

---

---

COX

Research and Technology, Inc.

---

---

DUPLEX SUBMERSIBLE PUMP  
CONTROL PANEL  
BARKER SUBDIVISION  
STATION #2

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

CP-1786

VOLTAGE	120/240V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	6.2	
FLA	19.6	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	GR	
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 3R	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Painted 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		

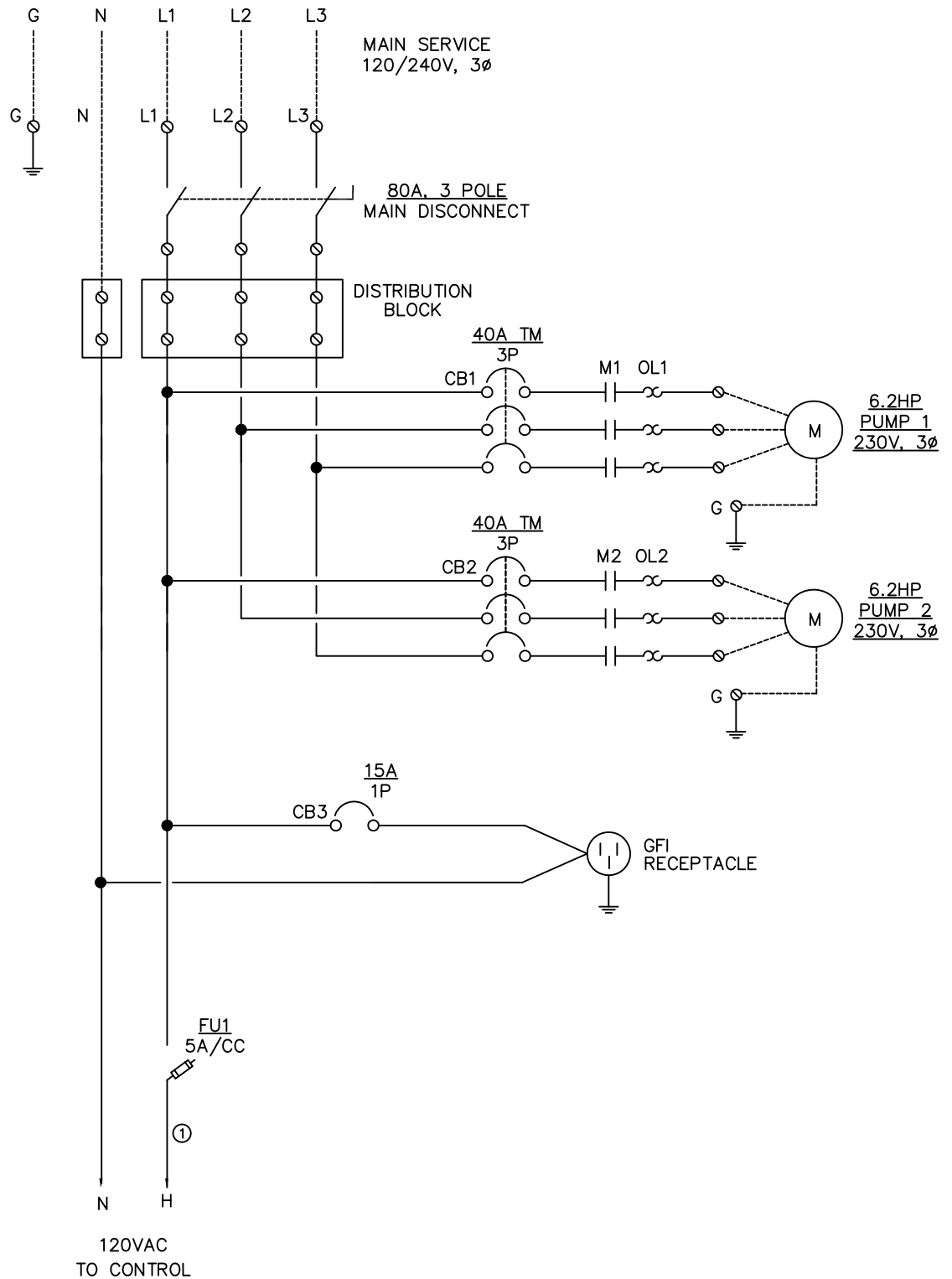
OPTIONS:

SEAL FAIL LIGHTS		(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	X	(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	X	
PHASE MONITOR		
NEMA RATED STARTERS	X ABB	
GROUND FAULT RECPT.	X	
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET		
ECONOMY VERSION		
SWING INTERNAL DOOR	X	

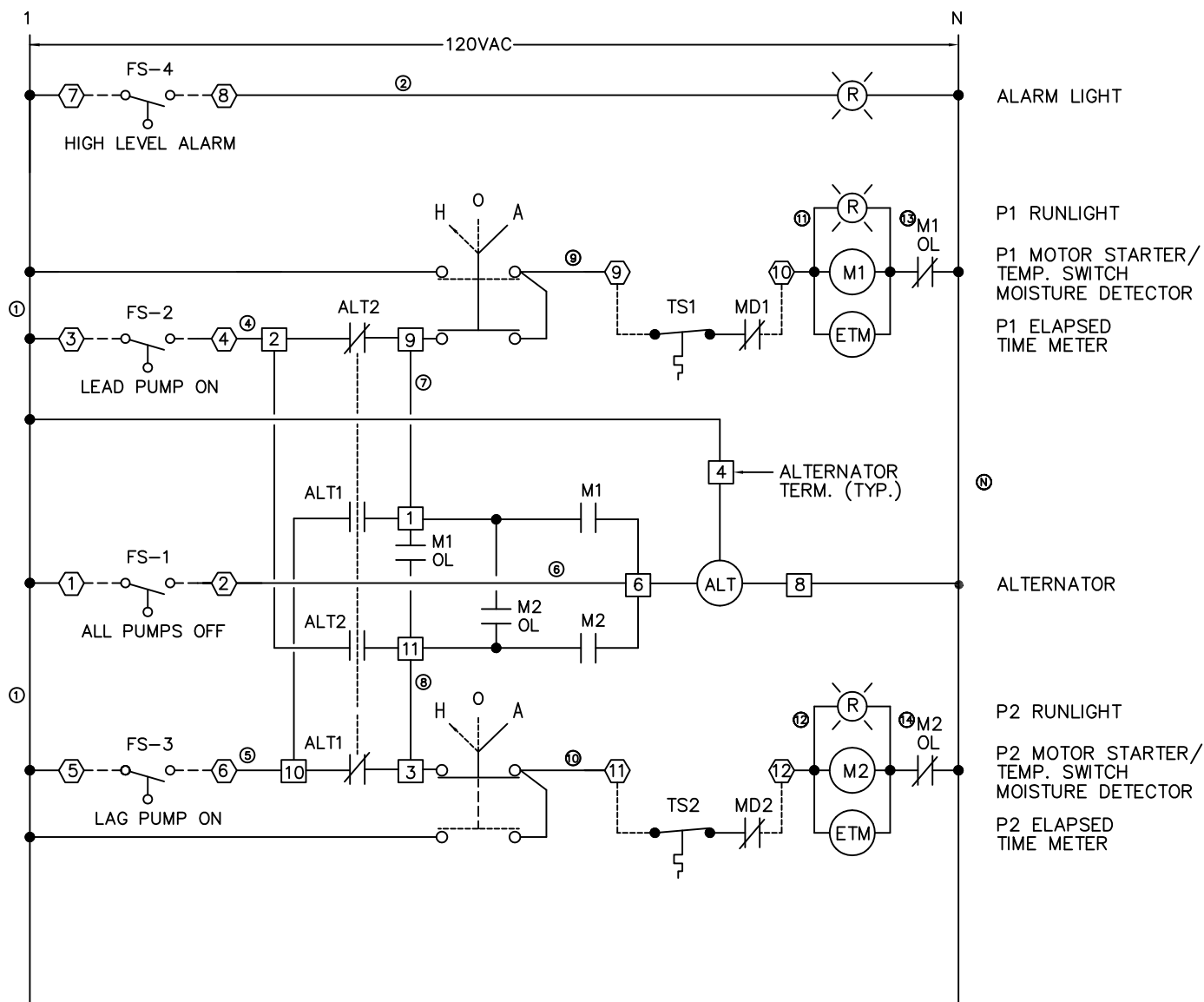
SOLD TO: Delta Process - Ruston, LA  
TAG : BARKER SUBDIVISION  
STATION #2

SHIP TO: Delta Process - Ruston, LA

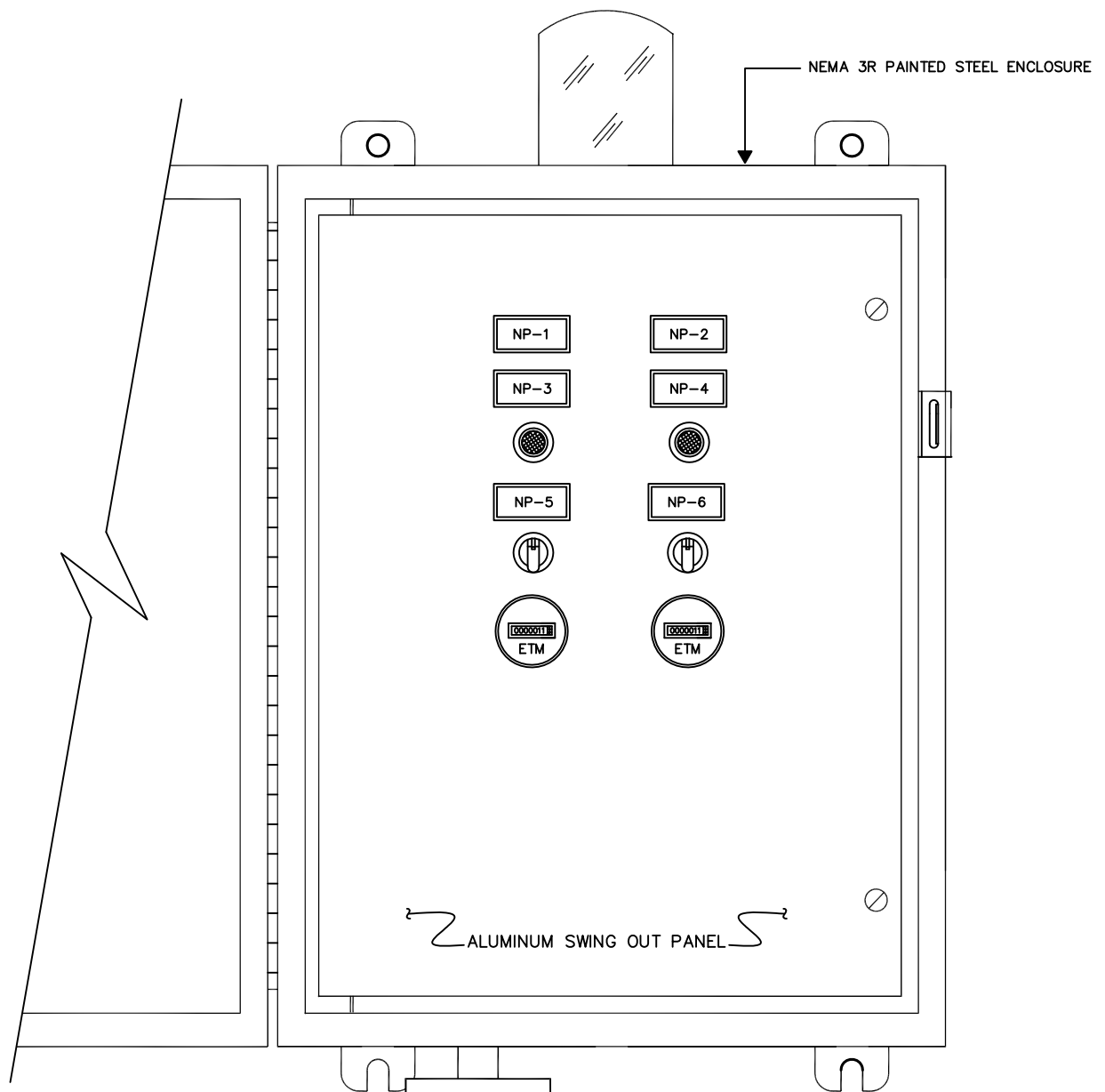
	Drawing Title						
	PANEL DESCRIPTION						
DATE 4/19/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE BY
	Project Title	<div>COX</div> <div>Research and Technology, Inc.</div>			P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER	
	SUBMERSIBLE PUMP CONTROL PANEL				Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1786	
						SHEET NUMBER	
						1	



	Drawing Title							
	POWER DIAGRAM							
DATE 4/19/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE	BY
	Project Title	COX			P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
	SUBMERSIBLE PUMP CONTROL PANEL	Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1786		
						SHEET NUMBER 2		



	Drawing Title    CONTROL DIAGRAM								
DATE 4/19/04			REFERENCE DRAWING S/N		NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.		ECN DRAWN BY C. RACHAL	DATE APPROVED BY
	Project Title   SUBMERSIBLE PUMP CONTROL PANEL		<div>COX</div> <div>Research and Technology, Inc.</div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030		PURCHASE ORDER NUMBER	
DRAWING NUMBER CP-1786									
SHEET NUMBER									
3									



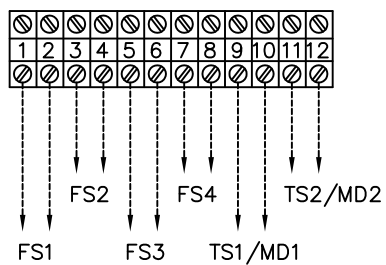
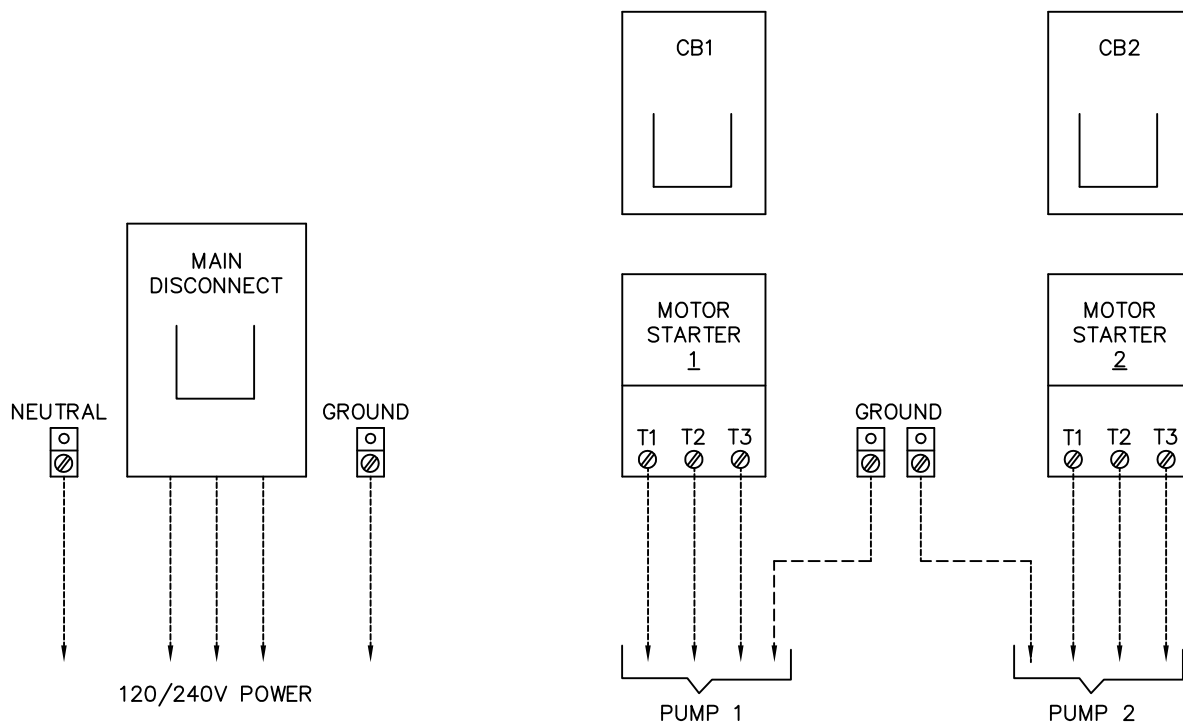
VIEW OF SWING OUT PANEL

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

**NAMEPLATE SCHEDULE**

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA

	Drawing Title    ENCLOSURE									
DATE 4/19/04			REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
			S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN		APPROVED		
						BY C. RACHAL		BY	DATE	
	Project Title		<div>COX</div> <div>Research and Technology, Inc.</div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030		PURCHASE ORDER NUMBER		
	SUBMERSIBLE PUMP CONTROL PANEL							DRAWING NUMBER CP-1786		
								SHEET NUMBER		
								4		



FS1 – FLOAT SWITCH 1  
 ALL PUMPS OFF  
 FS2 – FLOAT SWITCH 2  
 LEAD PUMP ON  
 FS3 – FLOAT SWITCH 3  
 LAG PUMP ON  
 FS4 – FLOAT SWITCH 4  
 HIGH LEVEL ALARM  
 TS1/MD1 – TEMP. SWITCH/MOISTURE DETECTOR 1  
 TS2/MD2 – TEMP. SWITCH/MOISTURE DETECTOR 2

	Drawing Title							
	EXTERNAL CONNECTIONS							
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY	
4/19/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	BY C. RACHAL	APPROVED		
	Project Title				P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
	SUBMERSIBLE PUMP CONTROL PANEL	<div>COX</div> Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1786		
						SHEET NUMBER 5		

# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	EBE	242010REPL	ENCLOSURE
1a	1	EBE	A2420P	BACKPLATE
1b	1	EBE	A2420SP	DEAD FRONT
2	1	ABB	OT63E3	MAIN DISC. SWITCH
3	2	ABB	A26N1-30-10-84	MOTOR STARTER NEMA SZ 1
4	2	ABB	TA25DU25	O.L. RELAYS (18-25A)
5	2	SQUARE D	QOU340	CB1, CB2
6	1	TIMEMARK	261DT120	ALTERNATING RELAY
7	2	ACI	JR22FR	RED PILOT LIGHT
8	1	AC/DC	BL5R120	ALARM LIGHT
9	2	GRASSLIN	UWZ52E	ELAPSED TIME METER
10	2	ACI	JR22P3M20B	HOA SWITCH
11	1	MARATHON	1323580	DISTRIBUTION BLOCK
12	1	MARATHON	1321580	DISTRIBUTION BLOCK
13	1	STOCK		GFI RECEPTACLE
14	1	SQUARE D	QOU115	CB3
15				
16				
17				
18				
19				
20				

	Drawing Title						
	<h2 style="margin: 0;">BILL OF MATERIALS</h2>						
DATE 4/19/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE
	Project Title	<div style="border-top: 3px double black; border-bottom: 3px double black; padding: 5px;"> <h1 style="margin: 0;">COX</h1> <p style="margin: 0;">Research and Technology, Inc.</p> </div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030		PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1786 SHEET NUMBER
	DUPLEX PUMP CONTROL PANEL						6