

MONTHLY MAINTENANCE LOG

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

MONTHLY MAINTENANCE LOG

Item #	Item	Action	Date:			
1	Breaker Panel	Test Breakers				
2	Exterior Lighting	Check Lamps				
3	Truck Arm Light	Check Lamps				
4	Overhead Lighting	Check Lamps				
5	Meter Socket	Check that Power Meter is Operating				
6	Perform Inventory of Consumables and Spare Parts	Complete Consumables and Reorder Log				
7	Other Comments					
8						
9						
10						
11	Initials					

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

ANNUAL MAINTENANCE LOG

Item #	Item	Action	Date:			
1	Exit Light	Test				
2	Finish Hardware for Door	Lubricate Hinges/Locks				
3	Fire Extinguisher	Maintain per Manuals Instructions				
4	Paint	Inspect / Touch Up As Req'd.				
5	Submersible Intake Pump	Inspect For Wear				
6	Flow Switch and Flow Sensor	Inspect O Rings, Wheel And Paddles				
7	Winch	Inspect Cable for Fraying and Rusting.				
8	Pipe Couplings and Valves	Lubricate Tighten.				
9	Chemical Pump	Clean and Service if required.				
10	Other Comments.					
11						
12						
13						
14	Initials					

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

ANNUAL MAINTENANCE LOG

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1	Exit Light	Test				
2	Finish Hardware for Door	Lubricate Hinges/Locks				
3	Fire Extinguisher	Maintain per Manuals Instructions				
4	Paint	Inspect / Touch Up As Req'd.				
5	Submersible Intake Pump	Inspect For Wear				
6	Flow Switch and Flow Sensor	Inspect O Rings, Wheel And Paddles				
7	Winch	Inspect Cable for Fraying and Rusting. Lubricate				
8	Pipe Couplings and Valves	Tighten.				
9	Chemical Pump	Clean and Service if required.				
10	Other Comments.					
11						
12						
13						
14	Initials					

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

MISCELLANEOUS MAINTENANCE LOG

Item #	Item	Action	Maintenance	Date:			
1	Submersible Pump Engine	Reactive Maintenance, page 25 of Franklin Electric Submersible Motor Manual	As Required				
2	PVC Ball Valves on Tanks	Check For Leakage, And Smooth Operation	During Each Chlorine Mixing				
3	Chlorine Injection Pump	Clean or Replace Diaphragm as Required	Every 8 Months				
4	Chlorine Injection Pump	Replace and Clean Cartridge Valves as Required	Every 8 Months				
5	Chlorine Injection Pump	Clean or Replace Diaphragm on 5-way Valve as Required	Every 8 Months				
6	Chlorine Mixer	Rinse Off Shaft and Agitator	Following Each Chlorine Mixing				
7	Chlorine Mix and Feed Tanks	Inspect for Leaks and Clean	Following Each Chlorine Mixing				
8	Flow Sensor	Replace Paddle and/or Sensor	Per False Readings on Flow Gauge				
9							
10							
11							
12	Initials						

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

MISCELLANEOUS MAINTENANCE LOG

Item #	Item	Action	Maintenance	Date:			
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7	Chlorine Mix and Feed Tanks	Inspect for Leaks and Clean	Following Each Chlorine Mixing				
8	Flow Sensor	Replace Paddle and/or Sensor	Per False Readings on Flow Gauge				
9							
10							
11							
12	Initials						

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

CONSUMABLES AND REORDER LOG

1	Breakers	2 for each size and type.	shelves in storage cabinet	Quantity on Hand and Reorder Dates			
2	Truckfill Timer	1 of each relay and timerbase.	shelves in storage cabinet				
3	Chemical Feed Pump	1	shelves in storage cabinet				
4	Chemical Injection Pump - replacement part kits.	3	shelves in storage cabinet				
5	Dustmasks	150	shelves in storage cabinet				
6	Exterior Lightinig - ballast	2 for each light type.	shelves in storage cabinet				
7	Eyewash - Spare container of solution.	1	shelves in storage cabinet				
8	Floor Cleaner - Dustban Liquid Cleaner 5013/9, 20L.	1 - 20 liters	shelves in storage cabinet				
9	Flow Sensor	1	shelves in storage cabinet				
10	Flow Switch	1	shelves in storage cabinet				
11	Fuses	6 of each type.	shelves in storage cabinet				
12	Motor Starter - Coil and Contact.	1	in motor starter panel				
13	Motor Starter - pilot light and over load heaters.	6 of each type.	in motor starter panel				
14	Panalarm Alarm Annunciator	1	shelves in storage cabinet				
15	Pilot Light and Lens	1 of each type.	in control panel				
16	Rubber Gloves - Fisher large, extra long, heavyweight.	12	shelves in storage cabinet				
17	Submersible Pump	1	Below Casing inside Pumphouse				
18	Submersible Pump Engine	1	Below Casing inside Pumphouse				
19	Terminal Blocks c/w end caps, end plates, cross connectors,	1 for each size and type.	shelves in storage cabinet				
20	Thermostats	1 of each type	shelves in storage cabinet				
21	Throttle Valve	1	shelves in storage cabinet				
22	Other Comments:						
23							
24							
25							
26							

Note: Other checks may be added in blank rows.

CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT

CONSUMABLES AND REORDER LOG

		Quantity on Hand and Reorder Dates			
1	Breakers	2 for each size and type.	shelves in storage cabinet		
2	Truckfill Timer	1 of each relay and timerbase.	shelves in storage cabinet		
3	Chemical Feed Pump	1	shelves in storage cabinet		
4	Chemical Injection Pump - replacement part kits.	3	shelves in storage cabinet		
5	Dustmasks	150	shelves in storage cabinet		
6	Exterior Lighting - ballast	2 for each light type.	shelves in storage cabinet		
7	Eyewash - Spare container of solution.	1	shelves in storage cabinet		
8	Floor Cleaner - Dustban Liquid Cleaner 501379, 20L.	1 - 20 liters	shelves in storage cabinet		
9	Flow Sensor	1	shelves in storage cabinet		
10	Flow Switch	1	shelves in storage cabinet		
11	Fuses	6 of each type.	shelves in storage cabinet		
12	Motor Starter - Coil and Contact.	1	in motor starter panel		
13	Motor Starter - pilot light and over load heaters.	6 of each type.	in motor starter panel		
14	Panalarm Alarm Annunciator	1	shelves in storage cabinet		
15	Pilot Light and Lens	1 of each type.	in control panel		
16	Rubber Gloves - Fisher large, extra long, heavyweight.	12	shelves in storage cabinet		
17	Submersible Pump	1	Below Casing inside Pumphouse		
18	Submersible Pump Engine	1	Below Casing inside Pumphouse		
19	Terminal Blocks c/w end caps, end plates, cross connectors.	1 for each size and type.	shelves in storage cabinet		
20	Thermostats	1 of each type	shelves in storage cabinet		
21	Throttle Valve	1	shelves in storage cabinet		
22	Other Comments:				
23					
24					
25					
26					

Note: Other checks may be added in blank rows.

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**MAINTENANCE TASKS BY EQUIPMENT
TABLE 7.1**

Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Item	Schedule
9.1 PIPES, PIPE SUPPORT, VALVES, INTAKE SCREEN, AND FITTINGS				
9.1	-	Throttling Valve	Check For Leakage, And Smooth Operation	Daily
9.1	4.1, 4.4	Pipe Fittings	Check For Leakage	Daily
-	-	Bypass Hose	Check For Leakage, Tighten Monthly	Daily
9.2 PUMPS				
9.2	4.1	Submersible Intake Pump	Inspect For Wear	Annually
9.2	4.1	Submersible Pump Engine	Reactive Maintenance, page 25 of Franklin Electric Submersible Motor Manual	As Required
9.3 METERS AND GAUGES				
9.3	4.1, 4.3	Flow Meter & Accumulator	Record Flow Rate and Accumulator Reading	Daily
9.3	4.1	Pressure Gauge	Record Reading	Daily
9.3	4.1	Thermometer	Record Reading	Daily
9.4 WATER TREATMENT				
9.4	-	Chlorine	Inspect Containers for Leaks and Moisture	Weekly
9.4	4.1, 4.3	Chlorine Injection Pump	Replace and Clean Cartridge Valves as Required	Every 8 Months
9.4	4.1, 4.3	Chlorine Injection Pump	Clean or Replace Diaphragm as Required	Every 8 Months
9.4	4.1, 4.3	Chlorine Injection Pump	Clean or Replace Diaphragm on 5-way Valve as Required	Every 8 Months
9.4	4.1	Chlorine Mixer	Rinse Off Shaft and Agitator	Following Each Chlorine Mixing
9.4	4.1	Chlorine Mix and Feed Tanks	Inspect for Leaks and Clean	Following Each Chlorine Mixing
9.4	4.1	PVC Ball Valves on Tanks	Check For Leakage, And Smooth Operation	During Each Chlorine Mixing

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**MAINTENANCE TASKS BY EQUIPMENT
TABLE 7.1**

Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Item	Schedule
9.5 HEATING SYSTEM				
9.5	-	Radiant Heaters	Check For Correct Operation	Daily
9.5	-	Electric Heater Thermostat	Check For Correct Operation	Daily
9.5	-	Percentage Input Controller for Radiant Heaters	Check For Correct Operation	Daily
9.6 ELECTRICAL PANELS, AND ASSOCIATED ITEMS				
9.6	4.2	Breaker Panel	Test Breakers	Monthly
9.6	4.2	Main Disconnect in Breaker Panel	Test	Annually
9.6	4.2	Motor Starter for Submersible Pump	Check all Switches	Monthly
9.6	4.2	Meter Socket	Check that Meter is Operating	Monthly
9.7 UNINTERRUPTIBLE POWER SYSTEM				
9.7	4.2	Uninterruptible Power System	Periodic Maintenance As Per Manual	6 Months or Per Alarm Conditions.
9.8 CONTROL PANEL, REMOTE CONTROL, AND ASSOCIATED ITEMS				
9.8	4.3	Pilot Lights	Observe Operation	Daily
9.8	4.3	Push Buttons	Observe Operation	Daily
9.8	4.3	Flow Switch	Inspect O Rings, Wheel And Paddles	Annually
9.8	4.3	Flow Sensor	Replace Paddle and/or Sensor	Per False Readings on Flow Gauge
9.9 ALARM ITEMS				
9.9	-	Alarm Thermostats	Check Operation	Weekly
9.9	-	Horn	Check Operation	Weekly
9.9	-	Strobe Beacon	Check Operation	Weekly
9.9	4.3	Annunciator	Press Test Button	Weekly
9.10 LUMINARIES				
9.10	-	Emergency Light	Push To Test Button	Weekly
9.10	-	Exit Light	Test	Annually
9.10	-	Exterior Lighting	Check Lamps	Monthly
9.10	-	Overhead Lighting	Check Lamps	Monthly
9.10	-	Truck Arm Light	Check Lamps	Monthly

**CLYDE RIVER TRUCKFILL
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**MAINTENANCE TASKS BY EQUIPMENT
TABLE 7.1**

Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Item	Schedule
9.11 HEAT TRACE SYSTEM				
9.11	4.5	Heat Trace Controller	Check for Messages on Panel	Daily
9.11	4.4, 4.5	Heating Cable	Feel Conduit for Heat	Daily During Cold Weather Conditions
9.12 LABORATORY AND SAFETY EQUIPMENT				
9.12	-	Chlorine Tester	Inventory Chemicals and Reorder as Necessary	Monthly
9.12	-	Fire Extinguisher	Maintain Per Manual's Instructions	Annually
9.12	-	Eyewash Station	Inventory Saline and Reorder as Necessary	Monthly
9.12	-	Valved Respirators	Inventory and Reorder as Necessary	Monthly
9.12	-	Safety Gloves	Inventory and Reorder as Necessary	Monthly
9.12	-	Rubberized Safety Apron	Inspect for Wear and Reorder if Necessary	Annually
9.12	-	Face Shield	Inspect for Wear and Reorder if Necessary	Annually
9.13 MISCELLANEOUS ITEMS				
9.13	-	Winch	Lubricate and Inspect Cable on Spool	Annually
9.13	-	Winch Cable	Inspect for Corrosion and Fraying	Annually
9.13	-	Janitorial Equipment	Restock as Required	Monthly
9.13	-	Interior Paint	Inspect and Repaint as Necessary	Annually

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**MAINTENANCE TASKS BY SCHEDULE
TABLE 7.2**

Schedule	Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Required
DAILY MAINTENANCE				
Daily During Cold Weather Conditions	9.11	4.4, 4.5	Heating Cable	Feel Conduit for Heat
Daily	9.1	-	Throttling Valve	Check For Leakage, And Smooth Operation
Daily	9.1	4.1, 4.4	Pipe Fittings	Check For Leakage
Daily	9.11	4.5	Heat Trace Controller	Check for Messages on Panel
Daily	9.3	4.1	Thermometer	Record Reading
Daily	9.3	4.1	Pressure Gauge	Record Reading
Daily	9.3	4.1, 4.3	Flow Meter & Accumulator	Record Flow Rate and Accumulator Reading
Daily	9.5	-	Percentage Input Controller for Radiant Heaters	Check For Correct Operation
Daily	9.5	-	Radiant Heaters	Check For Correct Operation
Daily	9.5	-	Electric Heater Thermostat	Check For Correct Operation
Daily	9.8	4.3	Pilot Lights	Observe Operation
Daily	9.8	4.3	Push Buttons	Observe Operation
Daily	-	-	Bypass Hose	Check For Leakage, Tighten Monthly
WEEKLY MAINTENANCE				
Weekly	9.4	-	Chlorine	Inspect Containers for Leaks and Moisture
Weekly	9.9	4.3	Annunciator	Press Test Button
Weekly	9.9	-	Horn	Check Operation
Weekly	9.9	-	Strobe Beacon	Check Operation
Weekly	9.9	-	Alarm Thermostats	Check Operation
Weekly	9.10	-	Emergency Light	Push To Test Button
MONTHLY MAINTENANCE				
Monthly	9.6	4.2	Breaker Panel	Test Breakers
Monthly	9.6	4.2	Meter Socket	Check that Meter is Operating
Monthly	9.6	4.2	Motor Starter for Submersible Pump	Check all Switches
Monthly	9.10	-	Exterior Lighting	Check Lamps
Monthly	9.10	-	Overhead Lighting	Check Lamps
Monthly	9.10	-	Truck Arm Light	Check Lamps

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**MAINTENANCE TASKS BY SCHEDULE
TABLE 7.2**

Schedule	Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Required
Monthly	9.12	-	Safety Gloves	Inventory and Reorder as Necessary
Monthly	9.12	-	Valved Respirators	Inventory and Reorder as Necessary
Monthly	9.12	-	Chlorine Tester	Inventory Chemicals and Reorder as Necessary
Monthly	9.12	-	Eyewash Station	Inventory Saline and Reorder as Necessary
Monthly	9.13	-	Janitorial Equipment	Restock as Required
ANNUAL MAINTENANCE				
Annually	9.2	4.1	Submersible Intake Pump	Inspect For Wear
Annually	9.6	4.2	Main Disconnect in Breaker Panel	Test
Annually	9.8	4.3	Flow Switch	Inspect O Rings, Wheel And Paddles
Annually	9.10	-	Exit Light	Test
Annually	9.12	-	Face Shield	Inspect for Wear and Reorder if Necessary
Annually	9.12	-	Rubberized Safety Apron	Inspect for Wear and Reorder if Necessary
Annually	9.12	-	Fire Extinguisher	Maintain Per Manual's Instructions
Annually	9.13	-	Winch	Lubricate and Inspect Cable on Spool
Annually	9.13	-	Interior Paint	Inspect and Repaint as Necessary
Annually	9.13	-	Winch Cable	Inspect for Corrosion and Fraying
MISCELLANEOUS				
As Required	9.2	4.1	Submersible Pump Engine	Reactive Maintenance, page 25 of Franklin Electric Submersible Motor Manual
During Each Chlorine Mixing	9.4	4.1	PVC Ball Valves on Tanks	Check For Leakage, And Smooth Operation
Every 8 Months	9.4	4.1, 4.3	Chlorine Injection Pump	Clean or Replace Diaphragm as Required
Every 8 Months	9.4	4.1, 4.3	Chlorine Injection Pump	Replace and Clean Cartridge Valves as Required
Every 8 Months	9.4	4.1, 4.3	Chlorine Injection Pump	Clean or Replace Diaphragm on 5-way Valve as Required

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**MAINTENANCE TASKS BY SCHEDULE
TABLE 7.2**

Schedule	Section 9 Tab	Section 4 Tables and Figs	Item	Maintenance Required
Following Each Chlorine Mixing	9.4	4.1	Chlorine Mixer	Rinse Off Shaft and Agitator
Following Each Chlorine Mixing	9.4	4.1	Chlorine Mix and Feed Tanks	Inspect for Leaks and Clean
Per False Readings on Flow Gauge	9.8	4.3	Flow Sensor	Replace Paddle and/or Sensor

**CLYDE RIVER TRUCKFILL
CLYDE RIVER, NT**

**TABLE OF SPARE PARTS & MISCELLANEOUS EQUIPMENT
TABLE 7.3**

Item	Part Description	Number	Location
1	Submersible Pump Motor	1	Inside Pumphouse
2	Submersible Pump	1	Inside Pumphouse
3	Throttle Valve	1	shelves in storage cabinet
4	Thermostats	2	shelves in storage cabinet
5	Chemical Injection Pump - replacement part kits.	3	shelves in storage cabinet
6	Flow Switch	1	shelves in storage cabinet
7	Chemical Feed Pump	1	shelves in storage cabinet
8	Eyewash - Spare container of fluid.	1	shelves in storage cabinet
9	Lighting Lamps & Ballasts	2 for each light type.	shelves in storage cabinet
10	Breakers	2 for each size and type.	shelves in storage cabinet
11	Terminal Blocks c/w end caps, end plates, cross connectors, and tear off markers.	1 for each size and type.	shelves in storage cabinet
12	Motor Starter - pilot light and over load heaters.	6 of each type.	in motor starter panel
13	Motor Starter - Coil and Contact.	1	in motor starter panel
14	Pilot Light and Lense	1 of each type.	in control panel
15	Panalarm Alarm Annunciator	1	shelves in storage cabinet
16	Flow Gauge/Accumulator	1	shelves in storage cabinet
17	Heat Trace Controller	1	shelves in storage cabinet
18	Termination Boots	2	shelves in storage cabinet
19	Mini Breakers	2 of each relay and timer. 1 of each relay and timer base.	shelves in storage cabinet
16	Fuses	6 of each type.	shelves in storage cabinet
20	Dustmasks	150	shelves in storage cabinet
21	Rubber Gloves - Fisher large, extra long, heavyweight.	12	shelves in storage cabinet
22	Face Shield	1	shelves in storage cabinet
23	Rubber Apron	1	shelves in storage cabinet
24	Fire Extinguisher	1	mounted by exit
25	Floor Cleaner - Industrial Quality, 20L.	1	on floor of pumphouse

8. Testing Certification
Data

8.0 TESTING AND CERTIFICATION DATA

8.1 General

Section 8 contains copies of the Commissioning Checklist, test results, initial settings for equipment, and warranties. If a warranty is not found in this section, it is probably part of the operating manuals in "Manufacturer Data and Service Information", Section 9. Please search the related material in Section 9 if a warranty for a certain component is not found here.

If a warranty for an item cannot be found anywhere in this manual, please contact the appropriate supplier as listed in Section 5. The supplier will be able to provide service information for the item.

Kudlick construction inc.

XOC OGO TEL (819) 645-2839 FAX (819) 645-2493

P.O. BOX 175 RANKIN INLET, N.W.T.

DILLON CONSULTING
C/O kirk Guenther ENG.
SUITE 201 5102, 51ieme street
Yellowknife N.W.T. X1A 1S7
fax 403-873-3328
tel 403-920-4555

Re : Clyde River pressure test report (galvanized 4 inch fill pipe)

1 Victaulic coupling

All coupling were check for mecanical fitness and torque as spec .
All coupling were check for leak under filling pressure and show no leaks.

2 Flow switch

Mecanical fit ok and torque as spec.
Leak free test ok under filling pressure.

3 Metering turbine

Mecanical fit ok and torque as spec.
Leak free test ok under filling pressure.

4 Chlorine injection point and system.

Mecanical fit ok and torque as spec. Plastic tube and pump perform as spec under filling pressure.
Leak free test ok under filling pressure.

5 Temperature gage.

Mecanical fit ok and torque as spec.
Leak free test ok under filling pressure

6 Pressure gage

Mecanical fit ok and torque as spec.
Leak free test ok under filling pressure

7 Hoze fitting

Mecanical fit ok and torque as spec.
Leak free test ok under filling pressure

By Guy Fauteux ing.

C :Contrat/nwt/clywa
#cy17

Kudlick construction inc. P.O. BOX 175, RANKIN INLET, N.W.T.

XOC OGO TEL (819) 645-2839 FAX (819) 645-2493

DILLON CONSULTING
C/O kirk Guenther ENG.
SUITE 201 5102, 51eme street
Yellowknife N.W.T. X1A 1S7
fax 403-873-3328
tel 403-920-4555

Re : Clyde River pressure test report (HDPE)

1 Quality evaluation of joint made by fusion process.(4 inches)

Performance of fusion process was inspected by cutting (2) reference joint and analysis show a complete homogeneous pvc material with absolutly no visible or détectable liaison.

With mecanical impact on sample substance show an absolute integrity with no separation.

2 Individual inspection of joint.

All joint were inspected and normal protuberance originating from melting of material was present uniformly on the circonference of four inche pipe.

3 Performance under pressure.

Test was perform at maximum output pressure from pump and canalisation test ok.

By Guy Fauteux ing.

C :Contrat/nwt/clyhdpe
cy18

Kudlick construction inc.

XQC-OGO TEL (819) 645-2839 FAX (819) 645-2493

DILLON CONSULTING
C/O kirk Guenther ENG.
SUITE 201 5102, 51ieme street
Yellowknife N.W.T. X1A 1S7
fax 403-873-3328
tel 403-920-4555

Re : Clyde River Intake flushing

1 Chlorine Mix

20 liter of high concentrate of chlorine is mix with water.

2 Injection of chlorine in containing conduit.(12 inches)

20 liter of mix chlorine is injected thru one inches orifice for back wash.

3 Back-wash one inche pipe re-installed.

Pump run for four hours with backwash fully open and butterfly valve crack .
at maximum for maximum washing.

By Guy Fauteux ing.

C :Contrat/nwt/clydede
cr19

Kudlick construction inc.

P.O. BOX 175, RANKIN INLET, N.W.T.

XQC OGO TEL (819) 645-2839 FAX (819) 645-2493

DILLON CONSULTING
C/O kirk Guenther ENG.
SUITE 201 5102, 51ieme street
Yellowknife N.W.T. X1A 1S7
fax 403-873-3328
tel 403-920-4555

Re : Clyde River heat trace insulation test

1 Heating cable Megger test

- 500 volts test results (infinity)
- 1000 volts test results (infinity)

2 Heating cable Megger test

- 500 volts test results (infinity)
- 1000 volts test results (infinity_)

By Guy Fauteux ing.

C :Contrat/nwt/cr20

**CLYDE RIVER TRUCKFILL STATION
CLYDE RIVER, NWT**

COMMISSIONING CHECKLIST

DATE: SEPT 18/97

ATTENDING: HAROLD McGOWAN (PLWS)
GUY FAUTEUX (KUDLIK)
KIRK GUENTHER (DILLON)
JERRY NATANINE (TOWN FOREMAN)

SYSTEM	CHECK	COMMENT	PASS
1 General Electrical			
Check operation of interior lights.	Go through.		✓
Check Breakers in Breaker Panel.	Work and Labeled correctly?	✓	✓
Exterior Lights	Override to turn on. Photo Eye working?	CAN NOT TURN ON CHECK BULBS, WIRING, CIRCUIT.	REPAIRED. TO SEND RATEAST.
2 Truckfill System			
Put empty water truck under arm and hose in truck.	Fit O.K.? Truckfill control positioned good?	Water Truck size: 1500 2000 gallons	✓
Check action of butterfly valve on offtake pipe.	Perform		✓
Turn agitator on for short time only to demonstrate working order.			✓
Fill feed tank with apx. 20 Liters of water only using pump on manual control and valving appropriately.	Perform		✓

SYSTEM	CHECK	COMMENT	PASS
Demonstrate injection pump operation including: automatic operation, manual operation, priming/bleeding, five way valve settings, typical maintenance.	Perform	BOARD CRASHED. HAVE TO TURN PUMP ON AND OFF AGAIN & REBOOT. BETTER TO TIE IN W/ FLOW SENSOR.	✓
Read accumulator	Perform	Accumulator Reading: <u>16 21 5 m³</u>	✓
Insert key into truckfill controller from arm.	Turn on to engage power.		✓
Push Start button and time filling empty truck tank. Read Flow Gauge once pump starts. Is injection pump working? Read Pressure gauge , temperature gauge . TRUCK SIZE 2000 IMP. G. 4082 L	Pump running? Fill tank full. TIME START: <u>15:47</u> TIME STOP <u>15:51</u> 4 min	Flow Gauge: <u>1680 L/min</u> Pressure Gauge: <u>4 psi</u> Temp. Gauge: <u>7°C</u>	
Press Stop button when full. Check operation : Will pump stop if key turned off also?	Perform	Elapsed Time: <u>4 min</u>	
Read accumulator when truck full . <u>9080 L</u> <u>4 min</u>	Perform Flow calculation match flow gauge?	Accumulator Reading: <u>16 33 m³</u> Accumulator Difference: <u>12 m³ - 12080 L</u> Calculate Flow Rate: <u>3000 L/min</u>	100 164 RECALCULATED ✓

SYSTEM	CHECK	COMMENT	PASS
3 Alarm System Check			
Explain alarms on system, how to test, acknowledge, react, and reset through PANALARM .	Perform		✓
Demonstrate Autodialer and Satellite Phone Operation and programming. N/A	Perform. Operates with alarm?		
Simulate Low Temp. Alarm.	Perform		✓
Simulate High Temp. Alarm.	Perform		✓
Simulate UPS Power Failure Alarm.	Perform	N/A (ON IF POWER OFF) NO ALARM IF FAIL	✓
Demonstrate UPS power backup .	Perform		✓
Explain maintenance of UPS and Main controller.	Perform		✓
4 Heat Trace and Heating			
Operate building heaters. Explain proportional controller usage.	Perform		✓
Operate heat trace, explain usage. Manual Overrides, simulate alarms, explain acknowledging alarms, any maintenance items..	Perform		✓
5 Spare Parts	Check From Tender Document	SOME MISSING ITEMS.	✓

→ ALARM THERMOSTAT X1
 { BAZZISTS F033 562 X2
 { F033

SYSTEM	CHECK	COMMENT	PASS
6 Miscellaneous Items			
Mix Instructions	Posted	SEND AND POST CORRECTIONS.	
MSDS Sheets	Posted	SEND EXTRA COPY TO POST.	
Electrical Single Line Diagram	Posted	DISCUSS TO COMPLETE ONCE RED LINES READ	
New deficiencies	Separate List	WILL MAKE IN YIC.	
Deficiencies Cleared on Preliminary List?	Check		✓

O&M'S TAKE 3 TO OFFICE LEAVE ONE ON SITE.

FRANKLIN ELECTRIC Pump STARTER

MODEL 2822019310 HP 7 1/2 VOLT 230 HZ 60 PH 1
RPM 3450 AMP 36.5 SF 1.15 SF MAX AMP 42.1 CODE F.