CROW BUTTE RESOURCES, INC.

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P.O. Box 169
Crawford, Nebraska 69339-0169

(308) 665-2215
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December 6, 2001

Mr. Melvyn Leach, Chief
Fuel Cycle Licensing Branch, FCSS
c/o Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Source Materials License SUA-1534
Docket No. 40-8943
Monitor Well SM7-23 Upper Control Limit Exceedance

Dear Mr. Leach:

On December 4, 2001 during routine biweekly water sampling of Crow Butte Resources, Inc. (CBR) shallow monitor well SM7-23, the single parameter upper control limit (UCL) was exceeded for sulfate. 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 sulfate. Based upon these results, monitor well SM7-23 was placed on excursion status.

Ms. Leigh Trocine at the NRC Operations Center was notified verbally on December 6, 2001 of the confirmation of the exceedance. In addition, CBR contacted the NRC Project Manager, Mr. Michael Layton. 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 performed on SM7-23 that covers the period from August 5, 1999 though December 5, 2001.

CBR believes that the exceedance of the sulfate UCL in SM7-23 is not due to the migration of mining solutions, but is most likely the result of variability in baseline water quality over time. SM7-23 had been on excursion status since April 2000 until the samples obtained on November 13, 20, and 27, 2001 were below the sulfate excursion criteria from the permit. Based on this monitoring data, CBR submitted a final report on November 29, 2001 removing SM7-23 from excursion status. As shown in the attached graphs, sulfate has increased since that time to concentrations that are again over the single UCL. The decrease in sulfate concentrations coincided with the change of the well pumping system from a pump jack to a submersible pump. CBR is reviewing data in an attempt to determine the cause of this decrease in sulfate concentrations as well as the subsequent increase.

NMSS01 Public

In accordance with Footnote C.1 of our Class III UIC permit issued by the Nebraska Department of Environmental Quality (NDEQ), CBR had not decreased the sampling frequency for SM7-23 to weekly because an additional three weeks of sampling had not been completed after the well was removed from excursion status. CBR will continue weekly monitoring in compliance with the requirements of our UIC permit and SUA-1534.

Please note that the fifth quarterly excursion report for SM7-23 dated September 25, 2001 proposed recalculation of the sulfate UCLs for SM7-23 and SM7-24. CBR requests that the NRC continue their review of this request and approve the proposed change.

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.

Michael Griffin
Manager of Health, Safety, and Environmental Affairs

Enclosures: As Stated

cc: Mr. Steve Collings - CBR, Denver
Mr. Mike Brost – CBR, Crawford

U.S. Nuclear Regulatory Commission
Mr. Mike Layton - ADDRESSEE ONLY
Fuel Cycle Licensing Branch
Mail Stop T-8A33
Washington, DC 20555

Crow Butte Project
Monitor Well Laboratory Report

Sample Date: 12-04-2001
Analysis Date: 12-05-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	404	351	179	1910	310
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	400	348	183	1910	300
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	406	352	185	1940	305
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	413	342	187	1950	303
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	407	344	185	1910	290
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	396	363	177	1910	285
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	406	375	183	1970	293
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	404	368	179	1930	295
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	22*	11*	3.2*	510	240
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	109	68*	6.1	550*	183
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

Crow Butte Project
Monitor Well Laboratory Report

Sample Date: 12-05-2001
Analysis Date: 12-05-2001
Analyst: LG/TF

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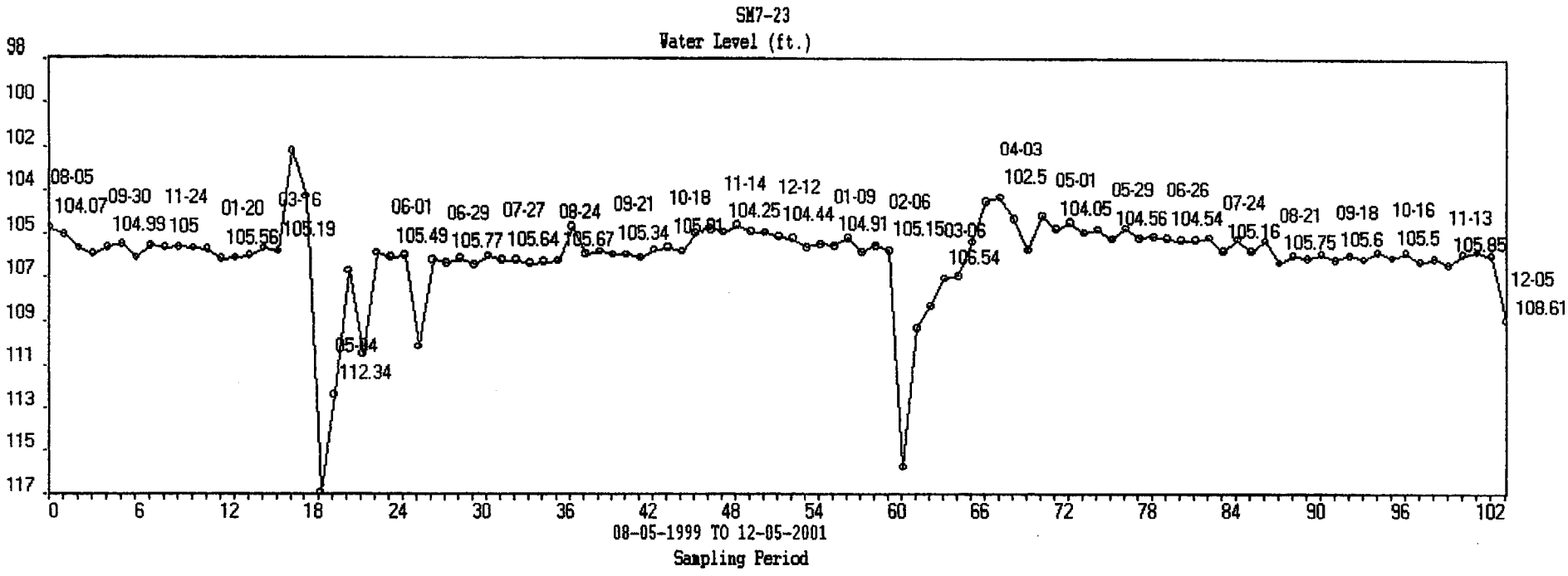
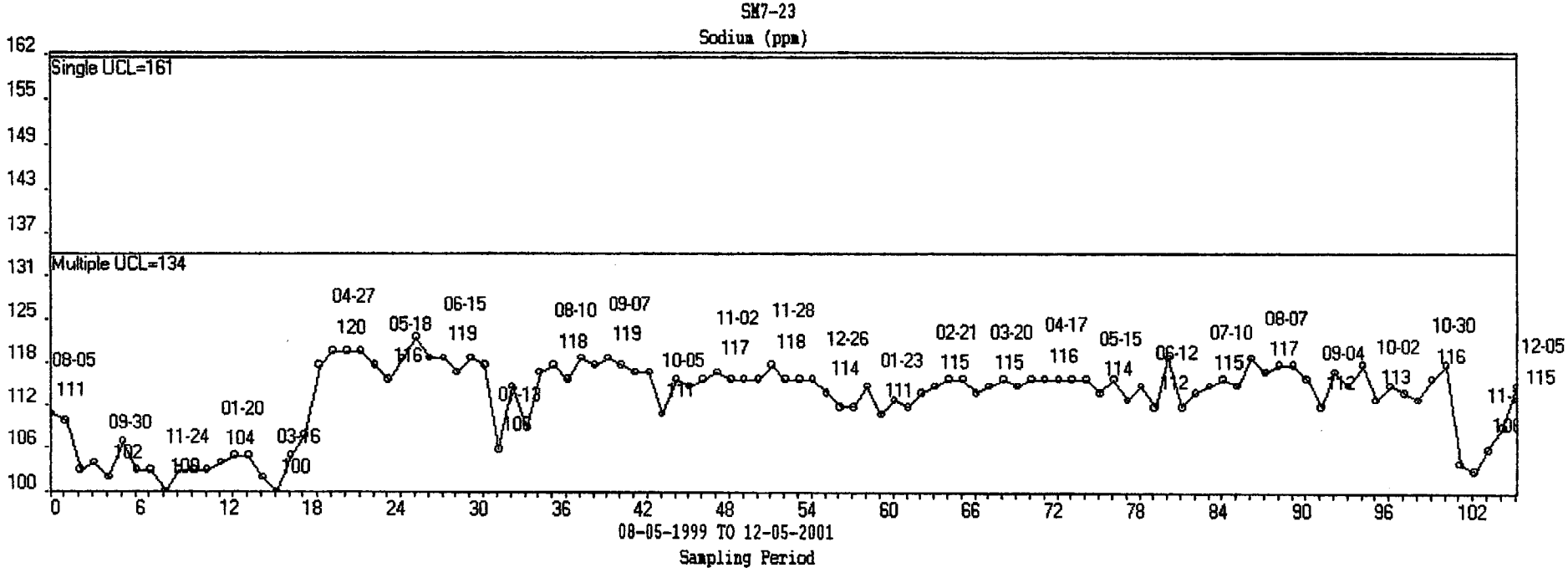
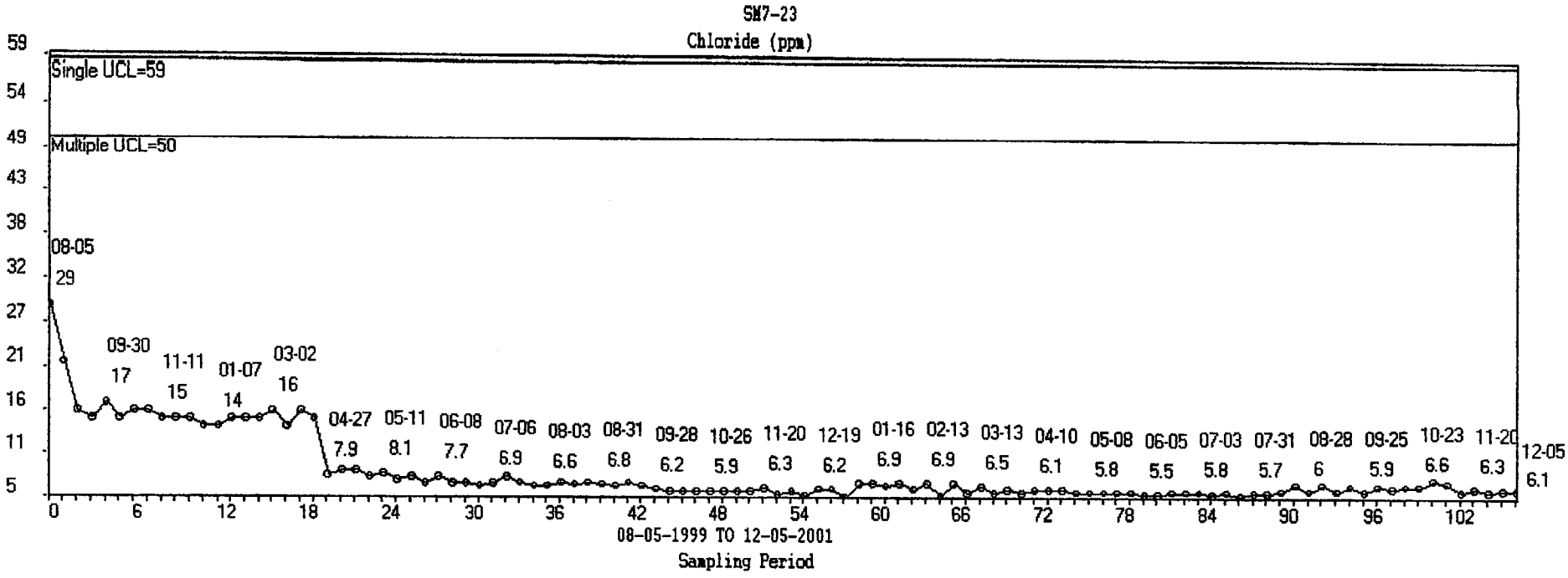
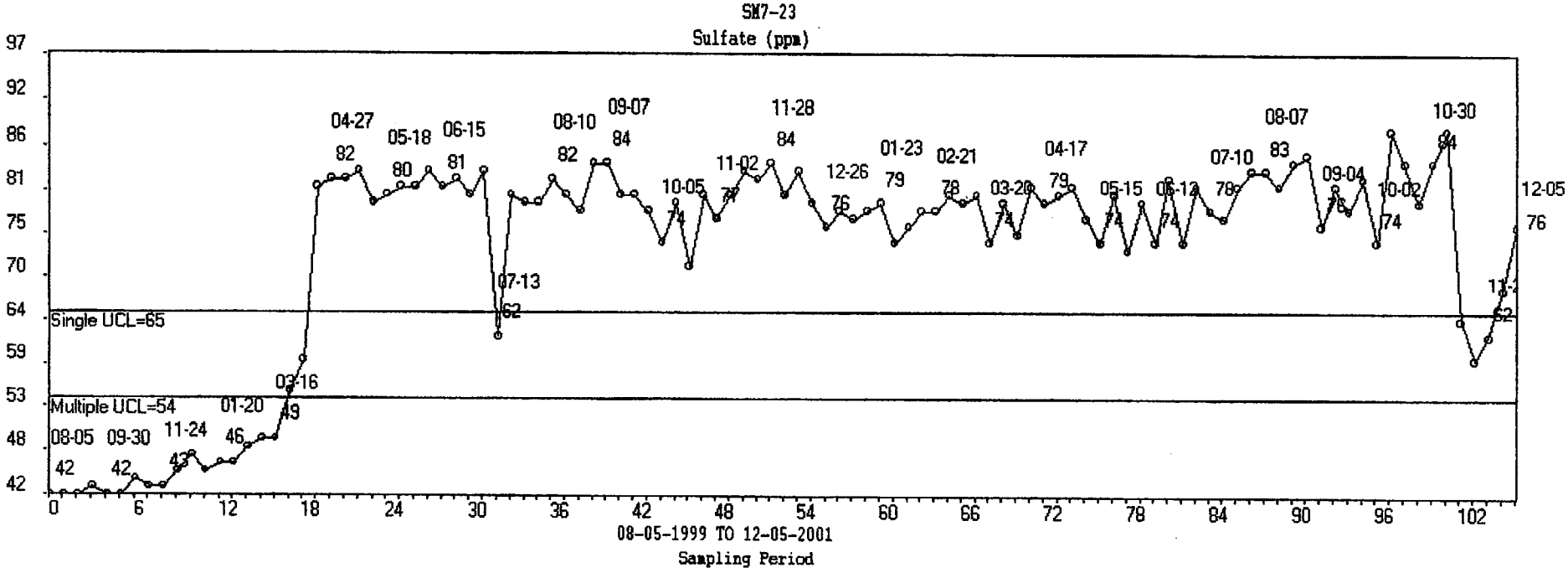
Single	586	544	269	2808	441
SM6-12					
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	115*	76*	6.1	570	185
Multiple	134	54	50	708	232
Single	161	65	59	850	278

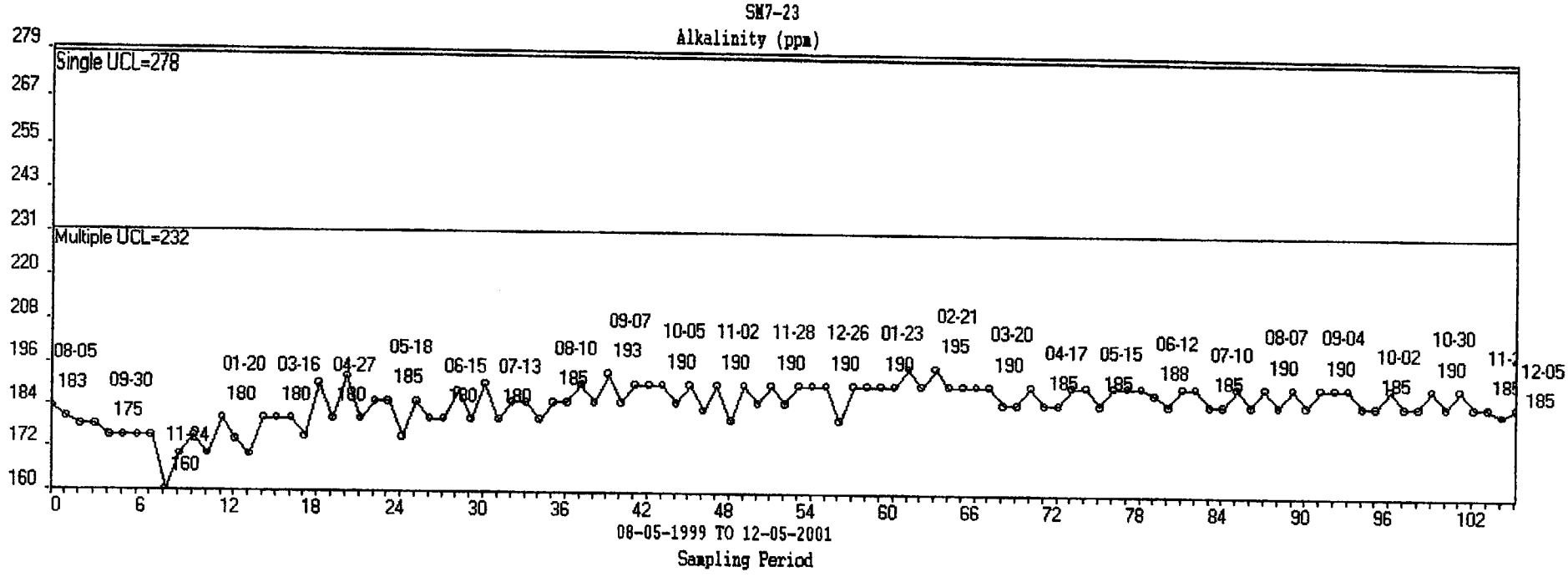
* - Denotes 5% change from previous sample.

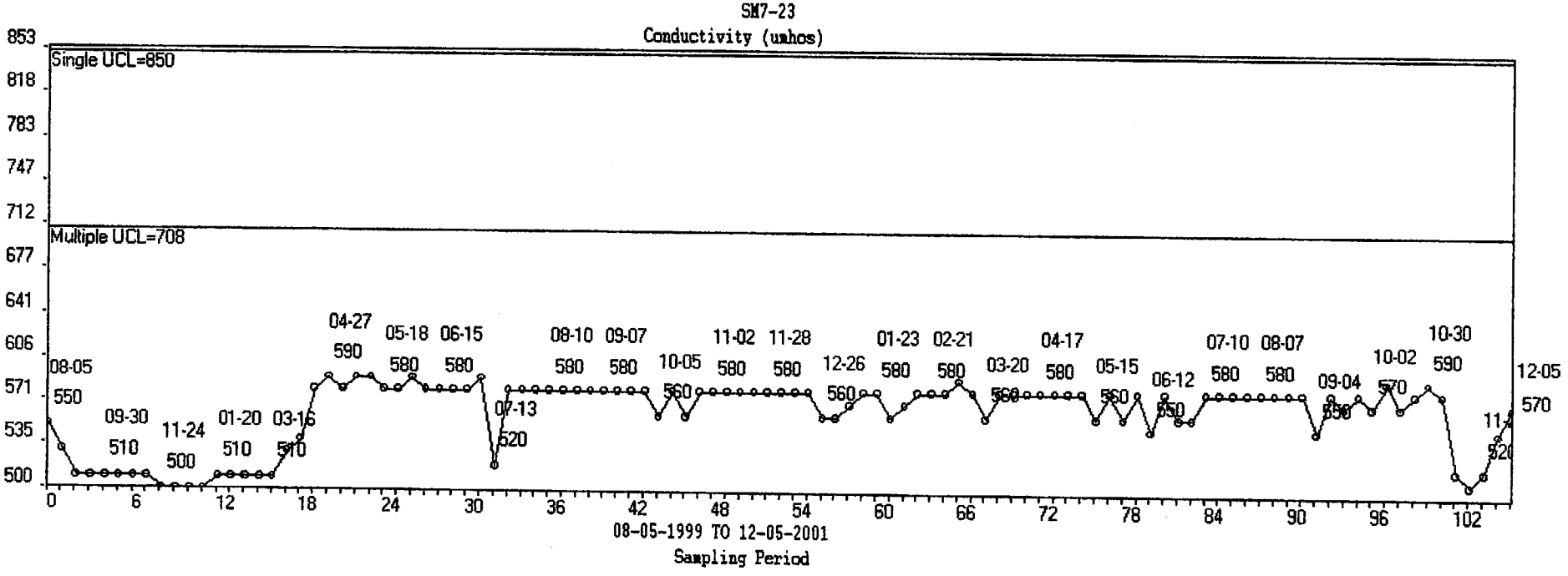

SM7-23
Water Level (ft.)
08-05-1999 TO 12-05-2001
Sampling Period


SM7-23
Sodium (ppm)
Single UCL=161
Multiple UCL=134
08-05-1999 TO 12-05-2001
Sampling Period


SM7-23
Chloride (ppm)
Single UCL=59
Multiple UCL=50
08-05 29
09-30 17
11-11 15
01-07 14
03-02 16
04-27 7.9
05-11 8.1
06-08 7.7
07-06 6.9
08-03 6.6
08-31 6.8
09-28 6.2
10-26 5.9
11-20 6.3
12-19 6.2
01-16 6.9
02-13 6.9
03-13 6.5
04-10 6.1
05-08 5.8
06-05 5.5
07-03 5.8
07-31 5.7
08-28 6
09-25 5.9
10-23 6.6
11-20 6.3
12-05 6.1
08-05-1999 TO 12-05-2001
Sampling Period


SM7-23
Sulfate (ppm)
Single UCL=65
Multiple UCL=54
08-05 42
09-30 42
11-24 43
01-20 46
03-16 49
04-27 82
05-18 80
06-15 81
07-13 62
08-10 82
09-07 84
10-05 74
11-02 77
11-28 84
12-26 76
01-23 79
02-21 78
03-20 74
04-17 79
05-15 74
06-12 74
07-10 78
08-07 83
09-04 76
10-02 74
10-30 84
12-05 76
08-05-1999 TO 12-05-2001
Sampling Period


SM7-23
Alkalinity (ppm)
Single UCL=278
Multiple UCL=232
08-05-1999 TO 12-05-2001
Sampling Period


SM7-23
Conductivity (umhos)
Single UCL=850
Multiple UCL=708
08-05-1999 TO 12-05-2001
Sampling Period