



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Inspection Report

Permit Number:	C0150032
Inspection Type:	PARTIAL OVERSITE
Inspection Date:	Tuesday, June 10, 2014
Start Date/Time:	6/10/2014 8:00:00 AM
End Date/Time:	6/10/2014 11:00:00 AM
Last Inspection:	Monday, May 12, 2014

Inspector: Karl Houskeeper

Weather: Clear Skies, Temp. 70 Deg. F.

InspectionID Report Number: 3870

Accepted by: JHELFRIC

6/23/2014

Representatives Present During the Inspection:	
OGM	Karl Houskeeper
OGM	Steve Christensen
OGM	Amanda Daniels
Company	Jay Marshall
OSM	Flynn Dickinson
Company	Karen Odendahl
OSM	Roberta Martinez-Hernandez

Permitee: **GENWAL RESOURCES INC**

Operator: **GENWAL RESOURCES INC**

Site: **CRANDALL CANYON MINE**

Address: **PO BOX 910, EAST CARBON UT 84520-0910**

County: **EMERY**

Permit Type: **PERMANENT COAL PROGRAM**

Permit Status: **ACTIVE**

Current Acreages

6,295.06	Total Permitted
34.47	Total Disturbed
11.89	Phase I
	Phase II
	Phase III

Mineral Ownership

- Federal
- State
- County
- Fee
- Other

Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

Met Jay Marshall and Karin Odendahl UEI at the Crandall mine site at 8:00 am. Pictures were taken and water samples were pulled from 002 and Pre-002.

Steve Christensen (DOGM), Amanda Daniels (DOGM), Flynn Dickinson (OSM) and Roberta Martinez-Hernandez (OSM) joined the inspection at approximately 8:45 am.

Karl R. Houskeeper

Inspector's Signature:

Date

Monday, June 16, 2014

Karl Houskeeper,

Inspector ID Number: 49

Note: This inspection report is prepared by the Division of Oil, Gas and Mining. It is not an official statement of compliance with the regulatory program of the Division of Oil, Gas and Mining. telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov



REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Signs and Markers

The mine identification sign is located at the entrance into the mining permit area. The sign contains the company name, address, phone number and Utah mining permit number as required by the Utah R645 Coal Rules. The sign is in compliance.

4.a Hydrologic Balance: Diversions

The diversions throughout the site are open and functional according to their design. The main undisturbed bypass inlet was viewed by all in attendance. A flume below the mine site in the river channel bottom was observed.

4.b Hydrologic Balance: Sediment Ponds and Impoundments

The main sediment pond was observed as part of the partial oversight inspection. The existing water level is below the markers in the pond. The markers were discussed and what their purpose serves. The paint on the three sediment markers has been worn away by snow/ice. It was discussed with Jay Marshall that the 60% sediment cleanout level, the 100% sediment levels need to be re-established. Jay Marshall indicated that the treatment basin was last cleaned 3 weeks prior to the inspection. With the exception of the 1st cell (used for re-circulation purposes), the remaining cells were clean and relatively free of accumulated sludge material.

4.d Hydrologic Balance: Water Monitoring

Water Samples were pulled in a split for DOGM and UEI from 002 and Pre-002.

4.e Hydrologic Balance: Effluent Limitations

Effluent Limitations were discussed concerning the iron treatment facility and current conditions regarding flocculent and coagulant treatment to meet those limitations. Jay Marshall indicated that it had been 3 weeks since they had used any flocculent. The current injection rate for the coagulant is 17.8 ppm. The mine-water discharge at the time of the inspection was 334.5 gpm.



Crandall Creek



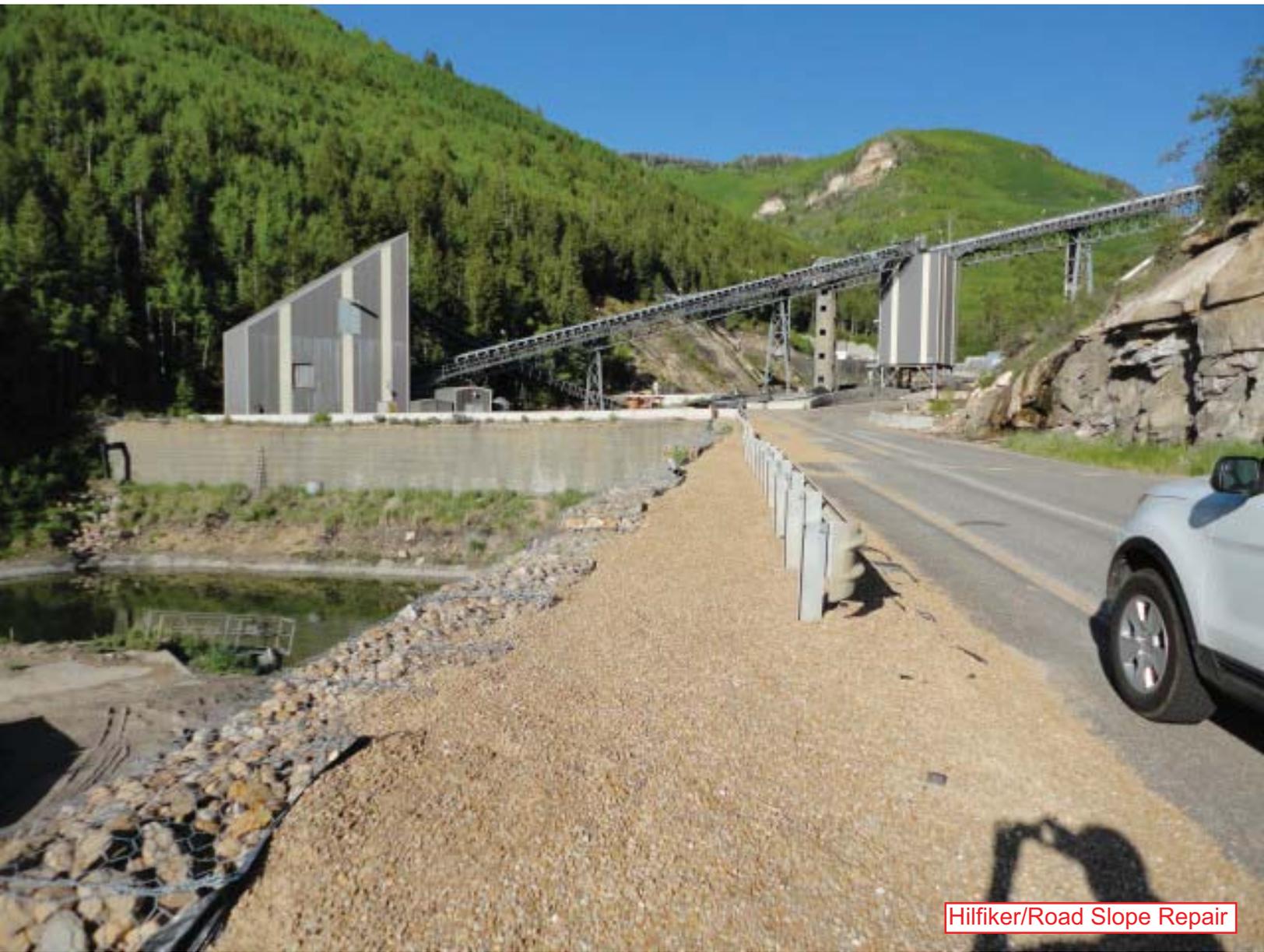
Crandall Creek @ Pond Discharge



Sediment Pond



Sediment Pond



Hilfiker/Road Slope Repair



Sediment Pond



Hilfiker/Road Slope Repair



Ditch DD-10



Mine Water Treatment Basin Outlet



Mine Water Treatment Basin (Looking West)



Mine Water Treatment Basin (Looking West)



Mine Water Treatment Highwall



Mine Water Treatment Highwall

Brandon Kim

View 22 Weeks 32K

	1	2	3	4	5	6	7	8	9	10
Reg. Meter Gallons	342,52	336,87	344,26	342,98	337,38	336,26	337,84	336,88	321,64	353,27
Raw Water Gallons	493338	485889	488607	493892	485834	484299	485348	483828	482500	490887
Gallons Consumed	8,274	8,274	8,274	8,277	8,274	8,274	8,274	8,274	8,274	8,278
TRM Consumed	16,288	17,894	16,889	16,258	17,825	17,882	17,842	17,895	17,845	18,894
Gallons Produced	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100
TRM Produced	0,20	0,206	0,201	0,202	0,206	0,207	0,206	0,207	0,218	0,429
	11	12	13	14	15	16	17	18	19	20
Reg. Meter Gallons	368,54	343,31	281,34	298,85	268,68	272,28	387,48	335,68	383,36	354,23
Raw Water Gallons	558528	494373	484838	388857	373813	383898	435568	483388	523848	511358
Gallons Consumed	8,283	8,283	8,277	8,288	8,283	8,288	8,288	8,2828	8,2828	8,2828
TRM Consumed	14,883	16,254	28,445	22,411	22,358	24,888	18,838	17,135	15,838	16,288
Gallons Produced	0,823	0,592	0,587	0,524	0,515	0,517	0,518	0,518	0,368	0,188
TRM Produced	1,11	1,197	1,458	1,488	1,278	1,338	1,188	1,873	0,784	0,188
	21	22	23	24	25	26	27	28	29	30
Reg. Meter Gallons	346,23	328,63	316,88	325,83	344,28	322,23	311,83	318,26	338,47	322,88
Raw Water Gallons	498284	473888	458118	468388	478788	464883	448838	455428	478883	488888
Gallons Consumed	8,277	8,277	8,277	8,274	8,274	8,274	8,274	8,274	8,2818	8,2713
TRM Consumed	16,578	12,496	18,444	17,858	17,387	17,826	18,478	18,162	17,268	17,283
Gallons Produced	0,188	0,188	0,188	0,188	0,188	0,188	0,188	0,188	0,188	0,188
TRM Produced	0,28	0,214	0,248	0,244	0,248	0,246	0,223	0,228	0,248	0,248
	31	January	February	March	View by Date					
Reg. Meter Gallons	328,47	30451828	2813828	33871828	192383600					
Raw Water Gallons	478182	488	488	488	344,88 GPM					
Gallons Consumed	8,274	4878388	478282,8	37381588	New Discharge Rate					
TRM Consumed	17,384	48	48	48	334,87 GPM					
Gallons Produced	0,188	3078288	31281333	4823488	Clear Water Average					
TRM Produced	0,24	41178715	50384888	502,8888	Filtered Gallons 1					
					Consumed Gallons 21					
					Alarm					
					Main					
					TRM					
					Consumed					
					Filtered					
					TRM					
					Clear Gallons					

Iron Treatment Monitoring Screen

Page: 01/01/2011

THE AUTHORITY OF THE BOARD OF EMERY COUNTY

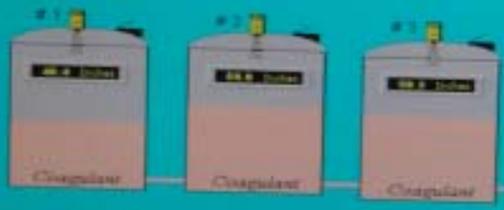
Brandon Kimb...

RSView 3.3 Works 3.3K

	1	2	3	4	5	6	7
Coagulant-Completed	8,2713	8,2713	8,2713	8,2724	8,2713	8,2713	8,2713
Flow Filter Coagulant	493236	493489	493667	493992	494221	494269	495346
Flow Coagulant	16,259	17,464	16,339	16,259	17,426	17,462	17,447
Coagulant-Completed	8,2713	8,2713	7,8199	8,2679	8,2679	8,2713	8,2667
Flow Filter Coagulant	483636	483446	483667	483528	484173	484329	483957
Flow Coagulant	17,495	17,445	16,294	14,804	16,254	16,449	17,411
Coagulant-Completed	8,2679	8,2667	8,2667	8,2679	8,2679	8,2679	8,2713
Flow Filter Coagulant	473813	473896	473564	473388	472946	474166	473594
Flow Coagulant	17,498	17,486	15,839	17,436	16,439	16,264	16,328
Coagulant-Completed	8,2713	8,2713	8,2713	8,2713	8,2713	8,2713	8,2713
Flow Filter Coagulant	473884	474739	474388	475788	474983	476039	474428
Flow Coagulant	17,496	16,344	17,409	17,487	17,436	16,426	16,462
Coagulant-Completed	8,2665	8,2713	8,2713				
Flow Filter Coagulant	473884	474484	474122				
Flow Coagulant	17,469	17,284	17,284				

January	February	March
111,986	81,747	112,29
April	May	June
116,116	103,546	103,296
July	August	September
8,266	8,266	8,266
October	November	December
8,266	8,266	8,266
Total by Year		
Coagulant Coagulant 889,877		

Coagulant	
Meters	22,000,000
Flow	17,344,170
Percent	0.000254
Cost	29,000,000
Filter	20,000,000
Alarm	0.047108
Flow Filter	335,000
Meter Setting	22



Control buttons: Stop, Start, Run, Coagulant, Disinfect, Stop, Start Coagulant

Iron Treatment Monitoring Screen

License No. 7
 Expires 03/31/2013
 THE UTILITY OF CLEAN WATERS OF ANET COUNTY,
 UTAH

J Jensen
 Brandon Kimbom

RTView 32 Works 32K

	1	2	3	4	5	6	7
Flocculant	0.100	0.100	0.100	0.100	0.100	0.100	0.100
MinFlow	483237	483209	490647	493852	485830	482700	485340
FFM	0.20	0.206	0.201	0.207	0.206	0.207	0.206

	8	9	10	11	12	13	14
Flocculant	0.100	0.100	0.100	0.223	0.592	0.207	0.671
MinFlow	483838	483495	459424	559628	494372	504028	383852
FFM	0.21	0.216	0.277	1.113	1.397	1.458	1.488

	15	16	17	18	19	20	21
Flocculant	0.100	0.107	0.110	0.119	0.200	0.100	0.100
MinFlow	373847	283896	435844	482388	527849	511165	498791
FFM	1.38	1.346	1.489	1.873	0.784	0.706	0.700

	22	23	24	25	26	27	28
Flocculant	0.100	0.100	0.100	0.100	0.100	0.100	0.100
MinFlow	473889	454398	469379	475199	463883	449938	455439
FFM	0.21	0.219	0.214	0.210	0.216	0.213	0.210

	29	30	31
Flocculant	0.100	0.100	0.100
MinFlow	475889	465493	478424
FFM	0.21	0.215	0.215

51.1 Last Cycle Water Chiller

0.000 Last Cycle Flocc Chiller

16.0

0.00

-0.00

0.00

0.000

1.000

Alarm
Min
FFM
Flocculant
Flocculant
FFM
Unit

Iron Treatment Monitoring Screen

CSView 7.2 Works 3.2K

MSD Flow	MSD Gallons	Chlorine Pounds	MSD Flow Gallons	MSD Chlorine	16.0	19M Gallons	0.17	Actual Chlorine Pounds	MSD Flow	337.5 Gal
524	13,8129	0.00027	1440	0.0000		1755.27	58.00	22.87	274.36	0.00
5	0.1111	0.00005	0	0.000		0.1111	58.00	24.28	370.87	0.00
23	4,3000	0.0015	4000	0.0000		0.1715	58.00	23.28	368.95	0.00
58	6,3200	0.0010	2230	0.0000		0.1700	58.00	22.91	371.42	0.00
67	3,3004	0.0004	511	1.000		3.7004	0.00	24.32	377.44	0.00
5	0.1254	0.00004	617	0.0000		0.0200	19.01	24.84	338.39	0.00
377	49,0000	0.0273	30000	0.1380		0.0007	19.01	25.33	335.29	0.00
437	64,1000	0.0273	30021	0.1350		0.0200	20.00	23.27	343.29	0.00
433	48,3000	0.0270	29004	0.1030		0.0378	20.00	24.28	343.03	0.00
434	47,1170	0.0280	25014	0.0900		0.0398	20.00	23.89	346.00	0.00
534	38,1000	0.0280	30002	0.0900		0.0332	20.00	24.23	350.64	0.00
472	40,1000	0.0270	30004	0.0870		0.0014	20.00	24.17	350.04	0.00
473	39,1074	0.0270	30004	0.1100		0.0320	20.00	22.81	364.40	0.00
472	38,0120	0.0270	31001	0.0900		0.0011	20.00	22.87	367.10	0.00
477	38,0000	0.0200	31027	0.0800		0.0700	20.00	22.87	368.88	0.00
472	36,0000	0.0270	31772	0.0900		0.0290	20.00	22.87	369.00	0.00
422	46,1000	0.0270	31004	0.0900		0.0071	20.00	22.87	370.00	0.00
422	45,1000	0.0270	30004	0.0900		0.0070	20.00	22.87	373.00	0.00
424	48,0000	0.0280	32001	0.0900		0.0007	20.00	22.87	380.00	0.00
425	38,0000	0.0280	30001	0.0900		0.0100	20.00	22.87	375.00	0.00
428	38,0000	0.0280	30001	0.0900		0.0011	20.00	22.87	370.00	0.00
429	39,1000	0.0280	29000	0.0900		0.0014	20.00	22.87	374.00	0.00
430	44,0000	0.0280	31001	0.0900		2.1042	58.00	22.87	374.00	0.00

Buttons: Refresh, Home, View, Configuration, Password, Print, Help

CSView 7.2 Works 3.2K

Iron Treatment Monitoring Screen