
COX

Research and Technology, Inc.

DUPLEX PUMP CONTROL PANEL DORAN UNDERDRAIN MANHOLE SUMP PUMPS

Cox Research and Technology, Inc.
14697 S. Harrells Ferry Road
Baton Rouge, LA. 70816
(225) 756-3271 Fax (225) 755-1030

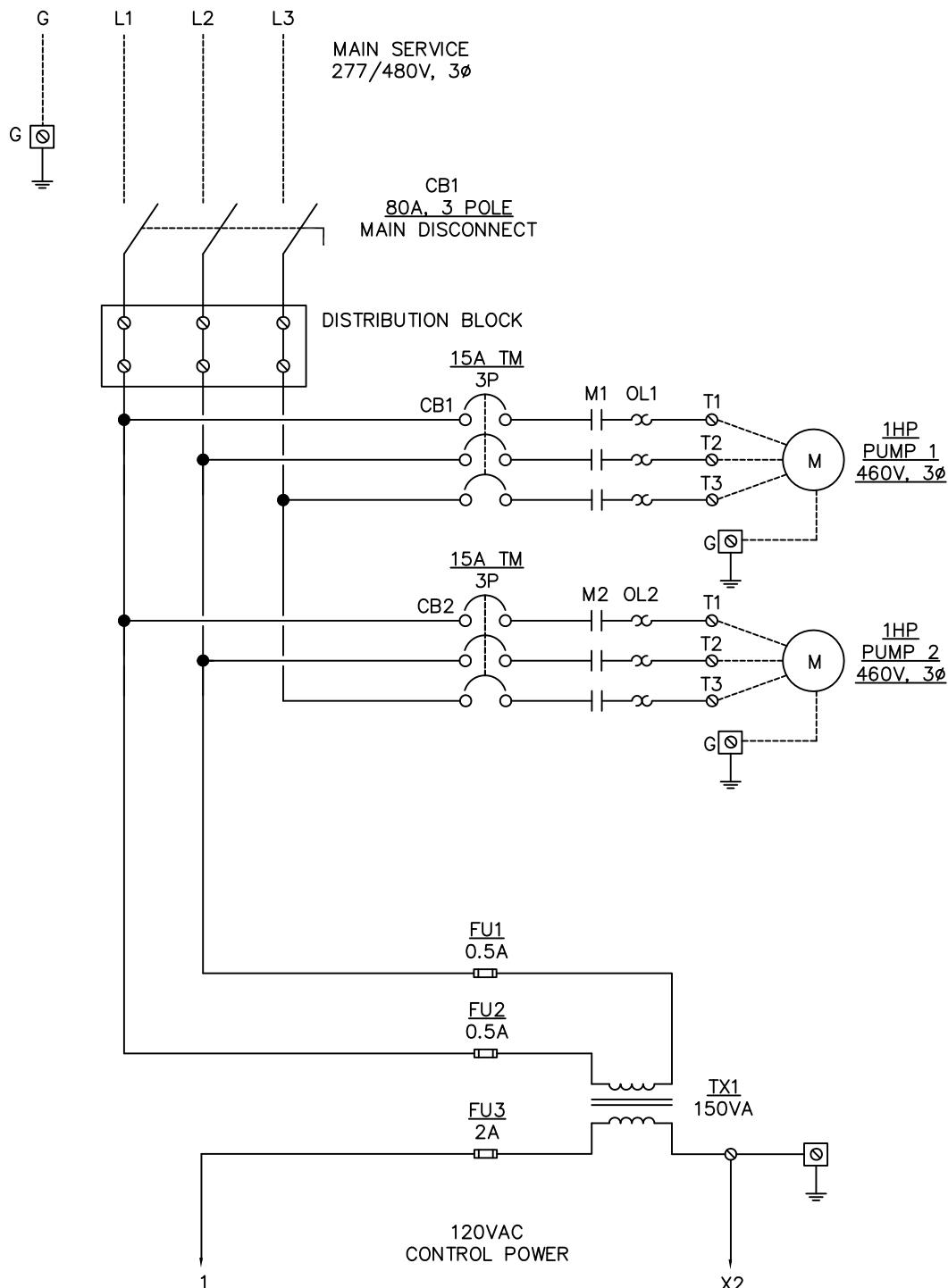
VOLTAGE	277/480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	1	
FLA	2.1 (EST)	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	ABS	
CATALOG NUMBER	EF10D-2	
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 4X	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Stainless Steel	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	Floats	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE		

OPTIONS:

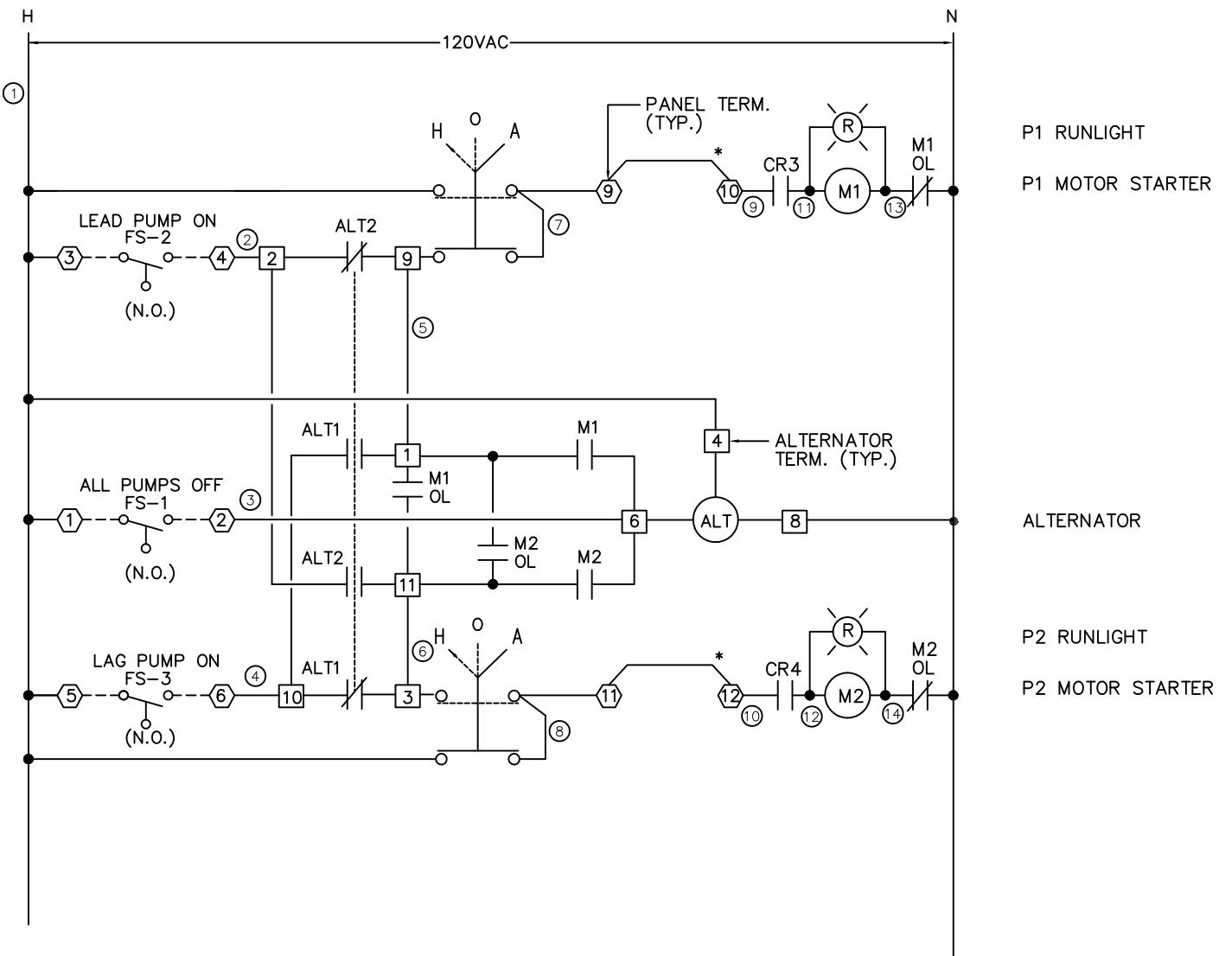
SEAL FAIL LIGHTS		(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(Submersible Only)
HT PUMP SHUTDOWN	X	(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT	X	
LIGHT PANEL MTD	X	
LIGHT REMOTE MTD		
LIGHT FLASHER		
LIGHTNING ARRESTER		
ELAPSED TIME METER		
PHASE MONITOR		
NEMA RATED STARTERS		
GROUND FAULT RECPT.		
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET		
ECONOMY VERSION		

SOLD TO: CF ENGINEERED EQUIPMENT - DALLAS, TX
TAG : DORAN
UNDERDRAIN MANHOLE SUMP PUMPS

	Drawing Title PANEL DESCRIPTION DATE 10/07/05						
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	DATE
	Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER			
			Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2172			
				SHEET NUMBER 1			

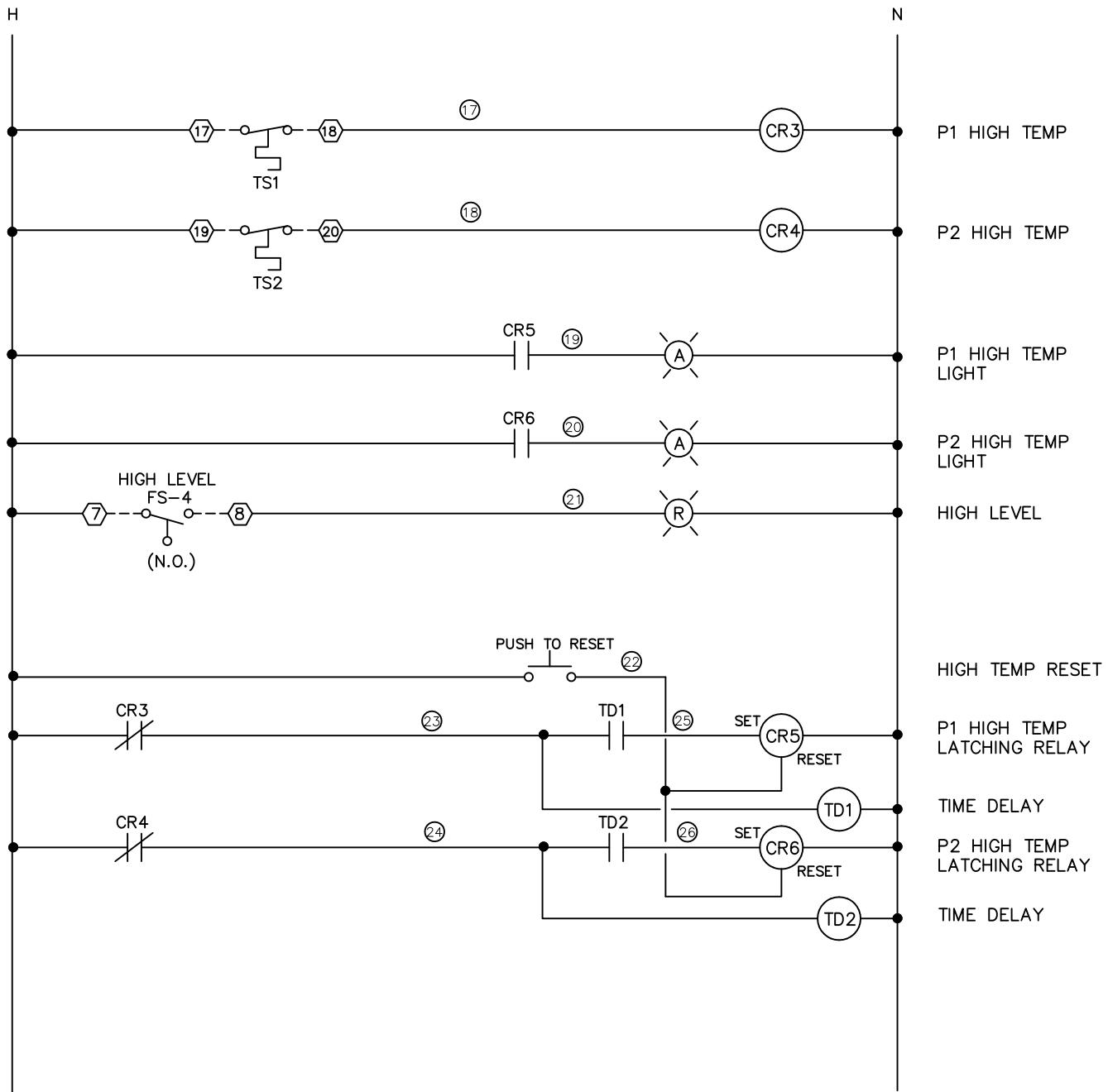


	Drawing Title POWER DIAGRAM				
DATE 10/07/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN	DATE APPROVED BY DATE
Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2172 SHEET NUMBER 2		

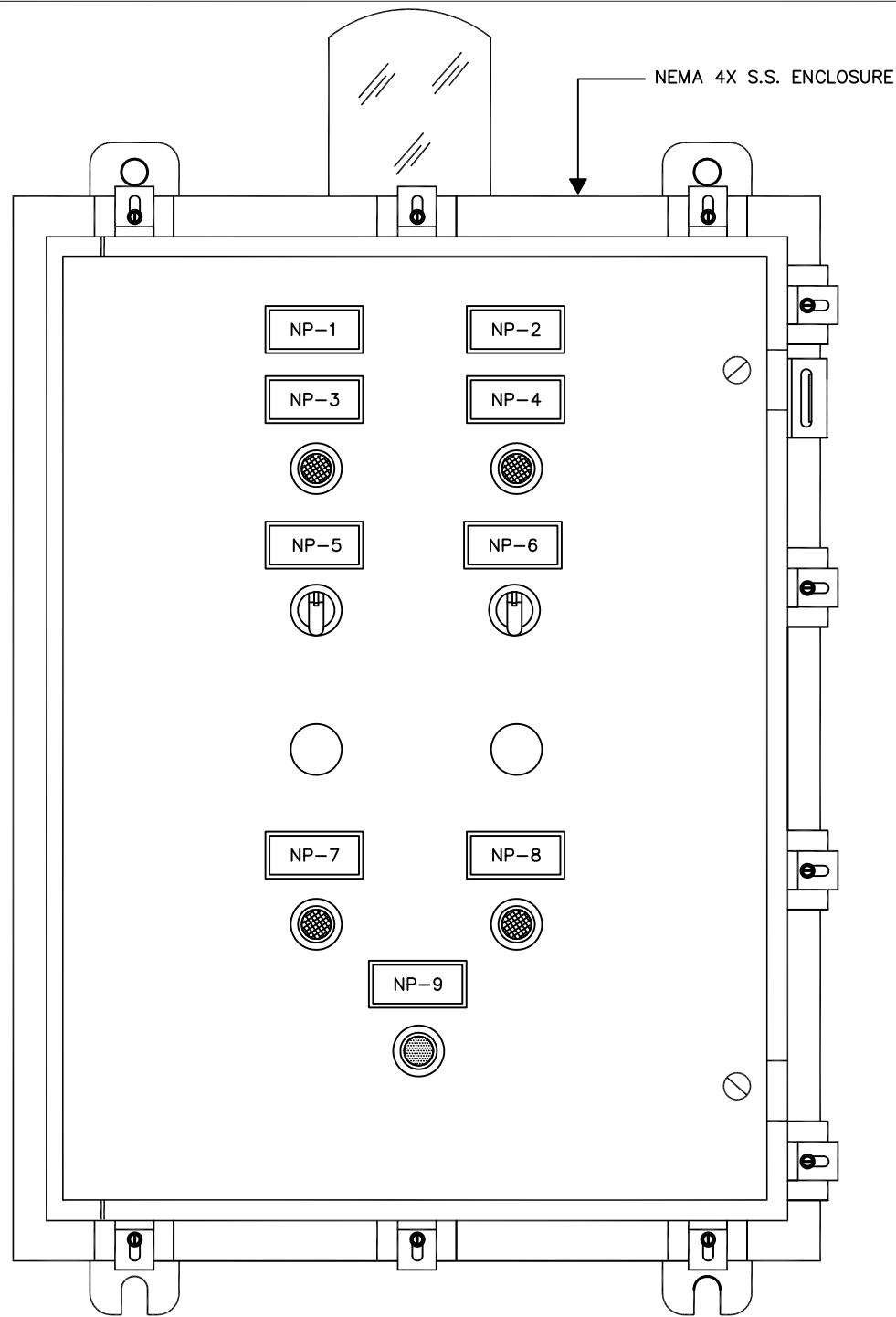


* REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

	Drawing Title CONTROL DIAGRAM				
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN APPROVED BY DATE
DATE 10/07/05		Application Engineer R.C.			
	Project Title DUPLEX PUMP CONTROL PANEL		COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2172 SHEET NUMBER 3



	Drawing Title CONTROL DIAGRAM							
DATE 10/07/05		REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE
	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY DATE			
	Project Title		<hr/> <hr/> COX Research and Technology, Inc. <hr/> <hr/>		P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL							
							DRAWING NUMBER CP-2172	
							SHEET NUMBER 4	



VIEW OF SWING OUT PANEL

NAMEPLATE SCHEDULE

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	H-O-A
NP-6	H-O-A
NP-7	HIGH TEMP
NP-8	HIGH TEMP
NP-9	PUSH TO RESET

NOTE:
SEWER GASSES WILL DESTROY COMPONENTS IN PANEL.
PROPER SEALS MUST BE INSTALLED EXTERNAL TO THE
PANEL TO PREVENT ENTRY OF GASSES.

	Drawing Title					
	ENCLOSURE					
DATE 10/07/05	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN	DATE APPROVED BY DATE	BY
	Project Title					
	DUPLEX PUMP CONTROL PANEL		COX Research and Technology, Inc.		PURCHASE ORDER NUMBER	
					DRAWING NUMBER CP-2172	
					SHEET NUMBER 5	

BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	C&I	I-242010ST4X	ENCLOSURE STAINLESS 4X
1a	1	C&I	CI-2420P	BACKPLATE
1b	1	C&I	CI-2420SP	DEAD FRONT
2	1	ABB	OT63E3	MAIN DISCONNECT
3	2	ABB	A16-30-10-84	MTR STR NEMA SIZE 0
4	2	ABB	TA25DU2.4	O.L. RELAY (1.7-2.4A)
5	2	ABB	S1N015TL	CB1, CB2
6	1	TIMEMARK	261DT120	ALTERNATING RELAY
7	2	ACI	JR22FR	RED PILOT LIGHT
8	2	ACI	JR22P3M20B	H-O-A SWITCH
9	1	ABB	T4150PSF-1	TRANSFORMER
10	1	AC/DC	BL5-R-120	ALARM LIGHT
11	2	ACI	JR22FY	AMBER PILOT LIGHT
12	2	MAGNECRAFT	W388AMLCPX-9	CR5,6 (LATCHING RELAY)
13	2	IDECK	RU2SA110	CR3,4
14	2	OMRON	H3YN2AC120	TIME DELAY 1,2
15	1	ACI	JR22AN11B	PUSH BUTTON
16	1	MARATHON	1323580	DISTRIBUTION BLOCK
17				
18				
19				
20				
21				
22				
23				
24				

	Drawing Title BILL OF MATERIALS					
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN	DATE APPROVED BY DATE
DATE 10/07/05	Project Title DUPLEX PUMP CONTROL PANEL					
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