

10-12-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

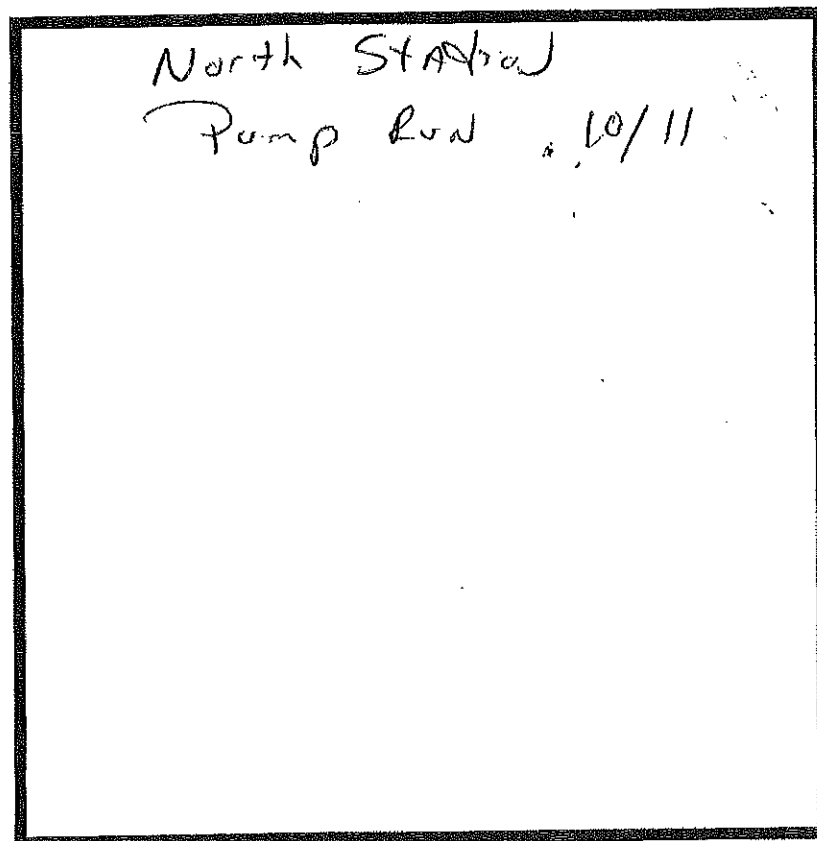
Revision No. 08

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 10 Day 12 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 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	✓
	22875	ERROR	ERROR	576	576	576			
4:00	Total:	Total:	Total:						
	39432658	ERROR	ERROR						
5:00	Flow:	Flow:	Flow:				.55	.90	✓
	22757	ERROR	ERROR	576	576	576			
5:00	Total:	Total:	Total:						
	40997128	ERROR	ERROR						
6:00	Flow:	Flow:	Flow:				.6	.9	✓
	22949	ERROR	ERROR	576	576	576			
6:00	Total:	Total:	Total:						
	42401387	ERROR	ERROR	60HZ	60HZ	60HZ			
7:00	Flow:	Flow:	Flow:				.7	.9	✓
	22937	ERROR	ERROR	576	576	576			
7:00	Total:	Total:	Total:						
	43767358	ERROR	ERROR						
8:00	Flow:	Flow:	Flow:				.7	.9	✓
	23168	ERROR	ERROR	576	576	576			
8:00	Total:	Total:	Total:						
	45145591	ERROR	ERROR						
9:00	Flow:	Flow:	Flow:				.7	.9	✓
	22714	ERROR	ERROR	576	576	576			
9:00	Total:	Total:	Total:						
	46523923	ERROR	ERROR						
10:00	Flow:	Flow:	Flow:				.7	.9	✓
	22799	ERROR	ERROR	576	576	576			
10:00	Total:	Total:	Total:						
	47864797	ERROR	ERROR	60HZ	60HZ	60HZ			
11:00	Flow:	Flow:	Flow:				.7	.9	✓
	22914	ERROR	ERROR	576	576	576			
11:00	Total:	Total:	Total:						
	49224200	ERROR	ERROR						
11:55	Flow:	Flow:	Flow:				.7	.9	✓
	22678	ERROR	ERROR	576	576	576			
	Total:	Total:	Total:						
	50446438	ERROR	ERROR						

PUMP OPERATOR: [Signature]
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 - M

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 3:23	Flow: 34626	Flow: 32235	619	619	.9	✓
3:00 3:29	Total: 42829747	Total: 94880235				
4:00	Flow: ERROR	Flow: 32909	619	619	.9	✓
4:00	Total:	Total: 96012680				
5:00	Flow: 35256	Flow: 31834	619	619	.9	✓
5:00	Total: 44262067	Total: 97948022				
6:00	Flow: 0	Flow: 32887	619	619	.9	✓
6:00	Total: 45407591	Total: 99910355				
7:00	Flow: 35371	Flow: 33114	619	619	.9	✓
7:00	Total: 46356891	Total: 18369161				
8:00	Flow: 35266	Flow: 32992	619	619	.9	✓
8:00	Total: 47224224	Total: 3891667				
9:00	Flow: 35384	Flow: 32011	619	619	.9	✓
9:00	Total: 48998189	Total: 5762407				
10:00	Flow: 35757	Flow: 33682	619	619	.9	✓
10:00	Total: 50346081	Total: 7500361				
11:00	Flow: 35601	Flow: 33956	619	619	.9	✓
11:00	Total: 52538901	Total: 9509171				
12:00 11:35	Flow: 37658	Flow: 33837	619	619	.9	✓
12:00 11:35	Total: 55680960	Total: 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: _____

10/12

Page 7 of 7

EVENT LOG BOOK

Page 1 of 1

10/13/34 Started North pumps
1351 Started South pumps

6/13/0500 North Station pumped 4,862,170

2/13/05 South Station Pumped 4,650,738

01/13/0600 North Station Pumped 3,907,950

0/12/0600 South station Pumped 4,069,050

01/13/0700	North Station Pumped	3,897,840
01/13/0700	North Station Pumped	3,897,840

2/13/2000	South Station Pumped	4,017,720
3/13/2000	North Station Pumped	1,017,720

3/13/0800	North Static Pumped	3,899,610
3/13/0800	South Static Pumped	3,899,610

11/13/08	South	Static	Pumped	4,006,590
11/13/08	North	Static	Pumped	3,201,100

11/13 / 0900	North Station Pumped	3,905,190
11/13 / 1000	South Station Pumped	3,833,100

1/13	1000	South	Station	Temp	3,982	680
2/13	1000	North	Station	Temp	3,982	680

1/13/2000	North Station	Pumped	3,896,970
1/13/2000	South Station	Drain	1,013,500

1/3/1200	300 th SFA 4.0.0	Pumped	4,012,590
1/3/1100	400 th SFA 4.0.0	Pumped	3,992,890

1/13/1100	North Station	Pumped	3,883,890
1/13/1100	South Station	Pumped	4,459,720

2/13/1155	Sub #2 Station	10 mpc	4,039,720
2/13/1155	North Station	Pumped	3 56 1.33

1131	1132	North Station	Imped	3.544	622
1131	1137	South Station	Pumped	3.544	175

9/13/1200 Total gallons pumped by North Station = 31,818,242

1/13/2000 Total gallons pumped by South Stations into CCS = 31,343,263

10-13-15

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:

Phil 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

10/12 / Pump Run

10-13-15

Rev 8, 10/01/2015

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>13</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:				.70	.90	✓
2:00	Total:	Total:	Total:						
3:00	Flow: 24085	Flow: ERROR	Flow: ERROR	576	576	576	.60	.90	✓
0340	Total: 50533079	Total: ERROR	Total: ERROR						
3:00	Flow:	Flow:	Flow:						
3:00	Total:	Total:	Total:						
4:00	Flow:	Flow:	Flow:						✓
4:00	Total:	Total:	Total:						
5:00	Flow: 23125	Flow: ERROR	Flow: ERROR	576	576	576	.45	.90	✓
5:00	Total: 5211217	Total: ERROR	Total: ERROR						
6:00	Flow: 22740	Flow: ERROR	Flow: ERROR	576	576	576	.6	.9	✓
6:00	Total: 53504616	Total: ERROR	Total: ERROR	601Hz	601Hz	601Hz			
7:00	Flow: 22788	Flow: ERROR	Flow: ERROR	576	576	576	.6	.9	✓
7:00	Total: 54887690	Total: ERROR	Total: ERROR						
8:00	Flow: 22847	Flow: ERROR	Flow: ERROR	576	576	576	.6	.9	✓
8:00	Total: 56233416	Total: ERROR	Total: ERROR						
9:00	Flow: 22926	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
9:00	Total: 57630310	Total: ERROR	Total: ERROR						
10:00	Flow: 22573	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
10:00	Total: 58945699	Total: ERROR	Total: ERROR						
11:00	Flow: 22490	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
11:00	Total: 60292813	Total: ERROR	Total: ERROR						
11:55	Flow: 22769	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
12:00	Total: 61428433	Total: ERROR	Total: ERROR						

PUMP OPERATOR

Date

10-13-15

Page 18 of 24

VERIFIED BY PUMP
COORDINATOR

Date:

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>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 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:				.45	.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

Date

Rubie Cooper
10-12-15

Page 19 of 24

VERIFIED BY PUMP

COORDINATOR

Date:

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

South Station
10/12/2015 Pump Run

Nights - Alan Sweeney
Days - Eric Cash

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>13</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:				
00:00	Total:	Total:				
1:00	Flow:	Flow:				
1:00	Total:	Total:				
2:00	Flow:	Flow:				
2:00	Total:	Total:				
3:00 3:51	Flow: 34719	Flow: 32184			.9	✓
3:00 3:51	Total: 53931748	Total: 10722288			.9	✓
4:00 5:00	Flow: 00000	Flow: 33181			.9	✓
4:00 5:00	Total: 55036437	Total: 12714769			.9	✓
5:00 6:00	Flow: 35126	Flow: 32609	619	619	.9	✓
5:00 6:00	Total: 56107723	Total: 14435847			.9	✓
6:00 7:00	Flow: 34418	Flow: 31771	609	609	.9	✓
6:00 7:00	Total: 57255323	Total: 16214826				
7:00 8:00	Flow: 34476	Flow: 32342	609	609	.9	✓
7:00 8:00	Total: 586006038	Total: 18272388				
8:00 9:00	Flow: 59907201	Flow: 31752	609	609	.9	✓
8:00 9:00	Total: 35186	Total: 200572				
9:00 10:00	Flow: 31245	Flow: 32570	609	609	.9	✓
9:00 10:00	Total: 60910121	Total: 21863848				
10:00 11:00	Flow: 3570	Flow: 32739	609	609	.9	✓
10:00 11:00	Total: 63014874	Total: 2386788				
11:00 12:00	Flow: 35919	Flow: 33095	609	609	.9	✓
11:00 12:00	Total: 64328516	Total: 24179600				
12:00	Flow:	Flow:				
12:00	Total:	Total:				

PUMP OPERATOR N. SweeneyDate 10/13/15VERIFIED BY PUMP
COORDINATORN. Sweeney
10/13/15

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

10/12

Date / Time

EVENT LOG BOOK

Page 1 of 7

10/13/1230 performed wildlife checks and prepared
 Stations for pumping
 10/13/1346 Started North pumps
 10/13/1351 Started South pumps
 10/13/10500 North Station pumped 4,862,170
 10/13/1050 South Station pumped 4,650,738
 10/13/10600 North Station Pumped 3,907,950
 10/13/10600 South Station Pumped 4,069,050
 10/13/10700 North Station Pumped 3,897,840
 10/13/10700 South Station Pumped 4,017,720
 10/13/10800 North Station Pumped 3,899,610
 10/13/10800 South Station Pumped 4,006,590
 10/13/10900 North Station Pumped 3,905,190
 10/13/10900 South Station Pumped 3,982,680
 10/13/11000 North Station Pumped 3,896,970
 10/13/11000 South Station Pumped 4,012,590
 10/13/11100 North Station Pumped 3,883,890
 10/13/11100 South Station Pumped 4,059,720
 10/13/1155 North Station Pumped 3,564,622
 10/13/1137 South Station Pumped 2,544,175
 10/13/1200 Total gallons pumped by North Station = 31,818,242
 10/13/1200 Total gallons pumped by South Station into CCS = 31,343,263

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1

Pump Coordinator Roles and Responsibilities

10/13

Pump Run

Date / Time

EVENT LOG BOOK

Page 1 of 1

10/14/0900

Prepared Pump Stations for Pump Run
performed wildlife walk-downs

10/14/1448

Started North Pumps

10/14/1453

Started South Pumps

10/14/10600

North Station Pumped

4,611,960

10/14/10600

South Station Pumped

4,412,149

10/14/0700

North Station Pumped

4,019,070

10/14/0700

South Station Pumped

4,041,900

10/14/0800

North Station Pumped

3,774,390

10/14/0800

South Station Pumped

3,975,210

10/14/0900

North Station Pumped

3,793,890

10/14/0900

South Station Pumped

3,960,390

10/14/1000

North Station Pumped

3,788,250

10/14/1000

South Station Pumped

4,060,830

10/14/1100

North Station Pumped

3,867,210

10/14/1100

South Station Pumped

4,067,370

10/14/1155

North Station Pumped

3,561,882

10/14/1140

South Station Pumped

2,736,960

10/14/1200

Total Pumped by North Station = 27,416,652

10/14/1200

Total Pumped by South Station in CCS = 27,314,809

10-14-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Cathy Ward

Date:

10/1/15

Approved:

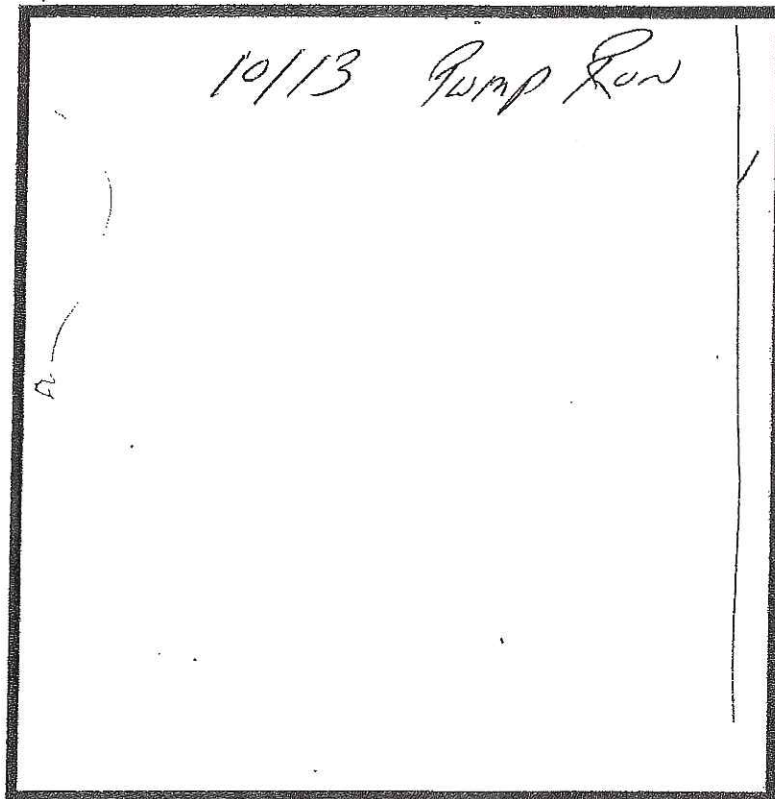
[Signature]

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



10-14-15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Bryan Ingram

ATTACHMENT 2

10/13 Pump Run

NORTH PUMPING STATION HOURLY LOG SHEET

Month 10 Day 14 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:						
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: 24798	Flow: ERROR	Flow: 84635424	574	576	574	.45	.90	✓
0448	Total: 41542190	Total: ERROR	Total: 19382						
6:00	Flow: 22401	Flow: ERROR	Flow: 19328	576	576	576	.5	.9	✓
6:00	Total: 63077839	Total: ERROR	Total: 85974049						
7:00	Flow: 22316	Flow: ERROR	Flow: 19283	576	576	576	.5	.9	✓
7:00	Total: 64430026	Total: ERROR	Total: 87135076						
8:00	Flow: 22470	Flow: ERROR	Flow: 19544	576	576	576	.6	.9	✓
8:00	Total: 65768532	Total: ERROR	Total: 88290412						
9:00	Flow: 22510	Flow: ERROR	Flow: 19739	576	576	576	.7	.9	✓
9:00	Total: 67134727	Total: ERROR	Total: 89336397						
10:00	Flow: 22249	Flow: ERROR	Flow: 19577	576	576	576	.7	.9	✓
10:00	Total: 68469520	Total: ERROR	Total: 89477239						
11:00	Flow: 22263	Flow: ERROR	Flow: 19552	576	576	576	.7	.9	✓
11:00	Total: 69785643	Total: ERROR	Total: 89477239						
11:55	Flow: 22860	Flow: ERROR	Flow: ERROR	576	576	576	.7	.9	✓
11:55	Total: 70956314	Total: ERROR	Total: ERROR						
12:00	Flow:	Flow:	Flow:						
12:00	Total:	Total:	Total:						

PUMP OPERATOR

Date

Bryan Ingram

Page 18 of 24

VERIFIED BY PUMP
COORDINATOR

N. Sweet

Date

10/14

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>13</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:				.50	.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

Dubbu Cooper

10-13-15

VERIFIED BY PUMP

COORDINATOR

Date:

Kyle Carr

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:

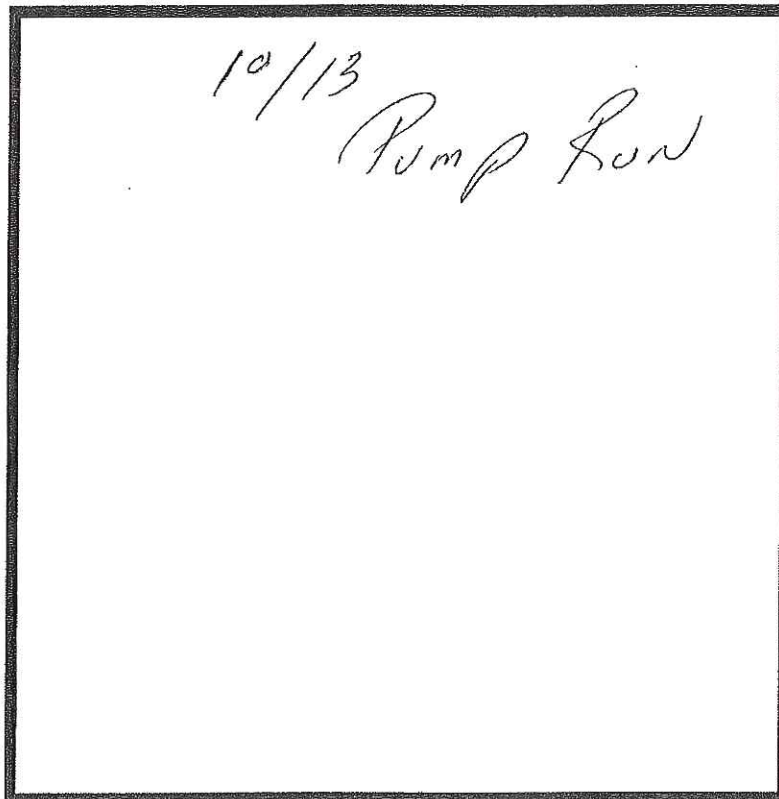
Patricia Ward

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

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	Flow:	Flow:				
2:00	Total:	Total:				
3:00	Flow:	Flow:				
3:00	Total:	Total:				
4:00	Flow:	Flow:				
4:00	Total:	Total:				
4:53	Flow:	Flow:				
4:53	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	Flow:	Flow:				
10:00	Total:	Total:				
11:00	Flow:	Flow:				
11:00	Total:	Total:				
12:00	Flow:	Flow:				
12:00	Total:	Total:				

167 mix + BTP
Pump Run

PUMP OPERATOR

Date

Page 23 of 24

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: _____

Pump Coordinator Roles and Responsibilities

10/16
Pump Run

Page of

Prepared pump Stations for pump runs

performed Wildlife Checks

* Pouring Rain! *

Started North pump

Started South pumps

North station pumped 1,861,275

South Station pumped 1,314,940

South Station pumped 4,022,700

North	Station	pumped	3,777,450
-------	---------	--------	-----------

North Station Pumped 3,780,810

South Station Pumped 4,015,080

North Station Pumped	3,782,760
----------------------	-----------

South Station Pump	3,931,800
North Station Pump	1,272,200

North	Static Pumped	3, 728, 100
South	Subsidence Pumped	3, 009, 000

South	STAYAW	umped	3, 401, 070
North	Solobal	Board	3, 745, 860

North	Station	1000	3, 743, 860
South	Station	1000	3, 932, 830

South	Station	Pumped	3,804.360
-------	---------	--------	-----------

South Station Pumped	3,971,070
----------------------	-----------

North Station Pump 3,794,860

South Station Pumped 3,128,696

Total Gallons Pumped by North Station = 28,276,875

Total Gallons Pumped by South Station Into CCS = 0

28,225 886

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Patricia Ward

Date:

10/1/15

Approved:

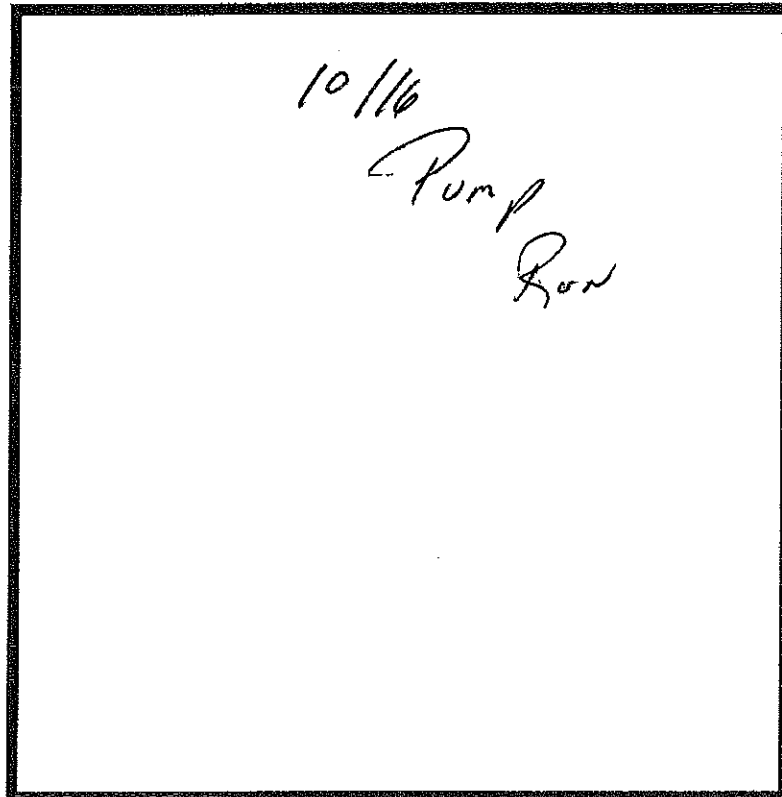
Paul Smith

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



ELZECASH

Rev 8, 10/01/2015

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>17</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: 33607	Flow: 30143	587	578	0.90	✓
4:00	Total: 5454210	Total: 66446800	598			
5:00	Flow: 34343	Flow: 31700	598	598	0.90	✓
5:00	Total: 6609660	Total: 66959936				
6:00	Flow: 35523	Flow: 32524	619	619	.9	✓
6:00	Total: 8152000	Total: 66924890				
7:00	Flow: 34100	Flow: 31698	598	598	.9	✓
7:00	Total: 10223789	Total: 70836469				
8:00	Flow: 31426	Flow: 30845	598	598	.9	✓
8:00	Total: 12246077	Total: 72696146				
9:00	Flow: 34135	Flow: 30897	598	598	.9	✓
9:00	Total: 14343974	Total: 74556512				
10:00	Flow: 34621	Flow: 31444	598	598	.9	✓
10:00	Total: 16393814	Total: 76401661				
11:00	Flow: 34354	Flow: 31957	598	598	.9	✓
11:00	Total: 14464792	Total: 7833556				
12:00	Flow: 34762	Flow: 32061	598	598	.9	✓
12:00	Total: 20081020	Total: 77849288				

PUMP OPERATOR

Kyle Carr/ELZECASH

VERIFIED BY PUMP
COORDINATOR

Bud Fink

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
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:

Pump Coordinator Roles and Responsibilities

10/16
Pump Run

Page _ of _

EVENT LOG BOOK

Prepared pump Stations for pump runs
performed wildlife checks

* Pouring Rain! *

Started North pump

Started South pumps

North Station pumped 1,861,275

South Station Pumped 1,314,940

South Station pumped 4,022,700

North Station pumped 3,772,450

North Station Pumped 3,780,810

South Station Pumped 4,015,080

North Station Pumped 3,782,760

South L	Station Pumped	3 931,800
---------	----------------	-----------

North Static Demand 3.728, 100

North	Station Pumped	2, 909, 090
South	Station Pumped	3, 909, 090

South	St. Martin	Pumped	3,151,212
North	St. Peter	Pumped	3,745,860

North Africa	1940	5,115,52
South Africa	1940	3,932,830

South	34414	Pinned	3436.650
North	34414	Pinned	3404.360

North station	Pumped	3,801,500
S. station	Pumped	3,971,070

South Station	Temp	37.1, 0.0
North Station	Temp	3.799

North	Station	Jump	5,177,100
South	Station	Jump	3,128,696

500th Station Sum per 3,128,676

Total Gallons Pumped by North Station = 28,276,875

Total Gallons Pumped by North Station = 20,000
Total Gallons Pumped by South Station into CCS = 7,000

28,225 886

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>17</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:				.70	.90	✓
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:				.80	.90	✓
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:				.85	.90	—
2:00	Total:	Total:	Total:						
3:00	Flow:	Flow:	Flow:				.90	.90	✓
3:00	Total:	Total:	Total:						
4:00	Flow: 23843	Flow: ERROR	Flow: 20622	576	576	576	.90	.90	✓
4:00	Total: 92654948	Total: ERROR	Total: 91908688						
5:00	Flow: 22144	Flow: ERROR	Flow: 20046	576	576	576	.55	.90	✓
5:00	Total: 93136680	Total: ERROR	Total: 92344112						
6:00	Flow: 22355	Flow: ERROR	Flow: 19170	576	576	576	.2	.9	✓
6:00	Total: 94490745	Total: ERROR	Total: 93536819	60Hz	60Hz	60Hz			
7:00	Flow: 22546	Flow: ERROR	Flow: 19756	576	576	576	.0	.9	✓
7:00	Total: 95827183	Total: ERROR	Total: 94680081						
8:00	Flow: 22492	Flow: ERROR	Flow: 19100	576	576	576	.2	.9	✓
8:00	Total: 97215351	Total: ERROR	Total: 95842809						
9:00	Flow: 21418	Flow: ERROR	Flow: 19062	576	576	576	.0	.9	✓
9:00	Total: 98557655	Total: ERROR	Total: 96973246						
10:00	Flow: 22386	Flow: ERROR	Flow: 19795	576	576	576	.3	.9	✓
10:00	Total: 99884687	Total: ERROR	Total: 98102567						
11:00	Flow: 22843	Flow: ERROR	Flow: 20191	576	576	576	.5	.9	✓
11:00	Total: 1248542	Total: ERROR	Total: 99309947						
11:58	Flow: 22496	Flow: ERROR	Flow: 20783	576	576	576			
	Total: 2450453	Total: ERROR	Total: 391973	60Hz	60Hz	60Hz			

PUMP OPERATOR Bryan Ingram
 Date 10-17-15

VERIFIED BY PUMP
 COORDINATOR N. Sweeney Date 10/16/15

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>16</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:				.35	.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:				.20	.90	✓
21:00	Total:	Total:	Total:						
22:00	Flow:	Flow:	Flow:				.45	.90	✓
22:00	Total:	Total:	Total:						
23:00	Flow:	Flow:	Flow:				.60	.90	✓
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP

OPERATOR Cubbe CooperDate 10-16-15

VERIFIED BY PUMP

COORDINATOR

Date: _____

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1
Pump Coordinator Roles and Responsibilities

10/17
Pump Run

Page 1 of 2

Date / Time	EVENT LOG BOOK	
10/17/2000	Prepared Pumping STATION for Pump Run	
10/17/2000	Performed Wildlife Checks	
10/17/2000		
10/17/2000	NORTH Pump STARTED	
10/17/2000	SOUTH Pump STARTED	
10/17/2000		2,353,662
10/17/2000	NORTH STATION Pumped	3,451,880
10/17/2000	SOUTH STATION Pumped	2,355,662
10/17/2000	NORTH STATION Pumped	3,885,240
10/17/2000	SOUTH STATION Pumped	3,918,870
10/17/2000	NORTH STATION Pumped	3,886,500
10/17/2000	SOUTH STATION Pumped	3,952,800
10/18/2000	NORTH STATION Pumped	3,849,290
10/18/2000	SOUTH STATION Pumped	3,952,590
10/18/2000	NORTH STATION Pumped	3,895,086
10/18/2000	SOUTH STATION Pumped	3,965,460
10/18/2000	NORTH STATION Pumped	3,898,740
10/18/2000	SOUTH STATION Pumped	3,972,240
10/18/2000	NORTH STATION Pumped	3,901,020
10/18/2000	SOUTH STATION Pumped	3,972,450
10/18/2000	NORTH STATION Pumped	3,880,660
10/18/2000	SOUTH STATION Pumped	3,965,550
10/18/2000	NORTH STATION Pumped	3,898,860
10/18/2000	SOUTH STATION Pumped	3,961,470
10/18/2000	NORTH STATION Pumped	3,884,850
10/18/2000	SOUTH STATION Pumped	3,971,400
10/18/2000	NORTH STATION Pumped	3,868,860
10/18/2000	SOUTH STATION Pumped	3,929,150
10/18/2000	NORTH STATION Pumped	3,859,050
10/18/2000	SOUTH STATION Pumped	3,850,380
10/18/2000	NORTH STATION Pumped	3,860,610
10/18/2000	SOUTH STATION Pumped	3,846,540
10/18/2000	NORTH STATION Pumped	3,880,140
10/18/2000	SOUTH STATION Pumped	3,903,600
10/18/2000	NORTH STATION Pumped	3,561,937
10/18/2000	SOUTH STATION Pumped	2,967,997

10/17
PUMP RUN

Page 2 of 2

[illegible]

Kyle Carr

ECSCCASH

10/18/15

Rev 8, 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

Revision No. 08

Author:

Carmel Ward

Date:

10/1/15

Approved:

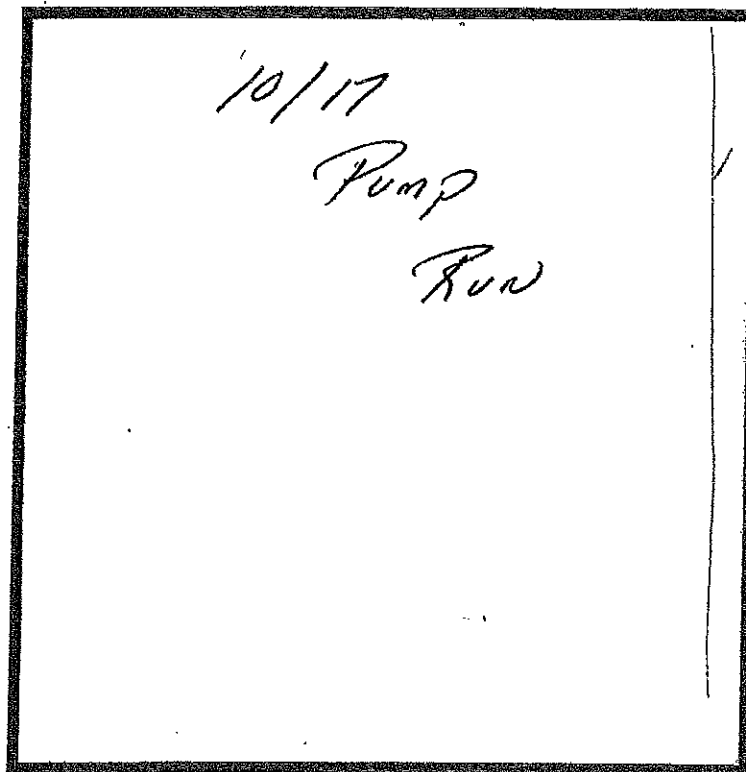
[Signature]

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>16</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: 34412	Flow: 31858	598	598	0.90	✓
00:00	Total: 25434779	Total: 84672889				
1:00	Flow: 34152	Flow: 31941	598	598	0.90	✓
1:00	Total: 27493099	Total: 86583779				
2:00	Flow: 34235	Flow: 31854	598	598	0.90	✓
2:00	Total: 29853577	Total: 88493760				
3:00	Flow: 34219	Flow: 32100	598	598	0.90	✓
3:00	Total: 31592357	Total: 90401956				
4:00	Flow: 34261	Flow: 31835	598	598	0.90	✓
4:00	Total: 33657865	Total: 92323931				
5:00	Flow: 34269	Flow: 31820	598	598	0.90	✓
5:00	Total: 35722923	Total: 94253935				
6:00	Flow: 34152	Flow: 31814	598	598	.9	✓
6:00	Total: 37733939	Total: 96147470				
7:00	Flow: 34397	Flow: 32017	598	598	.9	✓
7:00	Total: 39178415	Total: 99060125				
8:00	Flow: 33228	Flow: 31331	588	588	.9	✓
8:00	Total: 41485567	Total: 99955973				
9:00	Flow: 33261	Flow: 30526	588	588	.9	✓
9:00	Total: 43776446	Total: 1777779				
10:00	Flow: 33353	Flow: 31078	588	588	.9	✓
10:00	Total: 45745472	Total: 3641094				
11:00	Flow: 33493	Flow: 31614	588	588	.9	✓
11:00	Total: 47410033	Total: 5510965				
12:00	Flow: 34294	Flow: 31928	588	588	.9	✓
12:00	Total: 49152041	Total: 6255337				

PUMP OPERATOR Kyle CarrDate 10/18/15

Page 23 of 24

VERIFIED BY PUMP
COORDINATOR Brian

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET						
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 21:25	Flow: 33500	Flow: 30256	598	598	0.90	✓
21:00 21:25	Total: 20231628	Total: 79917761				
22:00	Flow: 34147	Flow: 30992	598	598	0.90	✓
22:00	Total: 21319787	Total: 80914962				
23:00	Flow: 34211	Flow: 31279	598	598	0.90	✓
23:00	Total: 23393721	Total: 82806569				
24:00	Flow:	Flow:				
24:00	Total:	Total:				

PUMP OPERATOR Kyle CarrDate 10/17/15 - 10/18/15VERIFIED BY PUMP
COORDINATOR _____

Date: _____

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1
 Pump Coordinator Roles and Responsibilities

10/17
 Pump Run

Date / Time

EVENT LOG BOOK

Page 1 of 2

10/17/2000	Prepared Pumping Station for Pump Run	
10/17/2000	Performed Wildlife Checks	
10/17/2000		
10/17/2000	NORTH Pump STARTED	
10/17/2000	SOUTH Pump STARTED	
10/17/2000		
10/17/2000	NORTH STATION Pumped	2,253,662
10/17/2000	SOUTH STATION Pumped	3,451,880
10/17/2000	NORTH STATION Pumped	2,255,662
10/17/2000	SOUTH STATION Pumped	3,885,240
10/17/2000	NORTH STATION Pumped	3,918,870
10/17/2000	SOUTH STATION Pumped	3,886,500
10/17/2000	NORTH STATION Pumped	3,952,800
10/17/2000	SOUTH STATION Pumped	3,849,290
10/17/2000	NORTH STATION Pumped	3,952,590
10/17/2000	SOUTH STATION Pumped	3,875,086
10/17/2000	NORTH STATION Pumped	3,965,460
10/17/2000	SOUTH STATION Pumped	3,898,740
10/17/2000	NORTH STATION Pumped	3,972,240
10/17/2000	SOUTH STATION Pumped	3,901,020
10/17/2000	NORTH STATION Pumped	3,972,450
10/17/2000	SOUTH STATION Pumped	3,900,640
10/17/2000	NORTH STATION Pumped	3,965,550
10/17/2000	SOUTH STATION Pumped	3,898,860
10/17/2000	NORTH STATION Pumped	3,961,470
10/17/2000	SOUTH STATION Pumped	3,884,850
10/17/2000	NORTH STATION Pumped	3,971,400
10/17/2000	SOUTH STATION Pumped	3,868,860
10/17/2000	NORTH STATION Pumped	3,929,150
10/17/2000	SOUTH STATION Pumped	3,859,050
10/17/2000	NORTH STATION Pumped	3,850,380
10/17/2000	SOUTH STATION Pumped	3,860,610
10/17/2000	NORTH STATION Pumped	3,846,540
10/17/2000	SOUTH STATION Pumped	3,880,140
10/17/2000	NORTH STATION Pumped	3,903,600
10/17/2000	SOUTH STATION Pumped	3,561,937
10/17/2000	NORTH STATION Pumped	2,967,997

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 1
Pump Coordinator Roles and Responsibilities10/17
PUMP RUN

Date / Time

EVENT LOG BOOK

Page 2 of 2

10/18/1200

Total Pumped by North Station = 56,638,723

10/18/1200

Total Pumped by South Station int CCS = 56,384,459

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>18</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: 22542	Flow: ERROR	Flow: 19884	576	576	576	.65	.90	✓
00:00	Total: 6104941	Total: ERROR	Total: 3582879						
1:00	Flow: 22701	Flow: ERROR	Flow: 19906	576	576	576	.70	.90	✓
1:00	Total: 7474513	Total: ERROR	Total: 4786996						
2:00	Flow: 22735	Flow: ERROR	Flow: 19967	576	576	576	.75	.90	✓
2:00	Total: 8837623	Total: ERROR	Total: 5991245						
3:00	Flow: 22823	Flow: ERROR	Flow: 19907	576	576	576	.80	.90	✓
3:00	Total: 10186954	Total: ERROR	Total: 6299939						
4:00	Flow: 22811	Flow: ERROR	Flow: ERROR	576	576	576	.80	.90	✓
4:00	Total: 11579107	Total: ERROR	Total: ERROR						
5:00	Flow: 22811	Flow: ERROR	Flow: ERROR	576	576	576	.75	.90	✓
5:00	Total: 12932948	Total: ERROR	Total: ERROR						
6:00	Flow: 22751	Flow: ERROR	Flow: ERROR	576	576	576	.4	.9	✓
6:00	Total: 14412528	Total: ERROR	Total: ERROR	6042	6042	6042			
7:00	Flow: 22344	Flow: ERROR	Flow: ERROR	576	576	576	.1	.9	✓
7:00	Total: 15769530	Total: ERROR	Total: ERROR						
8:00	Flow: 22218	Flow: ERROR	Flow: ERROR	576	576	576	-1	.9	✓
8:00	Total: 16934597	Total: ERROR	Total: ERROR						
9:00	Flow: 22017	Flow: ERROR	Flow: ERROR	576	576	576	-2	.9	✓
9:00	Total: 18272543	Total: ERROR	Total: ERROR						
10:00	Flow: 22270	Flow: ERROR	Flow: ERROR	576	576	576	-1	.9	✓
10:00	Total: 19591375	Total: ERROR	Total: ERROR						
11:00	Flow: 22668	Flow: ERROR	Flow: ERROR	576	576	576	.2	.9	✓
11:00	Total: 20939183	Total: ERROR	Total: ERROR						
11:55	Flow: 22457	Flow: ERROR	Flow: ERROR	576	576	576	.4	.9	✓
	Total: 22120337	Total: ERROR	Total: ERROR	6042	6042	6042			

PUMP OPERATOR: [Signature]Date: 10-18-15VERIFIED BY PUMP
COORDINATOR: [Signature]Date: 10-18-15

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>17</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:				.50	.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: 2120	Flow: 21652	Flow: 19788	576	576	576	.20	.90	✓
21:00	Total: 2531033	Total: 36841008	Total: 428051						
22:00	Flow: 22500	Flow: ERROR	Flow: 19941	576	576	576	.35	.90	✓
22:00	Total: 3407800	Total: ERROR	Total: 1190779						
23:00	Flow: 22608	Flow: ERROR	Flow: 19935	576	576	576	.50	.90	✓
23:00	Total: 4759361	Total: ERROR	Total: 2384547						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP
OPERATOR Abbie Bopee
Date 10-17-15

VERIFIED BY PUMP
COORDINATOR _____
Date: _____

10/18
Pump Run
Page 1 of 1

Page 1 of 1

EVENT LOG BOOK

Date / Time	Event Log Book	Page
10/18/23 20	prepared pump Stations for pump Run	184
1	performed wildlife checks	

10/19/0911 Fired up the North Pumping Station

10/19/0916 Fired up the South Pumping Station

10/19/1000 North Station Pumped 3,289,395

10/19/2000	South Station	Pumped.	2,861,386
------------	---------------	---------	-----------

10/19/1100	North Station Pumped	3,849,330
------------	----------------------	-----------

10/19/100	South Station Pumped	3,935,280
-----------	----------------------	-----------

10/14/1155	North Station Pumped	3,532,980
------------	----------------------	-----------

10/19/150	South Station Pumped.	3,287,400
-----------	-----------------------	-----------

10/19/1200 Total Gallons Pump by North Station. = 10,671,655

10/19/2000 Total Gallons Pumped into the CCS South Station = 10,084,066

ERIC CASH 10/19/15

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:

Eric Cash

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

South Station

10/18 Pump Run

Nan Sweeney - M

Eric Cash - D

10/18 Pump Run 10/01/2015

INJECTION OF L31 CANAL WATER INTO THE CANAL COOLING SYSTEM PROCEDURE

ATTACHMENT 3

SOUTH PUMP STATION HOURLY LOG SHEET Month 10 Day 18 Year 15						
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 9:16	Flow: 34114	Flow: 30526	5918	5918	.9	✓
9:00	Total: 491361828	Total: 6261761				
10:00	Flow: 33603	Flow: 31621	5918	5918	.9	✓
10:00	Total: 50520725	Total: 7533764				
11:00	Flow: 31343	Flow: 32311	5918	5918	.9	✓
11:00	Total: 37070000	Total: 9472654				
12:00	Flow: 34026	Flow: 31715	5918	5918	.9	✓
12:00	Total: 53644017	Total: 106463915				

PUMP OPERATOR BOB CASH

Date 10/18/15

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: _____

10/18
Pump Run
Page of

Page 1 of 1

Date / Time

EVENT LOG BOOK

10/18/2320 prepared pump Stations for pump Run
/ performed wildlife checks

10/19/0911 Fired up the North Pumping Station

10/19/0916 Fired up the South Pumping Station

10/19/1000	North Station	Pumped	3,289,395
------------	---------------	--------	-----------

10/19/2000	South Station Pumped.	2,861,386
------------	-----------------------	-----------

10/19/1100 North Station Pumped 3,849,330

10/19/100 South Station Pumped 3,935,280

10/14/1155 North Station Pumped 3,532,980

10/19/1150 South Station Pumped. 3,287,400

10/19/1200 Total Gallons Pump by North Station. = 10,671,655

10/19/1200 Total Gallons Pumped into the CCS South Station = 10,084,066

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>19</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:				.60	.90	✓
00:00	Total:	Total:	Total:						
1:00	Flow:	Flow:	Flow:				.70	.90	✓
1:00	Total:	Total:	Total:						
2:00	Flow:	Flow:	Flow:				.80	.90	✓
2:00	Total:	Total:	Total:						
3:00	Flow:	Flow:	Flow:				.90	.90	✓
3:00	Total:	Total:	Total:						
4:00	Flow:	Flow:	Flow:				.90	.90	✓
4:00	Total:	Total:	Total:						
5:00	Flow:	Flow:	Flow:						
5:00	Total:	Total:	Total:						
6:00	Flow:	Flow:	Flow:				1	.9	✓
6:00	Total:	Total:	Total:						
7:00	Flow:	Flow:	Flow:				1	.9	✓
7:00	Total:	Total:	Total:						
8:00	Flow:	Flow:	Flow:				.9	.9	✓
8:00	Total:	Total:	Total:						
9:00	Flow: <u>22229</u>	Flow: <u>21281</u>	Flow: <u>20343</u>	576	576	576	.7	1	✓
9:00	Total: <u>22210362</u>	Total: <u>36947853</u>	Total: <u>6355533</u>	60Hz	60Hz	60Hz			
10:00	Flow: <u>22720</u>	Flow: <u>Error</u>	Flow: <u>20374</u>	576	576	576	.7	.9	✓
10:00	Total: <u>23253049</u>	Total: <u>Error</u>	Total: <u>7287387</u>						
11:00	Flow: <u>22770</u>	Flow: <u>Error</u>	Flow: <u>20281</u>	576	576	576	.7	.9	✓
11:00	Total: <u>24611877</u>	Total: <u>Error</u>	Total: <u>8509125</u>						
11:55	Flow: <u>22758</u>	Flow: <u>Error</u>	Flow: <u>20461</u>	576	576	576	.8	.9	✓
11:55	Total: <u>25801944</u>	Total: <u>Error</u>	Total: <u>9582430</u>	60Hz	60Hz	60Hz			

PUMP OPERATOR

Date

10-19-15

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VERIFIED BY PUMP
COORDINATOR

Date

10/19

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>10</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:						
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:				.40	.90	✓
23:00	Total:	Total:	Total:						
24:00	Flow:	Flow:	Flow:						
24:00	Total:	Total:	Total:						

PUMP
OPERATOR Robert Cooper
Date: 10-10-15

VERIFIED BY PUMP
COORDINATOR
Date: _____