

# CROW BUTTE RESOURCES, INC.

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



(308) 665-2215  
(308) 665-2341 – FAX

October 2, 2006

Mr. Gary Janosko, Branch 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  
PR-15 Monitor Well Excursion

Dear Mr. Janosko:

On September 26, 2006 during routine biweekly water sampling of Crow Butte Resources, Inc. (CBR) perimeter monitor well PR-15, the multiple parameter upper control limit (UCL) was exceeded for chloride and conductivity. As required by License Condition 11.2 of Source Materials License SUA-1534, a second sample was collected within 48 hours and analyzed for the three excursion indicator parameters. The results of the second sample exceeded the multiple UCL for chloride and conductivity.

CBR notified Mr. Stephen J. Cohen by phone on September 27, 2006 of the confirmation of the exceedance as required in License Condition 9.2. Laboratory results for the sample analysis for PR-15 are attached. In addition, graphs are attached for the three excursion indicator parameters and water level that cover the period from February 14, 2006 to September 26, 2006.

PR-15 is a baseline restoration well in Mine Unit 1 that was chosen to monitor the boundary of Mine Unit 2 following the approval of restoration. The current restoration activities in Mine Unit 2 adjacent to PR-15 include groundwater transfer and wellfield recirculation. IJ-13 and PR-8, two other baseline restoration wells from Mine Unit 1, have remained on excursion status since December 27, 2002 and December 23, 2003 respectively. Due to the geometry of Mine Units 2 and 3, CBR is of the opinion that PR-15 will continue to exhibit the same trend as IJ-13 and PR-8 until Mine Units 2 and 3 can be fully restored along the perimeter of Mine Unit 1. (See attached map).

In accordance with License Condition 11.2, CBR has increased the sampling frequency for PR-15 to weekly until three consecutive weekly samples are below the exceeded UCLs. CBR will continue weekly sampling for an additional three weeks after this goal has been achieved as required by

**CROW BUTTE RESOURCES, INC.**



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Mr. Gary Janosko  
October 2, 2006  
Page 2

CBR's Nebraska Department of Environmental Quality (NDEQ) Class III UIC Permit requirements. If the well has not exceeded the UCLs after these samples, it 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 Ext. 114.

Sincerely,  
CROW BUTTE RESOURCES, INC.

A handwritten signature in cursive script that reads "Larry Teahon".

Larry Teahon  
Manager, Environmental, Health and Safety

Enclosures: As Stated

cc: U.S. Nuclear Regulatory Commission  
Mr. Stephen J. Cohen - ADDRESSEE ONLY  
Fuel Cycle Licensing Branch  
Mail Stop T-8A33  
Washington, DC 20555

Mr. Steve Collings - CBR, Denver

Sample Date  
Analysis Date

9/26/06  
9/26/06

## Crow Butte Project Monitor Well Laboratory Report

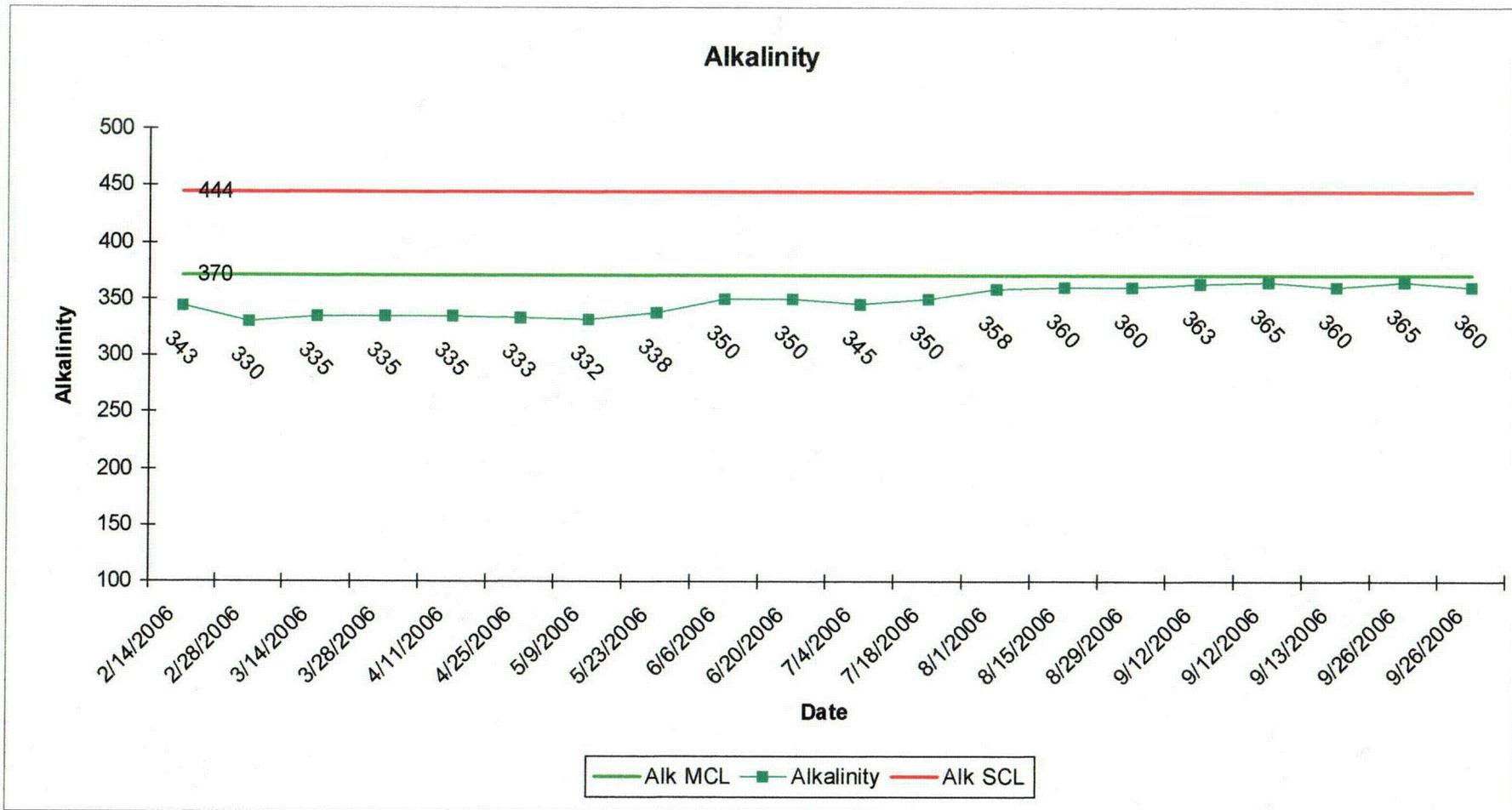
Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
BOW96-1	223	314	262	570	791	659	15	24	20
BOW96-1	220	314	262	540	791	659	14	24	20
CM4-3	330	446	372	2070	3211	2676	199	379	316
CM4-4	305	433	361	1880	3002	2502	184	310	258
CM4-5	308	413	344	1910	3171	2642	182	336	280
CM4-6	300	405	337	1860	2812	2344	180	264	220
CM4-7	305	418	348	1860	3332	2777	180	409	341
CM7-1	310	410	342	2040	2563	2136	180	239	199
CM7-10	295	454	378	1900	2877	2398	184	297	247
CM7-11	300	432	360	1930	2817	2347	184	281	234
CM7-12	298	422	352	1930	2794	2328	184	289	241
CM8-14	308	461	384	1860	2952	2460	180	295	248
CM8-15	315	446	372	1870	2909	2424	180	297	247
CM8-16	320	454	378	1860	2966	2472	176	312	260
CM8-17	315	446	372	1870	2938	2448	175	347	289
CM8-18	315	455	379	1860	2995	2496	176	276	230
IJ13P	717	415	346	4720	2900	2417	519	278	232
PR15	365	444	370	2430	2792	2327	236	268	223
PR15	360	444	370	2440	2792	2327	248	268	223
PR8	896	484	403	4900	2866	2388	566	282	235
SM4-10A	300	354	295	730	1053	877	11	36	30
SM5-13	195	314	262	560	880	733	14	39	32
SM5-14	185	304	253	510	854	712	8.6	31	26
SM5-15	205	311	259	560	973	811	14	60	50
SM5-16	185	285	238	460	732	610	4.9	30	25

Sample Date 9/26/06  
Analysis Date 9/26/06

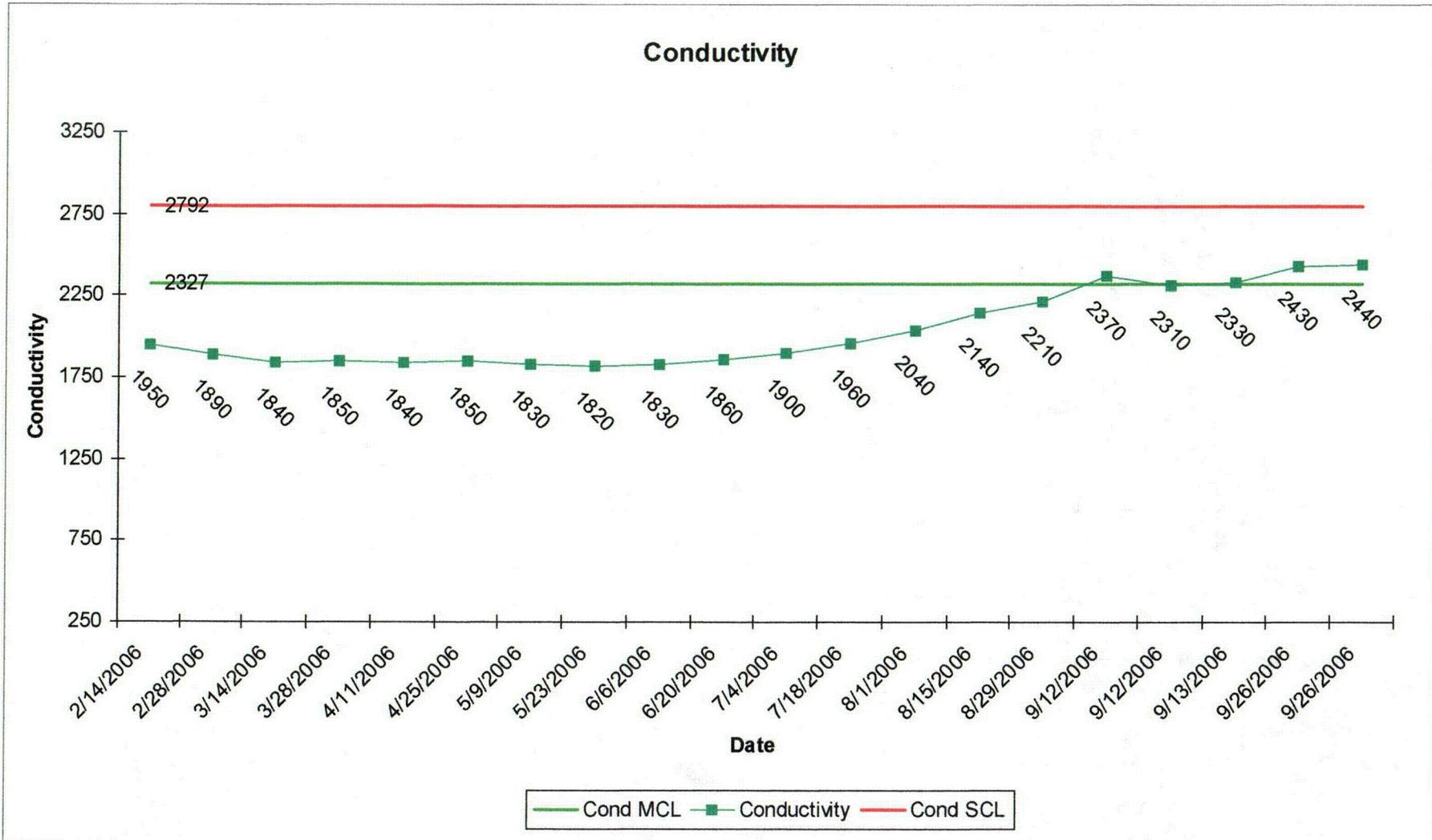
## Crow Butte Project Monitor Well Laboratory Report

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	( $\mu$ mho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
SM5-17	165	264	220	420	694	578	2	27	23
SM5-18	170	259	216	440	707	589	3.7	31	26
SM7-5	165	248	206	430	648	540	3.3	26	22
SM7-6	153	209	174	370	636	530	3.3	41	34
SM7-7	170	253	211	440	648	540	3.7	23	19
SM8-16	220	331	276	510	828	690	5.3	24	20
SM8-17	230	331	276	520	848	707	5.7	24	20
SM8-18	225	317	264	510	816	680	7	25	21
SM8-19	220	340	283	510	827	689	5.3	25	21
SM8-20	215	314	262	500	806	672	5.3	25	21
SM8-21	215	317	264	520	706	588	5.7	25	21
SM8-22	220	324	270	510	829	691	5.3	25	20

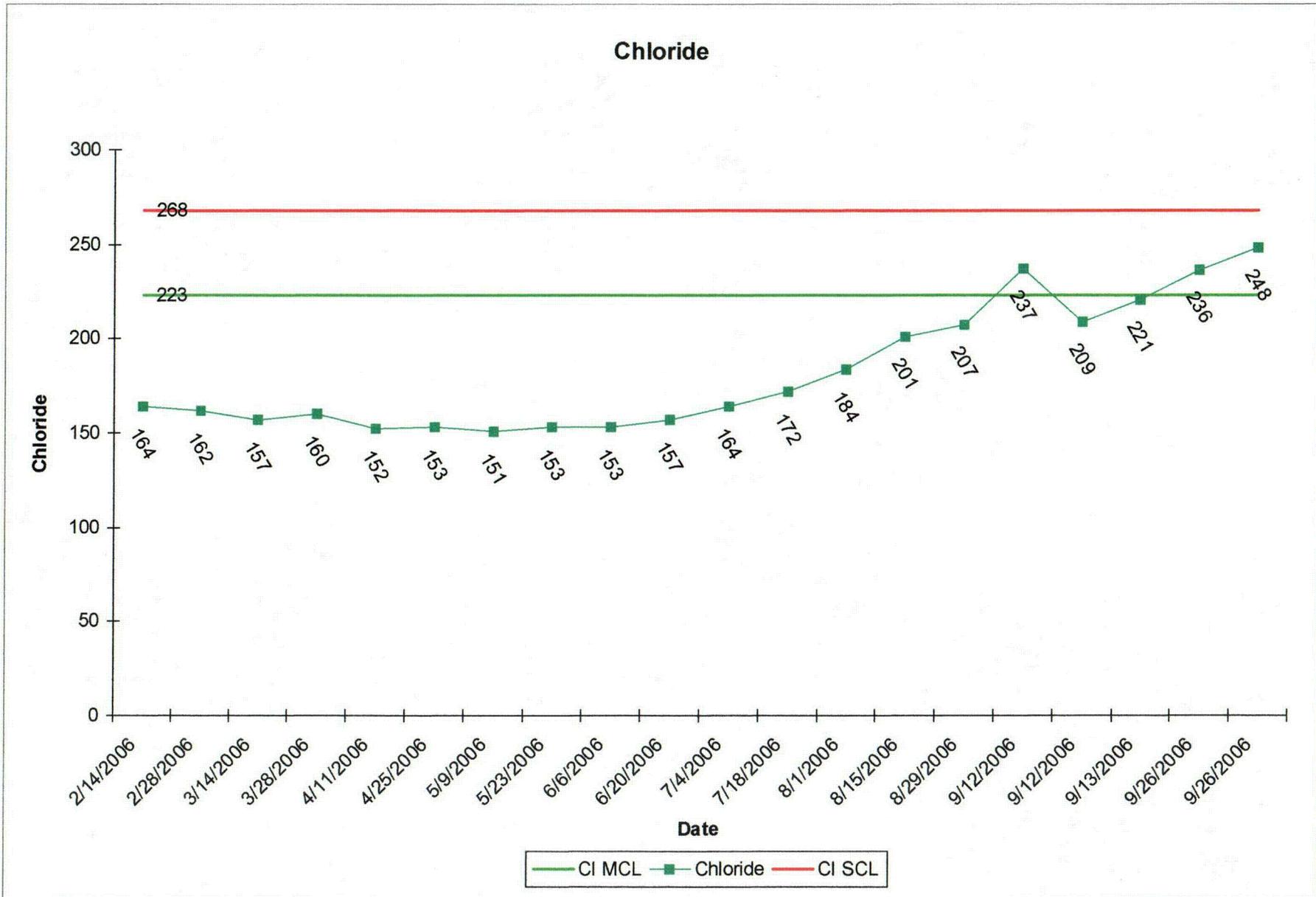
# PR15



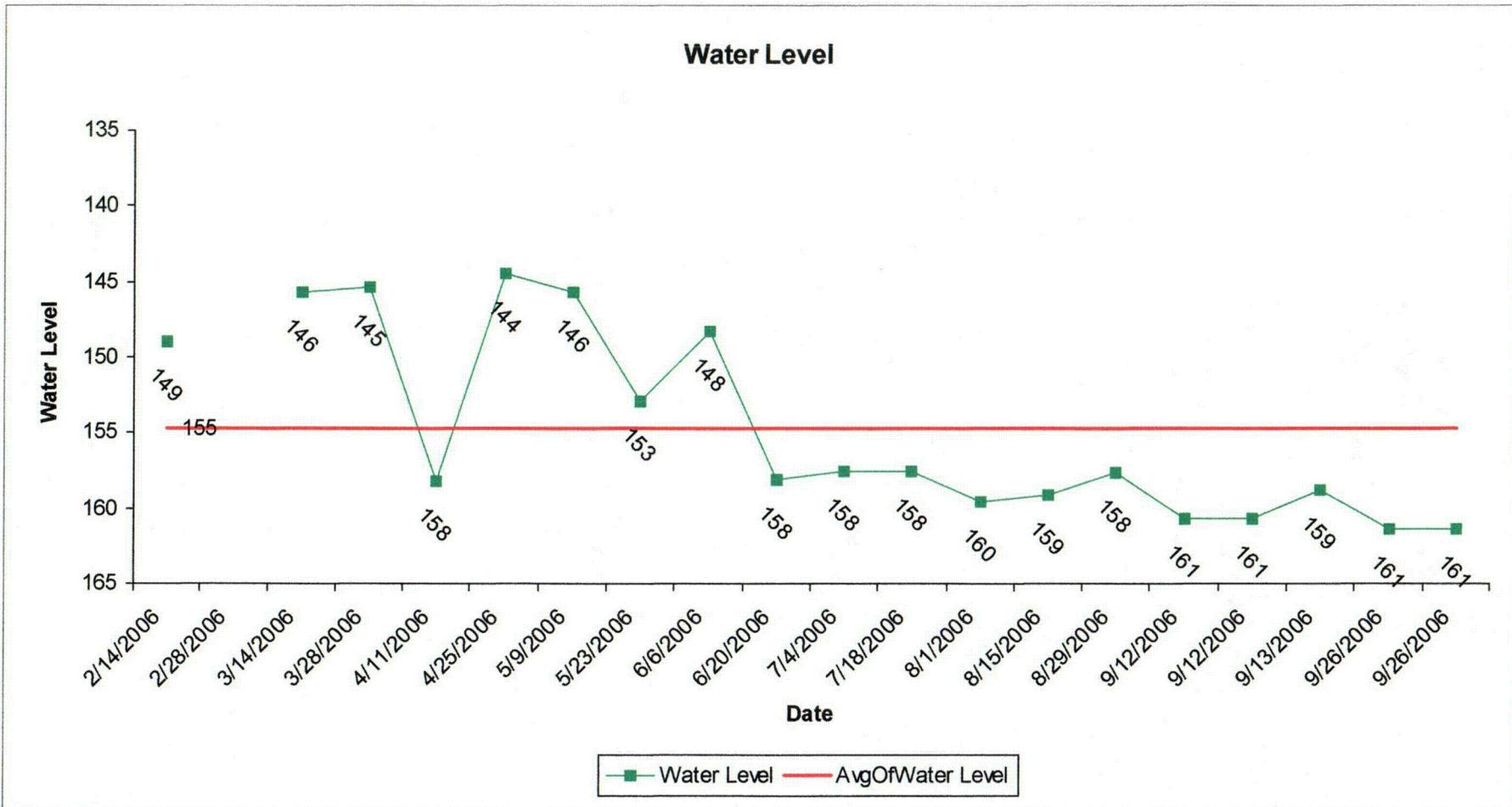
# PR15

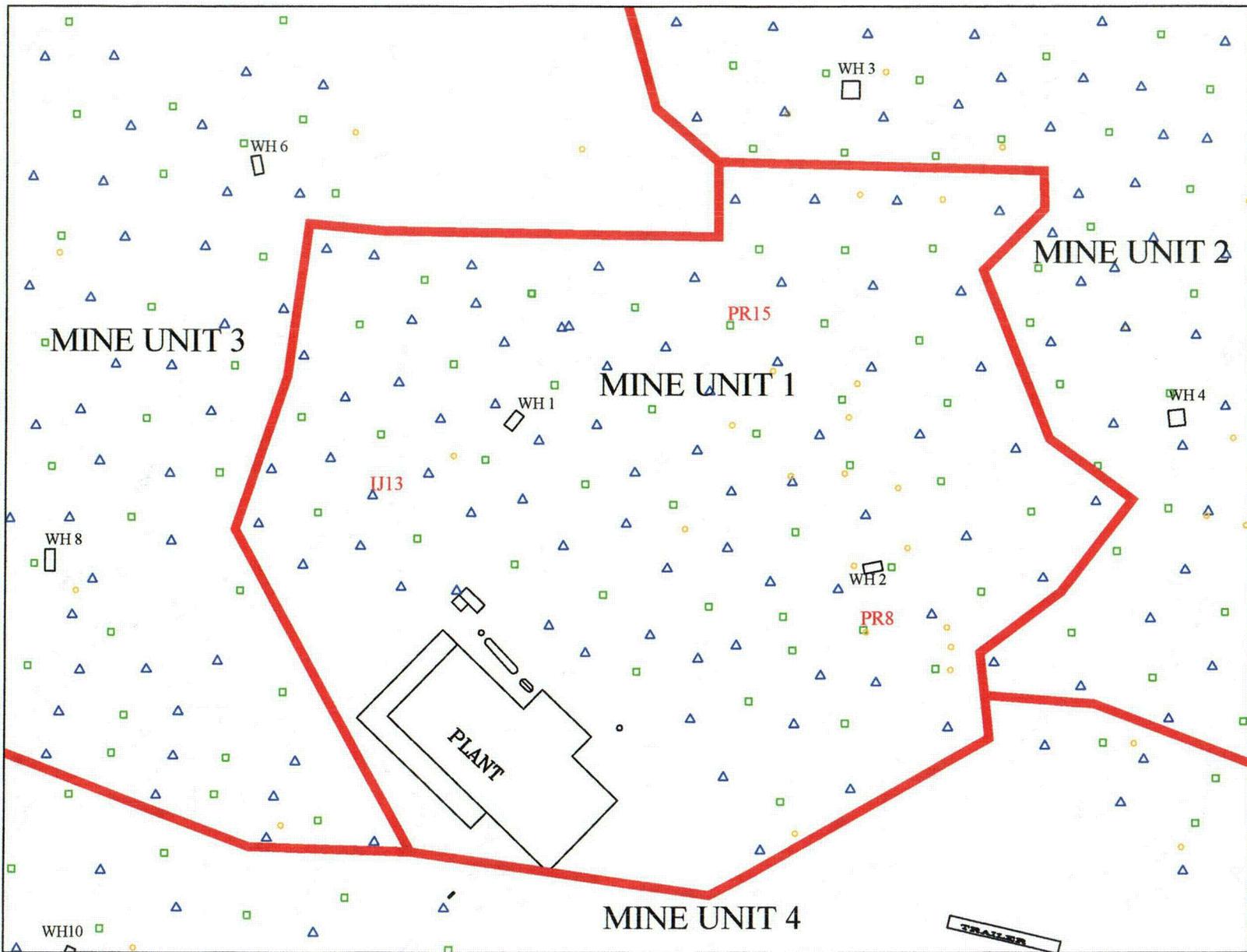


# PR15



# PR15





**CROW BUTTE RESOURCES**

MINE UNIT 1 MAP

SEC 19 T31N R 51W



Updated by WB 10/02/06      Filename: Unit1.dwg

- Producer
- △ Injector
- Monitor

Mine Unit 1 Baseline Wells in Red

