



City of Iqaluit
Nunavut
Booster Station No. 2



ALARM DIALER				DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
				CHECKED BY	APPROVED BY	SHEET No. ISS-ADLR	REV. A
No.	DATE	REVISION	APPR				
	1	MANUFACTURER		Barnett Engineering Ltd.			
	2	MODEL NO.		B1290			
	3	TYPE		ProTalk Plus Voice Dialler			
	4	SERVICE		Alarm Dialer			
	5						
	6	TAG NO.					
	7						
	8	VOICE CAPABILITY		Digital			
	9	NUMBER OF MESSAGES		8			
	10						
	11	RADIO CAPABILITY		Yes			
	12						
	13	DATA LOGGER		N/A			
	14	MEMORY		N/A			
	15						
	16	NUMBERS PROGRAMMABLE		4 Directories of 16			
	17	ALARM INPUTS		8			
	18	INPUT TYPE		Optically Isolated, Ground To Trigger			
	19	CONTROL OUTPUTS		4			
	20	OUTPUT TYPE		Form C Controllable from DTMF or Trigger on Inputs			
	21						
	22	I/O EXPANDABLE		Yes, Not Required in This Scope			
	23						
	24	POWER SUPPLY		See Battery Backup			
	25	BACKUP BATTERY		Yes			
	26						
	27	PROGRAMMING SOFTWARE		Yes			
	28						
	29	ENCLOSURE		6.5" x 8.5" x 2" Metal			
	30	ENVIRONMENT		-40 to +60 °C, 95% Relative Humidity			
	31	MOUNTING		Panel Backplane Mount			
	32	CABLE + COMMS		Programming Cable With Software			
	33						
	34	APPROVALS REQUIRED		CSA			
	35						
	36						
	37						
NOTES	38						
	39	TAGGING					
	40						
	41	PROCUREMENT		Supplied, Programmed and Installed by Contractor			
	42						
	43	ALTERNATES					
	44						
	45	ACCESSORIES		Installation, Operation and Maintenance Manual			
	46						



City of Iqaluit
Nunavut
Booster Station No. 2



CHLORINE ANALYZER				DESIGN BY	DRAWN BY	PROJECT No.	DATE
				CHECKED BY	APPROVED BY	SHEET No.	REV.
No.	DATE	REVISION	APPR				
	1	MANUFACTURER		Wallace & Tiernan			
	2	MODEL No.		Depolox 3 Plus			
	3	TYPE		Amperometric type analyzer			
	4	SERVICE		Treated Water			
	5						
S E N S O R	6	TAG No.		AE-313			
	7	TYPE		Free Chlorine Residual			
	8	RANGE		0 - 5 mg/l			
	9	CONNECTION	RATING	1/4" NPT	100 psig @ 65 °C		
	10	MOUNTING		Wall Mount			
	11	TEMPERATURE RANGE		-5 to 50 °C			
	12	CABLE LENGTH		1.2 m			
	13	APPROVALS		CSA			
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	C O N T R O L L E R	23	TAG No.		AIT-313		
24		CONTROLLER		Deplox 3 plus			
25		MOUNTING		Wall			
26		OUTPUT		4 - 20 mA			
27		DISPLAY	UNITS	LCD 2 line Backlight	Milligrams/Liter (mg/l)		
28		POWER SUPPLY		120 VAC, 60Hz			
29		INPUT SIGNALS		N/A			
30		ENCLOSURE		NEMA 4X			
31		APPROVALS		CSA			
32							
33							
34							
35							
36							
N O T E S	37	TAGGING		Each Transmitter to be c/w SS Tag Number			
	38						
	39	PROCUREMENT		1 of Deplox 3 Plus Transmitter			
	40			2 of Chlorine Sensor			
	41						
	42	ACCESSORIES		Installation, Operation and Maintenance Manual			
	43						
	44	ALTERNATES		Yokogawa			
	45						



City of Iqaluit
Nunavut
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CHLORINE ANALYZER				DESIGN BY	DRAWN BY	PROJECT No.	DATE
				CHECKED BY	APPROVED BY	SHEET No.	REV.
No.	DATE	REVISION	APPR				
	1	MANUFACTURER		Wallace & Tiernan			
	2	MODEL No.		Depolox 3 Plus			
	3	TYPE		Amperometric type analyzer			
	4	SERVICE		Treated Water			
	5						
S E N S O R	6	TAG No.		AE-413			
	7	TYPE		Free Chlorine Residual			
	8	RANGE		0 - 5 mg/l			
	9	CONNECTION	RATING	1/4" NPT	100 psi @ 65 °C		
	10	MOUNTING		Wall Mount			
	11	TEMPERATURE RANGE		-5 to 50 °C			
	12	CABLE LENGTH		1.2 m			
	13	APPROVALS		CSA			
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	C O N T R O L L E R	23	TAG No.		AIT-413		
24		CONTROLLER		Deplox 3 plus			
25		MOUNTING		Wall			
26		OUTPUT		4 - 20 mA			
27		DISPLAY	UNITS	LCD 2 line Backlight	Milligrams/Liter (mg/l)		
28		POWER SUPPLY		120 VAC, 60Hz			
29		INPUT SIGNALS		N/A			
30		ENCLOSURE		NEMA 4X			
31		APPROVALS		CSA			
32							
33							
34							
35							
36							
N O T E	37	TAGGING		Each Transmitter to be c/w SS Tag Number			
	38						
	39	REQUIREMENT		1 of Deplox 3 Plus Transmitter			
	40			2 of Chlorine Sensor			
	41						
	42	ACCESSORIES		Installation, Operation and Maintenance Manual			
	43						
	44	ALTERNATES		Yokogawa			
	45						



City of Iqaluit
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TURBIDITY ANALYZER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR					
	1	MANUFACTURER	HACH					
	2	MODEL No.	1720E Turbidity System					
	3	TYPE	Nephelometer					
	4	SERVICE	Treated Water					
	5							
S E N S O R	6	TAG No.	AE-312					
	7	MODEL No.	1720E					
	8	SENSOR RANGE	0 - 100 NTU					
	9	CALIBRATED RANGE	0 - 100 NTU					
	10							
	11	CONNECTIONS	INLET	OUTLET	1/4" NPT			1/2" NPT
	12	REQUIRED FLOW	200 to 750 ml/min					
	13	MOUNTING	Wall Mount					
	14	TEMPERATURE	0 to +50 °C					
	15	SENSOR CABLE LENGTH						
	16	APPROVALS REQUIRED	CSA					
	17							
	18							
	T R A N S M I T T E R	20	TAG No.	AIT-312				
21		CONTROLLER	SC100					
22		MOUNTING	Wall / Panel Mounted					
23		OUTPUTS	Two 4 - 20 mA			500 ohm max.		
24		DISPLAY	UNITS	LED Backlit LCD			NTU	
25		RELAYS	RATING	3 SPDT			5 amp @ 230 VAC	
26		OPERATING TEMPERATURE	-20 to 40 °C					
27		COMMUNICATIONS	RS-232					
28		POWER SUPPLY	120 VAC, 60Hz					
29		APPROVALS REQUIRED	CSA					
30		ENCLOSURE	NEMA 4X					
31								
32								
33								
N O T E S		36	TAGGING	Each Meter and Sensor to be c/w a SS Tag Number				
		37						
	38	PROCUREMENT	1 of 1720E Turbidity System (Controller and Sensor)					
	39		Calibration Kit and Standards					
	40							
	41	ACCESSORIES	Installation, Operation and Maintenance Manual					
	42							
	43	ALTERNATES						
44								



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TURBIDITY ANALYZER				DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
No.	DATE	REVISION	APPR	CHECKED BY	APPROVED BY	SHEET No. ISS-A4	REV. A
	1	MANUFACTURER	HACH				
	2	MODEL No.	1720E Turbidity System				
	3	TYPE	Nephelometer				
	4	SERVICE	Treated Water				
	5						
S E N S O R	6	TAG No.	AE-412				
	7	MODEL No.	1720E				
	8	SENSOR RANGE	0 - 100 NTU				
	9	CALIBRATED RANGE	0 - 100 NTU				
	10						
	11	CONNECTIONS	INLET	OUTLET	1/4" NPT		
	12	REQUIRED FLOW	200 to 750 ml/min				
	13	MOUNTING	Wall Mount				
	14	TEMPERATURE	0 to +50 °C				
	15	SENSOR CABLE LENGTH					
	16	APPROVALS REQUIRED	CSA				
	17						
	18						
	T R A N S M I T T E R	20	TAG No.	AIT-412			
21		CONTROLLER	RC100				
22		MOUNTING	Wall / Panel Mounted				
23		OUTPUTS	Two 4 - 20 mA			500 ohm max.	
24		DISPLAY	UNIT	LED Backlit LCD			NTU
25		RELAYS	RATING	3 SPDT			5 amp @ 230 VAC
26		OPERATING TEMPERATURE	-20 to 40 °C				
27		COMMUNICATIONS	RS-232				
28		POWER SUPPLY	120 VAC, 60Hz				
29		APPROVALS REQUIRED	CSA				
30		ENCLOSURE	NEMA 4X				
31							
32							
33							
34							
N O T E		36	TAGGING	Each Meter and Sensor to be c/w a SS Tag Number			
	37						
	38	PROCUREMENT	1 of 1720E Turbidity System (Controller and Sensor)				
	39		Calibration Kit and Standards				
	40						
	41	ACCESSORIES	Installation, Operation and Maintenance Manual				
	42						
	43	ALTERNATES					
	44						

MAGNETIC FLOWMETER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR					
F L O W T U B E	1	MANUFACTURER		Rosemount				
	2	MODEL No.		8705				
	3	TYPE		Electro/Magnetic				
	4	SERVICE		Wastewater				
	5	TAG No.		FE-401				
	6	LINE SIZE		12"				
	7	METER SIZE		8"				
	8	CONNECTION	TYPE	RATING	Flanged			150 lb
	9	MATERIAL	Carbon Steel					
	10	LINING MATERIAL	Polyurethane					
	11	ELECTRODE DESIGN	Bullet Nosed					
	12	ELECTRODE MATERIAL	316 SS					
	13	PROTECTION CLASSIFICATION	General Purpose					
	14	FINISH	Standard Enamel					
	15	GROUNDING RINGS	316 SS (x2)					
	16	CALIBRATED FLOW RANGE	0 - 10 000 L/min					
	17	SIGNAL CABLE LENGTH	50'					
	18	APPROVALS REQUIRED	CSA					
	19	LINING PROTECTORS	N/A					
	T R A N S M I T T E R	21	MODEL No.		8732C			
22		TAG No.		FI-401				
23		MOUNTING		Integral Mount				
24		OUTPUT		4 - 20 mA (Internal)				
25		DISPLAY	TYPE	UNITS	LCD Backlit			Liters / Minute
26		SCALE FACTOR	N/A					
27		SCALED PULSE OUTPUT	N/A					
28		AREA CLASSIFICATION	General Purpose					
29		FINISH	Standard Enamel					
30		POWER SUPPLY	120 VAC / 60 Hz					
31		APPROVALS REQUIRED	CSA					
32		INPUT / OUTPUT SIGNALS	Isolated					
33		ENCLOSURE	NEMA 4X					
34								
N O T E		35	TAGGING		Meter and Fowtube to be c/w SS Tag Number			
	36							
	37	PROCUREMENT		1 of 8705 Flowtube				
	38		1 of 8732C Transmitter					
	39							
	40	ACCESSORIES		Installation, Operation and Maintenance Manual				
	41							
	42	ALTERNATES		Yokogawa, ABB, E+H				
	43							

MAGNETIC FLOWMETER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR			83700	Jun-05	
						ISS-F2	A	
F L O W T U B E	1	MANUFACTURER		Rosemount				
	2	MODEL No.		8705				
	3	TYPE		Electro/Magnetic				
	4	SERVICE		Wastewater				
	5	TAG No.		FE-312				
	6	LINE SIZE		10"				
	7	METER SIZE		8"				
	8	CONNECTION	TYPE	RATING	Flanged			150 lb.
	9	MATERIAL		Carbon Steel				
	10	LINING MATERIAL		Polyurethane				
	11	ELECTRODE DESIGN		Bullet Nosed				
	12	ELECTRODE MATERIAL		316 SS				
	13	PROTECTION CLASSIFICATION		General Purpose				
	14	FINISH		Standard Enamel				
	15	GROUNDING RINGS		316 SS (x2)				
	16	CALIBRATED FLOW RANGE		0 - 10,000 L/min				
	17	SIGNAL CABLE LENGTH		50'				
	18	APPROVALS REQUIRED		CSA				
	19	LINING PROTECTORS		N/A				
	T R A N S M I T T E R	21	MODEL No.		8732C			
22		TAG No.		FIT-312				
23		MOUNTING		Integral Mount				
24		OUTPUT		4 - 20 mA (Internal)				
25		DISPLAY	TYPE	UNITS	LCD Backlit			Liters / Minute
26		SCALE FACTOR		N/A				
27		SCALED PULSE OUTPUT		N/A				
28		AREA CLASSIFICATION		General Purpose				
29		FINISH		Standard Enamel				
30		POWER SUPPLY		120 VAC / 60 Hz				
31		APPROVALS REQUIRED		CSA				
32		INPUT / OUTPUT SIGNALS		Isolated				
33		ENCLOSURE		NEMA 4X				
34								
N O T E S		35	TAGGING		Meter and Fowtube to be c/w SS Tag Number			
	36							
	37	PROCUREMENT		1 of 8705 Flowtube				
	38			1 of 8732C Transmitter				
	39							
	40	ACCESSORIES		Installation, Operation and Maintenance Manual				
	41							
	42	ALTERNATES		Yokogowa, ABB, E+H				
	43							



MAGNETIC FLOWMETER				DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
No.	DATE	REVISION	APPR	CHECKED BY	APPROVED BY	SHEET No. ISS-F3	REV. A
F L O W T U B E	1	MANUFACTURER			Rosemount		
	2	MODEL No.			8705		
	3	TYPE			Electro/Magnetic		
	4	SERVICE			Wastewater		
	5	TAG No.			FE-311		
	6	LINE SIZE			6"		
	7	METER SIZE			4"		
	8	CONNECTION	TYPE	RATING	Flanged	150 lb.	
	9	MATERIAL			Carbon Steel		
	10	LINING MATERIAL			Polyurethane		
	11	ELECTRODE DESIGN			Bullet Nosed		
	12	ELECTRODE MATERIAL			316 SS		
	13	PROTECTION CLASSIFICATION			General Purpose		
	14	FINISH			Standard Enamel		
	15	GROUNDING RINGS			316 SS (x2)		
	16	CALIBRATED FLOW RANGE			0 - 1450 L/min		
	17	SIGNAL CABLE LENGTH			50'		
	18	APPROVALS REQUIRED			CSA		
	19	LINING PROTECTORS			N/A		
	T R A N S M I T T E R	21	MODEL No.			8732C	
22		TAG No.			FIT-311		
23		MOUNTING			Integral Mount		
24		OUTPUT			4 - 20 mA (Internal)		
25		DISPLAY	TYPE	UNITS	LCD Backlit	Liters / Minute	
26		SCALE FACTOR			N/A		
27		SCALED PULSE OUTPUT			N/A		
28		AREA CLASSIFICATION			General Purpose		
29		FINISH			Standard Enamel		
30		POWER SUPPLY			120 VAC / 60 Hz		
31		APPROVALS REQUIRED			CSA		
32		INPUT / OUTPUT SIGNALS			Isolated		
33		ENCLOSURE			NEMA 4X		
34							
N O T E S		35	TAGGING			Meter and Fowtube to be c/w SS Tag Number	
	36						
	37	PROCUREMENT			1 of 8705 Flowtube		
	38				1 of 8732C Transmitter		
	39						
	40	ACCESSORIES			Installation, Operation and Maintenance Manual		
	41						
	42	ALTERNATES			Yokogawa, ABB, E+H		
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City of Iqaluit
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MAGNETIC FLOWMETER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
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No.	DATE	REVISION	APPR					
F L O W T U B E	1	MANUFACTURER		Rosemount				
	2	MODEL No.		8705				
	3	TYPE		Electro/Magnetic				
	4	SERVICE		Wastewater				
	5	TAG No.		FE-310				
	6	LINE SIZE		2"				
	7	METER SIZE		2"				
	8	CONNECTION	TYPE	RATING	Flanged			150 lb.
	9	MATERIAL		Carbon Steel				
	10	LINING MATERIAL		Polyurethane				
	11	ELECTRODE DESIGN		Bullet Nosed				
	12	ELECTRODE MATERIAL		316 SS				
	13	PROTECTION CLASSIFICATION		General Purpose				
	14	FINISH		Standard Enamel				
	15	GROUNDING RINGS		316 SS (x2)				
	16	CALIBRATED FLOW RANGE		0 - 270 L/min				
	17	SIGNAL CABLE LENGTH		50'				
	18	APPROVALS REQUIRED		CSA				
	19	LINING PROTECTORS		N/A				
	T R A N S M I T T E R	21	MODEL No.		8732C			
22		TAG No.		FIT-310				
23		MOUNTING		Integral Mount				
24		OUTPUT		4 - 20 mA (Internal)				
25		DISPLAY	TYPE	UNITS	LCD Backlit			Liters / Minute
26		SCALE FACTOR		N/A				
27		SCALED PULSE OUTPUT		N/A				
28		AREA CLASSIFICATION		General Purpose				
29		FINISH		Standard Enamel				
30		POWER SUPPLY		120 VAC / 60 Hz				
31		APPROVALS REQUIRED		CSA				
32		INPUT / OUTPUT SIGNALS		Isolated				
33		ENCLOSURE		NEMA 4X				
34								
N O T E S		35	TAGGING		Meter and Fowtube to be c/w SS Tag Number			
	36							
	37	PROCUREMENT		1 of 8705 Flowtube				
	38			1 of 8732C Transmitter				
	39							
	40	ACCESSORIES		Installation, Operation and Maintenance Manual				
	41							
	42	ALTERNATES		Yokogawa, ABB, E+H				
	43							



City of Iqaluit
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A Tyco International Ltd. Company

MAGNETIC FLOWMETER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR					
F L O W T U B E	1	MANUFACTURER		Rosemount				
	2	MODEL No.		8705				
	3	TYPE		Electro/Magnetic				
	4	SERVICE		Wastewater				
	5	TAG No.		FE-410				
	6	LINE SIZE		2"				
	7	METER SIZE		2"				
	8	CONNECTION	TYPE	RATING	Flanged			150 lb
	9	MATERIAL	Carbon Steel					
	10	LINING MATERIAL	Polyurethane					
	11	ELECTRODE DESIGN	Bullet Nosed					
	12	ELECTRODE MATERIAL	316 SS					
	13	PROTECTION CLASSIFICATION	General Purpose					
	14	FINISH	Standard Enamel					
	15	GROUNDING RINGS	316 SS (x2)					
	16	CALIBRATED FLOW RANGE	0 - 27 L/min					
	17	SIGNAL CABLE LENGTH	50'					
	18	APPROVALS REQUIRED	CSA					
	19	LINING PROTECTORS	N/A					
	T R A N S M I T T E R	21	MODEL No.		8732C			
22		TAG No.		FI-410				
23		MOUNTING		Integral Mount				
24		OUTPUT		4 - 20 mA (Internal)				
25		DISPLAY	TYPE	UNITS	LCD Backlit			Liters / Minute
26		SCALE FACTOR	N/A					
27		SCALED PULSE OUTPUT	N/A					
28		AREA CLASSIFICATION	General Purpose					
29		FINISH	Standard Enamel					
30		POWER SUPPLY	120 VAC / 60 Hz					
31		APPROVALS REQUIRED	CSA					
32		INPUT / OUTPUT SIGNALS	Isolated					
33		ENCLOSURE	NEMA 4X					
N O T E		35	TAGGING		Meter and Fowtube to be c/w SS Tag Number			
	36							
	37	PROCUREMENT		1 of 8705 Flowtube				
	38			1 of 8732C Transmitter				
	39							
	40	ACCESSORIES		Installation, Operation and Maintenance Manual				
	41							
	42	ALTERNATES		Yokogawa, ABB, E+H				
43								



City of Iqaluit
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		LEVEL SWITCH		DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR					
E L E M E N T	1	MANUFACTURER		Ktech				
	2	TYPE		Magnetic Float				
	3	MODEL No.		FS301-2				
	4							
	5	TAG No.		LSL-101 / LSLL-101				
	6	SERVICE		Deisel Fuel				
	7	PROBE MATERIAL		Brass				
	8	FLOAT MATERIAL		Polyurethane Foam				
	9	LENGTH		Co-ordinate With Mechanical				
	10	SETPOINTS		50% & 25% Full				
	11	PROCESS CONNECTION		2" NPT				
	12	ELECTRICAL CONNECTION		1/2" NPT				
	13	ENCLOSURE RATING		NEMA 4X				
	14	APPROVALAS		CSA				
	15	POWER SUPPLY		24 Vdc				
	16	CABLE LENGTH	SIZE	1.5'	18 AWG			
	17							
	18							
	19							
	20							
	21							
	22							
	23							
	24							
	25							
	26							
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	31							
	32							
	33							
	34							
	35							
	36							
	37							
	38							
	39							
N O T E S	40	TAGGING		Switch to be c/w SS Tag Number				
	41							
	42	PROCUREMENT		2 of FS301-2 Level Switch				
	43			Installation, Operation and Maintenance Manual				
	44							
	45	ALTERNATES						
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City of Iqaluit
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		LEVEL SWITCH		DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
				CHECKED BY	APPROVED BY	SHEET No. ISS-L2	REV. A
No.	DATE	REVISION	APPR				
E L E M E N T	1	MANUFACTURER		Magnetrol			
	2	TYPE		Float			
	3	MODEL No.		T10			
	4						
	5	TAG No.		LSH-300			
	6	SERVICE		Water			
	7	FLOAT MATERIAL		PVC			
	8	CONTACT TYPE	RATING	SPDT	10 Amp @ 120 VAC		
	9						
	10	SETPOINT					
	11	PROCESS CONNECTION		N/A			
	12	POWER SUPPLY		120 VAC			
	13	CABLE LENGTH	SIZE	20'	18 AWG		
	14	APPROVALS		CSA			
	15						
	16						
	17						
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	20						
	21						
	22						
	23						
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	31						
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	33						
	34						
	35						
	36						
	37						
	38						
	39						
N O T E S	40	TAGGING		Switch to be c/w SS Tag Number			
	41						
	42	PROCUREMENT		2 of T10 Level Switch			
	43			Installation, Operation and Maintenance Manual			
	44						
	45	ALTERNATES		Ktech			
	46						



City of Iqaluit
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		LEVEL SWITCH		DESIGN BY	DRAWN BY	PROJECT No.	DATE
						83700	Jun-05
No.	DATE	REVISION	APPR	CHECKED BY	APPROVED BY	SHEET No.	REV.
						ISS-L3	A
ELEMENT	1	MANUFACTURER		Ktech			
	2	TYPE		Magnetic Float			
	3	MODEL No.		FS301-4			
	4						
	5	TAG No.		LSLL-102 / LSL-102 / LSH-102 / LSHH-102			
	6	SERVICE		Deisel Fuel			
	7	PROBE MATERIAL		Brass			
	8	FLOAT MATERIAL		Polyurethane Foam			
	9	LENGTH		Co-ordinate With Mechanical			
	10	SETPOINTS		25% / 50% / 80% / 90% Full			
	11	PROCESS CONNECTION		2" NPT			
	12	ELECTRICAL CONNECTION		1/2" NPT			
	13	ENCLOSURE RATING		NEMA 4X			
	14	APPROVALAS		CSA			
	15	POWER SUPPLY		24 Vdc			
	16	CABLE LENGTH	SIZE	1.5'	18 AWG		
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NOTES	40	TAGGING		Switch to be c/w SS Tag Number			
	41						
	42	PROCUREMENT		2 of FS301-4 Level Switch			
	43			Installation, Operation and Maintenance Manual			
	44						
	45	ALTERNATES					
	46						



City of Iqaluit
Nunavut
Booster Station No. 2



PRESSURE TRANSMITTER				DESIGN BY	DRAWN BY	PROJECT No.	DATE		
				CHECKED BY	APPROVED BY	SHEET No.	REV.		
No.	DATE	REVISION	APPR	83700				Jun-05	
				ISS-P1				0	
T R A N S M I T T E R	1	MANUFACTURER		Rosemount					
	2	MODEL NO.		3051T					
	3	TYPE		Gauge					
	4	TAG NO.		PIT-401					
	5	RANGE		-14.7 to 30 psi					
	6	OUTPUT		4 - 20 mA Linear					
	7	CALIBRATION		0 - 100 psig					
	8	MANIFOLD TYPE	MATERIAL	306R Two-Valve	316	ST			
	9	DIAPHRAM		316L SST					
	10	FILL FLUID		Silicone					
	11	PROCESS CONNECTION	SIZE	316L SST	1/2"	NPT			
	12	ELECTRICAL CONNECTION		1/2" NPT					
	13	POWER SUPPLY		24 VDC					
	14	REQUIRED APPROVALS		CSA					
	15	ENCLOSURE		NEMA 4					
	16	MOUNTING		Pipe Mounted					
	17	DISPLAY	UNITS	LCD Meter	Eng. Units and % of Range				
	18								
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N O T E S	35								
	36	TAGGING		Transmitter to be c/w SS Tag Number					
	37								
	38	PROCUREMENT		1 of 3051T Pressure Transmitter					
	39			1 of 306R Two-Valve Manifold and 2" Pipe Bracket					
	40			Installation, Operation and Maintenance Manuals					
41									
42	ALTERNATES		Yokogawa						
42									



City of Iqaluit
Nunavut
Booster Station No. 2



		PRESSURE TRANSMITTER		DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
No.	DATE	REVISION	APPR	CHECKED BY	APPROVED BY	SHEET No. ISS-P2	REV. A
T R A N S M I T T E R	1	MANUFACTURER		Rosemount			
	2	MODEL NO.		3051T			
	3	TYPE		Gauge			
	4	TAG NO.		PIT-310			
	5	RANGE		-14.7 to 30 psi			
	6	OUTPUT		4 - 20 mA Linear			
	7	CALIBRATION		0 - 100 psig			
	8	MANIFOLD TYPE	MATERIAL	306R Two-Valve	316 SST		
	9	DIAPHRAM		316L SST			
	10	FILL FLUID		Silicone			
	11	PROCESS CONNECTION	SIZE	316L SST	1/2" NPT		
	12	ELECTRICAL CONNECTION		1/2" NPT			
	13	POWER SUPPLY		24 VDC			
	14	REQUIRED APPROVALS		CSA			
	15	ENCLOSURE		NEMA 4X			
	16	MOUNTING		Pipe Mounted			
	17	DISPLAY	UNITS	LCD Meter	Eng. Units and % of Range		
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N O T E S	35						
	36	TAGGING		Transmitter to be c/w SS Tag Number			
	37						
	38	PROCUREMENT		2 of 3051T Pressure Transmitter			
	39			1 of 306R Two-Valve Manifold and 2" Pipe Bracket			
	40			Installation, Operation and Maintenance Manuals			
	41						
	42	ALTERNATES		Yokogawa			
42							



City of Iqaluit
Nunavut
Booster Station No. 2



PRESSURE TRANSMITTER				DESIGN BY	DRAWN BY	PROJECT No.	DATE	
				CHECKED BY	APPROVED BY	SHEET No.	REV.	
No.	DATE	REVISION	APPR	ISS-P3				0
T R A N S M I T T E R	1	MANUFACTURER			Rosemount			
	2	MODEL NO.			3051T			
	3	TYPE			Gauge			
	4	TAG NO.			PIT-400			
	5	RANGE			-14.7 to 30 psi			
	6	OUTPUT			4 - 20 mA Linear			
	7	CALIBRATION			0 - 100 psig			
	8	MANIFOLD TYPE	MATERIAL		306R Two-Valve	316	ST	
	9	DIAPHRAM			316L SST			
	10	FILL FLUID			Silicone			
	11	PROCESS CONNECTION	SIZE		316L SST	1 1/2"	NPT	
	12	ELECTRICAL CONNECTION			1/2" NPT			
	13	POWER SUPPLY			24 VDC			
	14	REQUIRED APPROVALS			CSA			
	15	ENCLOSURE			NEMA 4			
	16	MOUNTING			Pipe Mounted			
	17	DISPLAY	UNITS		LCD Meter	Eng. Units and % of Range		
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N O T E S	35							
	36	TAGGING		Transmitter to be c/w SS Tag Number				
	37							
	38	PROCUREMENT			1 of 3051T Pressure Transmitter			
	39				1 of 306R Two-Valve Manifold and 2" Pipe Bracket			
	40				Installation, Operation and Maintenance Manuals			
41								
42	ALTERNATES			Yokogawa				
42								



City of Iqaluit
Nunavut
Booster Station No. 2



		LIMIT SWITCH		DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
No.	DATE	REVISION	APPR	CHECKED BY	APPROVED BY	SHEET No. ISS-S1	REV. A
ELEMENT	1	MANUFACTURER		Allen-Bradley			
	2	MODEL No.		802B Precision			
	3	SERVICE		General Area			
	4	TAG No.		ZSC-200 / ZSC-201			
	5	HEAD TYPE		Roller Lever			
	6	MOUNTING STYLE		Side Mount			
	7	POWER SUPPLY		24 Vdc			
	8	ELECTRICAL CONNECTION		1/2" NPT			
	9	OPERATING TEMPERATURE		-10 to 80 °C			
	10	CONTACT TYPE		SPDT, Form C			
	11	ENCLOSURE		NEMA 4X			
	12	APPROVALS		CSA			
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NOTES	40	TAGGING		Switch to be c/w SS Tag Number			
	41						
	42	PROCUREMENT		3 of 802B Precision Limit Switch			
	43						
	44	ALTERNATES		Square D			
	45						
	46						



TEMPERATURE TRANSMITTER				DESIGN BY	DRAWN BY	PROJECT No. 83700	DATE Jun-05
				CHECKED BY	APPROVED BY	SHEET No. ISS-T1	REV. A
No.	DATE	REVISION	APPR				
TRANSMITTER	1	MANUFACTURER		Rosemount			
	2	MODEL No.		644H			
	3	TAG No.		TIT-310			
	4	OUTPUT		4 - 20 mA			
	5	CALIBRATED RANGE		-10 to 40 °C			
	6	FAIL MODE		Low			
	7	POWER SUPPLY		24 VDC			
	8	ELECTRICAL CONNECTION	SIZE	Threaded Insert	1/2" - 14 NPT		
	9	MOUNTING		Integral w/ Sensor			
	10	ACCESSORIES		Integral LCD Display			
	11	REQUIRED APPROVALS		CSA			
	12	ENCLOSURE		NEMA 4X			
	SENSOR	14	TAG No.		TE-310		
15		SENSOR TYPE	LEADS	Pt 100 RTD	4-Wire		
16		SENSOR STYLE		Spring Loaded			
17		SENSOR LENGTH		8"			
18		TEMPERATURE RANGE		-196 to 600 °C			
19							
20							
21							
THERMOWELL	22	MOUNTING TYPE	SIZE	Welded	3/4" Pipe		
	23	MATERIAL		316 SST			
	24	STEM STYLE		Straight			
	25	IMMERSION LENGTH		6"			
	26						
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NOTES	34	TAGGING		Transmitter and Sensor c/w SS Tag Number			
	35						
	36	PROCUREMENT		3 of 644H Transmitter and Sensor			
	37			1 of Thermowell			
	38						
	39	ACCESSORIES		Installation, Operation and Maintenance Manual			
	40						
	41	ALTERNATES		WIKA			
	42						
43							