

XIII. SPECIFICATION SHEETS

LANDFILL GAS ANALYZER REPLACED WITH ECOTEC FAU-TDL - 2016
CELLULAR DATA ACQUISITION SYSTEM REPLACED WITH FLEETZOOM FZ400
INFORMATION FOR BOTH UNITS CAN BE FOUND IN APPENDIX A.1 OF THE OPERATIONS
MANUAL AS WELL AS IN A BOUND 3-RING BINDER IN THE FLARE BUILDING REFERENCE
SHELF.

IF YOU NEED FURTHER INFORMATION CALL ERIK KORSMO CB&I 503-939-3688

Project Spec Sheet List

Project # 9109403 Project Site SUDBURY LANDFILL

Description FBF ZTOF040X40LF 0000 0000

Customer MARK HEUETT CONTRACTORS

Location WALLA WALLA, WA

Cust. PO # LTR 08-23-10

Spec	Page	Of	Revision	Description	Spec Name
1	1	5	0	PNL-101	FLARE CONTROL PANEL
1	2	5	0	PNL-101	FLARE CONTROL PANEL
1	3	5	0	PNL-101	FLARE CONTROL PANEL
1	4	5	0	PNL-101	FLARE CONTROL PANEL
1	5	5	0	PNL-101	RECEIVER INSTRUMENTS
2	1	1	0	PNL-103	IGNITION TRANSFORMER
3	1	2	0	JB-203	JUNCTION BOX
3	2	2	0	BE-203	FLAME DETECTION SYSTEM
4	1	5	0	PR-101	PANEL RACK
4	2	5	0	PCV-302	PRESSURE CONTROL VALVES & REGULATORS
4	3	5	0	SV-303	SOLENOID VALVES
4	4	5	0	HV-304	MANUAL BALL VALVE
4	5	5	0	PI-305	PRESSURE GAGES
5	1	1	0	TCV-202A	ACTUATED CONTROL DAMPER
6	1	1	0	TE-201, TE-202A, TE-202B, TE-202C	THERMOCOUPLES & THERMOWELLS
7	1	1	0	PDSL-204	PRESSURE SWITCHES
8	1	1	0	BL-204	PURGE AIR BLOWER
9	1	1	0	SOV-102, SV-102, ZSC-102, ZSO-102	ACTUATED BUTTERFLY VALVE
10	1	1	0	FA-107	FLASH - BACK ARRESTOR
11	1	1	0	FE-107, FT-107	MASS FLOW METER
12	1	1	0	LG-101	GAGE GLASSES AND COCKS
13	1	1	0	PDI-101	PRESSURE GAGES



JZ SPECIFICATION SHEET
FLARE CONTROL PANEL

FOR JZ PARTS: (918)234-2751

PNL-101

Spec	Rev	1	0
Page No:	1 of 5		
Project	9109403		

Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	1	CE-101	HOFFMAN #C-SD36308 ENCLOSURE, NEMA 4	9000000
2				(36" H X 30" W X 8" D)	A01
3	2	1	----	HOFFMAN #CMFK MOUNTING KIT	----
4	3	1	----	HOFFMAN #C-P3630 SUBPANEL	----
5	4	1	----	HOFFMAN #AWDF2416N4 WINDOW KIT, HINGED, NEMA 4	----
6				(16" H X 24" W)	
7	5	1	HTR-1	HOFFMAN #D-AH4001B HEATER, 400 W	----
8	6	1	GFI-1	LEVITON #7599-I RECEPTACLE, GFCI, 15 A WITH	----
9				#80401-I COVER AND APPLETON #4CS1/2 BOX	
10					
11					
12					
13					
14					
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16					
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23					
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25 Notes:

ALL ITEMS REQUIRE UL LABEL
PANEL MOUNT

Revision	Date	Initials	Revision Description	Date	Name
Δ				Prepared	09/02/2010 JONES6A
Δ				Checked	09/13/2010 JONES6A
Δ				Approved	09/13/2010 JONES6A
Δ				Quote Attached: <input type="checkbox"/> Yes	Copies of Vendor Literature Req'd: 1

Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	1	L-1	CUTLER HAMMER #10250T181NC12N PILOT LIGHT,	----
2				TRANSFORMER TYPE, NEMA 4X, 120 V, WHITE LENS	
3	2	1	L-2	CUTLER HAMMER #10250T181NC8N PILOT LIGHT,	----
4				TRANSFORMER TYPE, NEMA 4X, 120 V, GREEN LENS	
5	3	1	L-3	CUTLER HAMMER #10250T181NC7N PILOT LIGHT,	----
6				TRANSFORMER TYPE, NEMA 4X, 120 V, RED LENS	
7					
8					
9					
10					
11					
12	4	1	S-1	CUTLER HAMMER #10250T20KB SELECTOR SWITCH, TWO	----
13				POSITION , NEMA 4X, 1-N/O AND 1-N/C CONTACTS	
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

25 Notes:

ALL ITEMS REQUIRE UL LABEL
PANEL MOUNT

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Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	1	PLC-1	ALLEN BRADLEY #1762-L40AWAR MICROLOGIX PROCESSOR	1157192
2				WITH DUAL RS-232 PORTS	
3	2	1	PLC-1	ALLEN BRADLEY #1762-IT4 THERMOCOUPLE INPUT MODULE	1127113
4	3	2	PLC-1	ALLEN BRADLEY #1762-IF2OF2 ANALOG INPUT AND OUTPUT	1127117
5				MODULE	
6	4	1	PLC-1	ALLEN BRADLEY #1762-NET-ENI ETHERNET MODULE	1212476
7					
8					
9	5	1	OIP-1	AUTOMATION DIRECT #EA7-S6M TOUCHSCREEN, NEMA 4,	----
10				CAPABLE OF MEMORY MODULE EXPANSION	
11	6	1	----	AUTOMATION DIRECT #EZ-MLOGIX-CBL CABLE	----
12	7	1	PS-1	PHOENIX #2938730 POWER SUPPLY, 24 V DC,	----
13				48 W, 120 V	
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

25 Notes:

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PANEL MOUNT

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Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	75	----	PHOENIX #3004362 TERMINAL	----
2	2	10	----	PHOENIX #0441504 GROUND TERMINAL	----
3	3	2	----	PHOENIX #3003020 END PLATE	----
4	4	2	----	PHOENIX #0800886 END STOP	----
5	5	1	----	PHOENIX #1051003 MARKER	----
6	6	1	----	PHOENIX #0801733 TRACK	----
7	7	10	----	ENTRELEC MTC6 TERMINAL (P/N 115 206.22)	----
8	8	2	----	PHOENIX #3006043 TERMINAL	----
9	9	1	----	PHOENIX #0443023 GROUND TERMINAL	----
10	10	2	----	PHOENIX #3006027 END PLATE	----
11					
12	11	1	CB-4	SQUARE D #60131 CIRCUIT BREAKER, 25 A	----
13	12	2	CB-2,11	SQUARE D #60110 CIRCUIT BREAKER, 10 A	----
14	13	1	CB-10	SQUARE D #60106 CIRCUIT BREAKER, 5 A	----
15					
16	14	1	MS-204	SQUARE D #LC1D12G7 MOTOR STARTER FOR 3/4 HP	----
17				120 V, 60 HZ MOTOR, 120 V COIL	
18	15	1	----	SQUARE D #LRD21 OVERLOAD RELAY, 12 TO 18 A	----
19				ADJUSTABLE RANGE	
20					
21	16	4	CR-63 67 68 69	IDEC #RR3B-ULCAC120V RELAY, 3 PDT WITH INDICATING	----
22				LIGHT AND PUSH-TO-TEST BUTTON	
23	17	4	----	IDEC #SR3B-05 SOCKET	----
24					

25 Notes:
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PANEL MOUNT

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JOHN ZINK COMPANY LLC

JZ SPECIFICATION SHEET
RECEIVER INSTRUMENTS

PNL-101

FOR JZ PARTS: (918)234-2751

Spec	Rev	1	0
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Project	9109403		

Project Name: FBF ZTOF040X40LF 0000 0000 Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL Customer P.O.: LTR 08-23-10

GENERAL	1	Service	TEMPERATURE
	2		
	3	Function	SWITCH
	4	Case	Color
	5	Mounting	INTERNAL
	6		
	7	Enclosure Class	General Purpose
	8	Power Supply	117 V 60 Hz
	9	Chart	
	10		
	11	Chart Drive	
	12	Scales	
	13		

INPUTS	25	Input Signals	TYPE K THERMOCOUPLE
	26	No. of Inputs	1
	27	Power for XMTRS	
	28	Transmitter Spec. No.	
	29	Burnout	UPSCALE
	30		
	31		
	32		

CONTROLLER	14	P=Prop(Gain), I=Integrat(Auto Reset), D=Derivative(Rate), Sub: s=Slow, f=Fast	
	15	Control Modes	
	16	Action	
	17	Auto-Man Switch	
	18	Set Point Adj.	
	19	Manual Reg.	
	20	Output	
	21		
	22		
	24		

OPTIONS	33	Alarm Switches: Qty	Form	1	
	34	Rating		8 A	
	35	Function		Meas. Var.	
	36	Contact	on Measurement	Open	Increase
	37				
	38				
39					
40					
41					
42					

ORDER	43	Manufacturer	WATLOW
	44	Model No.	CV-C6KH-0000-2500-D
	45	Tag No.	TSHH-201
	46	Quantity	1
	47	Mount	PANEL
	48	JZ Part No.	---

49 Notes:

ALL ITEMS REQUIRE UL LABEL

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Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

TRANSFORMER	1	Manufacturer	DONGAN	ENCLOSURE	13	Manufacturer	KILLARK
	2	Model	A06-SA6		14	Model	XJB-5106
	3	Tag No.	IT-1		15	Enclosure	NEMA 7
	4	Primary	120 V, 60 HZ		16	Dimensions	5" W X 10" H X 6" D
	5	Secondary	6000 V		17	JZ Part No.	0003653
	6	JZ Part No.	0002558		18		
	7				19	Sub-Panel Manufacturer	KILLARK
	8				20	Sub-Panel Model No	7998-4
	9				21	JZ Part No.	0901135
	10				22		
	11				23		
	12				24	Mount	BELOW

25 Notes:

QUANTITY: ONE (1) ASSEMBLY REQUIRED

ALL ITEMS REQUIRE UL LABEL

PANEL MOUNT, THEN SHIP LOOSE FOR FIELD INSTALLATION

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Project Name: FBZ ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	1	CE-203	HOFFMAN #A1412NF ENCLOSURE, NEMA 4	0015278
2				(14" H X 12" W X 6" D)	
3	2	1	----	HOFFMAN #A14P12 SUBPANEL	0003527
4	3	1	----	HUBBELL #SHC1023 CORD CONNECTOR, ALUMINUM,	1101680
5				1/2" NPT HUB FOR 3/8" DIAMETER CABLE COMPRESSION	
6					
7					
8					
9					
10					
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21					
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23					
24					

25 Notes:

ALL ITEMS REQUIRE UL LABEL

INSTALL CORD CONNECTOR IN BOTTOM OF ENCLOSURE

PANEL MOUNT, THEN SHIP LOOSE FOR FIELD INSTALLATION

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Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

FLAME SCANNER	1	Manufacturer	COEN	JZ Part No.
	2	Model No.	DSF-2000-SB	2653-213-05
	3	Quantity	1	
	4	Type	Ultra-Violet	
	5		SELF-CHECKING	
	6	Power Requirement	24 V DC	
	7	Cable	10' LENGTH	
	8	Mounting Connection	1" NPT (PROCESS), 1/2" NPT (CONDUIT)	
	9	Tag Number(s)	BE-203	
	10			
	11			
	12	Electrical Classification	CLASS 1, DIVISION 1, GROUP D	
	13	Mount	SHIP LOOSE FOR FIELD INSTALLATION	

FLAME RELAY	14	Manufacturer		
	15	Model No.		
	16	Quantity		
	17	Description		
	18			
	19			
	20	Power Requirement		
	21	Amplifier		
	22	Wiring Base		
	23	F.F.R.T.		
	24			
25				
26	Tag No.(s)			
27	Mount			

28 Notes:

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Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

	Item No.	Qty	Tag Number(s)	Description	JZ Part No.
1	1	25'	---	DELCO #440 IGNITION WIRE, HIGH VOLTAGE	0002167
2	2	400'	---	THERMO SENSORS #PPZS16KX THERMOCOUPLE WIRE,	0403529
3				16 GAGE SHIELDED, MOISTURE RESISTANT	
4					
5					
6					
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25 Notes:

ALL ITEMS REQUIRE UL LABEL
SHIP LOOSE FOR FIELD INSTALLATION

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Project Name: FBF ZTOF040X40LF 0000 0000 Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL Customer P.O.: LTR 08-23-10

LINE	1	Service	PROPANE / NATURAL GAS		ACCESSORIES	28	Filt. Reg.	Supply Gage	NO	NO
	2	Line No./Vessel No.				29	Line Strainer			
	3	Line Size/Sched. No.	1/2"			30	Housing Vent			
	4	Function	PILOT GAS			31	Internal Relief		NO	
BODY	5	Type of Body	REGULATOR		32					
	6	Body Size	Port Size	1/2"	33					
	7	Guiding	No. of Ports	2	34					
	8	End Conn. & Rating	1/2" NPT		SERVICES	35	Flow Units	SCFH		
	9	Body Material	ALUMINUM.			36	Fluid	PROPANE / NATURAL GAS		
	10	Packing Material				37	Quant. Max	25 / 50		
	11	Lubricator	Isolating Valve			38	Quant. Oper.	22 / 45		
	12	Seal Type				39	Valve Cv	Valve 1	1.33	35.02
	13	Trim Form				40	Norm. Inlet Press.	ΔP	20 PSIG	
	14	Trim Material				41	Max. Inlet Press.	400 PSIG		
	15	Seat Material	NITRILE			42	Max. Shut Off ΔP			
	16	Required Seat Tightness				43	Temp. Max.	Operating	180	60
	17	Max. Allow. Sound Level dBA				44	Oper. sp. gr.	Mol. Wt.	1.52 / 0.65	44 / 19
ACTUATOR	18	Type of Actuator	SPRING DIAPHRAGM			45	Oper. Visc.	% Flash		
	19	Pilot				46	% Superheat	% Solids		
	20	Supply to Pilot				47	Vapor Press.	Crit. Press.		
	21	Self Cont.	Ext. Conn.	X	48	Predicted Sound Level dBA				
	22	Diaphragm Material	NITRILE		ORDER	49				
	23	Diaphragm Rating				50	Manufacturer	FISHER		
	24	Spring Range	0 TO 35 PSIG			51	Model No.	67D-27		
	25	Set Point	15 PSIG			52	Mount	RACK		
	26					53	Tag No.	PCV-302		
	27					54	JZ Part No.	1260113		

55 Notes:
QUANTITY: ONE (1) REQUIRED

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Δ				Prepared	09/02/2010 JONES6A
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JOHN ZINK COMPANY LLC

JZ SPECIFICATION SHEET
SOLENOID VALVES

Spec Rev	4	0
Page No.	3 of 5	
Project	9109403	

FOR JZ PARTS: (918)234-2751

SV-303

Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

GENERAL	1	Tag No.	SV-303		SOLENOID	28	Enclosure	NEMA 4,7		
	2	Service	PILOT GAS			29	Voltage / HZ	120 V	60	
	3					30	Style of Coil	F		
	4	Line No. / Vessel No.				31	Single or Double Coil			
	5	Quantity	1			32				
VALVE BODY	6	Type			SERVICE COND.	33				
	7	Size: Body	Port	1/2"		3/4"	34	Fluid	PROPANE	NATURAL GAS
	8	Rating	Type Conn.			NPT	35	Qty. Maximum	25 SCFH	50 SCFH
	9	Material -- Body	ALUMINUM			36	Oper. Diff. Min / Max	0	20 PSIG	
	10	Material -- Seat	NITRILE			37	Allow. Diff. Min / Max	0	50 PSIG	
	11	Material -- Diaphragm	NITRILE			38	Temp. Norm / Max.	F 60	125	
	12	Operation Direct/ Pilot	DIRECT				39	Oper. sp. gr.	1.52	0.65
	13	Packless or Type Packed	PACKLESS			40	Oper. Viscosity			
	14	Manual Re-Set	NO			41	Required Cv			
	15	Manual Operator				42	Valve Cv	4.4		
	16					43				
	WHEN DEENERGIZED	18	2-Way Valve Opens/Close			CLOSES	44			
19		3-Way			45					
20		Vent Port Opens/Close			46					
21		Press Port Opens/Clos			47					
22		4-Way			48					
23		Press to Cyl.1 / Cyl.2			49					
24		Exh. from Cyl.1 / Cyl.2			50					
25					51	Manufacturer	ASCO			
26					52	Model No.	EF8215G20			
27					53	Mount	RACK			
					54	JZ Part No.	0012004			

55 Notes:

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JOHN ZINK
JOHN ZINK COMPANY LLC

FOR JZ PARTS: (918)234-2751

JZ SPECIFICATION SHEET

MANUAL BALL VALVE

HV-304

Spec Rev	4	0
Page No.	4 of 5	
Project	9109403	

Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

1	Manufacturer	APOLLO
2	Model No.	73A-103-01
3	Process Connections	THREADED
4	Body Material	CARBON STEEL
5	Ball Material	CARBON STEEL
6	Stem Material	CARBON STEEL
7	Seal/Seat Material	TFE/TFE
8	Packing Material	TFE
9	Handle Type	LEVER
10		
11		
12		

34 Notes:

	Qty	Tag No.	Size	Oper. Press. PSIG	Oper. Temp. ° F	Service	Mount	JZ Part No.
13								
14	1	HV-304	1/2"	15	60	PILOT GAS	RACK	0501519
15								
16								
17								
18								
19								
20								
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22								
23								
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31								
32								
33								

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Project Name	FBF ZTOF040X40LF 0000 0000	Customer Name	MARK HEUETT CONTRACTORS
Project Site	SUDBURY LANDFILL	Customer P.O.:	LTR 08-23-10

1	Type	Direct	13	Process Connection	1/2" BOTTOM
2	Mount Type	Local	14	Operating Temperature	60 F
3	Dial Diamete	4 1/2"	15	OPTIONS	
	Color	WHITE	16		
4	Case Material	Phenol	17		
5	Ring Type	Screwed	18		
6	Blow-Out Protection	Back	19		
7	Lens Material	Plastic	20		
8	Accuracy Required	+/- 0.5%	21		
9	Element Type	Bourdon	22		
10	Element Materia	SS	23	Manufacturer	WIKA
11	Socket Material	Steel	24	Model No.	222.34 4.5 30PSI 1/2L
12	Movement Material	SS			

	Quantity	Tag No	Range PSIG	Oper. Press. PSIG	Service	JZ Part No
25						
26	1	PI-305	0 TO 30	15	PILOT GAS	1209636
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						

45 Notes:

RACK MOUNT

Revision	Date	Initials	Revision Description	Date	Name
△				Prepare	09/02/2010 JONES6A
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Project Name: **FBF ZTOF040X40LF 0000 0000** Customer Name: **MARK HEUETT CONTRACTORS**
Project Site: **SUDBURY LANDFILL** Customer P.O.: **LTR 08-23-10**

DAMPERS	1	Tag No.	TCV-202A					
	2	Service	AIR					
	3	Manufacturer	AMERICAN WARMING					
	4	Line Size/Sched. No.						
	5	Type of Body	VC-412 OPPOSE BLADE					
	6	Body Size	36" H x 36" W					
	7	Port Size						
	8	End Conn. and Rating						
	9							
MATERIALS	10	Body	GALVANIZED					
	11	Disc						
	12	Shaft						
	13	Bushing						
	14	Trim: Seat						
	15	Packing						
	16							
	17							
	18	Required Seat Tightness						
19								
SERVICE	20	Temp °	Max	Min	AMBIENT			
	21	Press.	Max	Min	AMBIENT			
	22	Maximum Shut Off Δ /Pressure						
	23	Max Flow	Cv (Cg)					
	24	Norm. Flow	Cv (Cg)					
25								
ACTUATOR	26	Manufacturer	WORCESTER					
	27	Model No.	12H755Z120A20AF4174					
	28	Type	ELECTRIC					
	29							
30								
31								
32	Quantity	1						
33	Location	SHIP LOOSE						
34	JZ Part No.	9109403A05						

35 Notes:

ACTUATED DAMPER TO OPEN AT 4 MA INPUT AND CLOSE AT 20 MA INPUT.

ALSO SUPPLY HONEYWELL #4074ERU GASKET
JOHN ZINK PART NUMBER: 9019000445
QUANTITY: ONE (1) REQUIRED

Revision	Date	Initials	Revision Description	Date	Name
Δ				09/02/2010	JONES6A
Δ				09/13/2010	JONES6A
Δ				09/13/2010	JONES6A
Δ				Quote Attached: <input type="checkbox"/> Yes Copies of Vendor Literature Req'd: 1	

Project Name: FBF ZTOF040X40LF 0000 0000 Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL Customer P.O.: LTR 08-23-10

ELEMENT	1	Manufacturer	THERMO SENSORS		WELL	11	Material	INCONEL 600			
	2	Model No.	494-92716-18-K-I600			12	Construction	STRAIGHT PIPE			
	3	ISA Type	Wire Size	K		14 AWG	13	O.D. Dim.	I.D. Dim.	0.840"	0.622"
	4	Sheath O.D.	Sheath Mat'l	3/8"		INC 600	14	Process Conn.	Internal Conn.	1" NPT	
	5	Type	Ungrounded			15					
HEAD	6	Material	CAST IRON		ASSEMBLY	16	Nipple Length "N"				
	7	Conduit Connection	3/4"			17					
	8	Terminal Block	Single			18	Manufacturer				
	9					19	Model				
	10					20					

	Tag No.	Well Dimes.		Element Length	Single Duplex	Type	Gage	Service	JZ Part No.
		"U"	"T"						
21									
22	TE-201			18"	SINGLE	K	14	HIGH TEMPERATURE	1099113
23	TE-202A			18"	SINGLE	K	14	TEMPERATURE CONTROL	1099113
24	TE-202B								
25	TE-202C								
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									

37 Notes:

QUANTITY: FOUR (4) ASSEMBLIES REQUIRED

SHIP LOOSE FOR FIELD INSTALLATION

Revision	Date	Initials	Revision Description	Date	Name
△				Prepared	09/02/2010 JONES6A
△				Checked	09/13/2010 JONES6A
△				Approved	09/13/2010 JONES6A
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JZ SPECIFICATION SHEET
PRESSURE SWITCHES

Spec	Rev	7	0
Page No.	1 of 1		
Project	9109403		

FOR JZ PARTS: (918)234-2751

PDSL-204

Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

GENERAL	1	Type	Press	11	Type	Snap
	2	Setting	Field	12	Quantity	Single
	3	Dead Band	Fixed	13	Form	SPDT
	4			14	Rating	15 A / 120 V / 60 HZ
	5			15	Load	Non-inductive
ELEMENT	6	Type	Diaphragm	16	Enclosure	Expl. Proof
	7	Material	RUBBER	17	Conduit Connection	1/2" NPT
	8	Connection	1/8" NPT BOTTOM	18		
	9	Mounting	Local	19	Manufacturer	DWYER
	10			20	Model	1950-1-2F

	Tag No.	Process Cond.	Adj. Range	Set Point		Operating		Service	Mount	JZ Part No.
				Process	Signal	Temp. O F	Press. PSI			
21										
22	PDSL-204	Increase	0.4 TO 1.6"	0.5"		AMB.	ATM.	PURGE AIR	FIELD	0024372
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										

36 Notes:
QUANTITY: ONE (1) REQUIRED

Revision	Date	Initials	Revision Description	Date	Name
Δ				Prepared	09/02/2010 JONES6A
Δ				Checked	09/13/2010 JONES6A
Δ				Approved	09/13/2010 JONES6A
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JOHN ZINK

JOHN ZINK COMPANY LLC

FOR JZ PARTS: (918)234-2751

JZ SPECIFICATION SHEET

PURGE AIR BLOWER

BL-204

Spec Rev 8 0

Page No: 1 of 1

Project: 9109403

Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

1

PURGE AIR BLOWER

MANUFACTURER: AMERICAN FAN COMPANY

MODEL: SC-800

QUANTITY: ONE (1) REQUIRED

ARRANGEMENT: 4-FM

MOTOR: 3/4 HP, 1800 RPM, TOTALLY ENCLOSED EXLOSIONPROOF (TEXP), 56-C FRAME

120/240 V AC, SINGLE PHASE, 60 HZ

SPEED: 1750 RPM @ 0.5 BHP

DUTY: 700 CFM @ 1.7" H₂O

TEMPERATURE: 100 °F

ACCESSORIES: OUTLET FLANGE, INLET SCREEN, 50% CUTOFF DAMPER, DRAIN

JOHN ZINK PART NUMBER: 1063304

TAG: BL-204

SHIP LOOSE FOR FIELD INSTALLATION

Revision	Date	Initials	Revision Description	Date	Name
Δ				Prepared	09/02/2010 JONES6A
Δ				Checked	09/13/2010 JONES6A
Δ				Approved	09/13/2010 JONES6A
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JZ SPECIFICATION SHEET
ACTUATED BUTTERFLY VALVE
 SOV-102, SV-102, ZSC-102, ZSO-102

Spec	Rev	9	0
Page No:	1 of 1		
Project:	9109403		

FOR JZ PARTS: (918)234-2751

Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

GENERAL	1	Tag No.	SOV-102		POSITIONER	28	Manufacturer	
	2	Service	LANDFILL GAS			29	Model	
	3	Line No./Vessel No.				30	Signal Supply Requirement	
	4	Line Size/Sched. No.	6"			31	Input Signal	
TYPE	5	Type of Body	Body Size	WAFER	6"	32	Output Signal	
	6	Port Size	Valve Cv	6"		33	Electrical Rating	
	7	Shaft Diameter				34		
	8	Face to Face Dimension				35	Filter Regulator	
	9	End Conn. and Rating		6" 150 LB RF		36	Gage Set	
MATERIALS	10	Body		CARBON STEEL		37	Mechanical Travel Stop	
	11	Disc		316 STAINLESS STEEL		38	Instr. Tubing Requirements	STAINLESS STEEL
	12	Shaft		17-4 PH STAINLESS STEEL		39	Position Switch ZSC/O-102	TOPWORX #DXP-M21GNEB
	13	Bushing				40	Solenoid Valve SV-102	ASCO #EF8320G184 120V/60H
	14	Trim Form				41	Other Accessories	SPEED CONTROL VALVE
	15	Trim:	Seat	PTFE		42		
	16		Seal			43		
	17		Packing			44		
	18	Seat Leakage Classification				45	Fluid Type	LANDFILL GAS
ACTUATOR	20	Manufacturer		BETTIS		46	Operating Temperature Range	40 TO 100 F
	21	Model		DS350SR3		47	Operating Flow Rate Range	0 TO 350 SCFM
	22	Type (Pneumatic/Electrical)		PNEUMATIC		48	Operating Pressure Range	-40" H2O
	23	Input Signal (Max/Min)				49	Maximum Shut Off Δ /Pressure	
	24	Action (Spring Return/Double)		SPRING RETURN		50		
	25	Actuator/Valve Orientation				51	Manufacturer	XOMOX
	26	Failure Mode		CLOSED		52	Model Number	6" 801-267-ST2
27	Minimum Supply Pressure		100 PSIG		53	Mount	SKID	
					54	JZ Part No.	1060723	

55 Notes:

QUANTITY: ONE (1) ASSEMBLY REQUIRED

Revision	Date	Initials	Revision Description		Date	Name
Δ				Prepared	09/02/2010	JONES6A
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Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

1	Manufacturer	ENARDO
2	Model No.	E71006/D-AAF-13
3	Process Connections	125 LB FF
4	Body Material	ALUMINUM
5	Element Materia	ALUMINUM
6	Drain Connection	1/2" NPT WITH PLUG
7	Body Configuration	ECCENTRIC
8		
9		
10		
11		
12		

34 Notes:

TWO (2) 1/2" FNPT TAPS WITH PLUG REQUIRED, ONE ON EACH SIDE OF ELEMENT.

13	Qty	Tag No.	Size	Oper. Press. H2O	Oper. Temp. ° F	Service	Mount	JZ Part No.
14	1	FA-107	6"	10"	100	LANDFILL GAS	FIELD	1023686
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Revision	Date	Initials	Revision Description	Date	Name
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JOHN ZINK
JOHN ZINK COMPANY LLC

FOR JZ PARTS: (918)234-2751

JZ SPECIFICATION SHEET

MASS FLOW METER

FE-107, FT-107

Spec	Rev	11	0
Page No:	1 of 1		
Project:	9109403		

Project Name: FBF ZTOF040X40LF 0000 0000

Customer Name: MARK HEUETT CONTRACTORS

Project Site: SUDBURY LANDFILL

Customer P.O.: LTR 08-23-10

1

MASS FLOW METER

MANUFACTURER: THERMAL INSTRUMENT COMPANY
 MODEL: 62-9/9500-I-G-1/2-316SS-PG-120-4/20-ND
 QUANTITY: ONE (1) ASSEMBLY REQUIRED

CONNECTION: 3/4" MALE NPT COMPRESSION FITTING
 (316 STAINLESS STEEL BODY AND FERRULE)

MOUNT: TOP
 PROBE LENGTH: 12"
 TUBE MATERIAL: 316 STAINLESS STEEL

POWER: 120 V, SINGLE PHASE, 60 HZ
 ENCLOSURE RATING: NEMA 7/4X
 ENCLOSURE MATERIAL: ALUMINUM
 TRANSMITTER: INTEGRAL
 OUTPUT: 4 TO 20 MA

SERVICE: LANDFILL GAS (50% CH₄, 50% CO₂)
 PIPE: 6" DIAMETER, SDR 17 HDPE
 (5.814" INSIDE DIAMETER)

MINIMUM FLOW RATE: 0 SCFM
 DESIGN FLOW RATE: 350 SCFM
 MAXIMUM FLOW RATE: 385 SCFM

MINIMUM PRESSURE: 0 PSIG
 DESIGN PRESSURE: 10" H₂O
 MAXIMUM PRESSURE: 1 PSIG

MINIMUM TEMPERATURE: 32 °F
 DESIGN TEMPERATURE: 100 °F
 MAXIMUM TEMPERATURE: 120 °F

JOHN ZINK PART NUMBER: 9109403A11
 TAG NUMBER: FE-107, FT-107

SHIP LOOSE FOR FIELD INSTALLATION

Revision	Date	Initials	Revision Description		Date	Name
Δ				Prepared	09/02/2010	JONES6A
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JZ SPECIFICATION SHEET
GAGE GLASSES AND COCKS

Spec Rev	12	0
Page No.	1 of 1	
Project	9109403	

FOR JZ PARTS: (918)234-2751

LG-101

Project Name: FBF ZTOF040X40LF 0000 0000	Customer Name: MARK HEUETT CONTRACTORS
Project Site: SUDBURY LANDFILL	Customer P.O.: LTR 08-23-10

G A G E G L A S S	1	Type	Tubular		G A G E C O C K S	11	Type	Straight	
	2	Connection Type	Top & Bottom			12	Connection Vessel	3/4" NPT	
	3	Connection Size: Vent Drain	3/4"	3/4"		13	Connection: Gage Vent Drain	1/4"	1/4"
	4	Material	316 STAINLESS STEEL			14	Material	316 STAINLESS STEEL	
	5	Minimum Rating	-6 psig at 150 ° F			15	Minimum Rating	-6 psig at 150 ° F	
	6	Options	SHIELDED SIGHT GLASS			16	Construction		
	7	Manufacturer	KENCO			17	Bonnet		
	8	Model	EPG-3/4-22" OAL			18	Options	Ball Checks	
	9					19	Manufacturer	KENCO	
	10					20	Model	KTV-75-SS	

	Qty.	Tag No.	Visible Glass	C.L. Conn.	Model No.	Operating		Service	JZ Part No.
						Temp. ° F	Press. H2O		
21									
22	1	LG-101	18"	24"	BELOW	100	-40"	LANDFILL GAS	BELOW
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									

37 Notes:

DESCRIPTION: ISOLATION VALVES SHIELDED SIGHT GLASS
 MODEL: KTV-75-SS EPG-3/4-22" OAL
 QUANTITY: ONE (1) SET REQUIRED ONE (1) REQUIRED
 JOHN ZINK PART NUMBER: 1004970 1006492

CENTER TO CENTER DISTANCE IS 24" BETWEEN TWO (2) 3/4" DIAMETER FEMALE NPT VESSEL CONNECTIONS.

SKID MOUNT

Revision	Date	Initials	Revision Description	Date	Name
Δ				Prepared	09/02/2010 JONES6A
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JOHN ZINK

JOHN ZINK COMPANY LLC

FOR JZ PARTS: (918)234-2751

JZ SPECIFICATION SHEET

PRESSURE GAGES

PDI-101

Spec Re 13 0

Page No. 1 of 1

Project 9109403

Project Name **FBF ZTOF040X40LF 0000 0000**

Customer Name **MARK HEUETT CONTRACTORS**

Project Site **SUDBURY LANDFILL**

Customer P.O.: **LTR 08-23-10**

1	Type	DIRECT		13	Process Connection	1/8" NPT
2	Mount Type	LOCAL		14		
3	Dial Diamete	Color	4-3/4" WHITE	15	OPTIONS	
4	Case Material	ALUMINUM		16		
5	Ring Type	SCREWED		17		
6	Blow-Out Protection	BLOWOUT PLUG		18		
7	Lens Material	PLASTIC		19		
8	Accuracy Required	2%		20		
9	Element Type	DIAPHRAGM		21		
10	Element Materia	SILICONE RUBBER		22		
11	Socket Material			23	Manufacturer	DWYER
12	Movement Material			24	Model No.	2005

	Quantity	Tag No	Range H2O	Oper. Press. H2O	Service	JZ Part No
25						
26	1	PDI-101	0 TO 5"	2"	MOISTURE SEPARATOR	0404310
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						

45 Notes:

SKID MOUNT

Revision	Date	Initials	Revision Description	Date	Name
△				09/02/2010	JONES6A
△				09/13/2010	JONES6A
△				09/13/2010	JONES6A
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