

CROW BUTTE RESOURCES, INC.

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



(308) 665-2215
(308) 665-2341 – FAX

July 24, 2000

U.S. Nuclear Regulatory Commission
Mr. Philip Ting, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
Mail Stop T8A-33
Washington, D.C. 20555-0001

Re: Source Materials License SUA-1534
Docket No. 40-8943
Monitor Well SM6-13 Upper Control Limit Exceedance

Dear Mr. Ting:

On May 25, 2000 during routine biweekly water sampling of Crow Butte Resources, Inc. (CBR) shallow monitor well SM6-13, 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 SM6-13 was placed on excursion status.

In accordance with License Condition 11.2, CBR increased the sampling frequency for SM6-13 to weekly. Weekly samples were obtained from June 1, 2000 to July 20, 2000. The last three of these weekly samples (taken on July 6, 13, and 20, 2000) were below the excursion criteria from the license. Based upon these results, CBR is removing SM6-13 from excursion status. CBR will continue weekly sampling for an additional three weeks as required in the UIC permit issued by the Nebraska Department of Environmental Quality (NDEQ). If the well has not exceeded the UCL in that time, it will be returned to routine biweekly sampling status. Attached are copies of the analytical data for each of the weekly samples and graphs for each parameter covering the period of January 7, 2000 to July 20, 2000.

CBR believes that the exceedance of the sulfate single UCL in SM6-13 was due to natural fluctuations in the background concentrations and was not due to impacts from mining solutions. Due to the UCL calculational method contained in SUA-1534, the very low baseline concentrations for some parameters in this well resulted in equally low UCLs. Small variations in the natural concentrations can result in the exceedance of these UCLs. CBR notes that the water level in this

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CROW BUTTE RESOURCES, INC.



Mr. Philip Ting

July 24, 2000

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well and most other shallow monitor wells in this area increased during the same time and that this water level rise resulted in minor variations in the water quality.

To confirm the conclusion that mining activities were not the cause of the excursion, CBR performed mechanical integrity tests (MITs) on the ten mining wells closest to SM6-13. All wells successfully passed the MITs. Copies of the well MIT reports are attached.

CBR notes that a similar exceedance of low UCLs occurred in Mine Unit 6 in 1998. In 2000, three shallow monitor wells in Mine Unit 6 (SM6-13, SM6-18, and SM6-28) have exceeded low UCLs. All of these excursions appear to be related to natural fluctuation in the water quality that is related to water level in the well. At the time of the excursion in 1998, CBR requested a license amendment for the calculational method of determining UCLs in wells with 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 the shallow monitor was no longer on excursion status. CBR intends to submit a license amendment request to address the calculational method for UCLs for wells with low baseline concentrations in the near future.

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 - USNRC, Uranium Recovery Branch

Crow Butte Project
Monitor Well Laboratory Report

Page Number 1/2

Sample Date: 05-25-2000

Analyst: LG/HD

Analysis Date: 05-26-2000

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	28*	25*	7.7	570	255
Multiple	42	18	8	640	300
Single	50	21	10	760	360
SM6-21	23	16*	7.3*	500	215*
Multiple	24	20	8	594	260
Single	29	24	10	713	312
SM6-22	23	13*	4.6	460	210
Multiple	23	18	5	562	258
Single	27	21	6	674	310
SM6-23	28	16*	5.2	520	235
Multiple	30	17	5	576	262
Single	36	21	6	691	314
SM6-24	25	14*	5.0	470	210
Multiple	28	18	7	560	258
Single	33	21	9	672	310
SM6-25	26	16*	6.2	480	210
Multiple	30	18	7	580	270
Single	36	22	8	696	324
SM6-26	28	11*	5.0*	460	200
Multiple	32	18	7	605	257
Single	39	22	9	726	308
SM6-27	28	13*	4.6	470	220
Multiple	30	18	6	564	264
Single	36	21	7	677	317
SM6-28	35*	46*	7.7*	590*	240
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23	119	81	7.7*	580	175*
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24	122	73	12*	580	185
Multiple	137	74	30	674	216
Single	164	89	37	809	259
SM7-25	76	19	3.5*	370	160
Multiple	100	26	44	538	168
Single	120	32	52	645	202
CM6-23	403	333	187	1900	320
Multiple	475	416	240	2436	382
Single	570	500	288	2923	458
CM6-24	405	330	185	1890	310
Multiple	474	410	239	2328	384
Single	569	492	287	2794	461

* - Denotes 5% change from previous sample.

Crow Butte Project
Monitor Well Laboratory Report

Page Number 1/2

Sample Date: 05-26-2000

Analyst: SM/LG

Analysis Date: 05-26-2000

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	24*	25	6.9*	550	250
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-21					
Multiple	24	20	8	594	260
Single	29	24	10	713	312
SM6-22					
Multiple	23	18	5	562	258
Single	27	21	6	674	310
SM6-23					
Multiple	30	17	5	576	262
Single	36	21	6	691	314
SM6-24					
Multiple	28	18	7	560	258
Single	33	21	9	672	310
SM6-25					
Multiple	30	18	7	580	270
Single	36	22	8	696	324
SM6-26					
Multiple	32	18	7	605	257
Single	39	22	9	726	308
SM6-27					
Multiple	30	18	6	564	264
Single	36	21	7	677	317
SM6-28	33*	43*	7.3*	580	245
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23					
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24					
Multiple	137	74	30	674	216
Single	164	89	37	809	259
SM7-25					
Multiple	100	26	44	538	168
Single	120	32	52	645	202
CM6-23					
Multiple	475	416	240	2436	382
Single	570	500	288	2923	458
CM6-24					
Multiple	474	410	239	2328	384
Single	569	492	287	2794	461

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 06-01-2000
Analysis Date: 06-02-2000

Analyst: SM/LG

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM6-7	411	383	175	1950	290
Multiple	476	444	234	2352	336
Single	572	533	281	2822	403
CM6-8	409	382	179	1950	285
Multiple	509	460	254	2436	371
Single	611	552	305	2923	445
CM6-9	434	381	193	2040	310
Multiple	485	450	238	2388	356
Single	582	540	285	2866	428
CM6-10	416	378	177	1960	295
Multiple	509	458	272	2460	358
Single	611	550	327	2952	429
CM6-11	409	352	183	1940	300
Multiple	496	464	247	2316	364
Single	595	557	297	2779	436
CM6-20	412	350	191	1960	305
Multiple	479	442	272	2412	371
Single	575	530	327	2894	445
CM6-21	399	359	175	1910	295
Multiple	480	421	250	2352	356
Single	576	505	300	2822	428
CM6-22	404	344	183	1920	300
Multiple	481	461	266	2388	373
Single	577	553	320	2866	448
PR-8	384	340	135	1790	335
Multiple	504	440	235	2388	403
Single	605	528	282	2866	484
PR-15	298*	247*	110	1460	300
Multiple	492	428	223	2327	370
Single	590	514	268	2792	444
IJ-13	520	503	204	2480	420*
Multiple	492	442	232	2417	346
Single	590	530	278	2900	415
SM7-23	122	81	6.9*	590	185*
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM6-13	27*	27*	8.1*	570	245
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-28	33	38*	7.1	570	240
Multiple	38	33	7	648	293
Single	46	39	9	778	351

* - Denotes 5% change from previous sample.

Crow Butte Project
Monitor Well Laboratory Report

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Sample Date: 06-08-2000
Analysis Date: 06-09-2000

Analyst: SM/LG

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	27	25*	7.7	560	250
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-21	22	17*	7.7*	510	220
Multiple	24	20	8	594	260
Single	29	24	10	713	312
SM6-22	20*	13	4.6	470	210
Multiple	23	18	5	562	258
Single	27	21	6	674	310
SM6-23	28	17*	5.4	520	240
Multiple	30	17	5	576	262
Single	36	21	6	691	314
SM6-24	26	16*	6.2*	480	210
Multiple	28	18	7	560	258
Single	33	21	9	672	310
SM6-25	26	15*	6.6*	480	215
Multiple	30	18	7	580	270
Single	36	22	8	696	324
SM6-26	28	12*	5.4*	460	200
Multiple	32	18	7	605	257
Single	39	22	9	726	308
SM6-27	28	14*	5.4*	470	215
Multiple	30	18	6	564	264
Single	36	21	7	677	317
SM6-28	32	35*	6.9	560	240
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23	119	83	7.7*	580	180
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24	118	71	11*	570	175*
Multiple	137	74	30	674	216
Single	164	89	37	809	259
SM7-25	75	20	3.9*	370	160
Multiple	100	26	44	538	168
Single	120	32	52	645	202
CM6-23	412	339	184	1920	315
Multiple	475	416	240	2436	382
Single	570	500	288	2923	458
CM6-24	401	329	181	1900	305
Multiple	474	410	239	2328	384
Single	569	492	287	2794	461

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 06-15-2000
Analysis Date: 06-16-2000

Analyst: LG-HD

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM6-7	407	374	177	1930	295
Multiple	476	444	234	2352	336
Single	572	533	281	2822	403
CM6-8	403	365	181	1940	285
Multiple	509	460	254	2436	371
Single	611	552	305	2923	445
CM6-9	411*	362	193	2010	310
Multiple	485	450	238	2388	356
Single	582	540	205	2866	428
CM6-10	412	373	179	1950	293
Multiple	509	458	272	2460	358
Single	611	550	327	2952	429
CM6-11	410	345	187	1920	300
Multiple	496	464	247	2316	364
Single	595	557	297	2779	436
CM6-20	406	344	189	1940	310
Multiple	479	442	272	2412	371
Single	575	530	327	2894	445
CM6-21	396	339*	177	1900	300
Multiple	480	421	250	2352	356
Single	576	505	300	2822	428
CM6-22	396	346	183	1900	295
Multiple	481	461	266	2388	373
Single	577	553	320	2866	448
PR-8	368	322*	135	1770	330
Multiple	504	440	235	2388	403
Single	605	528	282	2866	484
PR-15	285	242	112	1460	300
Multiple	492	428	223	2327	370
Single	590	514	268	2792	444
IJ-13	490	451*	197	2380	415
Multiple	492	442	232	2417	346
Single	590	530	278	2900	415
SM7-23	119	81	6.9*	580	180
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM6-13	26	24	6.9*	550	250
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-28	31	29*	6.2*	540	245
Multiple	38	33	7	648	293
Single	46	39	9	778	351

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 06-22-2000

Analyst: SM/LG

Analysis Date: 06-23-2000

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	26	25	7.7*	550	255
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-21	23	15*	7.7	500	220
Multiple	24	20	8	594	260
Single	29	24	10	713	312
SM6-22	21	15*	4.2*	460	210
Multiple	23	18	5	562	258
Single	27	21	6	674	310
SM6-23	28	15*	5.4	510	235
Multiple	30	17	5	576	262
Single	36	21	6	691	314
SM6-24	26	17*	6.2	480	220
Multiple	28	18	7	560	258
Single	33	21	9	672	310
SM6-25	26	15	6.2*	480	215
Multiple	30	18	7	580	270
Single	36	22	8	696	324
SM6-26	28	13*	5.4	460	215*
Multiple	32	18	7	605	257
Single	39	22	9	726	308
SM6-27	26*	14	5.0*	470	205
Multiple	30	18	6	564	264
Single	36	21	7	677	317
SM6-28	31	27*	6.2	530	235
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23	117	82	6.9	580	188
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24	118	73	12*	580	180
Multiple	137	74	30	674	216
Single	164	89	37	809	259
SM7-25	75	19	3.5*	360	160
Multiple	100	26	44	538	168
Single	120	32	52	645	202
CM6-23	404	330	185	1890	310
Multiple	475	416	240	2436	382
Single	570	500	288	2923	458
CM6-24	403	322	189	1900	310
Multiple	474	410	239	2328	384
Single	569	492	287	2794	461

* - Denotes 5% change from previous sample.

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Monitor Well Laboratory Report

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Sample Date: 06-29-2000
Analysis Date: 06-30-2000

Analyst: SM/LG

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM6-7	410	384	177	1950	290
Multiple	476	444	234	2352	336
Single	572	533	281	2822	403
CM6-8	405	368	181	1950	295
Multiple	509	460	254	2436	371
Single	611	552	305	2923	445
CM6-9	413	379	187	1980	295
Multiple	485	450	238	2388	356
Single	582	540	285	2866	428
CM6-10	415	386	177	1960	290
Multiple	509	458	272	2460	358
Single	611	550	327	2952	429
CM6-11	409	344	182	1930	300
Multiple	496	464	247	2316	364
Single	595	557	297	2779	436
CM6-20	413	352	193	1950	310
Multiple	479	442	272	2412	371
Single	575	530	327	2894	445
CM6-21	397	364*	177	1910	295
Multiple	480	421	250	2352	356
Single	576	505	300	2822	428
CM6-22	399	343	183	1910	295
Multiple	481	461	266	2388	373
Single	577	553	320	2866	448
PR-8	369	314	128*	1720	325
Multiple	504	440	235	2388	403
Single	605	528	282	2866	484
PR-15	302*	250	112	1480	305
Multiple	492	428	223	2327	370
Single	590	514	268	2792	444
IJ-13	478	449	179	2270	400
Multiple	492	442	232	2417	346
Single	590	530	278	2900	415
SM7-23	119	80	6.6	580	180
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM6-13	25	24	6.9*	550	240*
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-28	30	26	5.4*	530	240
Multiple	38	33	7	648	293
Single	46	39	9	778	351

* - Denotes 5% change from previous sample.

Crow Butte Project
Monitor Well Laboratory Report

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

Analyst: SM/LG

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	24	20*	6.6	550	245
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-21	24	20	8	594	260
Multiple	29	24	10	713	312
Single					
SM6-22	23	18	5	562	258
Multiple	27	21	6	674	310
Single					
SM6-23	30	17	5	576	262
Multiple	36	21	6	691	314
Single					
SM6-24	28	18	7	560	258
Multiple	33	21	9	672	310
Single					
SM6-25	30	18	7	580	270
Multiple	36	22	8	696	324
Single					
SM6-26	32	18	7	605	257
Multiple	39	22	9	726	308
Single					
SM6-27	30	18	6	564	264
Multiple	36	21	7	677	317
Single					
SM6-28	30	24*	5.8*	530	235
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23	118	83	6.9	590	190*
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24	137	74	30	674	216
Multiple	164	89	37	809	259
Single					
SM7-25	100	26	44	538	168
Multiple	120	32	52	645	202
Single					
CM6-23	475	416	240	2436	382
Multiple	570	500	288	2923	458
Single					
CM6-24	474	410	239	2328	384
Multiple	569	492	287	2794	461
Single					

* - Denotes 5% change from previous sample.

Crow Butte Project
Monitor Well Laboratory Report

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Sample Date: 07-13-2000

Analyst: SM/LG

Analysis Date: 07-14-2000

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
CM6-7	410	380	177	1950	290
Multiple	476	444	234	2352	336
Single	572	533	281	2822	403
CM6-8	404	366	183	1950	295
Multiple	509	460	254	2436	371
Single	611	552	305	2923	445
CM6-9	423	374	196	2040	300
Multiple	485	450	238	2388	356
Single	582	540	285	2866	428
CM6-10	413	380	181	1970	290
Multiple	509	458	272	2460	358
Single	611	550	327	2952	429
CM6-11	407	352	186	1940	305
Multiple	496	464	247	2316	364
Single	595	557	297	2779	436
CM6-20	411	342	191	1950	310
Multiple	479	442	272	2412	371
Single	575	530	327	2894	445
CM6-21	401	354	183	1910	290
Multiple	480	421	250	2352	356
Single	576	505	300	2822	428
CM6-22	402	351	187	1920	300
Multiple	481	461	266	2388	373
Single	577	553	320	2866	448
PR-8	350*	302	121*	1660	325
Multiple	504	440	235	2388	403
Single	605	528	282	2866	484
PR-15	297	256	116	1510	303
Multiple	492	428	223	2327	370
Single	590	514	268	2792	444
IJ-13	458	429	173	2180	395
Multiple	492	442	232	2417	346
Single	590	530	278	2900	415
SM7-23	106*	62*	7.7*	520*	180*
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM6-13	25	20	6.6	550	245
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-28	29	23	5.8	530	240
Multiple	38	33	7	648	293
Single	46	39	9	778	351

* - Denotes 5% change from previous sample.

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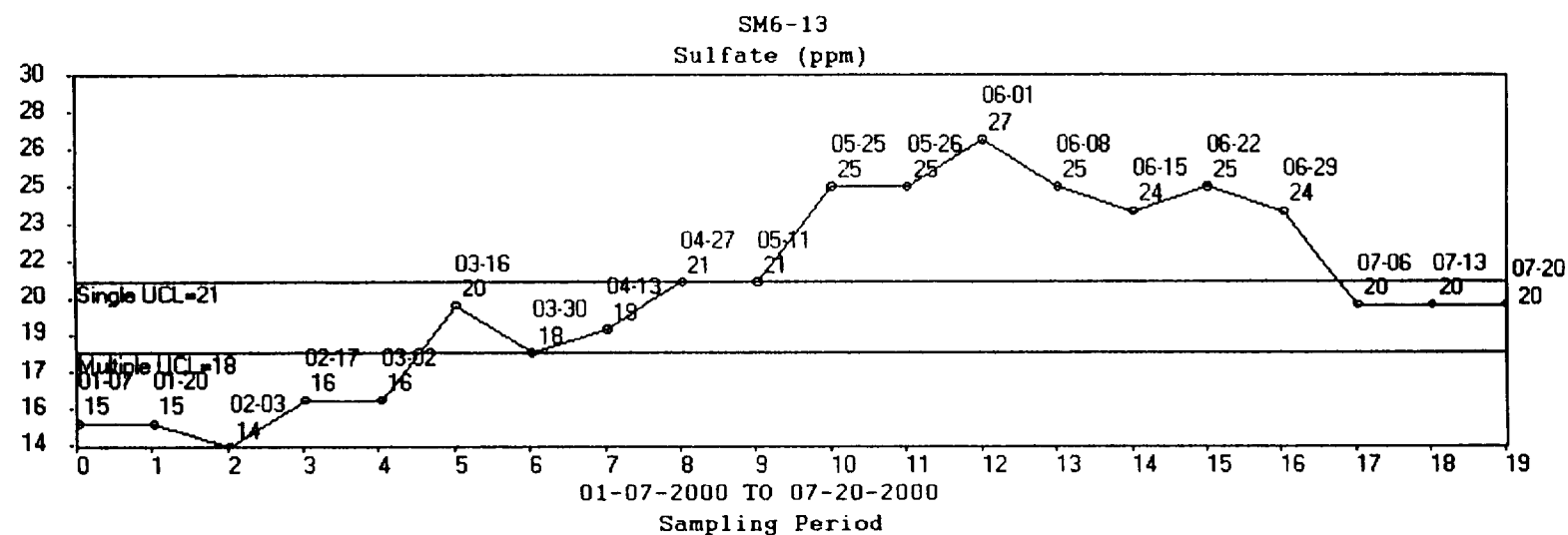
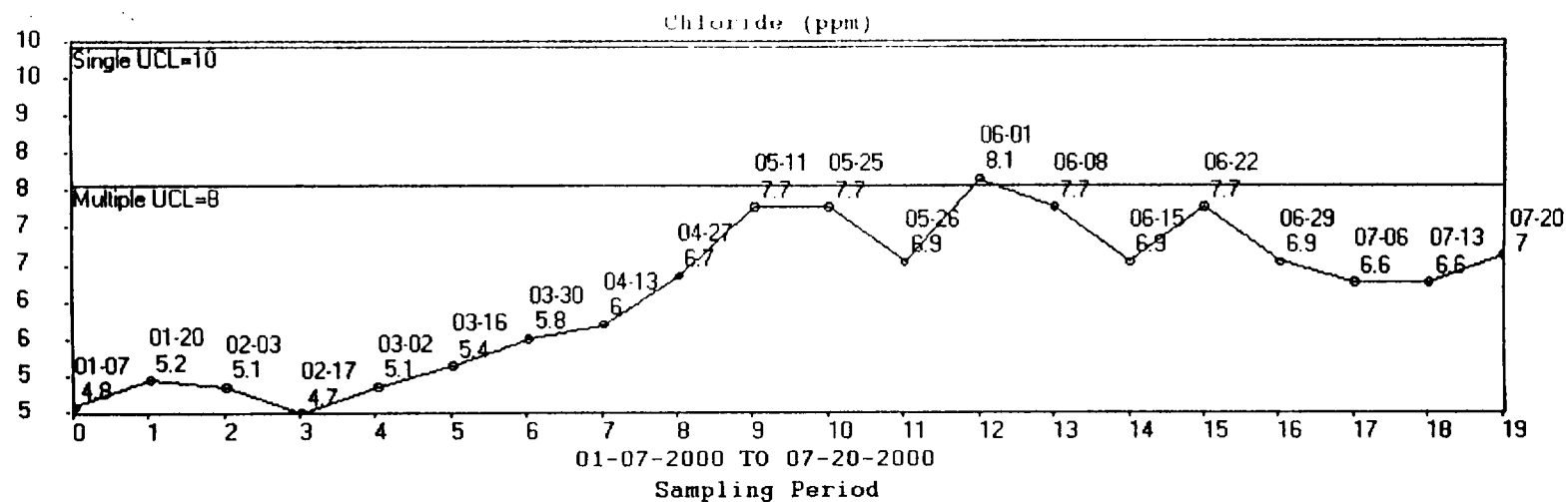
Sample Date: 07-20-2000

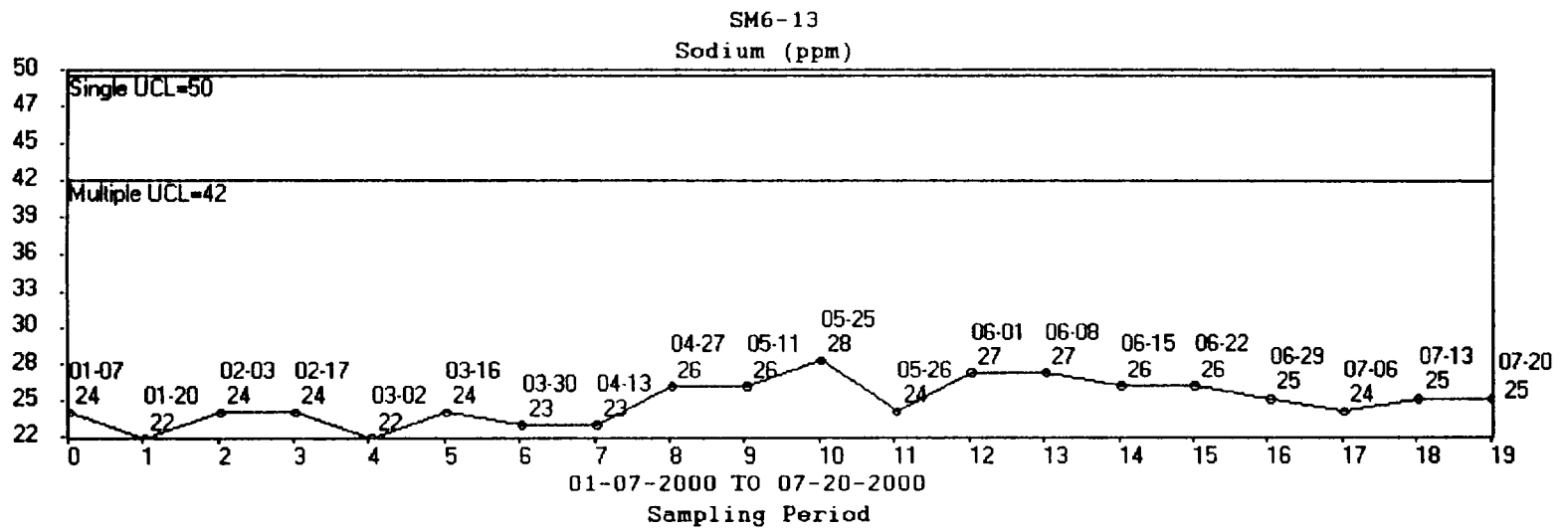
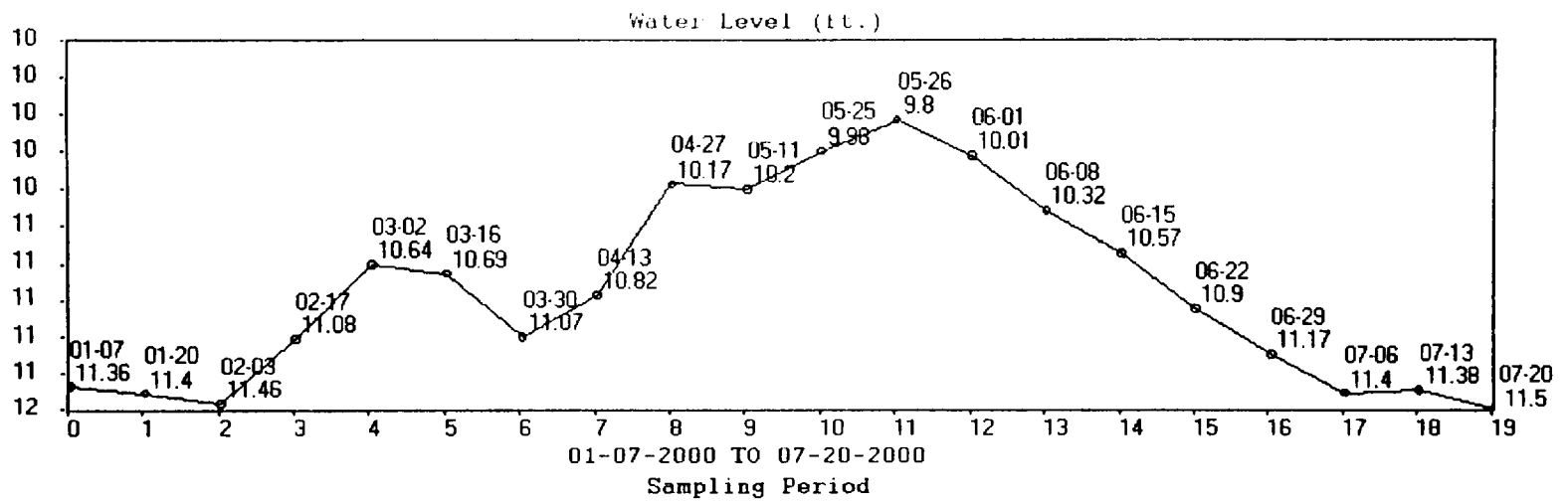
Analyst: SM/LG

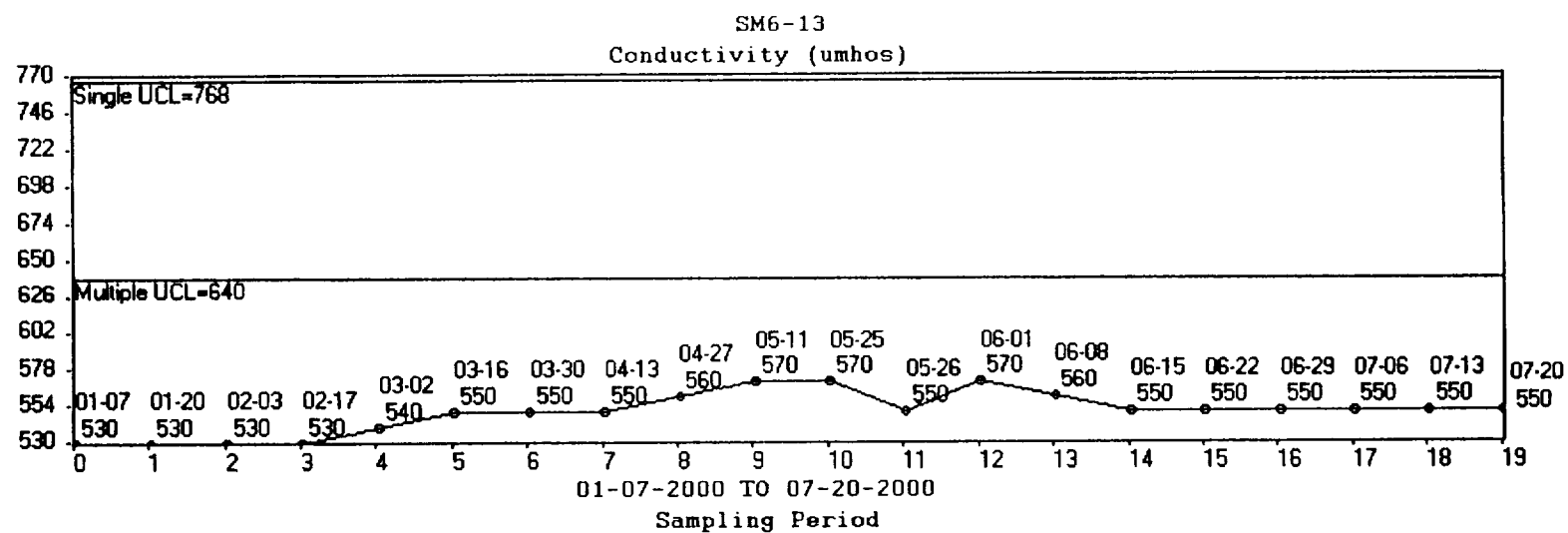
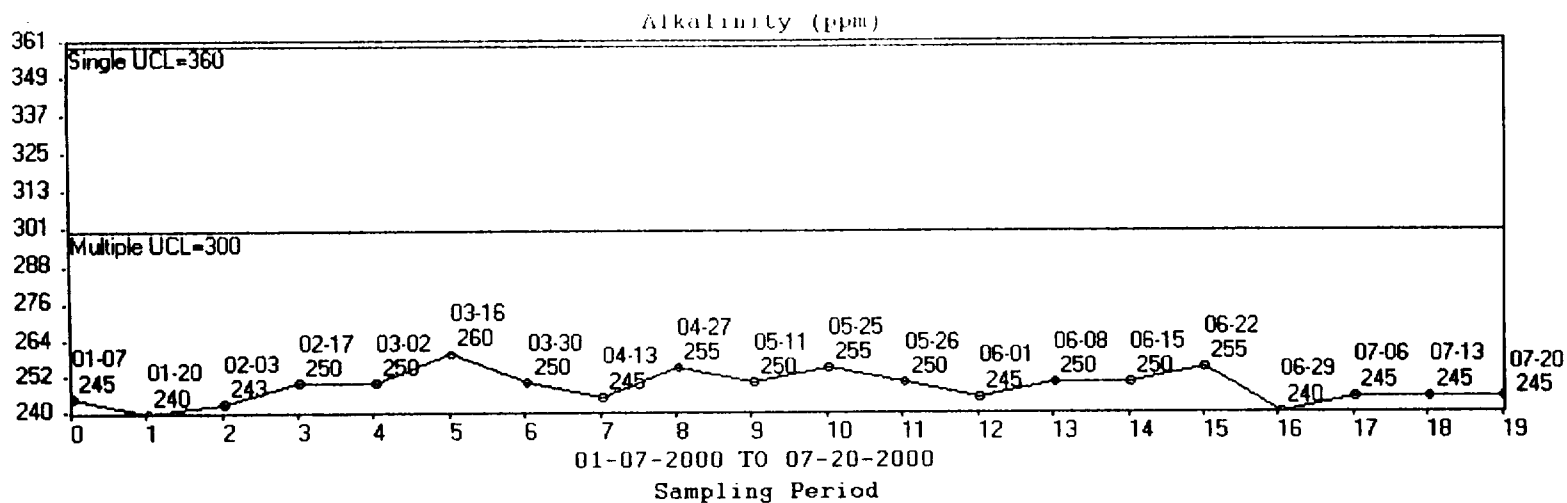
Analysis Date: 07-21-2000

Well Number	Sodium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Conductivity (UMHOS)	Alkalinity (mg/L)
SM6-13	25	20	7.0*	550	245
Multiple	42	18	8	640	300
Single	50	21	10	768	360
SM6-21	21	15*	7.8*	500	215
Multiple	24	20	8	594	260
Single	29	24	10	713	312
SM6-22	20	13	4.4	470	210
Multiple	23	18	5	562	258
Single	27	21	6	674	310
SM6-23	25	15*	5.7*	500	235
Multiple	30	17	5	576	262
Single	36	21	6	691	314
SM6-24	24*	18*	7.0*	480	220
Multiple	28	18	7	560	258
Single	33	21	9	672	310
SM6-25	23	15*	6.6	480	205*
Multiple	30	18	7	580	270
Single	36	22	8	696	324
SM6-26	25	12	5.9*	460	215*
Multiple	32	18	7	605	257
Single	39	22	9	726	308
SM6-27	25	14*	5.4	470	220
Multiple	30	18	6	564	264
Single	36	21	7	677	317
SM6-28	28	23	5.9	530	235
Multiple	38	33	7	648	293
Single	46	39	9	778	351
SM7-23	115*	80*	7.0*	580*	185
Multiple	134	52	45	708	232
Single	161	62	54	850	278
SM7-24	116	70	11*	570	175
Multiple	137	74	30	674	216
Single	164	89	37	809	259
SM7-25	72	19	3.7*	360	150
Multiple	100	26	44	538	168
Single	120	32	52	645	202
CM6-23	405	329	188	1920	320
Multiple	475	416	240	2436	382
Single	570	500	288	2923	458
CM6-24	404	318	185	1900	310
Multiple	474	410	239	2328	384
Single	569	492	287	2794	461

* - Denotes 5% change from previous sample.







Casing Integrity Test Report

Company: CBR Permit No: NE0122611Project: Crow Butte Well No.: 1560Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 448'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
10:15	0	125
10:20	5	123
10:25	10	121
10:30	15	119
10:35	20	117

Test Performed By: Paul HamakerDate: 5-1-00

Retest for increasing
SM b-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE0132611Project: Crow Butte Well No.: 1555Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): TOP - Ground Level Bottom

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
12:05	0	125
12:10	5	122
12:15	10	119
12:20	15	116
12:25	20	114

Test Performed By: Paul AmatoDate: 5-1-00

Retest for increasing
sm 6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____ PRINTED NAME OF PERSON SIGNING _____ TITLE _____

By _____ SIGNATURE _____ DATE _____

Casing Integrity Test Report

Company: CBR Permit No: NE0223611Project: CrowButte Well No.: 1545Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground level Bottom -

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
2:45	0	
2:50	5	
3:05	10	
3:00	15	
3:05	20	

Test Performed By: Paul HamakerDate: 5-1-00Retest for increasing
Sm 6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE 0122611Project: Crow Butte Well No.: T1713Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): TOP - Ground Level Bottom - 438'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
8:46	0	125
8:51	5	123
8:56	10	121
9:01	15	119
9:06	20	117

Test Performed By: Paul HamakerDate: 5-2-00Retest for SM 6-13
parameters increasing

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: LE0122611Project: Crow Butte Well No.: I1544Casing Type: White Certi-LOK Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): TOP - Ground Level Bottom - 433'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
10:04	0	125
10:09	5	122
10:14	10	119
10:19	15	116
10:24	20	114

Test Performed By: Paul HarnakerDate: 5-2-00Retest for increasing
SM 6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE0122611Project: Crow Butte Well No.: 1543Casing Type: White Centi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 423'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
11:56	0	125
12:01	5	127
12:06	10	119
12:11	15	146
12:16	20	114

Test Performed By: Paul HamakerDate: 5-2-00Retest for increasing
sm 6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE0122611Project: CrowButte Well No: 11515Casing Type: WhiteCerti-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 443'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
2:37	0	125
2:42	5	122
2:47	10	119
2:52	15	118
2:57	20	116

Test Performed By: Paul HamakerDate: 5-20-20Retest for increasing
sm6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE0122611Project: CrowButte Well No.: P1523Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 443'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
9:04	0	125
9:09	5	122
9:14	10	119
9:19	15	117
9:24	20	115

Test Performed By: Paul HamakerDate: 5-11-00

Retest for increasing
sm 6-13 Parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: CBR Permit No: NE0122611Project: Crow Butte Well No.: P134SCasing Type: yellowmine Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 428'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
10:59	0	125
11:04	5	122
11:09	10	119
11:14	15	116
11:19	20	114

Test Performed By: Paul HamakerDate: 5-11-00

Retest for increasing
sm6-13 parameters

CERTIFICATION

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By _____

PRINTED NAME OF PERSON SIGNING

TITLE

By _____

SIGNATURE

DATE

Casing Integrity Test Report

Company: C.B.R. Permit No: NE0122611Project: Crow Butte Well No.: P1710Casing Type: White Certi-Lok Diameter: 4 1/2"

Hole Depth: _____ Casing Depth: _____

Screened Interval(s): _____

Depth of Test Packer(s): Top - Ground Level Bottom - 439'

Cementing Record (List type of test, log, etc. to determine proper cement job): _____

TIME	ELAPSED TIME (Min)	PRESSURE (PSIG)
2:04	0	125
2:09	5	122
2:14	10	119
2:19	15	117
2:24	20	115

Test Performed By: Paul HarnakerDate: 5-11-00Retest for increasing
SM 6-13 parameters

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By _____
PRINTED NAME OF PERSON SIGNING TITLEBy _____
SIGNATURE DATE