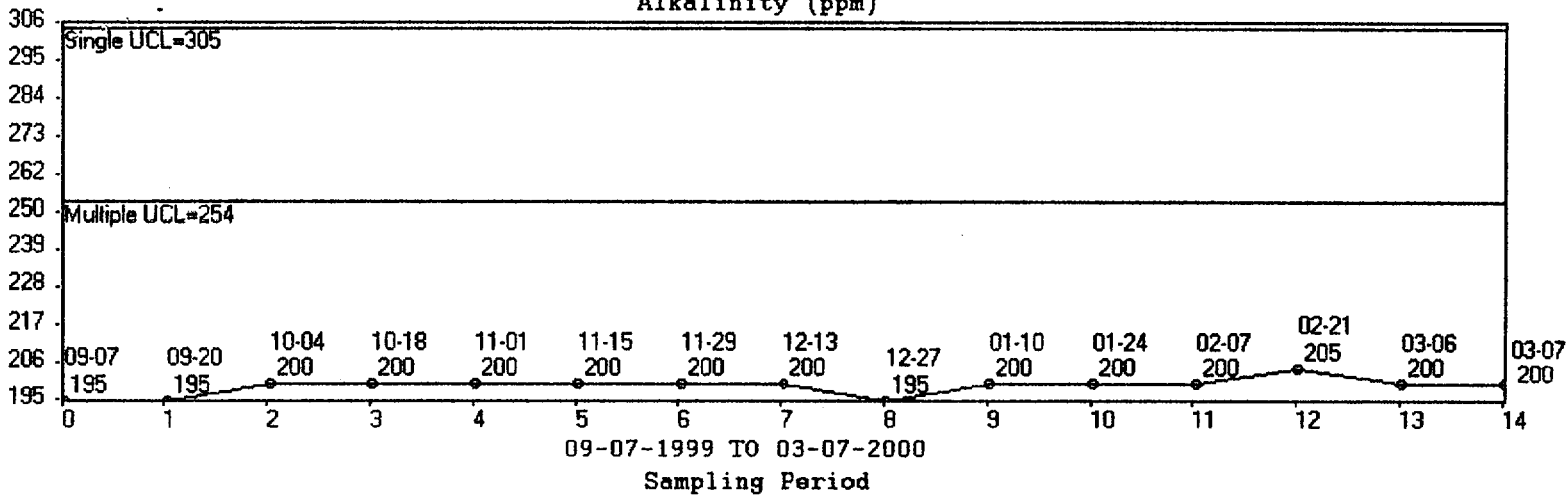
SM6-18
Chloride (ppm)



SM6-18
Sulfate (ppm)



SM6-18
Alkalinity (ppm)



SM6-18
Conductivity (umhos)

