

Michelle Edl
Idaho Department of Water Resources
PO Box 83720
Boise Idaho 83720-0098

4/1/2008

RECEIVED

APR 02 2008

DEPARTMENT OF WATER RESOURCES

RE: Water Right Permit No. 47-07991
Michelle Edl,

The Crystal Springs Hydroelectric project has received the Notice of Pending Order to Void Permit sent out by your office On March 25, 2007. By this letter the Permit holder, Crystal Springs Hydroelectric LP, states its objection to the pending order to void Permit No. 47-07991.

It is my understanding that a new review of the Crystal Springs water right no. 47791 is underway at IDWR because it is headed for license after remaining as a water permit for over the past 20 years. This position by the IDWR is confounding for a number of reasons that should be discussed

For clarification purposes a short history of the project follows:

11/10/1981: Crystal Springs Hydroelectric Company filed an application with the IDWR to acquire a water right for power generation. This application was for 110 CFS. The Water filing number is 47-7768.

5/1/1983: Crystal Springs Hydroelectric Company Filed an Application for license to generate power with the FERC.

12/27/1984: The water filing No. 47-7991 was submitted for an additional 40 CFS to accommodate an additional turbine which was being designed for inclusion at the project to maximize the power generation capability at the project.

1/1/1985: The final power plant design for the power project included four turbines, one more than the original FERC license permitted.

5/24/1985: The FERC issued a license for the Cedar Draw Creek Hydroelectric Project to the Crystal Springs Hydroelectric Company. The project is designated as FERC No. 8278. This original license included a powerhouse designed to utilize three turbines for generation.

12/2/1985: An amendment to the FERC license No. 8278 was submitted for the inclusion of a fourth unit at the power project. (The unit that was designed and installed in the plant but hadn't been proposed in the first license application)

10/7/1986: A field exam was performed by an engineering firm contracted by Bonneville Pacific. This exam was referenced in a subsequent filing of the, "proof of beneficial use form", with IDWR. The wording in the field exam indicated that three units were on-line but the fourth was off because the FERC had not yet issued the order for the amendment to the license allowing the startup of the fourth unit. According to the field examiner the fourth unit was, "physically present at the powerhouse and in perfect working order". The licensed water examiner indicated that he recommended the full 150 CFS water right allocation be allowed, (the original licensed 110 CFS in water right 47-7768 and the one in question 47-7991 for 40 CFS).

2/3/1987: The beneficial use form was submitted including the recommendation to allow the full 150 CFS. IDWR reviewed the proof of beneficial use form and the field examination. The IDWR did not, at that time or any other time in the ensuing 20 years, raise any objection to any aspect of the proof of beneficial use form or the field examination. This is evidenced by a lack of any communication from the IDWR and no follow-up field exam which would have been requested and conducted if any deficiencies had been noted.

2/24/1987: The FERC order to amend the license and allow operation of the fourth unit was issued. The fourth unit was commissioned and available for operation pending arrival of sufficient water to operate.

8/18/1987: The fourth unit (sometimes referred to as unit three) was observed running at the project and a note was made in the journal indicating a combined kW output.

9/30/1987: The Crystal Springs hydroelectric project produced 1,400,340 kWh of power over the course of the month of September. This is evidenced in the Idaho Power generation report.

10/31/1987: The Crystal Springs hydroelectric plant produced 1,188,120 kWh. During the course of that month there were at least 16 days that the fourth unit had to be in operation to achieve the daily kWh production that was attained. By observation and journal record we have established that in 1987 the primary three units in operation produce 2015 kilo-Watts, or a total of 48,360 kWh per day. According to the Crystal Springs daily production chart there were 16 days that the plant produced over 50,000 kWh. Water availability to attain these levels is evidenced in the United States Department of the Interior Geological Survey report for the Cedar Draw at station No. 13093550 for years 1987-1988..

5/9/1988: The Crystal Springs Power plant produced 59,100 kWh in a twenty-four hour period.

7/17/1988: Daily maintenance log indicates the operation of the fourth unit. The unit had operated prior to that date but the logs were not designed to indicate individual unit operational status prior to 6/30/1988.

11/01/1991: Proof due date. This is the final date designated by the IDWR when proof of beneficial use was to be shown. Prior to this date the proof of beneficial was submitted, a 150 CFS appropriation was recommended by the examiner, the field exam was reviewed and no deficiencies were noted by the IDWR and the water was appropriated in accordance with the permits in place.

1/14/1992: In a letter from the IDWR, Water Resource Agent Sharla Curtis wrote a letter in which she stated that, "Field examinations for these rights have been conducted and water right licenses will subsequently be issued on them".

9/22/1994: In a letter from the IDWR, Manager of the IDWR Water Permits Section Jim Johnson states, "The permit holder has completed all necessary development requirements and the fact that the rights are still permits in no way jeopardizes the validity of the rights. There is no other action that the permit holder can or needs to do at this time."

3/16/1996: Crystal Springs hydroelectric files an amendment of application with the FERC to change the configuration of the project and reduce minimum stream flow releases. No agency

comments were received from the IDWR regarding deficiencies in the water permits. Permits were issued for 47-s-138 and 37-s-139 to construct fish ladders in the stream.

It is the position of the current owners that if the IDWR had noted any deficiencies with the February 3, 1987 submission of the Proof of beneficial use or the field exam, that they should have taken that up in a timely manner. It is further our position that inquiries have been made over the past 20 years regarding the status of the permits and that on at least two occasions written assurances were provided that all was in order, that the licenses would be issued, and that the only reason they weren't issued was because the IDWR was too busy. I have records showing that the fourth unit was in operation as early as 8/18/1987 although the unit ran prior to that date. If necessary I can have affidavits signed by operators who were in place at the time stating that the fourth unit was in operation upon the date that water was available to run the unit. If this is not sufficient, I believe the appropriate resolution to this is to have another field exam conducted by the IDWR. Upon that exam the IDWR will have proof that the fourth unit is in fact operating and that there is no basis for refusing the issuance of the water license.

It has been expressed by one agent of the IDWR that the intent of the Proof of Beneficial use is to prevent a water right applicant from tying up a water right for future development. There is a preponderance of evidence that demonstrates that in this case the applicant had accomplished the development of the means to appropriately utilize the water prior to filing the Proof of Beneficial use form, and that the water was subsequently appropriated upon the authorization by the FERC on February 24, 1987 and the arrival of adequate water to run the fourth turbine.

Respectfully,



Tom McCauley

Manager Crystal Springs hydroelectric project

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	67	64	e49	41	38	32	89	233	83	74	83
2	277	69	65	e48	38	37	33	131	229	81	72	84
3	276	66	62	e48	39	38	35	125	194	76	73	88
4	274	65	62	e47	38	36	34	133	186	76	73	90
5	277	66	62	48	38	36	34	122	174	76	72	90
6	283	68	62	49	39	37	34	225	157	71	75	87
7	288	66	60	48	38	36	33	329	127	72	72	93
8	292	70	59	48	39	35	31	277	114	75	70	99
9	283	74	60	48	39	36	31	253	103	73	71	95
10	287	72	59	57	39	36	55	211	80	77	69	97
11	311	72	56	56	38	33	66	152	80	76	68	104
12	332	71	56	47	38	34	74	134	84	71	67	103
13	334	77	56	47	39	34	81	89	88	70	70	104
14	327	73	56	46	38	35	100	87	86	74	70	100
15	322	71	56	51	38	38	126	80	86	81	75	100
16	324	70	57	48	37	34	125	75	85	79	72	105
17	285	70	57	46	38	33	119	77	83	78	68	105
18	284	66	56	45	38	33	88	74	76	79	67	110
19	290	67	55	40	37	34	65	75	79	79	70	121
20	299	68	54	38	37	33	93	70	80	82	82	164
21	294	68	54	39	37	34	140	65	72	81	88	169
22	195	68	56	39	38	33	141	60	70	79	92	163
23	82	66	53	40	38	34	140	61	68	78	89	166
24	71	65	52	39	37	32	140	58	63	82	94	166
25	69	66	e50	39	37	32	123	66	64	83	93	164
26	67	64	e49	39	37	33	104	76	83	81	75	163
27	68	66	e49	40	37	32	91	80	81	84	78	165
28	68	64	e49	41	37	31	98	78	78	80	74	170
29	68	65	e51	41	38	33	90	111	81	77	78	195
30	68	64	e51	46	---	32	71	179	86	75	77	194
31	67	---	e50	41	---	32	---	248	---	74	80	---
TOTAL	7029	2044	1738	1398	1102	1064	2427	3890	3170	2403	2348	3737
MEAN	227	68.1	56.1	45.1	38.0	34.3	80.9	125	106	77.5	75.7	125
MAX	334	77	65	57	41	38	141	329	233	84	94	195
MIN	67	64	49	38	37	31	31	58	63	70	67	83
AC-FT	13940	4050	3450	2770	2190	2110	4810	7720	6290	4770	4660	7410

CAL YR 1987 TOTAL 31115 MEAN 85.2 MAX 334 MIN 28 AC-FT 61720
WTR YR 1988 TOTAL 32350 MEAN 88.4 MAX 334 MIN 31 AC-FT 64170

e Estimated

CRYSTAL SPRINGS DAILY PRODUCTION
OCTOBER 87 - SEPTEMBER 1988

DATE	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1	55,580 I	1,530 I	4,010 I	3,710 I	660 I	280 I	0 I	8,730 I	58,220 I	14,740 I	14,630 I	12,280
2	53,490 I	80 I	610 I	2,490 I	3,370 I	280 I	0 I	20,860 I	58,030 I	14,490 I	3,640 I	13,750
3	58,120 I	9,950 I	3,260 I	3,570 I	810 I	0 I	0 I	28,110 I	58,000 I	11,980 I	8,560 I	12,990
4	54,270 I	10,570 I	3,120 I	1,640 I	1,980 I	150 I	30 I	28,970 I	58,010 I	10,100 I	15,630 I	15,950
5	53,970 I	10,550 I	740 I	2,910 I	1,680 I	0 I	0 I	16,780 I	58,060 I	14,790 I	14,230 I	14,370
6	53,020 I	6,140 I	0 I	2,330 I	1,580 I	0 I	0 I	19,960 I	51,090 I	12,570 I	10,100 I	12,180
7	37,080 I	8,000 I	710 I	2,720 I	1,160 I	0 I	0 I	4,410 I	51,270 I	12,610 I	13,620 I	9,000
8	17,010 I	10,830 I	3,020 I	2,590 I	1,010 I	0 I	0 I	49,060 I	28,750 I	12,410 I	16,820 I	15,690
9	46,920 I	10,020 I	2,000 I	2,700 I	980 I	0 I	0 I	59,100 I	26,350 I	15,860 I	13,520 I	15,000
10	33,620 I	10,220 I	1,140 I	2,560 I	1,210 I	140 I	1,010 I	57,400 I	16,010 I	5,640 I	15,440 I	3,000
11	47,040 I	10,010 I	3,000 I	1,080 I	960 I	0 I	8,190 I	46,710 I	12,680 I	14,050 I	12,460 I	18,500
12	43,910 I	10,060 I	3,880 I	2,470 I	930 I	0 I	8,240 I	38,800 I	14,000 I	8,050 I	6,300 I	28,140
13	50,490 I	4,530 I	4,620 I	3,040 I	770 I	0 I	9,720 I	24,440 I	15,000 I	11,830 I	6,540 I	26,640
14	52,570 I	1,090 I	4,010 I	3,220 I	790 I	0 I	8,970 I	17,190 I	18,710 I	4,660 I	9,860 I	22,000
15	51,910 I	6,380 I	3,520 I	1,680 I	770 I	70 I	15,000 I	16,520 I	14,830 I	16,380 I	9,300 I	20,000
16	56,390 I	9,430 I	420 I	2,890 I	800 I	270 I	16,120 I	18,030 I	15,010 I	15,700 I	9,500 I	10,070
17	55,580 I	2,840 I	0 I	1,150 I	810 I	0 I	18,150 I	12,730 I	12,000 I	15,190 I	14,020 I	21,000
18	56,180 I	9,620 I	0 I	1,440 I	680 I	0 I	18,200 I	15,250 I	10,670 I	20,980 I	13,180 I	22,850
19	55,600 I	8,960 I	140 I	1,060 I	460 I	0 I	5,420 I	14,960 I	7,750 I	15,080 I	13,000 I	29,470
20	46,850 I	9,000 I	4,450 I	2,830 I	430 I	220 I	2,980 I	16,140 I	11,070 I	18,530 I	13,500 I	13,180
21	54,320 I	2,360 I	1,320 I	2,600 I	290 I	0 I	9,440 I	14,040 I	9,730 I	19,580 I	13,720 I	36,490
22	60,380 I	2,300 I	1,430 I	3,010 I	530 I	0 I	17,960 I	9,990 I	7,580 I	17,370 I	21,310 I	41,680
23	26,920 I	2,110 I	0 I	2,000 I	430 I	0 I	17,140 I	9,350 I	10,310 I	14,860 I	21,180 I	52,990
24	18,520 I	6,770 I	1,550 I	2,160 I	440 I	0 I	19,400 I	6,690 I	8,500 I	12,510 I	24,590 I	50,410
25	10,580 I	5,420 I	2,990 I	3,050 I	220 I	0 I	34,060 I	7,190 I	1,530 I	19,150 I	24,000 I	46,220
26	12,860 I	6,310 I	3,310 I	2,720 I	220 I	0 I	18,860 I	9,560 I	1,320 I	16,380 I	23,000 I	53,440
27	12,530 I	7,100 I	2,900 I	2,240 I	190 I	0 I	17,680 I	8,670 I	14,180 I	16,180 I	13,110 I	54,000
28	10,200 I	5,300 I	2,820 I	760 I	190 I	0 I	15,020 I	9,990 I	11,380 I	16,340 I	17,950 I	55,510
29	8,000 I	2,530 I	2,510 I	950 I	200 I	110 I	23,000 I	6,560 I	12,150 I	16,100 I	15,550 I	56,020
30	3,030 I	4,100 I	1,010 I	1,160 I	0 I	0 I	11,660 I	14,270 I	12,700 I	17,860 I	14,170 I	59,280
31	7,260 I	0 I	3,240 I	1,950 I	0 I	0 I	0 I	51,280 I	0 I	8,600 I	8,130 I	0
TOTALS	1,188,120	194,130	65,730	71,680	24,550	1,440	296,250	653,740	669,610	440,570	430,560	842,020

Listed below is the Crystal Springs generation from 1986-1988. March 28, 2008

Years	Generation Month	Sum of Actual Gross Kwh Generation	Sum of Actual Net Kwh
1986	Jan	52,000	25,584
	Feb	-	-
	Mar	57,000	56,544
	Apr	872,000	865,024
	May	1,294,000	1,283,648
	Jun	961,000	953,312
	Jul	805,000	785,560
	Aug	919,740	907,382
	Sep	1,274,040	1,263,848
	Oct	1,206,320	1,196,670
	Nov	331,600	328,948
	Dec	218,090	209,776
1987	Jan	164,070	155,568
	Feb	64,100	50,798
	Mar	63,320	55,894
	Apr	544,610	539,544
	May	444,950	440,191
	Jun	616,690	611,037
	Jul	535,240	530,029
	Aug	505,890	500,873
	Sep	1,400,340	1,389,108
	Oct	1,188,120	1,178,616
	Nov	194,130	192,577
	Dec	65,730	53,285
1988	Jan	71,680	71,107
	Feb	24,550	6,694
	Mar	1,440	(6,651)
	Apr	296,250	291,780
	May	653,740	647,771
	Jun	669,610	663,714
	Jul	440,570	436,656
	Aug	430,560	426,586
	Sep	842,020	835,034
	Oct	1,338,860	1,327,830
	Nov	87,680	81,119
	Dec	1,600	1,588
Grand Total		18,636,540	18,357,044

Tom McCauley

From: Ready, Kelly [KReady@idahopower.com]
Sent: Friday, March 28, 2008 1:31 PM
To: Tom McCauley
Subject: Crystal Springs generation 1986-1988

Tom,

Attached is the Crystal Springs generation from 1986 through 1988.

<<Crystal Springs generation 1986-1988.doc>>

Kelly Ready
Power Supply Reporting
Idaho Power Company
Phone# (208) 388-2607
Fax# (208) 433-5163
kready@idahopower.com

"EMF <idahopower.com>" made the following annotations.

This transmission may contain information that is privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. Thank you.

=====

3/28/2008

DATE

4/16/89

300-4102

UNIT Combinations

Comb	Cfs	Binary	Benchmark Kw ^{9/87}	Units on
0	0	0000	0	0
1	28	0001	549	1
2	35	0010	676	2
3	40	0100	748	3
4	47	1000	856	4
5	63	0011	1197	1+2
6	68	0101	1254	1+3
7	75	0110	1368	2+3
8	82	1010	1396 ^{10/87}	2+4
9	87	1100	1510 ^{4/89}	3+4
10	103	0111	1800 ^{8/87}	1+2+3
11	110	1011	2015 ^{10/87}	1+2+4
12	115	1101		1+3+4
13	122	1110	2080 ^{10/87}	2+3+4
14	150	1111	2560 ^{10/87}	1+2+3+4

KVA RATING

- 1 G
- 2 G
- 3
- 4 G

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/21/88OPERATOR Jon

ARRIVAL TIME 9:30
 DEPARTURE TIME 10:30
 METER READING 6739.11
 PREVIOUS DAYS READING - 6702.62
 PRODUCTION 26.49
 ESTIMATE PRODUCTION _____
 CALL OFFICE _____

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	☒			
CHECK SWITCHGEAR METERS	☒			
CHECK PRIDE RELAY	☒			
CHECK U. P. S.				
CHECK MODEM (AA TR MR)	☒			
CHECK BATTERY CHARGER	☒			
AMPERAGE 1.2	☒			
VOLTAGE 135	☒			
DUST EQUIPMENT				
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS				
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 52°WEATHER CONDITIONS cloudy

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	)(M(
UNIT #1	<u>1204</u>	<u>78</u>	<u>451/460</u>	<u>625</u>	<u>1234</u>
UNIT #2	<u>1205</u>	<u>87</u>	<u>559/590</u>	<u>1101</u>	
UNIT #3	<u>1201</u>	<u>111</u>	<u>637/620</u>	<u>195</u>	
UNIT #4	<u>906</u>	<u>112</u>	<u>721/716</u>	<u>129</u>	
BUSS VOLTAGE	<u>3894</u>				
PLANT POWER	<u>2365</u>	<u>(2389 Ipc)</u>			
CANAL LEVEL	<u>38.90</u>				
FOREBAY LEVEL	<u>34.50</u>				
MACHINE FAULTS	<u>a</u>				

UNIT #1 UNIT #2 UNIT #3 UNIT #4

WATTMETER READINGS _____
 FEEL BEARING TEMPS. _____
 CHECK BEARING OIL LEVEL _____
 CHECK PACKING WATER FLOW _____
 CHECK PACKING WATER PRESSURE _____

OPERATORS NOTES offline @ 12:59 online @ 16:30

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/22/88OPERATOR LARRY

ARRIVAL TIME 9:00
 DEPARTURE TIME 9:45
 METER READING 6780.79
 PREVIOUS DAYS READING - 6739.11
 PRODUCTION 41.68
 ESTIMATE PRODUCTION 45
 CALL OFFICE YES

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	☒			
CHECK SWITCHGEAR METERS	☒			
CHECK PRIDE RELAY	☒			
CHECK U.P.S.	☒			
CHECK MODEM (AA TR MR)	☒			
CHECK BATTERY CHARGER	☒			
AMPERAGE 1.2	☒			
VOLTAGE 135	☒			
DUST EQUIPMENT				
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS	☒			
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 42°
 WEATHER CONDITIONS CLEAR

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	)(
UNIT #1	<u>1205</u>	<u>88</u>	<u>446</u>	<u>700</u>	
UNIT #2	<u>1205</u>	<u>86</u>	<u>565</u>	<u>1124</u>	
UNIT #3	<u>1204</u>	<u>112</u>	<u>642</u>	<u>165</u>	
UNIT #4	<u>904</u>	<u>117</u>	<u>243</u>	<u>148</u>	
BUSS VOLTAGE	<u>3962</u>				
PLANT POWER	<u>2394</u>				
CANAL LEVEL	<u>30.70</u>				
FOREBAY LEVEL	<u>2696</u>				
MACHINE FAULTS	<u>0</u>				
WATTMETER READINGS	<u>4369</u>	<u>5950</u>	<u>1751</u>	<u>2593</u>	
FEEL BEARING TEMPS.	☒	☒	☒	☒	
CHECK BEARING OIL LEVEL	☒	☒	☒	☒	
CHECK PACKING WATER FLOW	☒	☒	☒	☒	
CHECK PACKING WATER PRESSURE	☒	☒	☒	☒	

OPERATORS NOTES PLANT HAS A LOT OF WATER

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/23/88OPERATOR Tom

ARRIVAL TIME 8:45
 DEPARTURE TIME _____
 METER READING 6833.79
 PREVIOUS DAYS READING - 6780.79
 PRODUCTION 53.00
 ESTIMATE PRODUCTION 55.00
 CALL OFFICE _____

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	☒			
CHECK SWITCHGEAR METERS	☒			
CHECK PRIDE RELAY	☒			
CHECK U.P.S.	☒			
CHECK MODEM (AA TR MR)	☒			
CHECK BATTERY CHARGER	☒			
AMPERAGE 1.2	☒			
VOLTAGE 135	☒			
DUST EQUIPMENT				
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS				
OPERATORS NOTES ON BACK OF REPORT	(YES)	☒		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 68WEATHER CONDITIONS Nice

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	<u>1204</u>	<u>95</u>	<u>447</u>	<u>711</u>	<u>1234</u>
UNIT #2	<u>1206</u>	<u>87</u>	<u>567</u>	<u>1145</u>	
UNIT #3	<u>1205</u>	<u>113</u>	<u>647</u>	<u>189</u>	
UNIT #4	<u>905</u>	<u>124</u>	<u>749</u>	<u>172</u>	
BUSS VOLTAGE	<u>3938</u>				
PLANT POWER	<u>2422</u>				
CANAL LEVEL	<u>38.87</u>				
FOREBAY LEVEL	<u>34.30</u>				
MACHINE FAULTS	<u>2</u>				

WATTMETER READINGS
 FEEL BEARING TEMPS.
 CHECK BEARING OIL LEVEL
 CHECK PACKING WATER FLOW
 CHECK PACKING WATER PRESSURE

UNIT #1	UNIT #2	UNIT #3	UNIT #4
<u>04373</u>	<u>05960</u>	<u>01767</u>	<u>02611</u>
☒	☒	☒	☒
☒	☒	☒	☒
☒	☒	☒	☒

OPERATORS NOTES We need to pull packing boxes on #1 + 2 to clean + adjust.

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/24/88OPERATOR Tom

ARRIVAL TIME 9:30
 DEPARTURE TIME 14:30
 METER READING 6884.19
 PREVIOUS DAYS READING - 6833.79
 PRODUCTION 50.40
 ESTIMATE PRODUCTION 50.40
 CALL OFFICE ✓

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	<u>✓</u>			
CHECK SWITCHGEAR METERS	<u>✓</u>			
CHECK PRIDE RELAY	<u>✓</u>			
CHECK U.P.S.	<u>✓</u>			
CHECK MODEM (AA TR MR)	<u>✓</u>			
CHECK BATTERY CHARGER	<u>✓</u>			
AMPERAGE 1.2	<u>✓</u>			
VOLTAGE 135	<u>✓</u>			
DUST EQUIPMENT				
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS				
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				
<u>Unit 3 Vibrations</u>		<u>✓</u>	<u>✓ no reply</u>	<u>✓</u>
<u>Wash Equipment / Filter</u>	<u>✓</u>			
TEMPERATURE OUTSIDE <u>65</u>				
WEATHER CONDITIONS <u>Nice</u>				

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	<u>1204</u>	<u>99</u>	<u>453</u>	<u>719</u>	<u>1234</u>
UNIT #2	<u>1206</u>	<u>87</u>	<u>570</u>	<u>1169</u>	
UNIT #3	<u>1206</u>	<u>105</u>	<u>(599)</u>	<u>213</u>	
UNIT #4	<u>905</u>	<u>125</u>	<u>746</u>	<u>197</u>	
BUSS VOLTAGE	<u>3954</u>				
PLANT POWER	<u>2365</u>				
CANAL LEVEL	<u>35.22</u>				
FOREBAY LEVEL	<u>31.45</u>				
MACHINE FAULTS	<u>0</u>				

	UNIT #1	UNIT #2	UNIT #3	UNIT #4
WATTMETER READINGS	<u>04377</u>	<u>05976</u>	<u>01182</u>	<u>02630</u>
FEEL BEARING TEMPS.	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
CHECK BEARING OIL LEVEL	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
CHECK PACKING WATER FLOW	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
CHECK PACKING WATER PRESSURE	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>

OPERATORS NOTES #3 high vibration, High noise level, Reduced production capability. I tried to contact Brett. I got a hold of Larry. He checked out Pigeon + took meter readings while I cleaned out the Runner + replaced packing in #3. The Strip from the trash rack where I stuck in the Runner + Coasting. Start to finish 1 hour + 28 minutes!!

DATE 9/25

OPERATOR *LARRY*

ARRIVAL TIME	7:30	13:45	
DEPARTURE TIME	8:30	14:30	
METER READING	6930.41		
PREVIOUS DAYS READING -	6884.19		
PRODUCTION	46.22		
ESTIMATE PRODUCTION	47		
CALL OFFICE	NA		PLANT STATUS

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	☒	☐	☐	☐
CHECK SWITCHGEAR METERS	☒	☐	☐	☐
CHECK PRIDE RELAY	☒	☐	☐	☐
CHECK U. P. S.	☒	☐	☐	☐
CHECK MODEM (AA TR MR)	☒	☐	☐	☐
CHECK BATTERY CHARGER	☒	☐	☐	☐
AMPERAGE 1.2	☒	☐	☐	☐
VOLTAGE 135	☒	☐	☐	☐
DUST EQUIPMENT	☒	☐	☐	☐
SWEEP FLOOR	☒	☐	☐	☐
GREASE CRYSTAL TRASHRACKS	☒	☐	☐	☐
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 48°
WEATHER CONDITIONS Part Cloudy

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	1205	91	686	724	1234
UNIT #2	1206	117	685	1188	
UNIT #3	905	131	784	232	
UNIT #4	4070			219	
BUSS VOLTAGE	2080				
PLANT POWER	39.40				
CANAL LEVEL	35.86				
FOREBAY LEVEL					
MACHINE FAULTS					

MACHINE TABLETS	UNIT #1	UNIT #2	UNIT #3	UNIT #4
WATTMETER READINGS	43.80	59.87	17.95	26.46
FEEL BEARING TEMPS.	✓	✓	✓	✓
CHECK BEARING OIL LEVEL	✓	✓	✓	✓
CHECK PACKING WATER FLOW	✓	✓	✓	✓
CHECK PACKING WATER PRESSURE	✓	✓	✓	✓

OPERATORS NOTES Everything Running ok This morn.

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 7/26/88OPERATOR LARRY

ARRIVAL TIME 8:45
 DEPARTURE TIME 9:30
 METER READING 983.05
 PREVIOUS DAYS READING - 6930.41
 PRODUCTION 53.44
 ESTIMATE PRODUCTION 52
 CALL OFFICE Yes

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	☒			
CHECK SWITCHGEAR METERS	☒			
CHECK PRIDE RELAY	☒			
CHECK U.P.S.	☒			
CHECK MODEM (AA TR MR)	☒			
CHECK BATTERY CHARGER	☒			
AMPERAGE 1.2	☒			
VOLTAGE 135	☒			
DUST EQUIPMENT	☒			
SWEEP FLOOR	☒			
GREASE CRYSTAL TRASHRACKS	☒			
OPERATORS NOTES ON BACK OF REPORT	(YES)	~~(NO)~~		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 42°
 WEATHER CONDITIONS COOL & CLEAR

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	YMK
UNIT #1	<u>1204</u>	<u>79</u>	<u>451</u>	<u>733</u>	<u>1734</u>
UNIT #2	<u>1205</u>	<u>86</u>	<u>365</u>	<u>1212</u>	
UNIT #3	<u>1204</u>	<u>112</u>	<u>645</u>	<u>256</u>	
UNIT #4	<u>905</u>	<u>124</u>	<u>733</u>	<u>243</u>	
BUSS VOLTAGE	<u>3962</u>				
PLANT POWER	<u>2394</u>				
CANAL LEVEL	<u>32.16</u>				
FOREBAY LEVEL	<u>28.29</u>				
MACHINE FAULTS	<u>0</u>				

WATTMETER READINGS
 FEEL BEARING TEMPS.
 CHECK BEARING OIL LEVEL
 CHECK PACKING WATER FLOW
 CHECK PACKING WATER PRESSURE

UNIT #1	UNIT #2	UNIT #3	UNIT #4
<u>4384</u>	<u>5491</u>	<u>1811</u>	<u>2683</u>
☒	☒	☒	☒
☒	☒	☒	☒
☒	☒	☒	☒

OPERATORS NOTES

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/27/88OPERATOR Tom

ARRIVAL TIME 9:30
 DEPARTURE TIME 11:00
 METER READING 7037.85
 PREVIOUS DAYS READING - 6983.85
 PRODUCTION 54.00
 ESTIMATE PRODUCTION 54.00
 CALL OFFICE ✓

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	✓			
CHECK SWITCHGEAR METERS	✓			
CHECK PRIDE RELAY	✓			
CHECK U.P.S.	✓			
CHECK MODEM (AA TR MR)	✓			
CHECK BATTERY CHARGER	✓			
AMPERAGE 1.2	✓			
VOLTAGE 135	✓			
DUST EQUIPMENT	✓			
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS				
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

Dump trashTEMPERATURE OUTSIDE 54°WEATHER CONDITIONS cloudy windy drizzly

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	<u>1204</u>	<u>99</u>	<u>449/460</u>	<u>742</u>	<u>1234</u>
UNIT #2	<u>1206</u>	<u>87</u>	<u>570/590</u>	<u>1235</u>	
UNIT #3	<u>1202</u>	<u>112</u>	<u>692/612</u>	<u>281</u>	
UNIT #4	<u>905</u>	<u>124</u>	<u>733/733</u>	<u>268</u>	
BUSS VOLTAGE	<u>3942</u>				
PLANT POWER	<u>2394</u>				
CANAL LEVEL	<u>33.32</u>				
FOREBAY LEVEL	<u>29.32</u>				
MACHINE FAULTS	<u>0</u>				

	UNIT #1	UNIT #2	UNIT #3	UNIT #4
WATTMETER READINGS	<u>04387</u>	<u>06015</u>	<u>01828</u>	<u>02601</u>
FEEL BEARING TEMPS.				
CHECK BEARING OIL LEVEL				
CHECK PACKING WATER FLOW				
CHECK PACKING WATER PRESSURE				

OPERATORS NOTES #3 excessive oil leakage @ Bearing on genside
or @ coupler. #1 " water " @ packing gland on
front end. need to shut down to adjust.

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/28/88

OPERATOR _____

ARRIVAL TIME 9:30 16:00
 DEPARTURE TIME 12:00 17:00
 METER READING 7093.36
 PREVIOUS DAYS READING - 7037.85
 PRODUCTION 5651
 ESTIMATE PRODUCTION 56
 CALL OFFICE ✓

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	✓			
CHECK SWITCHGEAR METERS	✓			
CHECK PRIDE RELAY	✓			
CHECK U.P.S.	✓			
CHECK MODEM (AA TR MR)	✓			
CHECK BATTERY CHARGER	✓			
AMPERAGE 1.2	✓			
VOLTAGE 135	✓			
DUST EQUIPMENT	✓			
SWEEP FLOOR	✓			
GREASE CRYSTAL TRASHRACKS	✓			
OPERATORS NOTES ON BACK OF REPORT	(YES)	(M)		
OTHER PLEASE DESCRIBE				
<u>Plant looks good!</u>	✓			

TEMPERATURE OUTSIDE 52°
 WEATHER CONDITIONS cool clear

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	<u>1204</u>	<u>97</u>	<u>446</u>	<u>758</u>	<u>1234</u>
UNIT #2	<u>1206</u>	<u>86</u>	<u>565</u>	<u>1259</u>	
UNIT #3	<u>1206</u>	<u>112</u>	<u>645</u>	<u>305</u>	
UNIT #4	<u>904</u>	<u>130</u>	<u>746</u>	<u>292</u>	
BUSS VOLTAGE	<u>39.3</u>				
PLANT POWER	<u>2394</u>				
CANAL LEVEL	<u>30.90</u>				
FOREBAY LEVEL	<u>25.73</u>				
MACHINE FAULTS	<u>0</u>				

	UNIT #1	UNIT #2	UNIT #3	UNIT #4
WATTMETER READINGS	<u>04395</u>	<u>06030</u>	<u>01844</u>	<u>02695</u>
FEEL BEARING TEMPS.	✓	✓	✓	✓
CHECK BEARING OIL LEVEL	✓	✓	✓	✓
CHECK PACKING WATER FLOW	✓	✓	✓	✓
CHECK PACKING WATER PRESSURE	✓	✓	✓	✓

OPERATORS NOTES _____

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/29/88
OPERATOR TomARRIVAL TIME 8:45
DEPARTURE TIME 9:30
METER READING 7149.38
PREVIOUS DAYS READING - 7093.36
PRODUCTION 56.02
ESTIMATE PRODUCTION 56.00
CALL OFFICE ✓

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	✓			
CHECK SWITCHGEAR METERS	✓			
CHECK PRIDE RELAY	✓			
CHECK U.P.S.	✓			
CHECK MODEM (AA TR MR)	✓			
CHECK BATTERY CHARGER	✓			
AMPERAGE 1.2	✓			
VOLTAGE 135	✓			
DUST EQUIPMENT				
SWEEP FLOOR				
GREASE CRYSTAL TRASHRACKS	✓			
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 56°
WEATHER CONDITIONSNice Day cool / warming

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	>M<
UNIT #1	<u>1206</u>	<u>88</u>	<u>449</u>	<u>727</u>	<u>1234</u>
UNIT #2	<u>1206</u>	<u>88</u>	<u>570</u>	<u>1283</u>	
UNIT #3	<u>1206</u>	<u>113</u>	<u>650</u>	<u>329</u>	
UNIT #4	<u>905</u>	<u>180</u>	<u>799</u>	<u>315</u>	
BUSS VOLTAGE	<u>3911</u>				
PLANT POWER	<u>2422</u>				
CANAL LEVEL	<u>45.01</u>				
FOREBAY LEVEL	<u>40.11</u>				
MACHINE FAULTS	<u>0/0</u>				

	UNIT #1	UNIT #2	UNIT #3	UNIT #4
WATTMETER READINGS	<u>04403</u>	<u>06042</u>	<u>01060</u>	<u>02695</u>
FEEL BEARING TEMPS.	✓	✓	✓	✓
CHECK BEARING OIL LEVEL	✓	✓	✓	✓
CHECK PACKING WATER FLOW	✓	✓	✓	✓
CHECK PACKING WATER PRESSURE	✓	✓	✓	✓

OPERATORS NOTES

CRYSTAL SPRINGS DAILY MAINTENANCE

DATE 9/30/88OPERATOR Tom

ARRIVAL TIME 9:15
 DEPARTURE TIME 10:15
 METER READING 7208.66
 PREVIOUS DAYS READING - 7149.28
 PRODUCTION 59.28
 ESTIMATE PRODUCTION 59.00
 CALL OFFICE ✓

PLANT STATUS

OPERATORS CHECKLIST	NORMAL	PROBLEM	REPORTED	REPAIRED
CHECK TRANSFORMER	✓			
CHECK SWITCHGEAR METERS	✓			
CHECK PRIDE RELAY	✓			
CHECK U.P.S.	✓			
CHECK MODEM (AA TR MR)	✓			
CHECK BATTERY CHARGER	✓			
AMPERAGE 1.2	✓			
VOLTAGE 135	✓			
DUST EQUIPMENT	✓			
SWEEP FLOOR	✓			
GREASE CRYSTAL TRASHRACKS	✓			
OPERATORS NOTES ON BACK OF REPORT	(YES)	(NO)		
OTHER PLEASE DESCRIBE				

TEMPERATURE OUTSIDE 48°
 WEATHER CONDITIONS Nice clear Day.

PLANT FUNCTION

STATUS

	RPM	AMPS	KW	HOURS	YMK
UNIT #1	1205	81	451	802	1234
UNIT #2	1205	87	572	1307	
UNIT #3	1203	112	652	353	
UNIT #4	903	114	749	340	
BUSS VOLTAGE	3943				
PLANT POWER	2422				
CANAL LEVEL	43.62				
FOREBAY LEVEL	38.22				
MACHINE FAULTS	0				

WATTMETER READINGS
 FEEL BEARING TEMPS.
 CHECK BEARING OIL LEVEL
 CHECK PACKING WATER FLOW
 CHECK PACKING WATER PRESSURE

UNIT #1	UNIT #2	UNIT #3	UNIT #4
01414	06056	01875	02695

OPERATORS NOTES