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# COX

Research and Technology, Inc.

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DUPLEX PUMP  
CONTROL PANEL

CENTRAL CONTROL BUILDING  
VALERO REFINING COMPANY

KROTZ SPRINGS  
230V, 1Ø

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

CP-2199r1

VOLTAGE	120/240v	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	1/60	
NO. MOTORS	2	
HP	1.5	
FLA		
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	Goulds	
CATALOG NUMBER	WE1512HH	
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	<input type="checkbox"/>	(Submersible Only)
SEAL FAIL RELAYS	<input type="checkbox"/>	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	<input type="checkbox"/>	(Submersible Only)
HT PUMP SHUTDOWN	<input checked="" type="checkbox"/>	(Self-Primer, Submersible)
ALARM HORN	<input type="checkbox"/>	
ALARM LIGHT	<input type="checkbox"/>	
LIGHT PANEL MTD	<input type="checkbox"/>	
LIGHT REMOTE MTD	<input type="checkbox"/>	
LIGHT FLASHER	<input type="checkbox"/>	
LIGHTNING ARRESTER	<input type="checkbox"/>	
ELAPSED TIME METER	<input type="checkbox"/>	
PHASE MONITOR	<input type="checkbox"/>	
NEMA RATED STARTERS	<input type="checkbox"/>	
GROUND FAULT RECPT.	<input type="checkbox"/>	
GREEN RUN LIGHTS VS. RED	<input type="checkbox"/>	
POLE, BOX, SEAL	<input type="checkbox"/>	
INTRINSICALLY SAFE RELAYS	<input type="checkbox"/>	
HIGH TEMP. LOCKOUT, MANUAL RESET	<input type="checkbox"/>	
ECONOMY VERSION	<input type="checkbox"/>	

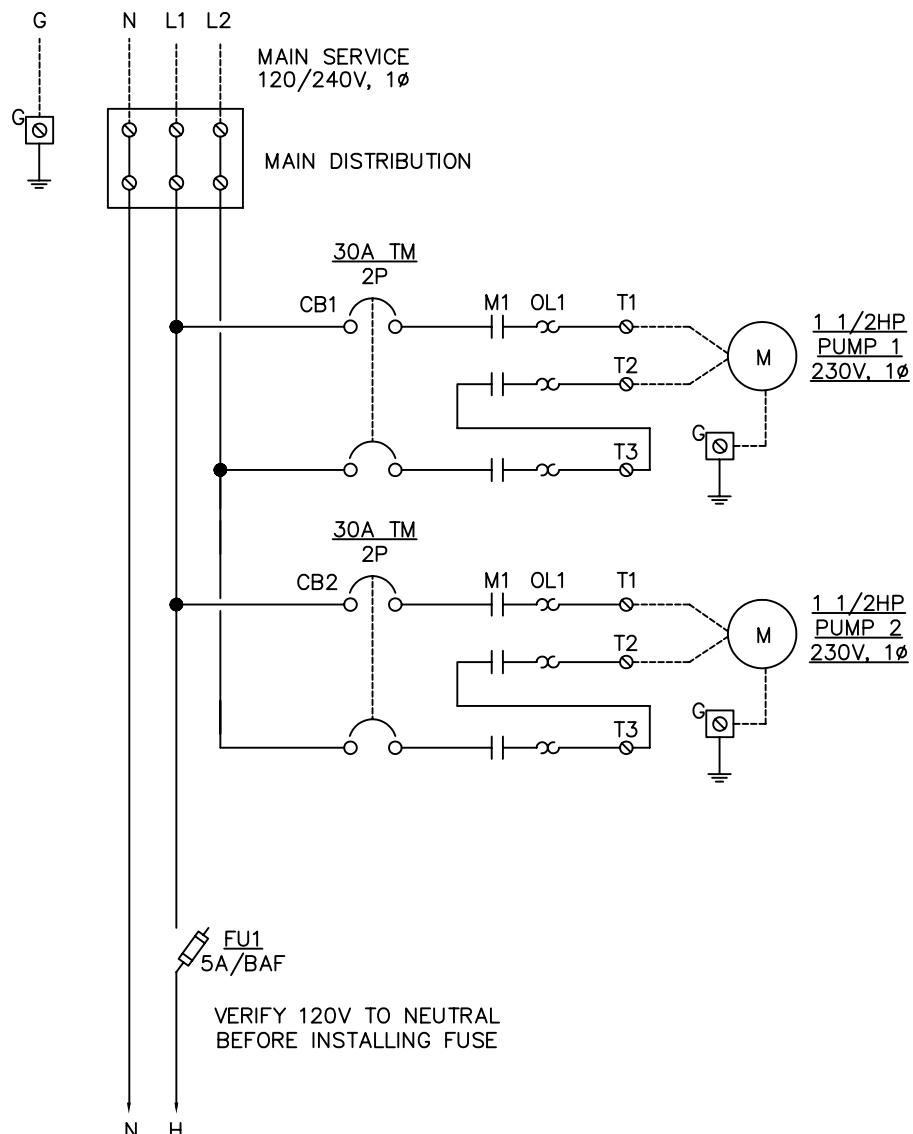
**SOLD TO:** Delta Process - Denham Springs, LA  
**TAG :** Central Control Building - Valero Refining Co.  
Krotz Springs, LA

SHIP TO: Delta Process - Denham Springs, LA

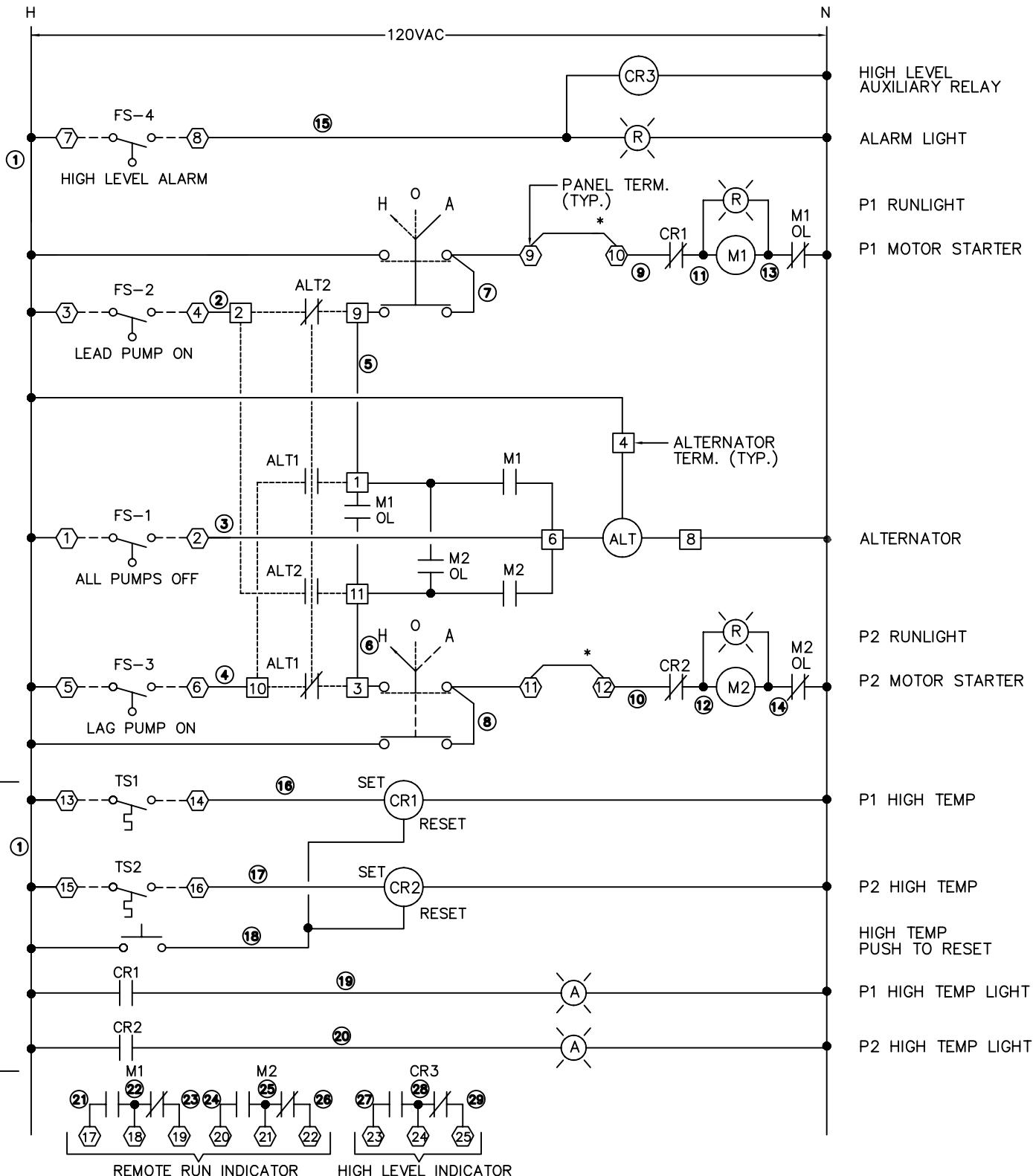
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	Drawing Title  <b>PANEL DESCRIPTION</b>  DATE 9/22/09		R1	CHANGE TO 230V, 1Ø Submersible		9/21/09	TL
	REFERENCE DRAWING		NO.	REVISION-LOCATION	ECN	DATE	BY
S/N	Sales Engineer C.C.	Application Engineer R.C.		DRAWN BY M.SUTHERLAND	APPROVED BY DATE		
	Project Title		<hr/> <b>COX</b> <hr/> Research and Technology, Inc. <hr/>		P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL				Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2199r1	
						SHEET NUMBER 1	

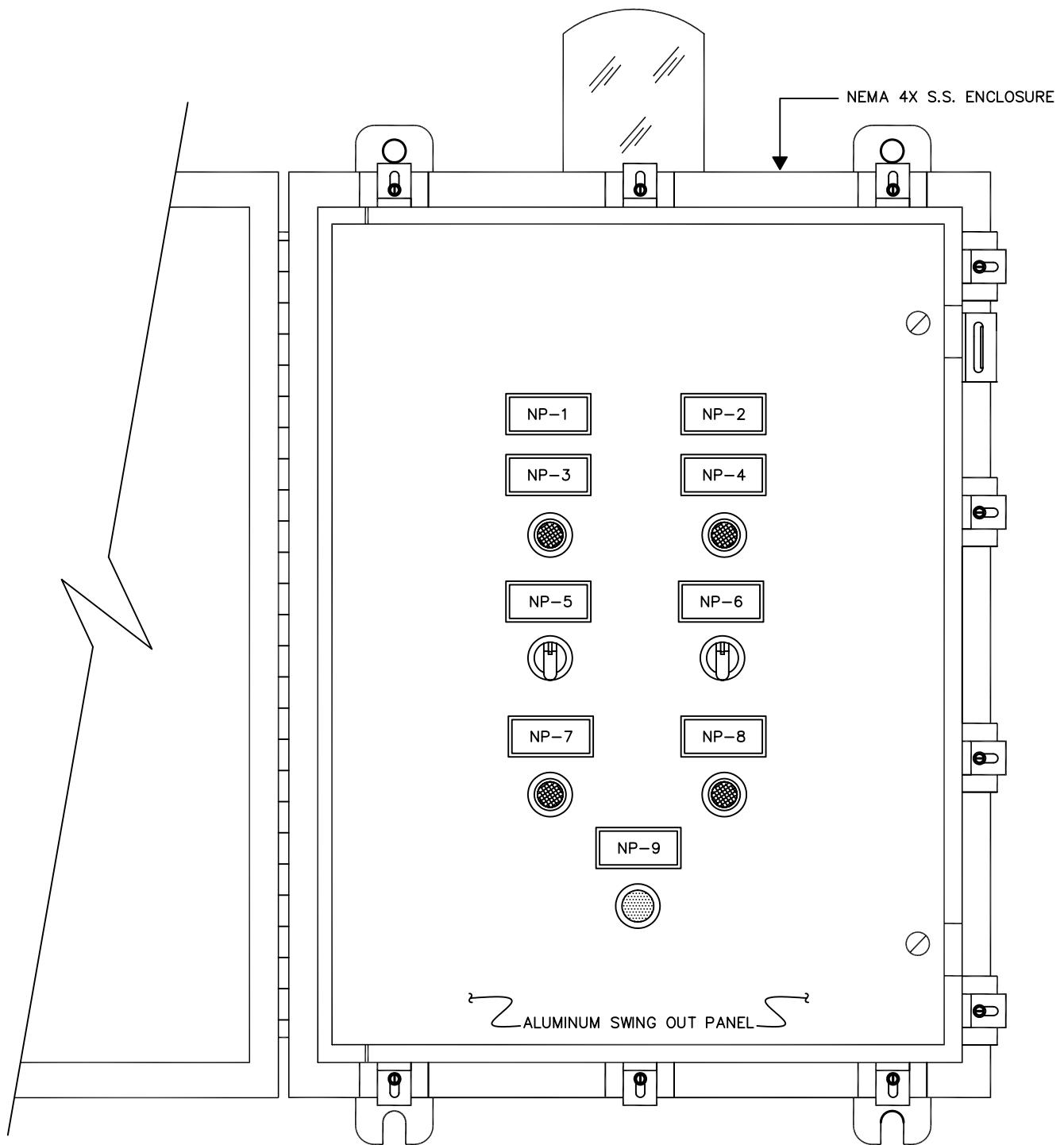


	Drawing Title  POWER DIAGRAM	R1	CHANGE TO 230V, 1Ø Submersible			9/21/09	TL
		REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN
DATE 9/22/09	S/N	Sales Engineer C.C.	Application Engineer R.C.		DRAWN BY M.SUTHERLAND	APPROVED BY	DATE
	Project Title  DUPLEX PUMP CONTROL PANEL	<hr/> <hr/> <b>COX</b> <hr/> <hr/> 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-2199r1		
					SHEET NUMBER 2		



\* REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

	Drawing Title  CONTROL DIAGRAM	R1	CHANGE TO 230V, 1Ω Submersible	9/21/09	TL
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY R.C.	ECN APPROVED BY DATE BY DATE
DATE 9/22/09					
	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-2199rl SHEET NUMBER 3	



#### NAMEPLATE SCHEDULE

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	HIGH TEMP
NP-8	HIGH TEMP
NP-9	HIGH TEMP RESET

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

DATE 9/22/09	Drawing Title  ENCLOSURE	R1		CHANGE TO 230V, 1Ø Submersible		9/21/09	TL
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY M.SUTHERLAND	ECN APPROVED BY		
	Project Title  DUPLEX PUMP CONTROL PANEL	<u>COX</u> 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-2199rl  SHEET NUMBER 4		

# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	C & I	I-242010ST4X	ENCLOSURE
1a	1	C & I	CI-2420P	BACKPLATE
1b	1	C & I	CI-2420ASP	DEAD FRONT
2	2	ABB	A26-30-10-84	MOTOR STARTER
3	2	ABB	TA25DU19	O.L. RELAY (13-19A)
4	2	SQUARE D	QOU230	CB1, CB2
5	1	TIMEMARK	261DT120	ALTERNATING RELAY
6	2	ACI	JR22FY	AMBER PILOT LIGHT
7	2	ACI	JR22FR	RED PILOT LIGHT
8	2	ACI	JR22P3M20B	HOA SWITCH
9	1	ACI	JR22AN11B	PUSH BUTTON
10	2	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAYS
11	1	AC/DC	BL5-R-120	ALARM LIGHT
12	2	ABB	CAL5-11	AUXILIARY CONTACTS
13	1	IDEC	RU2S-A110	CR3
14	2	MARATHON	1321580	DISTRIBUTION BLOCKS
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Drawing Title  BILL OF MATERIALS			R1	CHANGE TO 230V, 1Ø Submersible			9/21/09	TL
DATE 9/22/09	REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
	S/N	Sales Engineer	Application Engineer	DRAWN		APPROVED		
	C.C.	R.C.	BY M.SUTHERLAND	BY	DATE			
Project Title  DUPLEX PUMP CONTROL PANEL					P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER		
						DRAWING NUMBER		
						CP-2199rl		
				SHEET NUMBER				
				5				