

Pump Coordinator Roles and Responsibilities

10/4 Pump Run

Page 14 of 24

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ERCC CASH 10/5/15
Rev 8, 10/01/2015

Revision No. 08

Author:

Patricia Ward

Date:

10/1/15

Approved:

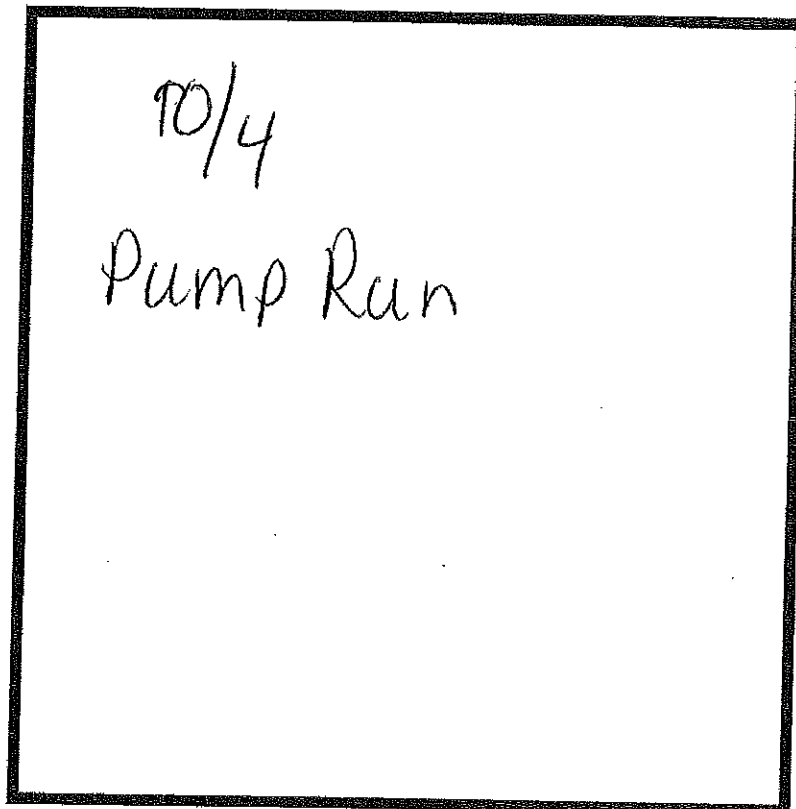
Pat Swell

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET Month <u>10</u> Day <u>5</u> Year <u>15</u>						
Time	North Pump (107944)	South Pump (107939)	RPM No Pump	RPM So Pump	South Canal Level	System Checks Sat
00:00	Flow:	Flow:			.85	✓
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00	Flow:	Flow:				
2:00	Total:	Total:				
3:00	Flow:	Flow:				
3:00	Total:	Total:				
4:00	Flow:	Flow:				
4:00	Total:	Total:				
5:00	Flow:	Flow:				
5:00	Total:	Total:				
6:00	Flow:	Flow:				
6:00	Total:	Total:				
7:00	Flow:	Flow:				
7:00	Total:	Total:				
8:00 8:40	Flow: 33352	Flow: 3258	609	609	.85	✓
8:00 8:40	Total: 89452063	Total: 38101070				
9:00	Flow: 34040	Flow: 31231	609	609	.85	✓
9:00	Total: 90060819	Total: 36054597				
10:00	Flow: 34264	Flow: 31686	609	609	.85	✓
10:00	Total: 91157009	Total: 402544598				
11:00	Flow: 33872	Flow: 32532	598	598	.85	✓
11:00	Total: 93255899	Total: 42478291				
12:00	Flow: 34401	Flow: 33167	598	598	.85	✓
12:00	Total: 94812799	Total: 43512439				

PUMP OPERATOR ELSON CASIDate 10/5/15VERIFIED BY PUMP
COORDINATOR _____

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET Month <u>10</u> Day <u>5</u> Year <u>2015</u>						
Time	North Pump (107944)	South Pump (107939)	RPM No Pump	RPM So Pump	South Canal Level	System Checks Sat
13:00	Flow:	Flow:				
13:00	Total:	Total:				
14:00	Flow:	Flow:				
14:00	Total:	Total:				
15:00	Flow:	Flow:				
15:00	Total:	Total:				
16:00	Flow:	Flow:				
16:00	Total:	Total:				
17:00	Flow:	Flow:				
17:00	Total:	Total:				
18:00	Flow:	Flow:				
18:00	Total:	Total:				
19:00	Flow:	Flow:				
19:00	Total:	Total:				
20:00	Flow:	Flow:				
20:00	Total:	Total:				
21:00	Flow:	Flow:				
21:00	Total:	Total:				
22:00	Flow:	Flow:				
22:00	Total:	Total:				
23:00	Flow:	Flow:				
23:00	Total:	Total:				
24:00	Flow:	Flow:				
24:00	Total:	Total:				

PUMP OPERATOR EGSC/ASA
 Date 10/5/15

VERIFIED BY PUMP
 COORDINATOR _____
 Date: _____

10-5-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Patricia W. J.

Date:

10/1/15

Approved:

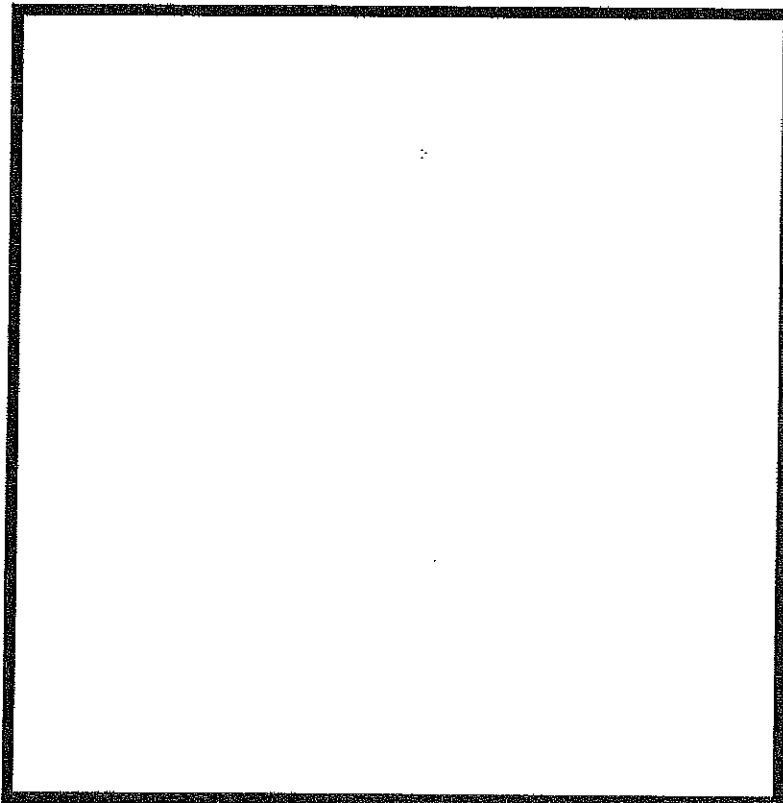
Patricia W. J.

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Bryan Ingram

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET									
Month <u>10</u> Day <u>5</u> Year <u>15</u>				RPM	RPM	RPM	North	South	System
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	East Pump	Center Pump	West Pump	Canal Level North of 344 St	Canal Level South of 344 St	Checks Sat
00:00	Flow:	Flow:	Flow:				0	1	✓
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:						
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:						
2:00	Total:	Total:	Total:						
3:00	Flow:	Flow:	Flow:						
3:00	Total:	Total:	Total:						
4:00	Flow:	Flow:	Flow:						
4:00	Total:	Total:	Total:						
5:00	Flow:	Flow:	Flow:						
5:00	Total:	Total:	Total:						
6:00	Flow:	Flow:	Flow:						
6:00	Total:	Total:	Total:						
7:00	Flow:	Flow:	Flow:						
7:00	Total:	Total:	Total:						
8:00	Flow: <u>21354</u>	Flow: <u>21165</u>	Flow: <u>ERROR</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.4</u>	<u>1</u>	✓
8:00	Total: <u>93706358</u>	Total: <u>32101887</u>	Total: <u>ERROR</u>	<u>60Hz</u>	<u>60Hz</u>	<u>60Hz</u>			
9:00	Flow: <u>21301</u>	Flow: <u>20852</u>	Flow: <u>ERROR</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.55</u>	<u>1</u>	✓
9:00	Total: <u>94180787</u>	Total: <u>32593250</u>	Total: <u>ERROR</u>						
10:00	Flow: <u>21628</u>	Flow: <u>20721</u>	Flow: <u>ERROR</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.2</u>	<u>1</u>	✓
10:00	Total: <u>95415868</u>	Total: <u>33795873</u>	Total: <u>ERROR</u>						
11:00	Flow: <u>21554</u>	Flow: <u>20641</u>	Flow: <u>ERROR</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.0</u>	<u>1</u>	✓
11:00	Total: <u>96698336</u>	Total: <u>35922054</u>	Total: <u>ERROR</u>						
12:00	Flow: <u>21868</u>	Flow: <u>20542</u>	Flow: <u>ERROR</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.01</u>	<u>1</u>	✓
12:00	Total: <u>97944839</u>	Total: <u>36121133</u>	Total: <u>ERROR</u>	<u>60Hz</u>	<u>60Hz</u>	<u>60Hz</u>			

 PUMP OPERATOR K. [Signature]
 Date 10-5-15

 VERIFICATION
 COORDINATOR [Signature]
 Date 10-5-15

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET									
Month <u>10</u> Day <u>4</u> Year <u>15</u>									
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
13:00	Flow:	Flow:	Flow:						
13:00	Total:	Total:	Total:						
14:00	Flow:	Flow:	Flow:						
14:00	Total:	Total:	Total:						
15:00	Flow:	Flow:	Flow:						
15:00	Total:	Total:	Total:						
16:00	Flow:	Flow:	Flow:						
16:00	Total:	Total:	Total:						
17:00	Flow:	Flow:	Flow:						
17:00	Total:	Total:	Total:						
18:00	Flow:	Flow:	Flow:				.70	.90	✓
18:00	Total:	Total:	Total:						
19:00	Flow:	Flow:	Flow:						
19:00	Total:	Total:	Total:						
20:00	Flow:	Flow:	Flow:						
20:00	Total:	Total:	Total:						
21:00	Flow:	Flow:	Flow:						
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:						
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:						
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP

OPERATOR

Robert Cooper
10-4-15

VERIFIED BY PUMP

COORDINATOR

Date:

Pump Run 10/5 - 10/6/15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1

Pump Coordinator Roles and Responsibilities

Date / Time

EVENT LOG BOOK

Page _ of _

10/5/15 Pump Run

NO 4-31 Pumping during
this cycle AS 504 ACCE was
not Addressed.

Ben [Signature]

**INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM
ATTACHMENT 2**

NORTH PUMPING STATION HOURLY LOG SHEET Month **10** Day **06** Year **2015**

Time	West Pump (107942)	Center Pump (107941)	East Pump (107940)	North Canal Level	South Canal Level	System Checksheet
00:00	Flow: Total:	Flow: Total:	Flow: Total:			
01:00	Flow: Total:	Flow: Total:	Flow: Total:			
02:00	Flow: Total:	Flow: Total:	Flow: Total:			
03:00	Flow: Total:	Flow: Total:	Flow: Total:			
04:00	Flow: Total:	Flow: Total:	Flow: Total:			
05:00	Flow: Total:	Flow: Total:	Flow: Total:			
06:00	Flow: Total:	Flow: Total:	Flow: Total:			
07:00	Flow: Total:	Flow: Total:	Flow: Total:			
08:00	Flow: Total:	Flow: Total:	Flow: Total:			
09:00	Flow: Total:	Flow: Total:	Flow: Total:			
10:00	Flow: Total:	Flow: Total:	Flow: Total:			
11:00	Flow: Total:	Flow: Total:	Flow: Total:			
12:00	Flow: Total:	Flow: Total:	Flow: Total:			
13:00	Flow: Total:	Flow: Total:	Flow: Total:			
14:00	Flow: Total:	Flow: Total:	Flow: Total:			
15:00	Flow: Total:	Flow: Total:	Flow: Total:			
16:00	Flow: Total:	Flow: Total:	Flow: Total:			
17:00	Flow: Total:	Flow: Total:	Flow: Total:			
18:00	Flow: Total:	Flow: Total:	Flow: Total:			
19:00	Flow: Total:	Flow: Total:	Flow: Total:			
20:00	Flow: Total:	Flow: Total:	Flow: Total:			
21:00	Flow: Total:	Flow: Total:	Flow: Total:			
22:00	Flow: Total:	Flow: Total:	Flow: Total:			
23:00	Flow: Total:	Flow: Total:	Flow: Total:			
23:59	Flow: Total:	Flow: Total:	Flow: Total:			

LESS THAN 504

NO WATER ALLOTTED

Nannette Sweeney
Nannette Sweeney

10/06/15

**INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM
ATTACHMENT 3**

SOUTH PUMP STATION HOURLY LOG SHEET				Month 10	Day 06	Year 2015
Time	North Pump (107944)	South Pump (107939)		North Canal Level	South Canal Level	System Check Sat
00:00	Flow: Total:	Flow: Total:				
01:00	Flow: Total:	Flow: Total:				
02:00	Flow: Total:	Flow: Total:				
03:00	Flow: Total:	Flow: Total:				
04:00	Flow: Total:	Flow: Total:				
05:00	Flow: Total:	Flow: Total:				
06:00	Flow: Total:	Flow: Total:				
07:00	Flow: Total:	Flow: Total:				
08:00	Flow: Total:	Flow: Total:				
09:00	Flow: Total:	Flow: Total:				
10:00	Flow: Total:	Flow: Total:				
11:00	Flow: Total:	Flow: Total:				
12:00	Flow: Total:	Flow: Total:				
13:00	Flow: Total:	Flow: Total:				
14:00	Flow: Total:	Flow: Total:				
15:00	Flow: Total:	Flow: Total:				
16:00	Flow: Total:	Flow: Total:				
17:00	Flow: Total:	Flow: Total:				
18:00	Flow: Total:	Flow: Total:				
19:00	Flow: Total:	Flow: Total:				
20:00	Flow: Total:	Flow: Total:				
21:00	Flow: Total:	Flow: Total:				
22:00	Flow: Total:	Flow: Total:				
23:00	Flow: Total:	Flow: Total:				
23:59	Flow: Total:	Flow: Total:				

LESS THAN 504

NO WATER ALLOTTED

Nannette Sweeney
Nannette Sweeney

10/06/15

Pump Coordinator Roles and Responsibilities

10/6/pump

Page 1 of 1

Page 14 of 24

10-7-15

Deb Cooper
Eric Cash

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

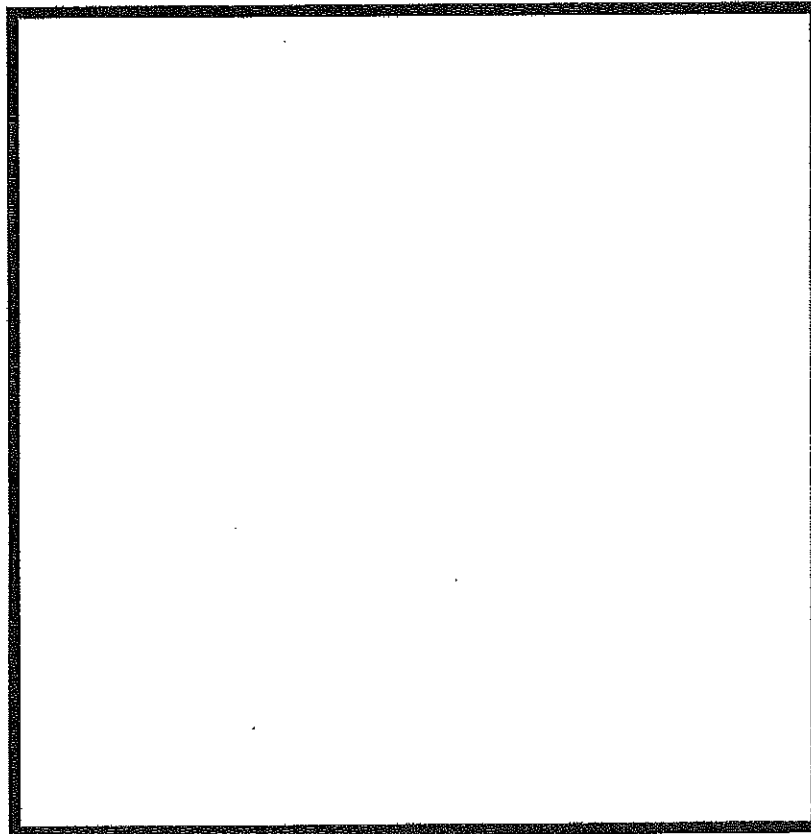
Date:

Approved:

Date:

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

Bryant Ingram

NORTH PUMPING STATION HOURLY LOG SHEET									
Month <u>10</u> Day <u>7</u> Year <u>15</u>									
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
00:00	Flow:	Flow:	Flow:						
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:						
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:				.55	.90	✓
2:00	Total:	Total:	Total:						
3:00	Flow:	Flow:	Flow:				.50	.90	✓
3:00	Total:	Total:	Total:						
4:00	Flow:	Flow:	Flow:				.60	.90	✓
4:00	Total:	Total:	Total:						
5:00	Flow:	Flow:	Flow:				.70	.90	✓
5:00	Total:	Total:	Total:						
6:00	Flow:	Flow:	Flow:						
6:00	Total:	Total:	Total:						
7:00	Flow:	Flow:	Flow:						
7:00	Total:	Total:	Total:						
8:00	Flow:	Flow:	Flow:						
8:00	Total:	Total:	Total:						
9:00	Flow:	Flow:	Flow:						
9:00	Total:	Total:	Total:						
10:00	Flow: <u>24359</u>	Flow: <u>ERROR</u>	Flow: <u>19786</u>	<u>576</u>	<u>576</u>	<u>576</u>	<u>.7</u>	<u>.1</u>	✓
10:00	Total: <u>97948443</u>	Total: <u>ERROR</u>	Total: <u>72567983</u>	<u>60HZ</u>	<u>60HZ</u>	<u>60HZ</u>			
11:00	Flow: <u>21104</u>	Flow: <u>ERROR</u>	Flow: <u>19462</u>				<u>.6</u>	<u>.1</u>	✓
11:00	Total: <u>99038271</u>	Total: <u>ERROR</u>	Total: <u>73437444</u>						
11:55	Flow: <u>21402</u>	Flow:	Flow:						
11:55	Total: <u>104731</u>	Total:	Total:						

PUMP OPERATOR

10-7-15

VERIFIED BY PUMP

COORDINATOR

(Date)

NORTH PUMPING STATION HOURLY LOG SHEET

Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
13:00	Flow:	Flow:	Flow:						
13:00	Total:	Total:	Total:						
14:00	Flow:	Flow:	Flow:						
14:00	Total:	Total:	Total:						
15:00	Flow:	Flow:	Flow:						
15:00	Total:	Total:	Total:						
16:00	Flow:	Flow:	Flow:						
16:00	Total:	Total:	Total:						
17:00	Flow:	Flow:	Flow:						
17:00	Total:	Total:	Total:						
18:00	Flow:	Flow:	Flow:				1.65	1.90	✓
18:00	Total:	Total:	Total:						
19:00	Flow:	Flow:	Flow:						
19:00	Total:	Total:	Total:						
20:00	Flow:	Flow:	Flow:						
20:00	Total:	Total:	Total:						
21:00	Flow:	Flow:	Flow:						
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:						
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:						
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

OPERATOR

INDEX

ELCC CASH 10/7/15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Calvin Ward

Date:

10/1/15

Approved:

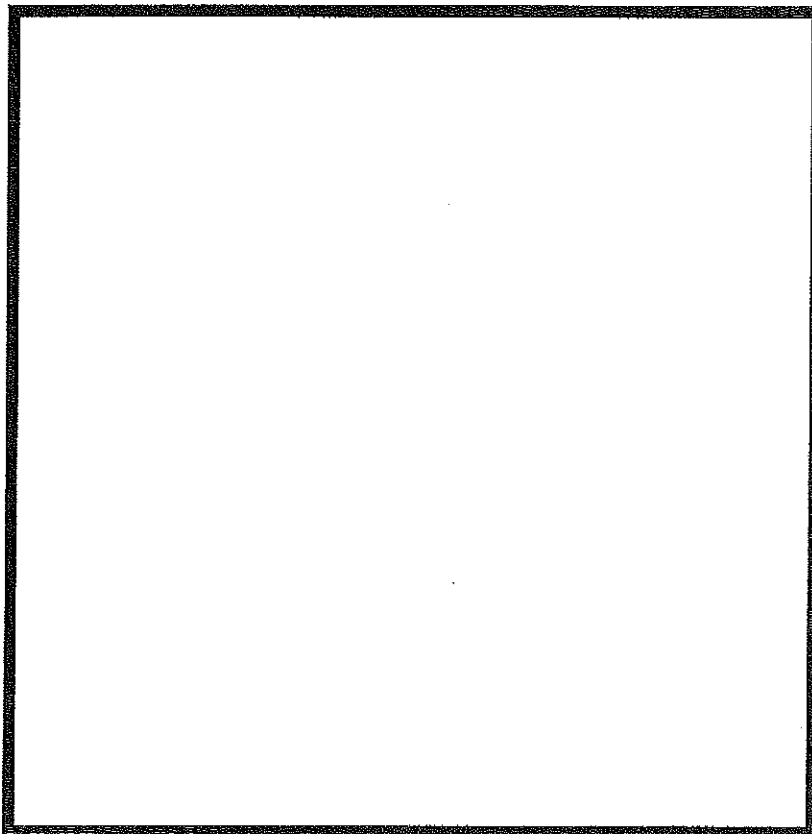
Paul Smith

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET Month <u>10</u> Day <u>07</u> Year <u>2015</u>						
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat
00:00	Flow:	Flow:				
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00	Flow:	Flow:				
2:00	Total:	Total:				
3:00	Flow:	Flow:				
3:00	Total:	Total:				
4:00	Flow:	Flow:				
4:00	Total:	Total:				
5:00	Flow:	Flow:				
5:00	Total:	Total:				
6:00	Flow:	Flow:				
6:00	Total:	Total:				
7:00	Flow:	Flow:				
7:00	Total:	Total:				
8:00	Flow:	Flow:				
8:00	Total:	Total:				
9:00	Flow:	Flow:				
9:00	Total:	Total:				
10:00 10:13	Flow: 33486	Flow: 30412	5918	5918	.85	✓
10:00 10:13	Total: 0500250	Total: 43901580				
11:00	Flow: 33332	Flow: 32653	5918	5918	.85	✓
11:00	Total: 06044834	Total: 45312961				
12:00	Flow: 35094	Flow: 32651	5918	5918	.85	✓
12:00	Total: 09174060	Total: 45358423			.85	

PUMP OPERATOR ERIC CASH

VERIFIED BY PUMP
COORDINATOR

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET			Month	Day	Year		
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat	
13:00	Flow:	Flow:					
13:00	Total:	Total:					
14:00	Flow:	Flow:					
14:00	Total:	Total:					
15:00	Flow:	Flow:					
15:00	Total:	Total:					
16:00	Flow:	Flow:					
16:00	Total:	Total:					
17:00	Flow:	Flow:					
17:00	Total:	Total:					
18:00	Flow:	Flow:					
18:00	Total:	Total:					
19:00	Flow:	Flow:					
19:00	Total:	Total:					
20:00	Flow:	Flow:					
20:00	Total:	Total:					
21:00	Flow:	Flow:					
21:00	Total:	Total:					
22:00	Flow:	Flow:					
22:00	Total:	Total:					
23:00	Flow:	Flow:					
23:00	Total:	Total:					
24:00	Flow:	Flow:					
24:00	Total:	Total:					

PUMP OPERATOR _____

Date _____

VERIFIED BY PUMP
COORDINATOR _____

Date: _____

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1

Pump Coordinator Roles and Responsibilities

Date / Time

EVENT LOG BOOK

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10/8/2000

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NO L-31 Pumping during the
10/7/15 pump run, cycle as
504 A.F. was not achieved

Bul
[Signature]

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET Month 10 Day 08 Year 2015

Time	West Pump (107942)	Center Pump (107941)	East Pump (107940)	North Canal Level	South Canal Level	System Checks at
00:00	Flow: Total:	Flow: Total:	Flow: Total:			
01:00	Flow: Total:	Flow: Total:	Flow: Total:			
02:00	Flow: Total:	Flow: Total:	Flow: Total:			
03:00	Flow: Total:	Flow: Total:	Flow: Total:			
04:00	Flow: Total:	Flow: Total:	Flow: Total:			
05:00	Flow: Total:	Flow: Total:	Flow: Total:			
06:00	Flow: Total:	Flow: Total:	Flow: Total:			
07:00	Flow: Total:	Flow: Total:	Flow: Total:			
08:00	Flow: Total:	Flow: Total:	Flow: Total:			
09:00	Flow: Total:	Flow: Total:	Flow: Total:			
10:00	Flow: Total:	Flow: Total:	Flow: Total:			
11:00	Flow: Total:	Flow: Total:	Flow: Total:			
12:00	Flow: Total:	Flow: Total:	Flow: Total:			
13:00	Flow: Total:	Flow: Total:	Flow: Total:			
14:00	Flow: Total:	Flow: Total:	Flow: Total:			
15:00	Flow: Total:	Flow: Total:	Flow: Total:			
16:00	Flow: Total:	Flow: Total:	Flow: Total:			
17:00	Flow: Total:	Flow: Total:	Flow: Total:			
18:00	Flow: Total:	Flow: Total:	Flow: Total:			
19:00	Flow: Total:	Flow: Total:	Flow: Total:			
20:00	Flow: Total:	Flow: Total:	Flow: Total:			
21:00	Flow: Total:	Flow: Total:	Flow: Total:			
22:00	Flow: Total:	Flow: Total:	Flow: Total:			
23:00	Flow: Total:	Flow: Total:	Flow: Total:			
23:59	Flow: Total:	Flow: Total:	Flow: Total:			

LESS THAN 504
NO WATER ALLOTTED

Nannette Sweeney
Nannette Sweeney

10/08/15

**INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM
ATTACHMENT 3**

SOUTH PUMP STATION HOURLY LOG SHEET				Month 10	Day 08	Year 2015
Time	North Pump (107944)	South Pump (107939)		North Canal Level	South Canal Level	System Check Sat
00:00	Flow: Total:	Flow: Total:				
01:00	Flow: Total:	Flow: Total:				
02:00	Flow: Total:	Flow: Total:				
03:00	Flow: Total:	Flow: Total:				
04:00	Flow: Total:	Flow: Total:				
05:00	Flow: Total:	Flow: Total:				
06:00	Flow: Total:	Flow: Total:				
07:00	Flow: Total:	Flow: Total:				
08:00	Flow: Total:	Flow: Total:				
09:00	Flow: Total:	Flow: Total:				
10:00	Flow: Total:	Flow: Total:				
11:00	Flow: Total:	Flow: Total:				
12:00	Flow: Total:	Flow: Total:				
13:00	Flow: Total:	Flow: Total:				
14:00	Flow: Total:	Flow: Total:				
15:00	Flow: Total:	Flow: Total:				
16:00	Flow: Total:	Flow: Total:				
17:00	Flow: Total:	Flow: Total:				
18:00	Flow: Total:	Flow: Total:				
19:00	Flow: Total:	Flow: Total:				
20:00	Flow: Total:	Flow: Total:				
21:00	Flow: Total:	Flow: Total:				
22:00	Flow: Total:	Flow: Total:				
23:00	Flow: Total:	Flow: Total:				
23:59	Flow: Total:	Flow: Total:				

LESS THAN 504

NO WATER ALLOTTED

Nannette Sweeney
Nannette Sweeney

10/08/15

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Date:

Approved:

Date:

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps

North Station
10/8 Pump Run

Nan Sweeney - Nights
Pikie Ingram - Days

10/8 pump

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Bryan Ingram

ATTACHMENT 2

Run

NORTH PUMPING STATION HOURLY LOG SHEET									
Month <u>10</u> Day <u>9</u> Year <u>15</u>									
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level (North of 344 St)	South Canal Level (South of 344 St)	System Checks Sat
00:00	Flow:	Flow:	Flow:						
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:						
1:00	Total:	Total:	Total:						
2:00 2:24	Flow: 21521	Flow: ERROR	Flow: ERROR	576	576	576	.4	.85	✓
2:00	Total: 259477	Total:	Total:						
3:00	Flow: 28527	Flow: ERROR	Flow: ERROR	576	576	576	.4	.85	✓
3:00	Total: 1006222	Total:	Total:						
4:00	Flow: 22830	Flow: ERROR	Flow: ERROR	576	576	576	.4	.85	✓
4:00	Total: 2473132	Total:	Total:						
5:00	Flow: 22590	Flow: ERROR	Flow: ERROR	576	576	576	.4	.85	✓
5:00	Total: 3835688	Total:	Total:						
6:00	Flow: 22297	Flow: ERROR	Flow: ERROR	576	576	576	.6	.9	✓
6:00	Total: 5228959	Total:	Total:	600Hz	600Hz	600Hz			
7:00	Flow: 22425	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
7:00	Total: 6570834	Total:	Total:						
8:00	Flow: 22572	Flow: ERROR	Flow: ERROR	576	576	576	.7	.1	✓
8:00	Total: 7917522	Total:	Total:						
9:00	Flow: 22537	Flow: ERROR	Flow: ERROR	576	576	576	.7	.1	✓
9:00	Total: 9288260	Total:	Total:						
10:00	Flow: 22729	Flow: ERROR	Flow: ERROR	576	576	576	.7	.1	✓
10:00	Total: 10635188	Total:	Total:						
11:00	Flow: 22409	Flow: ERROR	Flow: ERROR	576	576	576	.7	.1	✓
11:00	Total: 11969166	Total:	Total:						
11:58 11:58	Flow: 23016	Flow: ERROR	Flow: ERROR	576	576	576	.7	.1	✓
12:00 12:00	Total: 13177052	Total:	Total:						

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET				Month	Day	Year			
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat.
13:00	Flow:	Flow:	Flow:						
13:00	Total:	Total:	Total:						
14:00	Flow:	Flow:	Flow:						
14:00	Total:	Total:	Total:						
15:00	Flow:	Flow:	Flow:						
15:00	Total:	Total:	Total:						
16:00	Flow:	Flow:	Flow:						
16:00	Total:	Total:	Total:						
17:00	Flow:	Flow:	Flow:						
17:00	Total:	Total:	Total:						
18:00	Flow:	Flow:	Flow:						
18:00	Total:	Total:	Total:						
19:00	Flow:	Flow:	Flow:						
19:00	Total:	Total:	Total:						
20:00	Flow:	Flow:	Flow:						
20:00	Total:	Total:	Total:						
21:00	Flow:	Flow:	Flow:						
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:						
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:						
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP
OPERATORVERIFIED BY PUMP
COORDINATOR

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Patricia Ward

Date:

10/1/15

Approved:

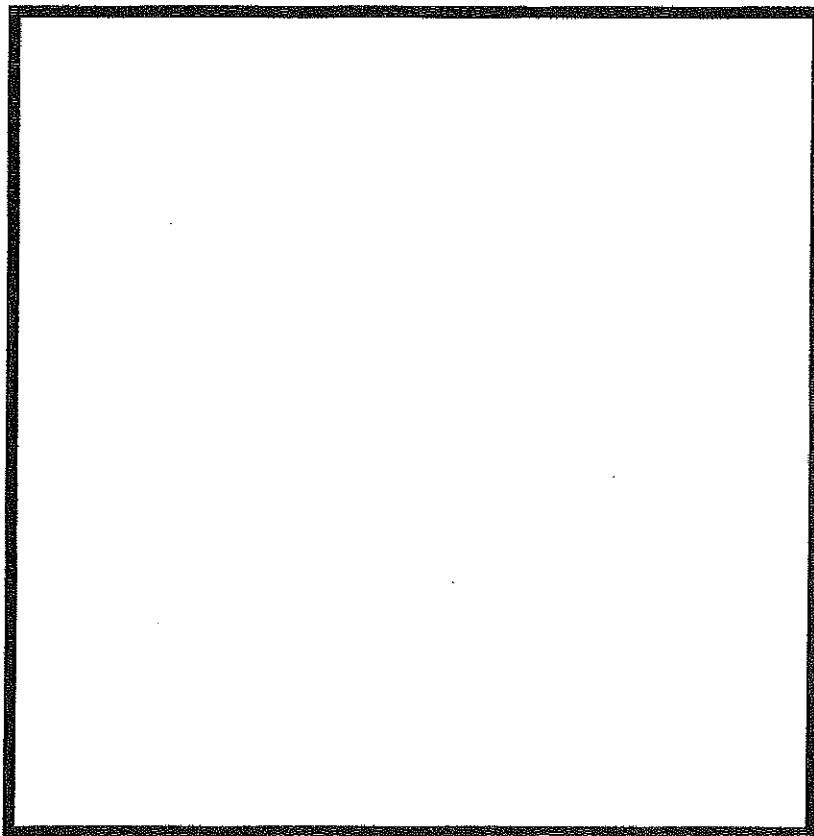
Paul Smith

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
Month <u>10</u> Day <u>09</u> Year <u>2015</u>						
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat.
00:00	Flow:	Flow:				
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00	Flow:	Flow:				
2:00	Total:	Total:				
3:00	Flow: 33579	Flow: 30466	598	598	.8	✓
3:00	Total: 09125254	Total: 46074961				
4:00	Flow: 32025	Flow: 30876	598	598	.8	✓
4:00	Total: 358618	Total: 4687370				
5:00	Flow: 33662	Flow: 30670	598	598	.8	✓
5:00	Total: 2373535	Total: 460410657				
6:00	Flow: 33705	Flow: 31313	598	598	.8	✓
6:00	Total: 47018545	Total: 51713632				
7:00	Flow: 33644	Flow: 31432	598	598	.8	✓
7:00	Total: 6241370	Total: 53621320				
8:00	Flow: 33542	Flow: 30275			.8	✓
8:00	Total: 6354055	Total: 57302240	598	598		
9:00	Flow: 33401	Flow: 30275	598	598	.8	✓
9:00	Total: 103565441	Total: 57302240				
10:00	Flow: 33406	Flow: 32142	598	598	.8	✓
10:00	Total: 12401947	Total: 59196106				
11:00	Flow: 36285	Flow: 32128	598	598	.8	✓
11:00	Total: 14950360	Total: 6092235				
12:00	Flow: 36146	Flow: ERROR LOG	598	598	.8	✓
12:00	Total: 16266500	Total: ERROR LOG			.8	

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COORDINATOR

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET			Month	Day	Year		
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat	
13:00	Flow:	Flow:					
13:00	Total:	Total:					
14:00	Flow:	Flow:					
14:00	Total:	Total:					
15:00	Flow:	Flow:					
15:00	Total:	Total:					
16:00	Flow:	Flow:					
16:00	Total:	Total:					
17:00	Flow:	Flow:					
17:00	Total:	Total:					
18:00	Flow:	Flow:					
18:00	Total:	Total:					
19:00	Flow:	Flow:					
19:00	Total:	Total:					
20:00	Flow:	Flow:					
20:00	Total:	Total:					
21:00	Flow:	Flow:					
21:00	Total:	Total:					
22:00	Flow:	Flow:					
22:00	Total:	Total:					
23:00	Flow:	Flow:					
23:00	Total:	Total:					
24:00	Flow:	Flow:					
24:00	Total:	Total:					

PUMP OPERATOR _____

Date: _____

VERIFIED BY PUMP
COORDINATOR _____

Date: _____

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1

Pump Coordinator Roles and Responsibilities

10/9/15

Pump Run

Date / Time

EVENT LOG BOOK

Page 1 of 1

10/10/10200	Check Wildlife, prep Stations for pumping	
10/10/10220	Started North Pumps	
10/10/10225	Started South Pumps	
10/10/10300	North Station Pumped	2,542,880 gals
10/10/10300	South Station Pumped	2,272,795 gals
10/10/10400	North Station Pumped	3,768,420 gals
10/10/10400	South Station Pumped	3,957,600 gals
10/10/10500	North Station Pumped	3,776,400 gals
10/10/10500	South Station Pumped	3,962,280 gals
10/10/10600	North Station Pumped	3,787,620 gals
10/10/10600	South Station Pumped	3,954,270 gals
10/10/10700	North Station Pumped	3,803,130 gals
10/10/10700	South Station Pumped	4,002,090 gals
10/10/10800	North Station Pumped	3,805,590 gals
10/10/10800	South Station Pumped	3,970,380 gals
10/10/10900	North Station Pumped	3,812,160 gals
10/10/10900	South Station Pumped	3,896,370 gals
10/10/11000	North Station Pumped	3,811,110 gals
10/10/11000	South Station Pumped	3,963,420 gals
10/10/11100	North Station Pumped	3,811,170 gals
10/10/11100	South Station Pumped	4,131,270 gals
10/10/11155	North Station Pumped	3,506,102 gals
10/10/11	South Station Pumped	2,103,810 gals

10/10/12100 Total For North Station Pump Cycle = 36,424,587

10/10/12100 Total gals pumped into the CCS S. station = 36,217,285

10-10-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Patricia Ward

Date:

10/1/15

Approved:

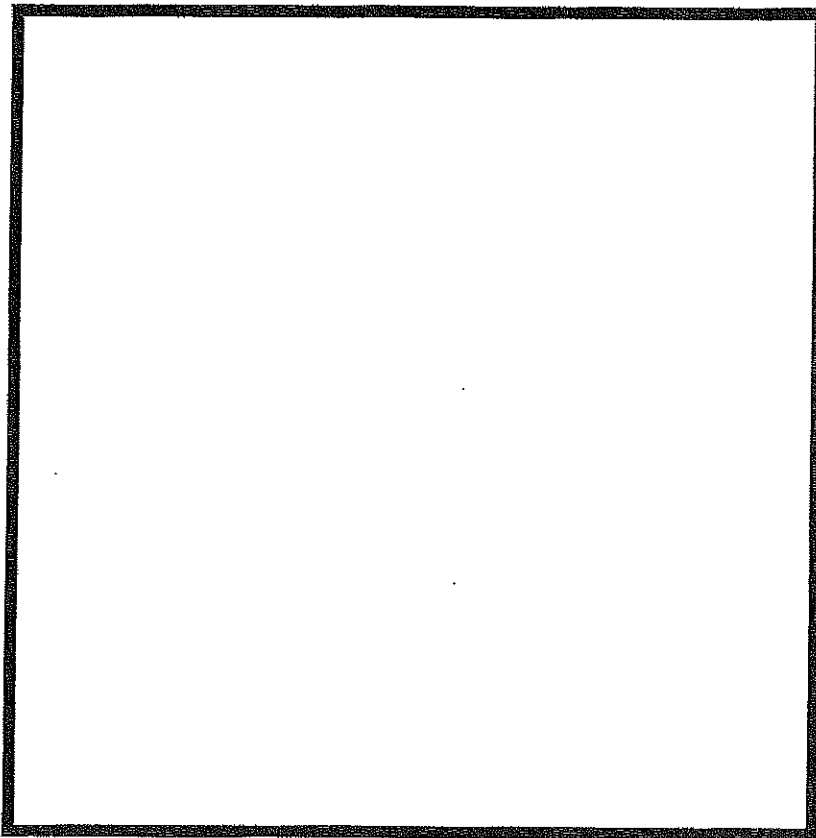
Patricia Ward

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

10/9 Pump Run

SOUTH PUMP STATION HOURLY LOG SHEET						
		Month	Day	Year		
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat
00:00	Flow:	Flow:				
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00 02:25	Flow: 33056	Flow: 30801	598	598	0.85	✓
2:00 02:25	Total: 16387003	Total: 61374410				
3:00	Flow: 33056	Flow: 32960	619	619	0.85	✓
3:00	Total: 16603722	Total: 62479399				
4:00	Flow: 33056	Flow: 32847	619	619	0.85	✓
4:00	Total: 16733466	Total: 64446746				
5:00	Flow: 33056	Flow: 33117	619	619	0.85	✓
5:00	Total: 16951863	Total: 66539090				
6:00	Flow: 35296	Flow: 31340	619	619	0.85	✓
6:00	Total: 17665553	Total: 67722880				
7:00	Flow: 35202	Flow: 31565	619	619	0.85	✓
7:00	Total: 19543549	Total: 69601167				
8:00	Flow: 34542	Flow: 31037	609	609	0.85	✓
8:00	Total: 21357954	Total: 71488879				
9:00	Flow: 33351	Flow: 30949	609	609	0.85	✓
9:00	Total: 23044732	Total: 73345362				
10:00	Flow: 34782	Flow: 33032	609	609	0.85	✓
10:00	Total: 24997851	Total: 75284311				
11:00	Flow: 36886	Flow: 33009	609	609	0.85	✓
11:00	Total: 26615407	Total: 77008409				
12:00 11:30	Flow: 37214	Flow: 33146	609	609	0.85	✓
12:00 11:30	Total: 27711546	Total: 77648080				

PUMP OPERATOR E. Cash

Page 22 of 24

VERIFIED BY PUMP
OPERATOR

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
			Month	Day	Year	
Time	North Pump (107944)	South Pump (107939)	RPM No Pump	RPM So Pump	South Canal Level	System Checks Sat
13:00	Flow:	Flow:				
13:00	Total:	Total:				
14:00	Flow:	Flow:				
14:00	Total:	Total:				
15:00	Flow:	Flow:				
15:00	Total:	Total:				
16:00	Flow:	Flow:				
16:00	Total:	Total:				
17:00	Flow:	Flow:				
17:00	Total:	Total:				
18:00	Flow:	Flow:				
18:00	Total:	Total:				
19:00	Flow:	Flow:				
19:00	Total:	Total:				
20:00	Flow:	Flow:				
20:00	Total:	Total:				
21:00	Flow:	Flow:				
21:00	Total:	Total:				
22:00	Flow:	Flow:				
22:00	Total:	Total:				
23:00	Flow:	Flow:				
23:00	Total:	Total:				
24:00	Flow:	Flow:				
24:00	Total:	Total:				

PUMP OPERATOR

Date:

VERIFIED BY PUMP
COORDINATOR

Date:

10-10-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Calvin Ward

Date:

10/1/15

Approved:

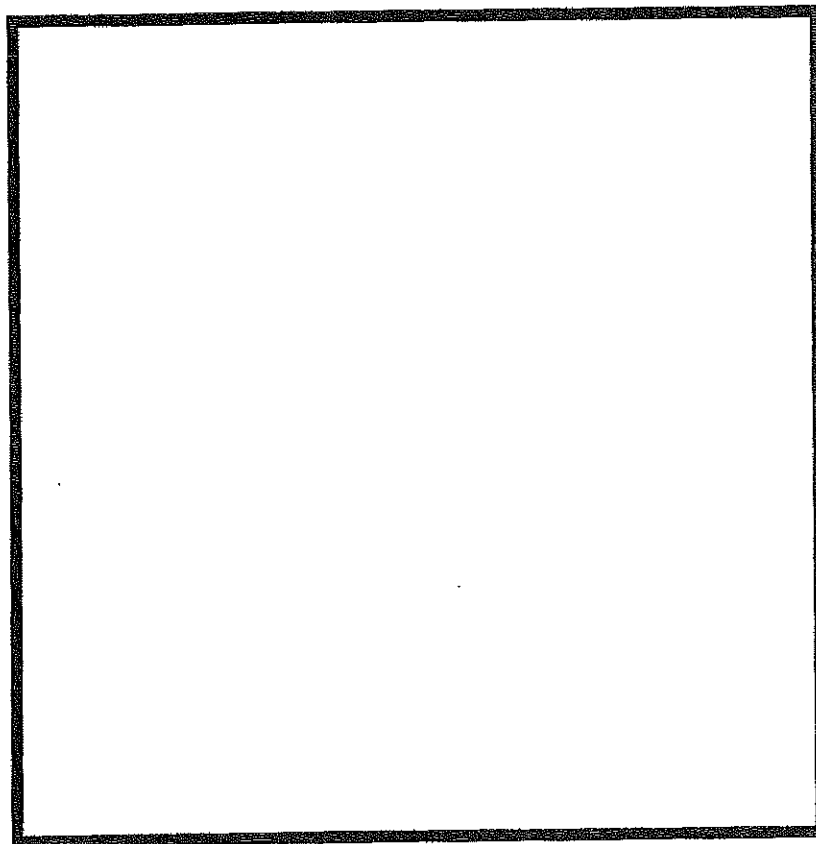
Paul Smith

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Bryan Ingram

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET				Month	Day	Year			
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
00:00	Flow:	Flow:	Flow:						
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:				.50	.90	✓
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:				.40	.90	✓
0220	23452	ERROR	19916	576	576	576			
2:00	Total:	Total:	Total:						
	13256314	ERROR	73456543						
3:00	Flow:	Flow:	Flow:				.40	.90	✓
	21989	ERROR	19586	576	576	576			
3:00	Total:	Total:	Total:						
	14121941	ERROR	74205366						
4:00	Flow:	Flow:	Flow:				.40	.90	✓
	22436	ERROR	19409	576	576	576			
4:00	Total:	Total:	Total:						
	15484712	ERROR	75403259						
5:00	Flow:	Flow:	Flow:				.40	.90	✓
	22452	ERROR	19390	576	576	576			
5:00	Total:	Total:	Total:						
	16813879	ERROR	76567842						
6:00	Flow:	Flow:	Flow:				.5	.9	✓
	22691	ERROR	19521	576	576	576			
6:00	Total:	Total:	Total:						
	17966675	ERROR	77623646	60Hz	60Hz	60Hz			
7:00	Flow:	Flow:	Flow:				.6	.9	✓
	22665	ERROR	19694	576	576	576			
7:00	Total:	Total:	Total:						
	19298996	ERROR	78712638						
8:00	Flow:	Flow:	Flow:				.7	.9	✓
	22642	ERROR	19652	576	576	576			
8:00	Total:	Total:	Total:						
	20659364	ERROR	79948006						
9:00	Flow:	Flow:	Flow:				.7	.9	✓
	22719	ERROR	19859	576	576	576			
9:00	Total:	Total:	Total:						
	22036158	ERROR	81140535						
10:00	Flow:	Flow:	Flow:				.75	.9	✓
	22488	ERROR	19771	576	576	576			
10:00	Total:	Total:	Total:						
	23385357	ERROR	82329752	60Hz	60Hz	60Hz			
11:00	Flow:	Flow:	Flow:				.8	.9	✓
	22718	ERROR	19862	576	576	576			
11:00	Total:	Total:	Total:						
	24738214	ERROR	83516931						
11:55	Flow:	Flow:	Flow:				.8	.9	✓
	22835	ERROR	19898	576	576	576			
12:00	Total:	Total:	Total:						
	25915278	ERROR	94555947						

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

NORTH PUMPING STATION HOURLY LOG SHEET				Month	Day	Year			
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
13:00	Flow:	Flow:	Flow:						
13:00	Total:	Total:	Total:						
14:00	Flow:	Flow:	Flow:						
14:00	Total:	Total:	Total:						
15:00	Flow:	Flow:	Flow:						
15:00	Total:	Total:	Total:						
16:00	Flow:	Flow:	Flow:						
16:00	Total:	Total:	Total:						
17:00	Flow:	Flow:	Flow:						
17:00	Total:	Total:	Total:						
18:00	Flow:	Flow:	Flow:				.80	.90	✓
18:00	Total:	Total:	Total:						
19:00	Flow:	Flow:	Flow:						
19:00	Total:	Total:	Total:						
20:00	Flow:	Flow:	Flow:						
20:00	Total:	Total:	Total:						
21:00	Flow:	Flow:	Flow:						
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:						
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:						
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP

OPERATOR *N. [Signature]*

VERIFIED BY PUMP

COORDINATOR

Pump Run 10/10/15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1

Pump Coordinator Roles and Responsibilities

Date / Time	EVENT LOG BOOK	Page 1 of 1
10/11 /	checked Wildlife, prep. STATION for pumping	
10/11 / 0235	STARTED NORTH Pumps	
10/11 / 0240	STARTED SOUTH Pumps	
10/11 / 0300	NORTH STATION Pumped	1,648,775
10/11 / 0300	SOUTH STATION Pumped	1,307,780
10/11 / 0400	NORTH STATION Pumped	3,948,540
10/11 / 0400	SOUTH STATION Pumped	3,954,960
10/11 / 0500	NORTH STATION Pumped	3,915,780
10/11 / 0500	SOUTH STATION Pumped	3,985,620
10/11 / 0600	NORTH STATION Pumped	3,840,390
10/11 / 0600	SOUTH STATION Pumped	4,000,830
10/11 / 0700	North Station Pumped	3,900,630
10/11 / 0700	South Station Pumped	3,996,480
10/11 / 0715	Turned South station Hz down From 58 Hz to 57 Hz.	
10/11 / 0800	North station Pumped	3,895,530
10/11 / 0800	South station Pumped	3,936,330
10/11 / 0900	North station Pumped	3,891,180
10/11 / 0900	South station Pumped	3,856,770
10/11 / 1000	North station Pumped	3,894,450
10/11 / 1000	South station Pumped	3,908,700
10/11 / 1011	Turned Hz up to 58 Hz From 57 Hz South Station	
10/11 / 1100	North station Pumped	3,903,300
10/11 / 1100	South station Pumped	4,089,330
10/11 / 1200	North station Pumped	3,562,790
10/11 / 1200	South station Pumped	3,225,563
10/11 /	North station Pumped Total	36,401,920 gal
10/11 /	South station Pumped Total	36,262,363 gal
10/11 /		
10/11 /		
10/11 /		
10/11 /		
10/11 /		
10/11 /		
10/11 /		

Pump Run 10/10/15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

operators

Kyle Carr
Andrew Cooper

Revision No. 08

Author:

Cathy Ward

Date:

10/1/15

Approved:

Paul Smith

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps

Total water Pumped
into the
CCS- 36,262,363 gals

Document on the log sheet periodic maintenance/lubrication and pump level changes.
Every hour check out the system for the following and document on the hourly log sheet:

- i) External leakage
- ii) Signs of shore erosion
- iii) Excessive pipe movement
- iv) Intake Grass or debris/wildlife approach
- v) Erratic pump motor amperage ($> \pm 10\%$ of benchmark full flow value)

Page of

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET			Month	Day	Year		
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM So. Pump	South Canal Level	System Checks Sat	
00:00	Flow:	Flow:					
00:00	Total:	Total:					
1:00	Flow:	Flow:					
1:00	Total:	Total:					
2:00 2:40	Flow: 84287	Flow: 30677	609	609	0.85	✓	
2:00 2:40	Total: 27849352	Total: 77773147			0.85		
3:00	Flow: 34339	Flow: 81475	609	609	0.85	✓	
3:00	Total: 28241760	Total: 78268684					
4:00	Flow: 32676	Flow: 31342	609	609	0.85	✓	
4:00	Total: 29579108	Total: 80107844					
5:00	Flow: 35860	Flow: 31976	609	609	0.85	✓	
5:00	Total: 30482587	Total: 82016927					
6:00	Flow: 34450	Flow: 32075	609	609	0.85	✓	
6:00	Total: 32196972	Total: 83930764					
7:00	Flow: 34529	Flow: 32162	609	609	0.85	✓	
7:00	Total: 34103966	Total: 8582100					
8:00	Flow: 33102	Flow: 31418	598	598	0.85	✓	
8:00	Total: 35392956	Total: 87724775					
9:00	Flow: 33805	Flow: 30234	598	598	0.85	✓	
9:00	Total: 37405478	Total: 89553572					
10:00	Flow: 34270	Flow: 31981	598	598	0.85	✓	
10:00	Total: 38966182	Total: 91419590	609	609	0.85		
11:00	Flow: 36984	Flow: 33071	609	609	0.85	✓	
11:00	Total: 41120898	Total: 93329270					
12:00	Flow:	Flow:					
12:00	Total:	Total:					

PUMP OPERATOR Kyle Carr

VERIFIED BY PUMP

PumpRun 10-10-15

Debbie Cooper
Brian Ingraham

Rev 8, 10/01/2015

JECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Calvin Ward

Date:

10/1/15

Approved:

Paul Smith

Date:

10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps

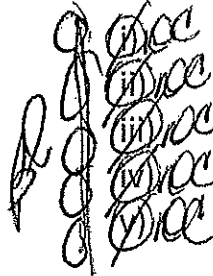
Total water Pumped
North Station
36,401,920 gals

South Station
~~36,262,363~~^{4C}
36,262,363 gals

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2
 North Pump Operator Roles and Responsibilities

Document on the log sheet periodic maintenance/lubrication and pump level changes.
 Every hour Check out the system for the following and document on the hourly log sheet:

- 
 External leakage
 Signs of shore erosion
 Excessive pipe movement
 Intake Grate fouling or debris/wildlife approach
 Erratic pump motor amperage ($> \pm 10\%$ of benchmark full flow value)

Date / Time	EVENT LOG BOOK			Page _ of _
10-11/0235	SD4 A/F reached North pump station starts pumps.			
/	Center flow meter/totalizer reads ERROR 0010. West			
/	pump flow meter/totalizer reads ERROR 0010. All			
/	other readings within normal limits. South pump			
/	Station begins pumps at 0240.			
10300	no changes noted.			
10400	no changes noted.			
10500	no changes noted.			
10600	Check all pumps and RT tubes			
10700	SAME			
/	EAST	CENTER	WEST	
/	60 Hz	60 Hz	60 Hz	
/	cur 65.9	cur 60.9	cur 61.9 A	
/	BUS 648	BUS 644 VDC	BUS 648 VDC	
/	VDC			
10800	Check pumps and RTubes. Check for wildlife,			
/	grass and debris			
10900	SAME			
11000	SAME			
11100	SAME			
11155	All pumps off at 11:55 Two back flushing			
/	of the pumps. One minute each time. No wildlife			
/	grass and debris around pumps			

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

Bryan Ingram

NORTH PUMPING STATION HOURLY LOG SHEET Month 10 Day 11 Year 15									
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St.	South Canal Level South of 344 St.	System Checks Sat
00:00	Flow:	Flow:	Flow:						
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:				.60	.90	✓
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:						
0235	23428	ERROR	ERROR	576	576	576	.55	.90	✓
2:00	Total:	Total:	Total:						
	26027109	ERROR	ERROR						
3:00	Flow:	Flow:	Flow:						
	23874	ERROR	ERROR	576	576	576	.40	.90	✓
3:00	Total:	Total:	Total:						
	26580806	ERROR	ERROR						
4:00	Flow:	Flow:	Flow:						
	23344	ERROR	ERROR	576	576	576	.40	.90	✓
4:00	Total:	Total:	Total:						
	27996094	ERROR	ERROR						
5:00	Flow:	Flow:	Flow:						
	22782	ERROR	ERROR	576	576	576	.40	.90	✓
5:00	Total:	Total:	Total:						
	29366948	ERROR	ERROR						
6:00	Flow:	Flow:	Flow:						
	22831	ERROR	ERROR	576	576	576	.55	.9	✓
6:00	Total:	Total:	Total:						
	30768295	ERROR	ERROR	6042	6042	6042			
7:00	Flow:	Flow:	Flow:						
	22790	ERROR	ERROR	576	576	576	.6	.9	✓
7:00	Total:	Total:	Total:						
	3249567	ERROR	ERROR						
8:00	Flow:	Flow:	Flow:						
	22661	ERROR	ERROR	576	576	576	.6	.9	✓
8:00	Total:	Total:	Total:						
	33458184	ERROR	ERROR						
9:00	Flow:	Flow:	Flow:						
	22645	ERROR	ERROR	576	576	576	.7	.9	
9:00	Total:	Total:	Total:						
	34642764	ERROR	ERROR						
10:00	Flow:	Flow:	Flow:						
	22770	ERROR	ERROR	576	576	576	.7	.9	✓
10:00	Total:	Total:	Total:						
	36211627	ERROR	ERROR						
11:00	Flow:	Flow:	Flow:						
	22940	ERROR	ERROR	576	576	576	.75	.9	✓
11:00	Total:	Total:	Total:						
	37576448	ERROR	ERROR						
11:55	Flow:	Flow:	Flow:						
	22616	ERROR	ERROR	576	576	576	.75	.9	✓
12:00	Total:	Total:	Total:						
	38715209	ERROR	ERROR						

PUMP OPERATOR: [Signature]

VERIFIED BY PUMP
COORDINATOR: A. Cooper

Pump Coordinator Roles and Responsibilities

10/17

Pump Run

Page _ of _

EVENT LOG BOOK

Set South Station up for pumping

set North Station up for pumping

performed wildlife checks, All clear

Started North pumps

Started South pumps

North Pump Station pumped 2,723,112

South pump Station pumped 2,486,326

South Pump Station Pumped 4,038,780

North Pump Station pumped 3,906,960

North Pump Station Pumped 3,909,180

South pump Station pumped 4,056,990

North Station Pumped = 3,914,580

South Station Pumped = 4,098,480

North Station Pumped = 3,921,150

South station Pumped = 4,099,590

North Station Pumped = 3,914,460

South station Pumped = 4,066,8

North : Static Pumped = 3903.390

South Station Pumped = 4,105,020

North Station Pumped = 3,909,390

South Static Pumped = 4,229,380

North Station Pump = 3, 586, 770
South Station Pump = 2, 512, 437

South Station Pumped = 2,503,427

Total Gallons Pumped North Station = 33,628.892

Total Gallons Pumped Into CCS (South Station) = 33,683,385

10-12-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

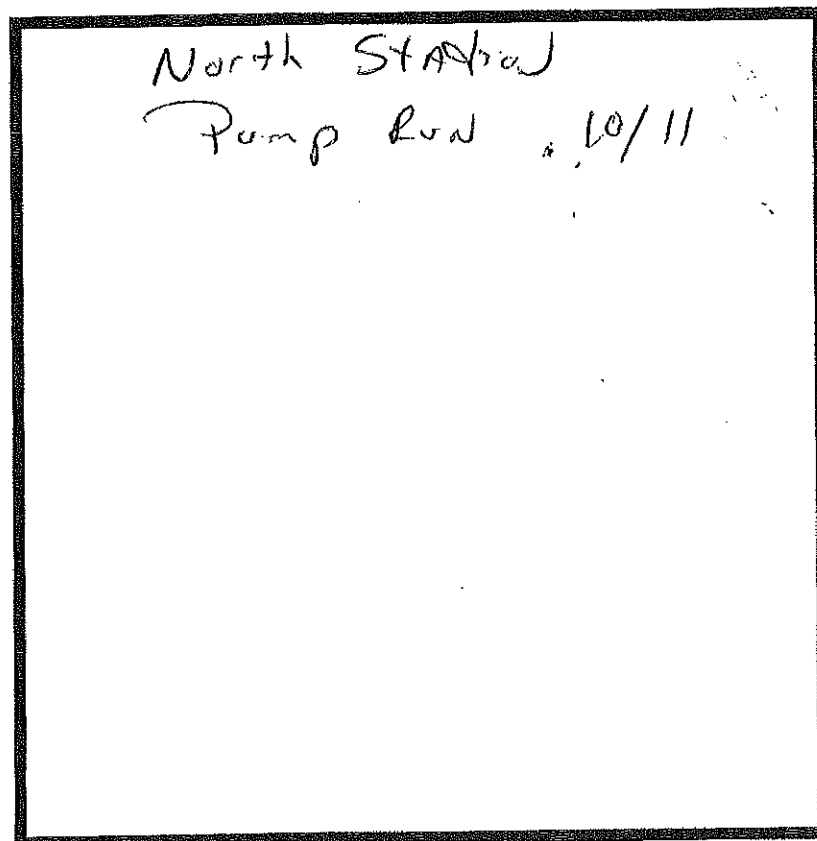
Revision No. 08

Author: Calvin Ward Date: 10/1/15

Approved: Paul Dwyer Date: 10/1/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps



INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 2

Bryan Ingram

NORTH PUMPING STATION HOURLY LOG SHEET									
Month <u>10</u> Day <u>12</u> Year <u>15</u>									
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 244 St	South Canal Level South of 344 St	System Checks Sat
00:00	Flow:	Flow:	Flow:						
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:						
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:				.55	.90	✓
2:00	Total:	Total:	Total:						
3:00	Flow:	Flow:	Flow:				.45	.90	✓
03:10	22196	ERROR	ERROR	576	576	576			
3:00	Total:	Total:	Total:						
	38177252	ERROR	ERROR						
4:00	Flow:	Flow:	Flow:				.40	.90	✓
4:00	Total:	Total:	Total:						
	39432658	ERROR	ERROR						
5:00	Flow:	Flow:	Flow:				.55	.90	✓
5:00	Total:	Total:	Total:						
	40997128	ERROR	ERROR						
6:00	Flow:	Flow:	Flow:				.6	.9	✓
6:00	Total:	Total:	Total:						
	42401387	ERROR	ERROR	576	576	576			
7:00	Flow:	Flow:	Flow:				.7	.9	✓
7:00	Total:	Total:	Total:						
	43767358	ERROR	ERROR	576	576	576			
8:00	Flow:	Flow:	Flow:				.7	.9	✓
8:00	Total:	Total:	Total:						
	45145591	ERROR	ERROR	576	576	576			
9:00	Flow:	Flow:	Flow:				.7	.9	✓
9:00	Total:	Total:	Total:						
	46523923	ERROR	ERROR	576	576	576			
10:00	Flow:	Flow:	Flow:				.7	.9	✓
10:00	Total:	Total:	Total:						
	47864797	ERROR	ERROR	576	576	576			
11:00	Flow:	Flow:	Flow:				.7	.9	✓
11:00	Total:	Total:	Total:						
	49224200	ERROR	ERROR	576	576	576			
11:55	Flow:	Flow:	Flow:				.7	.9	✓
	22678	ERROR	ERROR	576	576	576			
	Total:	Total:	Total:						
	50446438	ERROR	ERROR						

PUMP OPERATOR: W. B. Cooper
10-12-15VERIFIED BY PUMP
COORDINATOR

Date:

NORTH PUMPING STATION HOURLY LOG SHEET				Month	Day	Year			
Time	East Pump (107942)#3	Center Pump (107941)#2	West Pump (107940)#1	RPM East Pump	RPM Center Pump	RPM West Pump	North Canal Level North of 344 St	South Canal Level South of 344 St	System Checks Sat
13:00	Flow:	Flow:	Flow:						
13:00	Total:	Total:	Total:						
14:00	Flow:	Flow:	Flow:						
14:00	Total:	Total:	Total:						
15:00	Flow:	Flow:	Flow:						
15:00	Total:	Total:	Total:						
16:00	Flow:	Flow:	Flow:						
16:00	Total:	Total:	Total:						
17:00	Flow:	Flow:	Flow:						
17:00	Total:	Total:	Total:						
18:00	Flow:	Flow:	Flow:				.55	.90	✓
18:00	Total:	Total:	Total:						
19:00	Flow:	Flow:	Flow:						
19:00	Total:	Total:	Total:						
20:00	Flow:	Flow:	Flow:						
20:00	Total:	Total:	Total:						
21:00	Flow:	Flow:	Flow:						
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:						
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:						
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP OPERATOR Arthur Cooper
12-11-48

SECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author: Patricia Ward Date: 10/11/15

Approved: Paul Sweeney Date: 10/11/15

Revision 7: Added RPM Columns for North and South Pumping Stations in Procedure.

Revision 8: Added requirement for validating CCS level margin prior to starting L31 pumps

South Station
10/11 Pump Run

Nan Sweeney - N
Eric Cash - D

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
Month <u>10</u> Day <u>12</u> Year <u>2015</u>						
Time	North Pump (107944)	South Pump (107939)	RPM No. Pump	RPM Sb. Pump	South Canal Level	System Checks Sat.
00:00	Flow:	Flow:				
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00	Flow:	Flow:				
2:00	Total:	Total:				
3:00	Flow:	Flow:				
3:23	34624	32235	619	619	.9	✓
3:00	Total:	Total:				
3:29	42829747	94880235				
4:00	Flow:	Flow:				
4:00	ERROR	32909	619	619	.9	✓
4:00	Total:	Total:				
4:00		96012680				
5:00	Flow:	Flow:				
5:00	35256	31834	619	619	.9	✓
5:00	Total:	Total:				
5:00	44262067	97948022				
6:00	Flow:	Flow:				
6:00	0	32887	619	619	.9	✓
6:00	Total:	Total:				
6:00	45407591	999103551				
7:00	Flow:	Flow:				
7:00	55371	33114	619	619	.9	✓
7:00	Total:	Total:				
7:00	416356891	18368161				
8:00	Flow:	Flow:				
8:00	35266	32992	619	619	.9	✓
8:00	Total:	Total:				
8:00	47224224	3891667				
9:00	Flow:	Flow:				
9:00	35384	32011	619	619	.9	✓
9:00	Total:	Total:				
9:00	499946189	5762407				
10:00	Flow:	Flow:				
10:00	35757	33682	619	619	.9	✓
10:00	Total:	Total:				
10:00	50346081	7500361				
11:00	Flow:	Flow:				
11:00	35601	33956	619	619	.9	✓
11:00	Total:	Total:				
11:00	32538901	9509171				
12:00	Flow:	Flow:				
11:35	37658	33837	619	619	.9	✓
12:00	Total:	Total:				
11:35	55680960	10650761				

PUMP OPERATOR

N. Sweeney / 19/12/15

VERIFIED BY PUMP
COORDINATOR

N. Sweeney

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
		Month	Day	Year		
Time	North Pump (107944)	South Pump (107939)	RPM No Pump	RPM So Pump	South Canal Level	System Checks Sat
13:00	Flow:	Flow:				
13:00	Total:	Total:				
14:00	Flow:	Flow:				
14:00	Total:	Total:				
15:00	Flow:	Flow:				
15:00	Total:	Total:				
16:00	Flow:	Flow:				
16:00	Total:	Total:				
17:00	Flow:	Flow:				
17:00	Total:	Total:				
18:00	Flow:	Flow:				
18:00	Total:	Total:				
19:00	Flow:	Flow:				
19:00	Total:	Total:				
20:00	Flow:	Flow:				
20:00	Total:	Total:				
21:00	Flow:	Flow:				
21:00	Total:	Total:				
22:00	Flow:	Flow:				
22:00	Total:	Total:				
23:00	Flow:	Flow:				
23:00	Total:	Total:				
24:00	Flow:	Flow:				
24:00	Total:	Total:				

PUMP OPERATOR

Date: _____

VERIFIED BY PUMP
COORDINATOR

Date: _____