

CROW BUTTE RESOURCES, INC.

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Crawford, Nebraska 69339-0169



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March 22, 2001

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

Re: Source Materials License SUA-1534
Docket No. 40-8943
SM7-23 Monitor Well Excursion Quarterly Report

Dear Mr. Leach:

On April 27, 2000 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 (and a third sample taken on April 28) also exceeded the single UCL for sulfate. Based upon these results, monitor well SM7-23 was placed on excursion status. This report is a quarterly report submitted to NRC to provide an update on the status of SM7-23.

As required by License Condition 11.2, CBR increased the sampling frequency for SM7-23 to weekly. Laboratory results for the analysis of weekly samples from March 27 through June 19, 2001 are attached. In addition, graphs are attached for each excursion parameter and water level for SM7-23 for the period from August 5, 1999 through June 19, 2001. The data indicates that sulfate concentrations have continued to exceed the single UCL of 62 mg/l. All other excursion monitoring parameters have remained stable at levels that are well below their respective UCLs.

CBR believes that the exceedance of the sulfate UCL in SM7-23 is not due to the migration of mining solutions. SM7-23 is located in a new area of Mine Unit 7 where mining activities have not begun. The nearest active mining well is approximately 800 feet from SM7-23. In addition, several other shallow monitor wells are located between SM7-23 and these active mining wells. If the excursion were due to mining solutions, it would be reasonable to expect that these wells would also be affected.

The conclusion that this UCL exceedance is not caused by a migration of mining solutions is further

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CROW BUTTE RESOURCES, INC.



Mr. Mel Leach
June 25, 2001
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supported by the trends for the other four excursion parameters. If the exceedance were due to mining solutions, it is certain that some of the other parameter concentrations would be affected.

As shown in the trending graphs, the sulfate concentrations in SM7-23 appear stable at the current levels. Since it is apparent that mining activities have not affected the sulfate concentrations, CBR believes that it may be necessary to propose new multiple and single UCLs for sulfate in SM7-23. In the meantime, CBR plans to continue to sample SM7-23 on a weekly basis. If three consecutive weekly samples are below the exceeded UCL, the well will be returned to normal status.

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'.

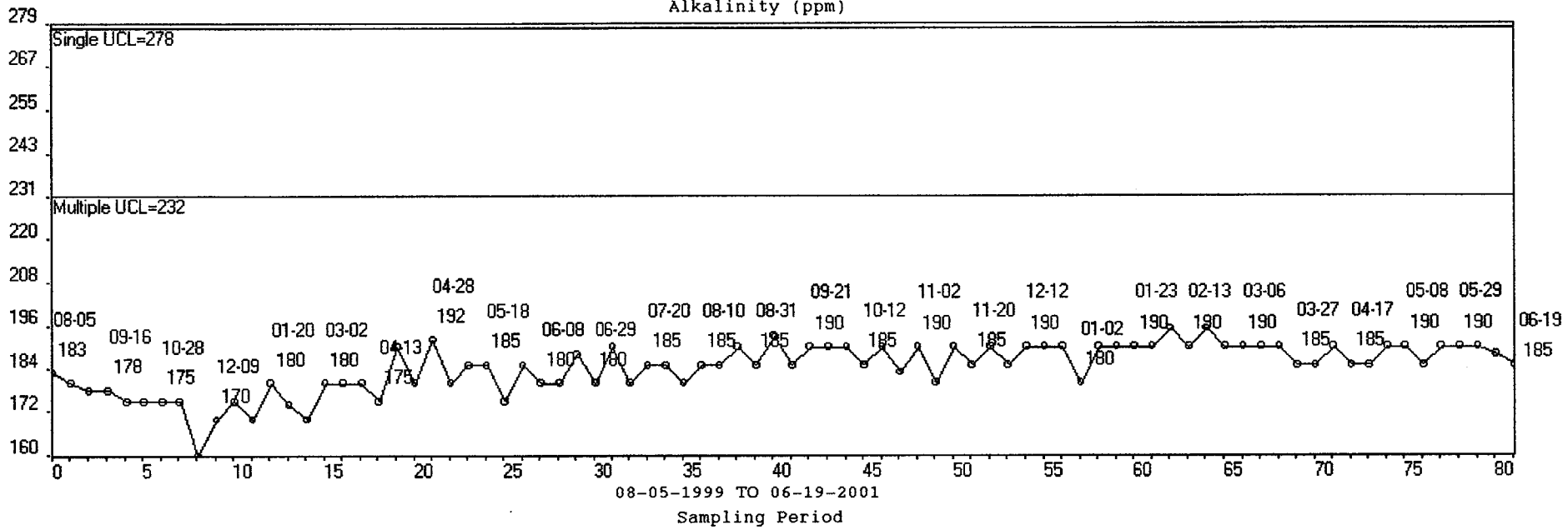
Michael Griffin
Manager of Health, Safety, and Environmental Affairs

Enclosures: As Stated

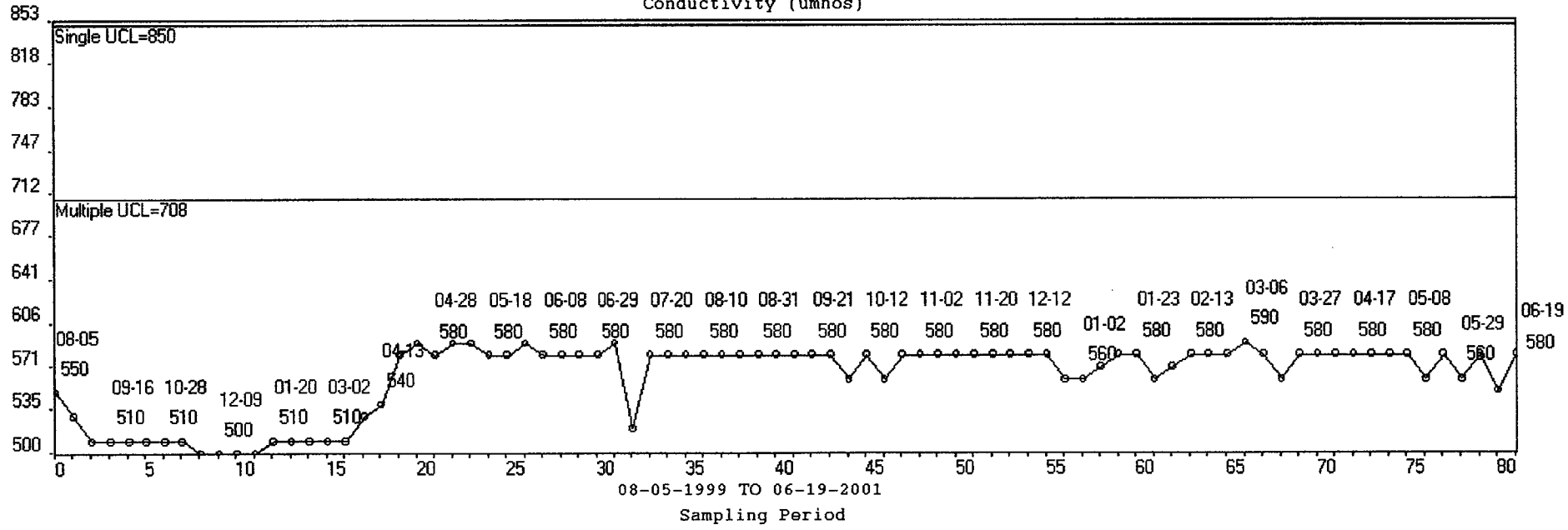
cc: Mr. Steve Collings - CBR, Denver

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

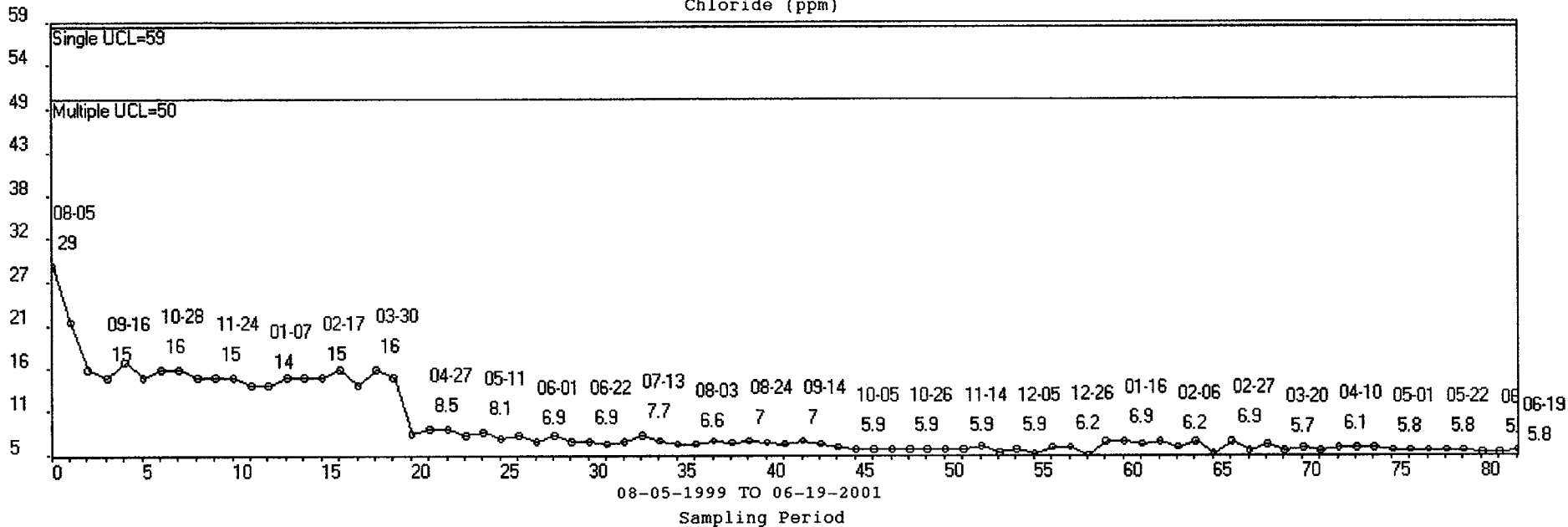
SM7-23
Alkalinity (ppm)



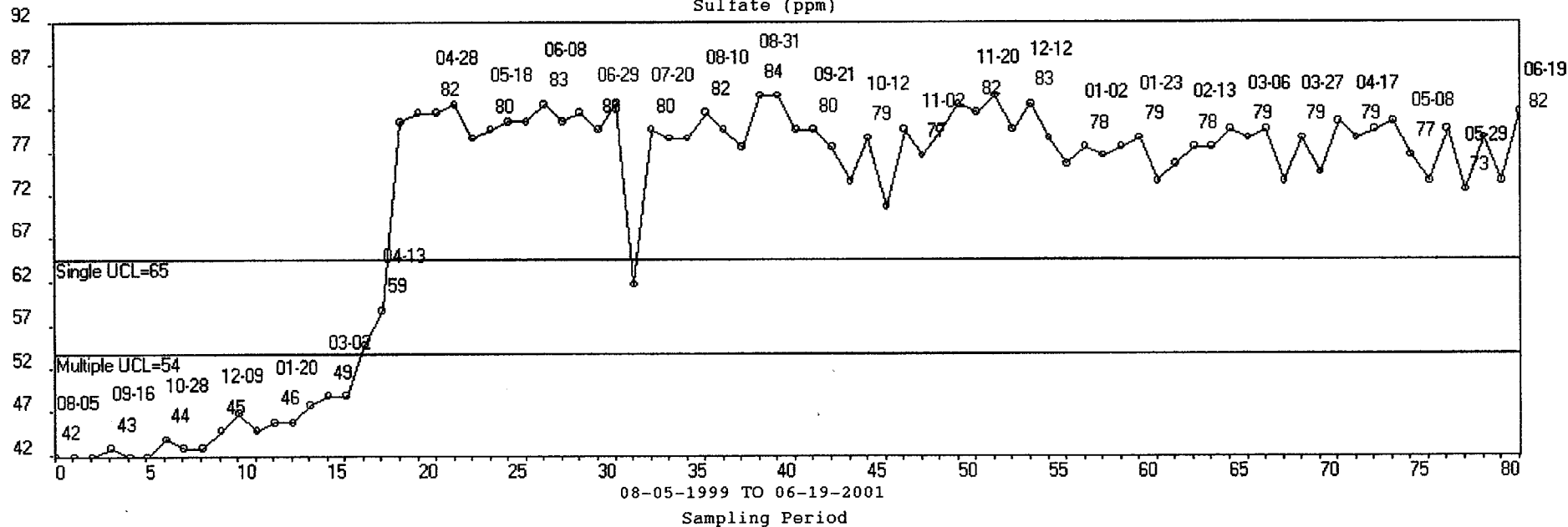
SM7-23
Conductivity (umhos)



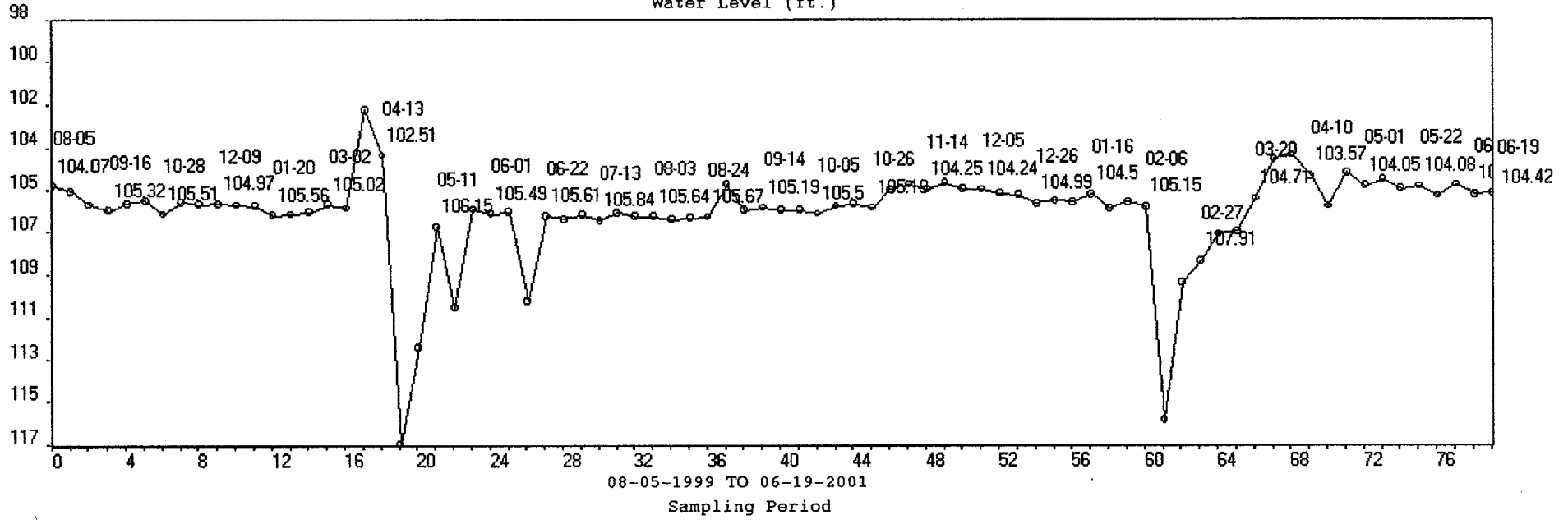
SM7-23
Chloride (ppm)



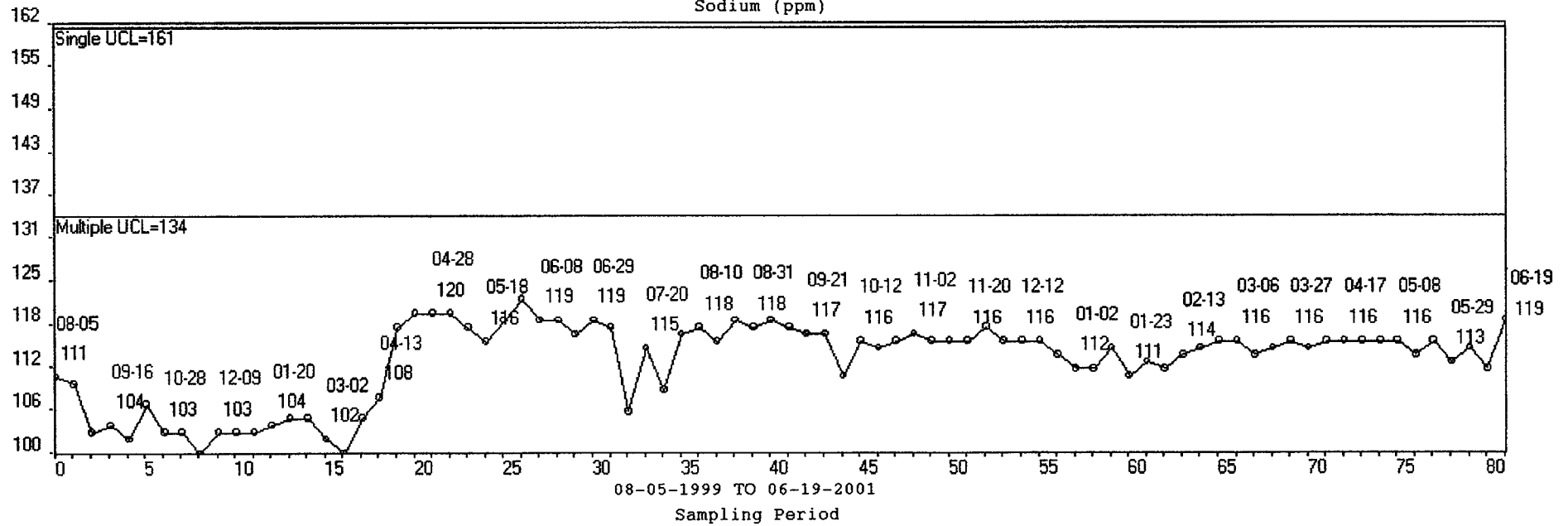
SM7-23
Sulfate (ppm)



SM7-23
Water Level (ft.)



SM7-23
Sodium (ppm)



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Sample Date: 03-27-2001
Analysis Date: 03-28-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	400	352	178	1910	300
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	400	335	175	1900	300
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	400	350	181	1930	300
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11					
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	403	354	179	1920	300
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	402	375	183	1960	280
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	400	374	175	1950	290
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	398	352	179	1940	303
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	24*	14	5.7	520	245
Multiple	30	16	6	613	290
Single	36	19	7	736	348
SM7-23	116	79*	6.1*	580	185
Multiple	134	52	45	708	232
Single	161	62	54	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 04-03-2001
Analysis Date: 04-04-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	392	303	179	1840	305
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	389	307	175	1840	300
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	389	316	173	1850	305
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	390	319	175	1850	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	403	357	179	1940	295
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	388	307	175	1840	300
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	400	315	179	1870	308
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	380	310	175	1840	300
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	388	318	181	1860	310
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	395	314	183	1870	305
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	115	75*	5.7*	580	185
Multiple	134	52	45	708	232
Single	161	62	54	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 04-10-2001
Analysis Date: 04-11-2001

Analyst: IG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	404	335	179	1910	310
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	400	346	175	1910	310
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	399	347	181	1920	295
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	421	358	191	1990	310
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	400	355	179	1920	295
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	399	365	183	1950	285
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	400	360	176	1940	290
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	404	357	179	1940	300
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	24	13*	5.7	520	245
Multiple	30	16	6	613	290
Single	36	19	7	736	348
SM7-23	116	81*	6.1*	580	190
Multiple	134	52	45	708	232
Single	161	62	54	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 04-17-2001

Analyst: SM/LG

Analysis Date: 04-18-2001

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	391	316	181	1840	310
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	386	313	173	1830	300
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	388	307	177	1850	303
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	389	327	177	1840	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	407	358	183	1950	295
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	391	313	179	1830	305
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	390	309	175	1850	300
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	382	316	179	1830	305
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	391	324	183	1850	305
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	400	313	187	1880	305
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	116	79	6.1	580	185
Multiple	134	52	45	708	232
Single	161	62	54	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 04-24-2001
Analysis Date: 04-25-2001

Analyst: IG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	404	344	179	1910	303
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	400	338	175	1910	298
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	406	347	181	1940	300
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	421	359	190	1990	305
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	404	360	179	1920	290
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	406	359	184	1960	280
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	408	370	175	1950	290
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	409	349	179	1940	295
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	24	14*	5.5	520	240
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	116	80	6.1	580	185
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 05-01-2001
Analysis Date: 05-02-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	391	313	181	1850	310
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	385	315	175	1840	300
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	389	312	177	1850	308
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	392	309*	178	1850	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	410	350	183	1940	300
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	389	309	179	1840	305
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	390	301	175	1850	298
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	388	307	179	1830	300
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	393	320	183	1850	305
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	406	317	187	1870	310
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	116	81	5.8	580	190
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 05-08-2001
Analysis Date: 05-09-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	406	352	179	1910	305
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	398	351	176	1900	295
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	409	346	181	1950	305
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	424	360	187	2010	300
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	405	348	181	1920	300
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	407	355	183	1950	283
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	406	363	181	1950	290
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	408	346	179	1940	300
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	24	13*	5.5	520	240
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	116	77	5.8	580	190
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 05-15-2001
Analysis Date: 05-16-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	391	307	181	1840	305
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	391	324	175	1840	305
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	388	320	177	1850	305
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	390	315	178	1850	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	410	353	183	1930	300
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	390	304	179	1840	310
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	389	311	177	1850	300
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	389	310	177	1840	295
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	392	318	183	1850	305
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	406	313	187	1870	305
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	114	74	5.8	560	185
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 05-22-2001
Analysis Date: 05-23-2001

Analyst: LG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	408	342	179	1910	308
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	406	336	175	1900	295
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	407	345	181	1930	305
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	425	358	189	1980	305
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	406	348	181	1920	300
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	412	363	183	1980	280
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	410	367	181	1950	293
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	411	353	179	1940	300
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	23	14*	5.3	520	240
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	116	80*	5.8	580	190
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 05-29-2001

Analyst: IG/TF

Analysis Date: 05-30-2001

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	394	313	183	1850	308
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	384	324	177	1840	300
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	392	320	179	1850	305
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	395	317	179	1850	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	412	358	183	1940	300
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	390	309	179	1830	305
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	395	313	179	1850	300
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	388	310	179	1840	298
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	391	317	183	1850	300
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	404	317	187	1870	305
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	113	73*	5.8	560	190
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Sample Date: 06-05-2001
Analysis Date: 06-06-2001

Analyst: IG/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	405	342	179	1910	305
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	408	342	177	1900	300
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	416	340	182	1970	300
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	425	355	189	1970	305
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	408	351	181	1920	300
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	411	360	183	1960	280
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	407	361	183	1950	290
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	411	347	181	1930	300
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	23	13*	5.3	520	240
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	115	79*	5.5*	580	190
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 06-12-2001

Analyst: SM/TF

Analysis Date: 06-13-2001

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM4-4	392	314	183	1860	310
Multiple	491	390	258	2502	361
Single	589	468	310	3002	433
CM4-5	387	322	179	1850	300
Multiple	493	395	280	2642	344
Single	592	474	336	3171	413
CM4-6	387	324	181	1850	300
Multiple	445	402	220	2344	337
Single	534	482	264	2812	405
CM4-7	390	326	180	1860	300
Multiple	514	394	341	2777	348
Single	616	472	409	3332	418
CM6-4	414	358	183	1940	305
Multiple	480	450	241	2364	367
Single	576	540	289	2837	441
CM7-2	392	314	179	1830	300
Multiple	492	408	296	2448	354
Single	590	490	356	2938	425
CM7-3	392	321	181	1850	305
Multiple	524	409	317	2544	372
Single	629	491	380	3053	446
CM7-4	384	311	179	1840	303
Multiple	463	379	241	2257	359
Single	556	455	289	2709	431
CM7-5	388	318	183	1860	295
Multiple	484	391	277	2368	366
Single	580	469	333	2841	439
CM7-6	402	317	185	1880	310
Multiple	484	397	263	2356	362
Single	580	477	315	2827	435
SM7-23	112	74*	5.5	550*	188
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

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Sample Date: 06-19-2001
Analysis Date: 06-20-2001

Analyst: SM/TF

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM5-8	404	352	178	1910	310
Multiple	475	449	241	2396	373
Single	570	539	289	2876	448
CM5-9	404	349	179	1910	305
Multiple	475	446	241	2387	361
Single	570	536	289	2864	433
CM5-10	405	354	183	1940	305
Multiple	480	460	277	2453	336
Single	576	552	333	2943	403
CM5-11	425	355	189	1970	300
Multiple	478	443	256	2414	365
Single	573	531	307	2897	438
CM5-12	411	346	181	1920	295
Multiple	494	452	269	2485	380
Single	593	543	323	2982	456
CM6-1	408	377	185	1940	280
Multiple	510	460	278	2640	360
Single	612	552	334	3168	432
CM6-2	412	374	185	1970	292
Multiple	485	461	233	2352	364
Single	582	553	279	2822	436
CM6-3	411	359	181	1940	303
Multiple	488	454	224	2340	367
Single	586	544	269	2808	441
SM6-12	21*	11*	4.7*	510	245
Multiple	39	28	19	613	290
Single	46	33	23	736	348
SM7-23	119*	82*	5.8*	580*	185
Multiple	134	54	50	708	232
Single	161	65	59	850	278

* - Denotes 5% change from previous sample.