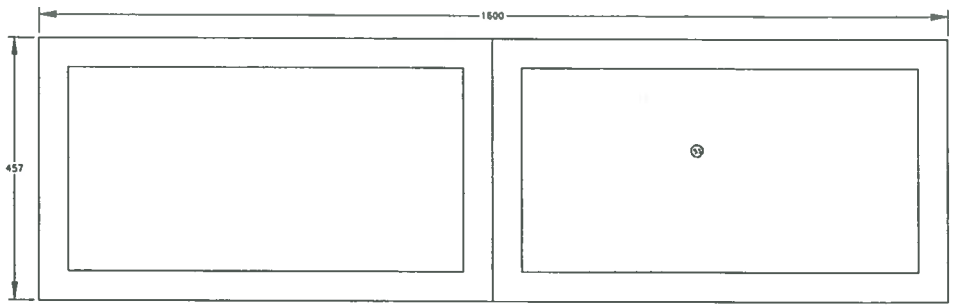
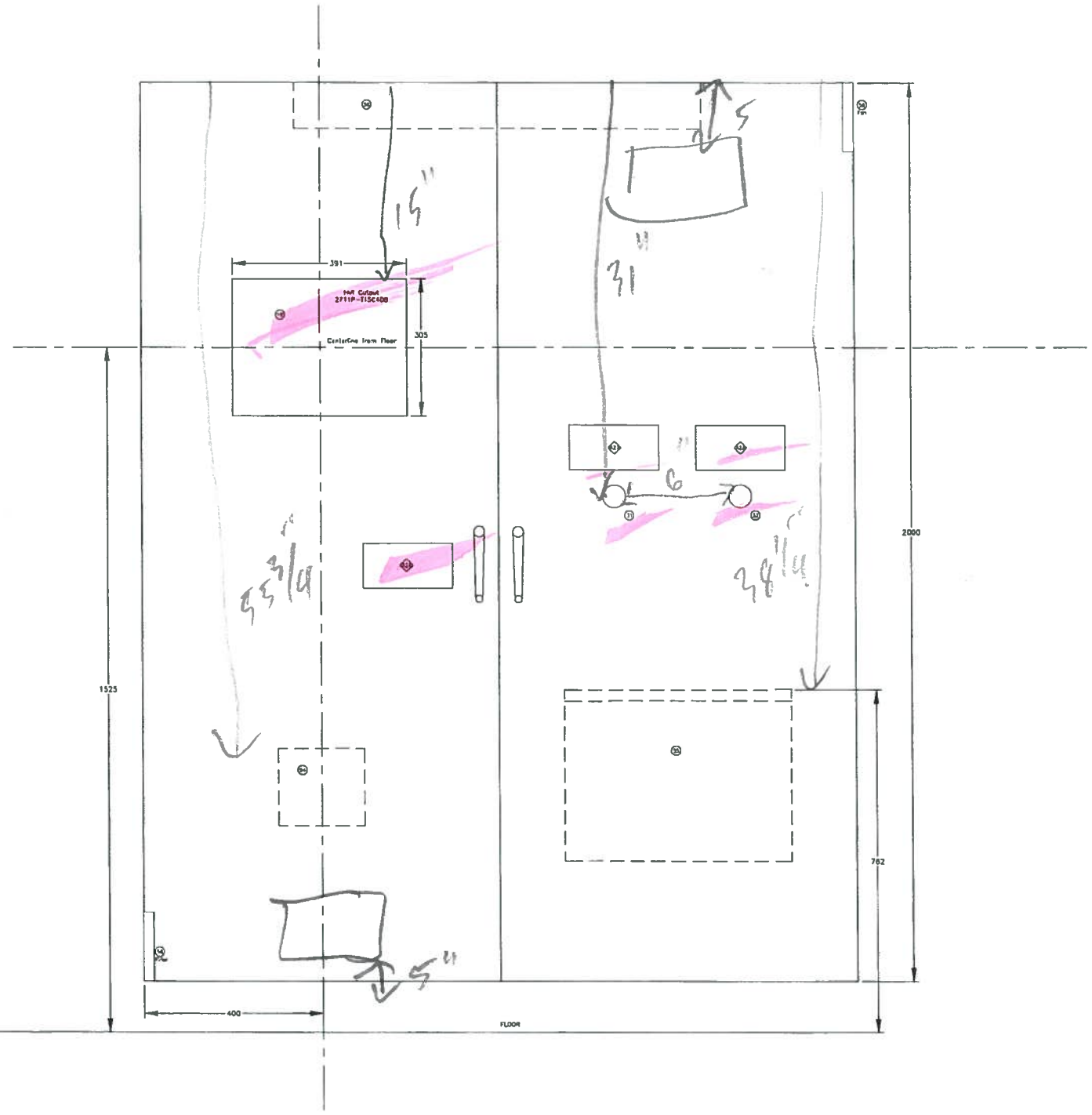


Note: Cutouts on bottom of top hat are to be aligned with all vertical panduits



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PFX13250 Dec-12

DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
A	22JUL2013	ISSUED FOR REVIEW	RR	CF	--
B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

ENGINEER STAMP

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — M. A. GHALY # 38913

OCT 24 2013

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

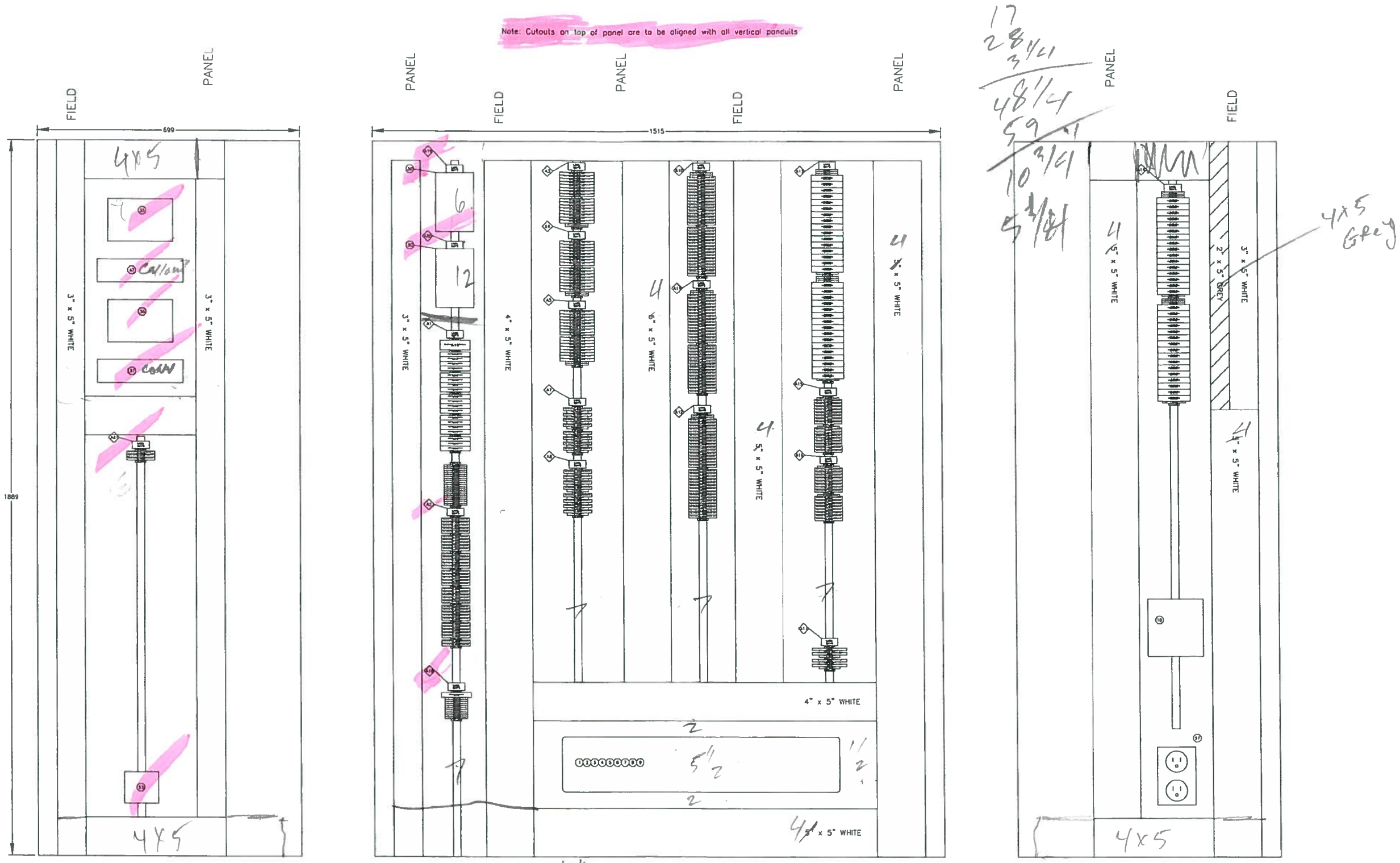
SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA – MULTI WELL TIE–IN
PENN WEST WELLSITE
d–055–A/094–P–10
Control Panel Layout

DWG#	d055A094P10-ELC-3401	SHT 2 OF 3	REV	0

Note: Cutouts on top of panel are to be aligned with all vertical panduits



DRAWING#	REFERENCE DRAWING TITLE

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THIRD PARTY LOGO

SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
Control Panel Layout

DWG# d055A094P10-ELC-3400 | SHT 1 OF 3 | REV 0

(99)

Bill Of Materials

Item	Qty	Description	Mfr	CAT#	Supplier
1	1	PLC Processor	AB	1756-L72	Owner
2	1	PLC Power Supply	AB	1756-PB75	Owner
3	1	PLC Rack	AB	1756-A17	Owner
4	3	PLC Input Card	AB	1756-IB32	Owner
5	2	PLC Output Card	AB	1756-OB32	Owner
6	2	PLC Relay Output Card	AB	1756-OW16I	Owner
7	3	PLC Analog Input Card	AB	1756-IF16	Owner
8	2	PLC Analog Output Card	AB	1756-OF8	Owner
9	1	PLC Communications Card	AB	1756-EN2T	Owner
10	1	Ethernet Switch	Stratix	1783-RMS10T	Owner
11	1	HMI	AB	2711P-T15C4D8	Owner
12	2	PLC BLANK FILLERS	AB	1756-N2	Owner
13	1	Prosoft Modbus Card	Prosoft	MVI56E-MCM	Owner
14	0				
15	0				
16	0				
17	TBD	Fuse Indication c/w Feed Through - KDKS1EN	Weidmuller	2147483647	Vendor
18	TBD	Label - SCHT5	Weidmuller	1631930000	Vendor
19	TBD	End Bracket - WEW 35/2	Weidmuller	1061200000	Vendor
20	64	1 Pole 24VDC Relay	Omron	G2R-1-SND-24VDC	Vendor
21	64	1 Pole 24VDC Relay Base	Omron	P2RF-05-E	Vendor
22	0	Single Disconnect - WTR 2.5	Weidmuller	1855610000	Vendor
23	TBD	Ground Terminal - WPE4	Weidmuller	1010100000	Vendor
24	TBD	Double Disconnect - WDTR 2.5	Weidmuller	2147483647	Vendor
25	TBD	Fused with Feed Through KDKS1EN/SMT10-60VUC BFI H-	Weidmuller	2147483647	Vendor
26	0	DC Blown Fuse Indication - KDKS 1PE/LD	Weidmuller	9158330001	Vendor
27	TBD	Circuit breaker	Weidmuller	CB4200Series	Vendor
28	TBD	Regular Feed Through Terminal - WDU 2.5	Weidmuller	1020000000	Vendor
29	As Req	Wireway	Open	-	Vendor
30	2	3 Pole Power Distribution Block	Mersen	67593	Vendor
31	1	Pushbutton - 1NO 1NC Push-Pull Mushroom Red Button c/w Guard	AB	800T-FX6D4 800T-N129	Vendor
32	1	Pushbutton - Green c/w NO Contacts	AB	800T-A2A2	Vendor
33	1	Spare Fuse Holder c/w 10 of Each Fuse Size	Open		Vendor
34					
35	1	Ethernet Radio	MDS	iNet2	Owner
36	1	UHF Base Radio	Motorola	CDM750	Owner
37	1	24-12VDC Converter	Open	~~10~~ Amp 20	Owner
38					
39					
40	0	ROC827 Series 2 c/w Ethernet	Emerson		Owner
41	0	ROC Expander Rack	Emerson	EXP	Owner
42	0	ROC 24VDC Power Supply	Emerson	PM-24	Owner
43	0	ROC Advanced Pulse Module	Emerson		Owner
44	0	ROC MVS	Emerson		Owner
45	0	ROC RS485	Emerson		Owner
46	0	ROC Analog Output	Emerson		Owner
47	1	Callout Main Module	Barnett	B1290	Owner
48	0				Owner
49	0				Owner
50	1	Cabinet - 1600mmWx2000mmHx800mmD	Rittal	8901410	Vendor
51	1	Backpan - 1515mmWx1900mmH	Rittal		Vendor
52	2	Sidepan - 700mmWx1900mmH	Rittal		Vendor
53	1	Top Hat - 1600mmW x 457mmH	Open		Vendor
54	1	Drawing Packet	Open		Vendor
55	1	Fold Down Table	Open		Vendor
56	1	Flourescent Light c/w Door Switch	Open		Vendor
57	1	GFIC Receptacle	Open		Vendor
58	1	Fan c/w Filter	Open		Vendor

A99

Nameplate Schedule

Qty	Item	Color	Description	Size
1	A1	Black On White	24VDC DISTRIBUTION	44.5x9.5
1	A2	Black On White	24VDC DISTRIBUTION	44.5x9.5
1	A3	Black On White	SLOT2 IF16	44.5x9.5
1	A4	Black On White	SLOT3 IF16	44.5x9.5
1	A5	Black On White	SLOT4 IF16	44.5x9.5
0	A6	Black On White		44.5x9.5
1	A7	Black On White	SLOT6 OF8	44.5x9.5
1	A8	Black On White	SLOT7 OF8	44.5x9.5
0	A9	Black On White		44.5x9.5
1	A10	Black On White	SLOT9 IB32	44.5x9.5
1	A11	Black On White	SLOT10 IB32	44.5x9.5
1	A12	Black On White	SLOT11 IB32	44.5x9.5
1	A13	Black On White	SLOT 12 OB32	44.5x9.5
1	A14	Black On White	SLOT13 OB32	44.5x9.5
1	A15	Black On White	SLOT14 OW16	44.5x9.5
1	A16	Black On White	SLOT15 OW16	44.5x9.5
1	A17	Black On White	SLOT16 MODBUS	44.5x9.5
1	A18	Black On White	MANUAL ESD	44.5x9.5
1	A19	Black On White	+24VDC POWER BLOCK	44.5x9.5
1	A20	Black On White	-24VDC POWER BLOCK	44.5x9.5
1	A21	Black On White	12VDC DISTRIBUTION	44.5x9.5
1	A22	Black On White		44.5x9.5
0	A23	Black On White		44.5x9.5
0	A24	Black On White		44.5x9.5
0	A25	Black On White		44.5x9.5
0	A26	White On Red	DANGER AUTHORIZED PERSONNEL ONLY MORE THAN ONE VOLTAGE SOURCE	~~100x200~~ 2x4
0	A27	White On Red	MANUAL ESD	~~100x200~~ 2x4
0	A28	Black On White	MANUAL ESD RESET	~~100x200~~ 1x4
0	A29			100x200

WIRE COLOR	
DESCRIPTION	COLOR
DIGITAL INPUT&OUTPUT	ORANGE
ANALOG INPUT	PURPLE
DC+	RED
DC-	BLUE
ANALOG OUTPUT	1 PAIR BELDEN

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0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

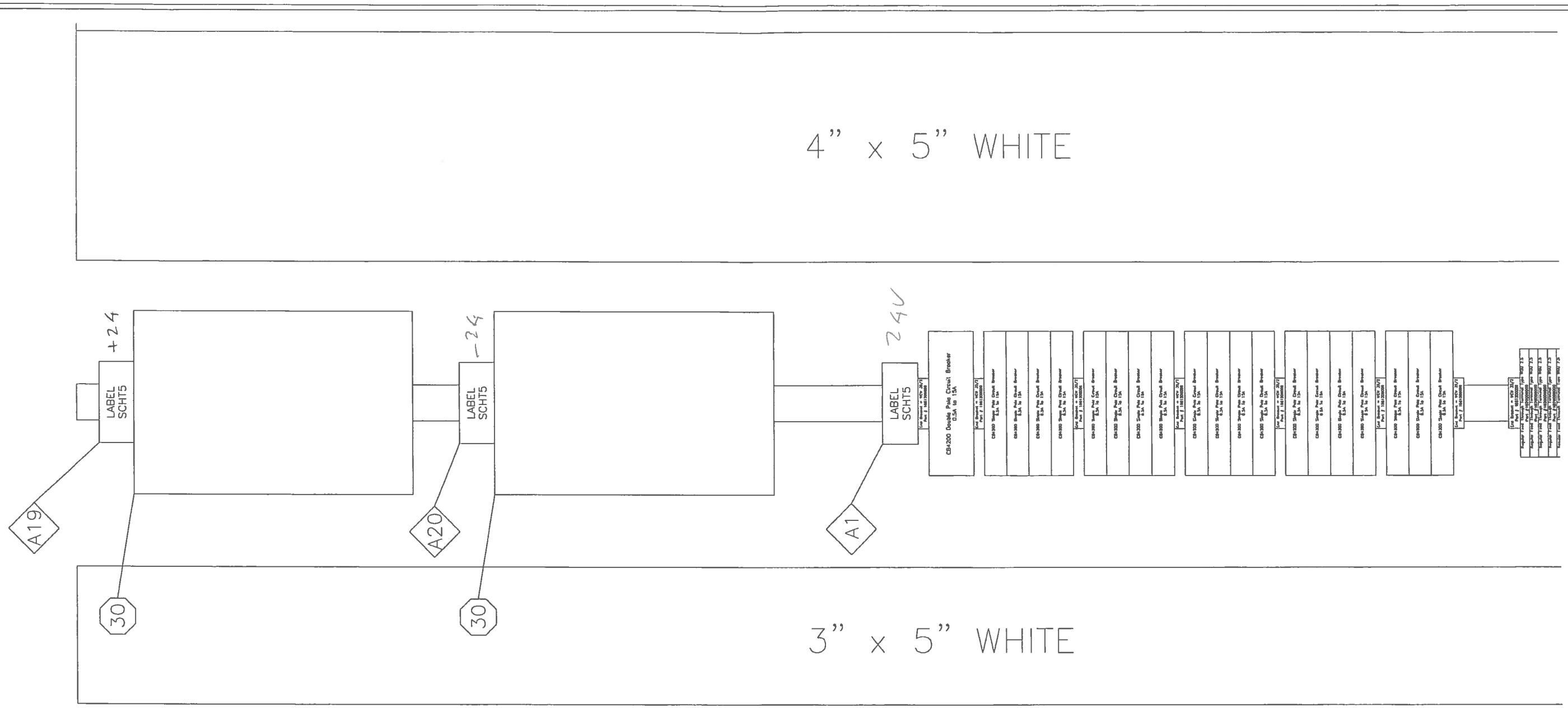
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
Control Panel Layout

DWG# d055A094P10-ELC-3402 | SHT 3 OF 3 | REV 0



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M. A. GHALY
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PROFESSIONAL ENGINEER

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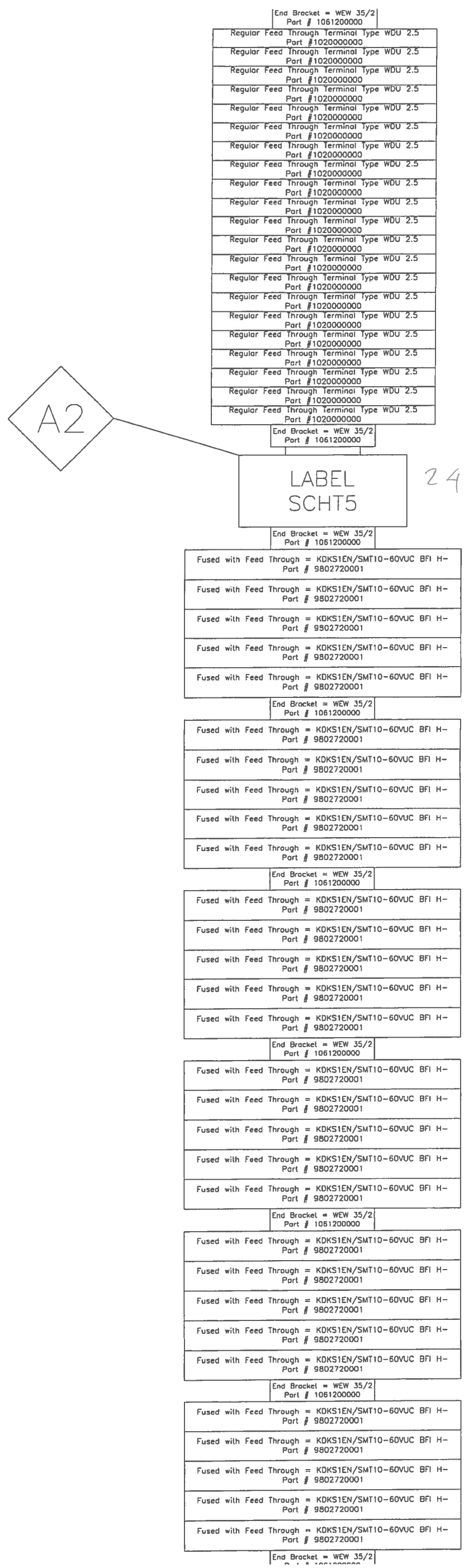
THIRD PARTY LOGO

SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG#	d055A094P10-ELC-3410	SHT 1 OF 10	REV	0



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THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

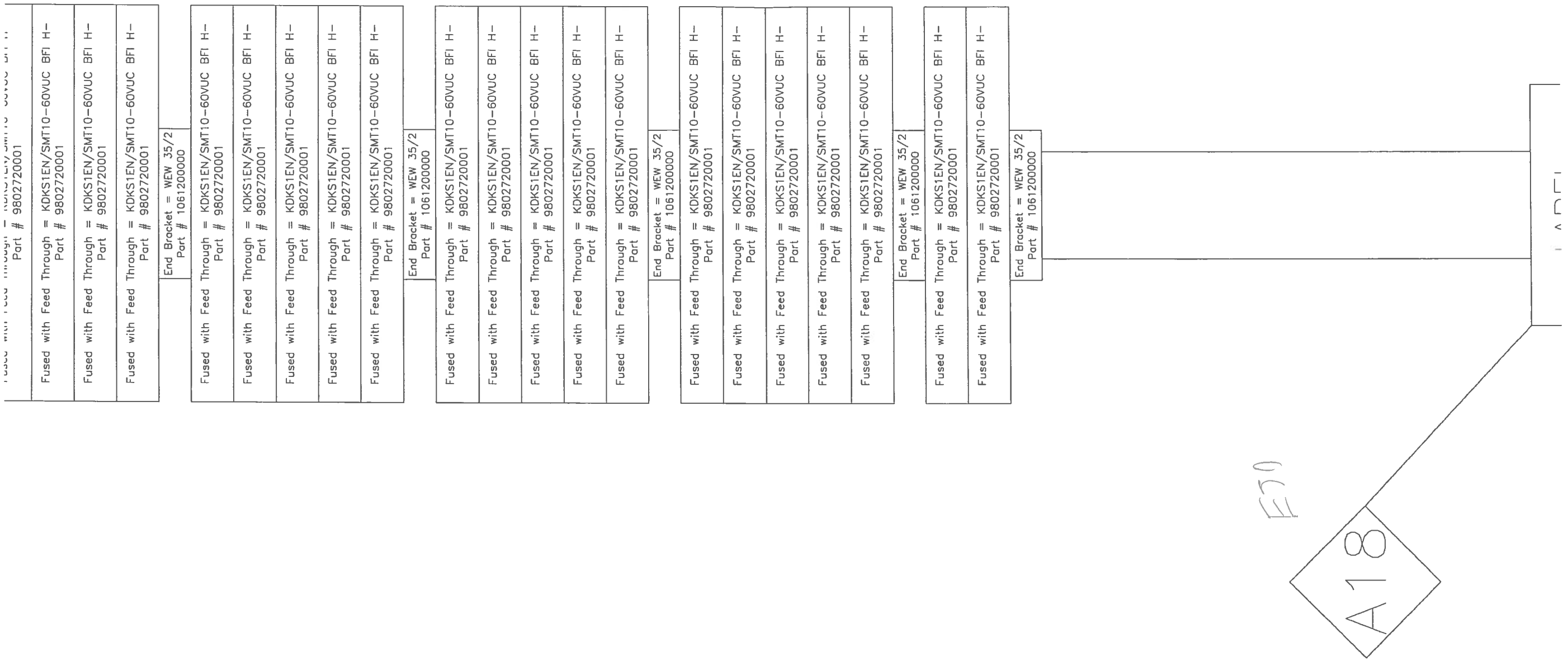
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3411

SHT 2 OF 10 | REV 0



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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3412 | SHT 3 OF 10 | REV 0

A3

52 F 16

LABEL
SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Blown Fuse Indication with 2 feedthrough and ground connection
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Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

End Bracket = WEW 35/2
Part # 1061200000

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

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Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

End Bracket = WEW 35/2
Part # 1061200000

A4

53 IF 16

LABEL
SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

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Blown Fuse Indication with 2 feedthrough and ground connection
Type KDKS1PE/SMT10-60VUC BFI H-
Part# 9158330001

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

End Bracket = WEW 35/2
Part # 1061200000

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PROVINCE OF ALBERTA
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38913
BRITISH COLUMBIA
OCT 24 2013

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN
SIZE: D
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3413

SHT 4 OF 10

REV 0

A7

56 - OF 8

LABEL
SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

End Bracket = WEW 35/2
Part # 1061200000

A8

57 OF 8

LABEL
SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
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Ground Terminal Type WPE 4
Part #1010100000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Ground Terminal Type WPE 4
Part #1010100000

End Bracket = WEW 35/2
Part # 1061200000

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3414 | SHT 5 OF 10 | REV 0

A10

5GIB32

LABEL
SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

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Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

End Bracket = WEW 35/2
Part # 1061200000

DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
A	22JUL2013	ISSUED FOR REVIEW	RR	CF	-
B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R R	MG	MG

ENGINEER STAMP

PROFESSIONAL ENGINEER
PROVINCE OF ALBERTA
M. A. GHALY
38913
OCT 2 4 2013

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

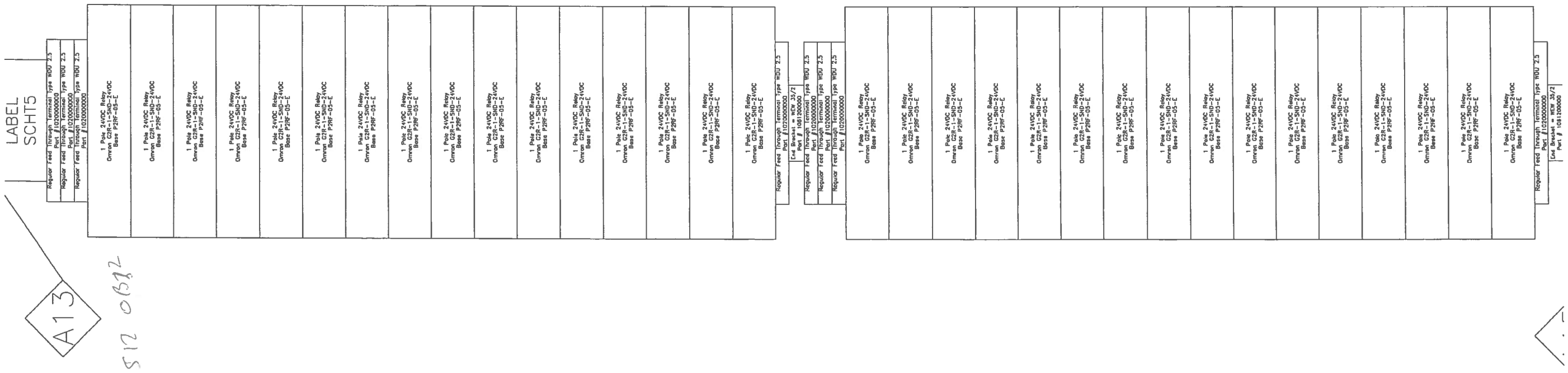
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3415

SHT 6 OF 10 | REV 0



DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
A	22JUL2013	ISSUED FOR REVIEW	RR	CF	–
B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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THIRD PARTY LOGO

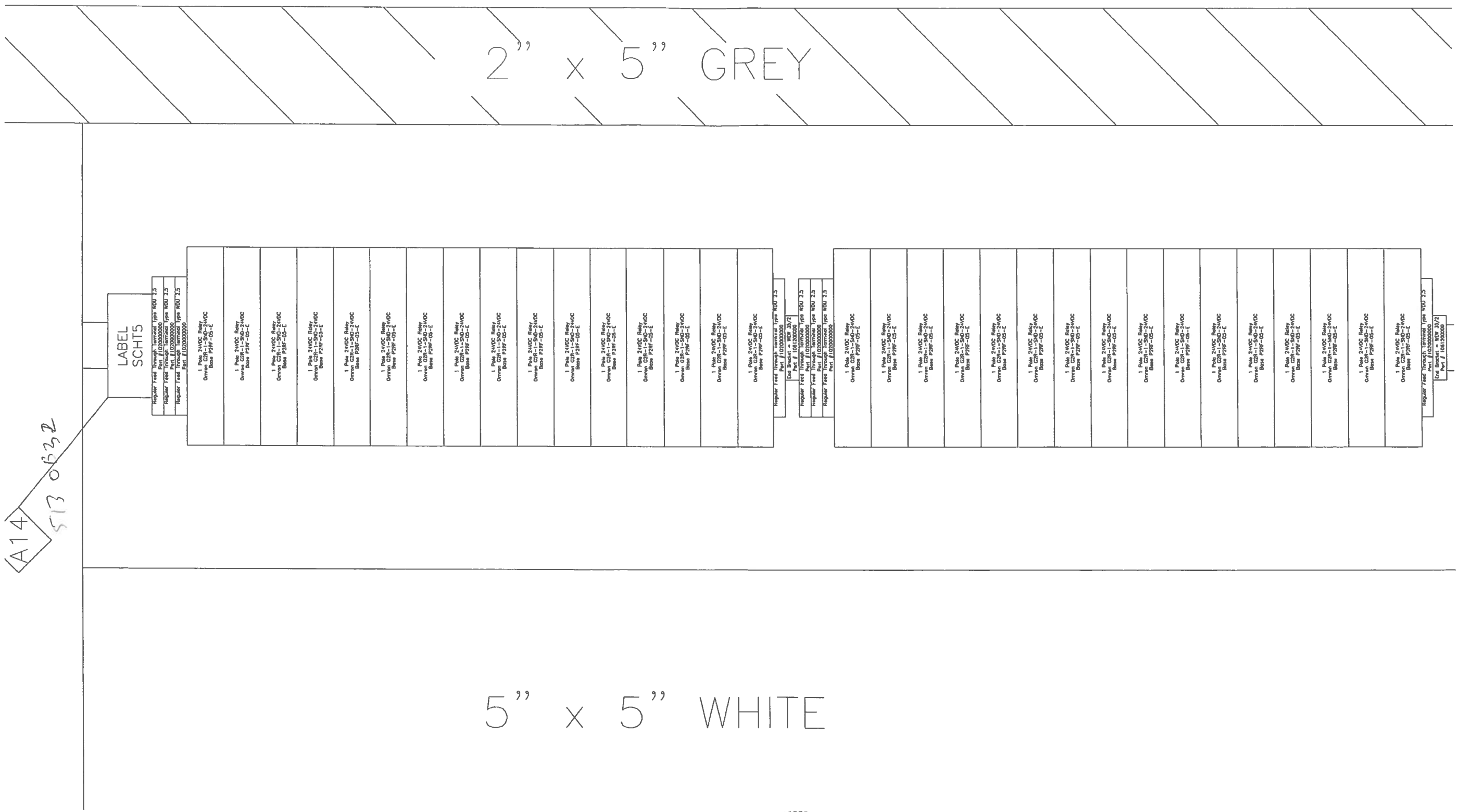
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3416 | SHT 7 OF 10 | REV 0



DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
A	22JUL2013	ISSUED FOR REVIEW	RR	CF	–
B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — M. A. GHALY # 38913

OCT 2 4 2013

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THIRD PARTY LOGO

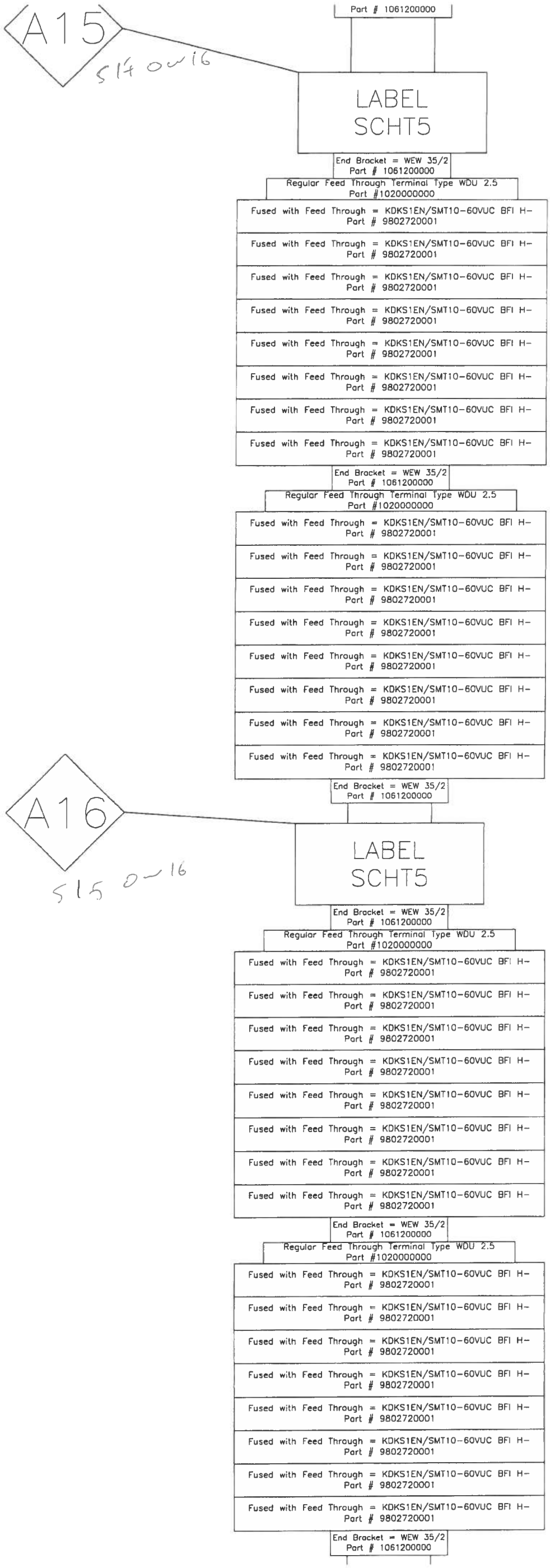
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3417 | SHT 8 OF 10 | REV 0



DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

ENGINEER STAMP

PROFESSIONAL ENGINEER
PROVINCE OF ALBERTA
M. A. GHALY
38913
OCT 24 2013

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3418 | SHT 9 OF 10 | REV 0

A12

511 IB 32

LABEL SCHT5

End Bracket = WEW 35/2
Part # 1061200000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Regular Feed Through Terminal Type WDU 2.5
Part #1020000000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

End Bracket = WEW 35/2
Part # 1061200000

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

Fused with Feed Through = KDKS1EN/SMT10-60VUC BFI H-
Part # 9802720001

End Bracket = WEW 35/2
Part # 1061200000

DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
A	22JUL2013	ISSUED FOR REVIEW	RR	CF	-
B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. GHALY
38013

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OCT 24 2013

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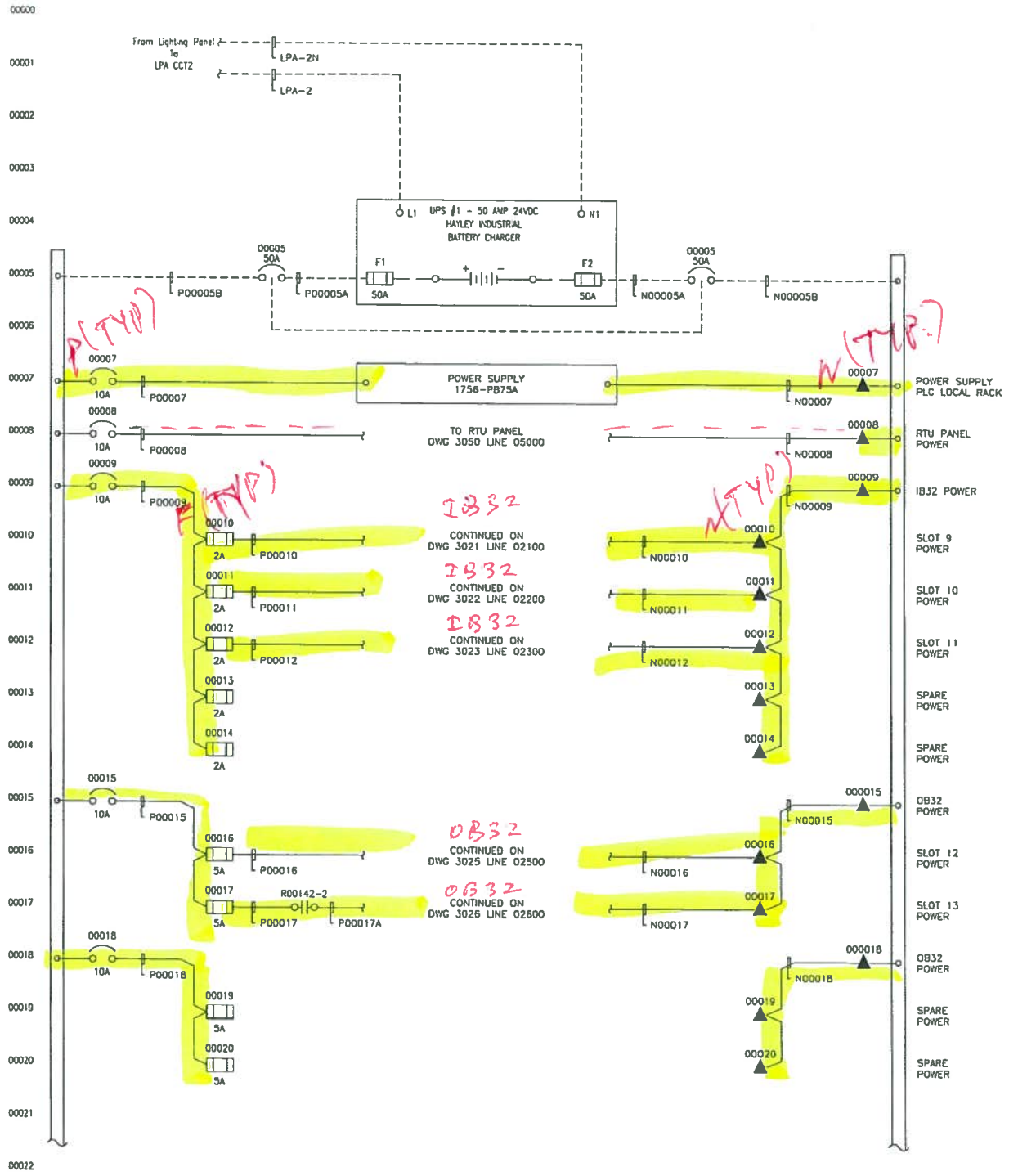
THIRD PARTY LOGO

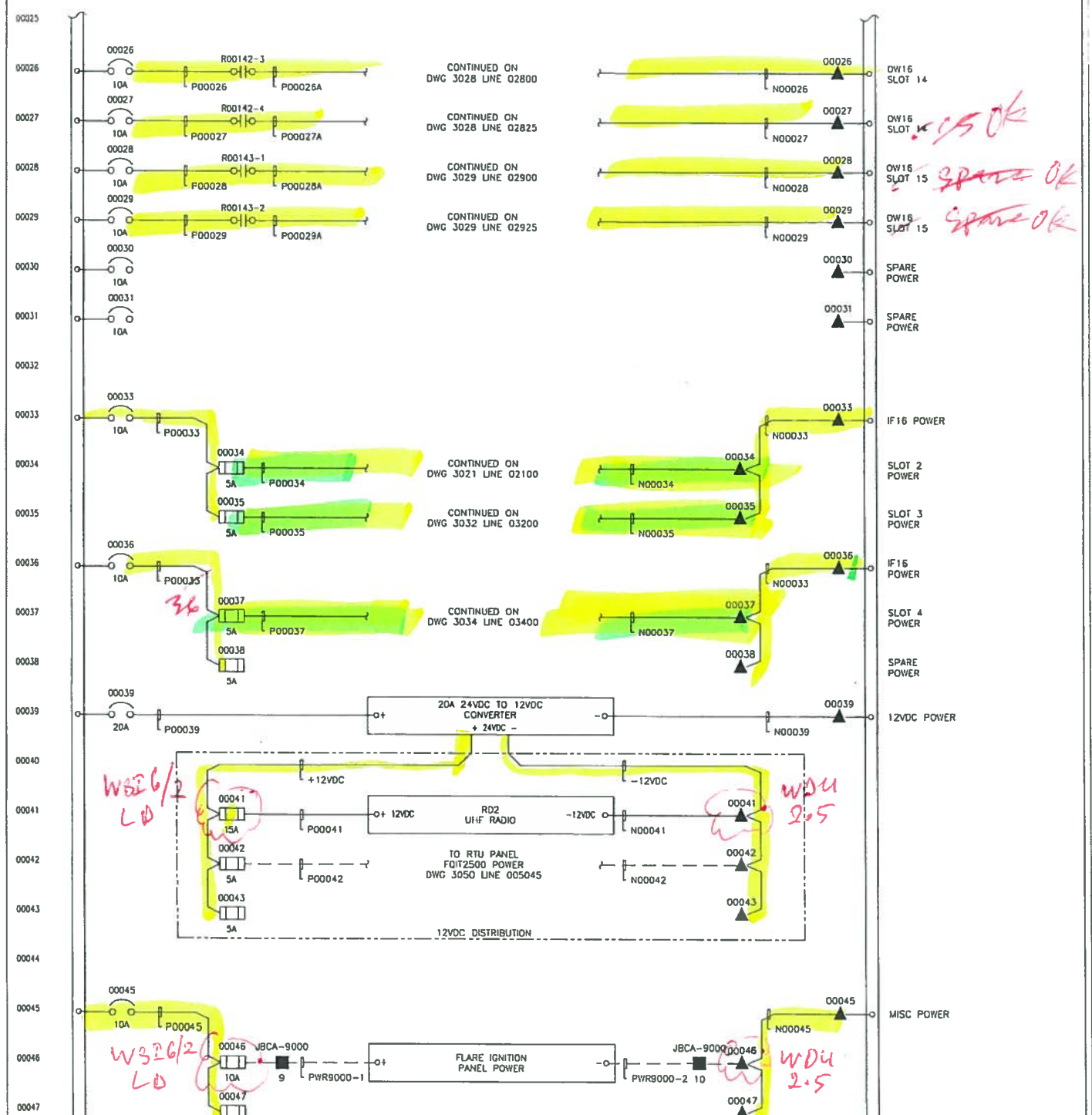
SCALE: AS SHOWN
SIZE: 0
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
CONTROL PANEL TERMINAL LAYOUT

DWG# d055A094P10-ELC-3419
SHT 10 OF 10
REV 0





DRAWING#	REFERENCE DRAWING TITLE

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THIRD PARTY LOGO

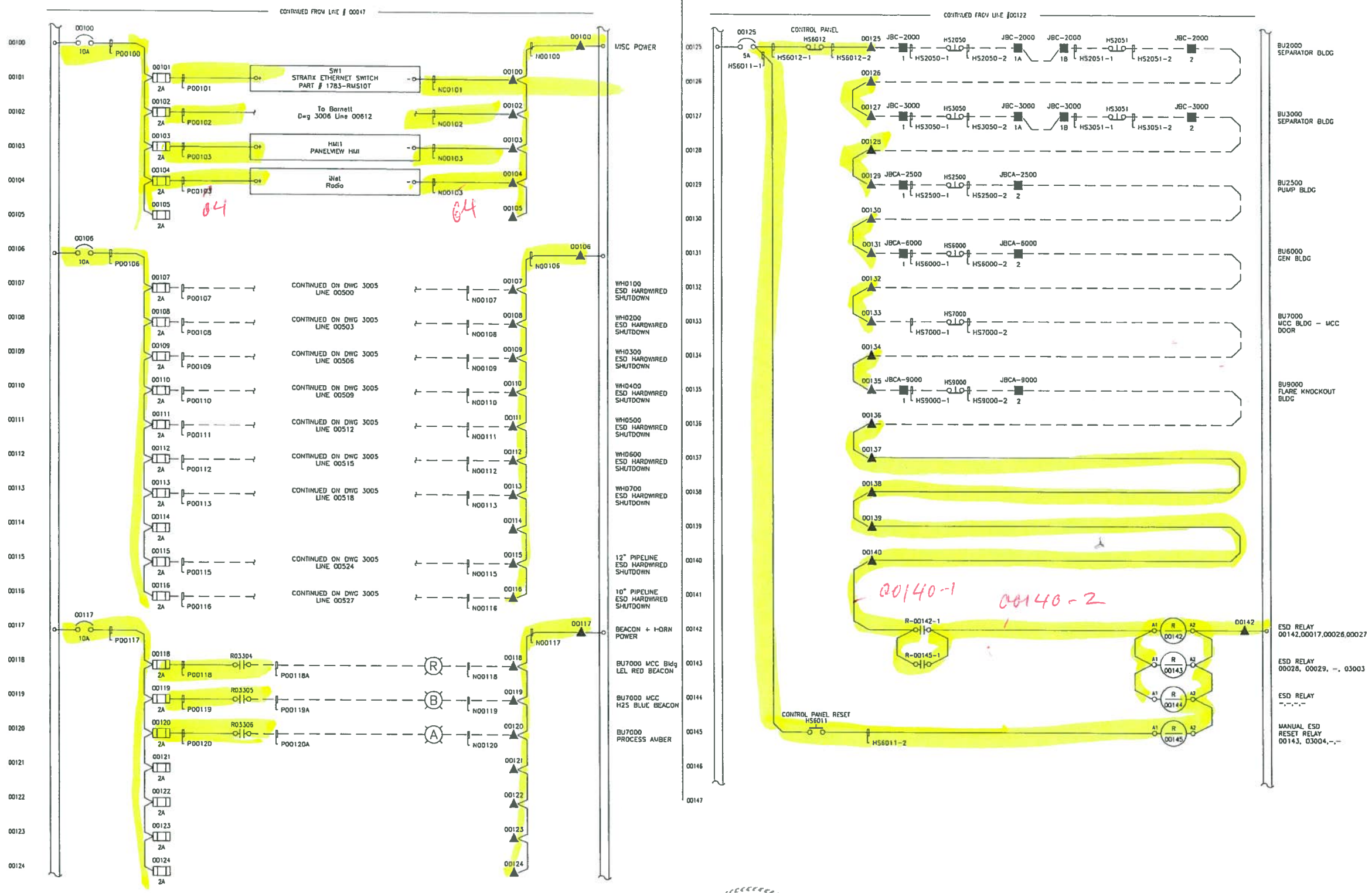
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
24VDC DISTRIBUTION

DWG# d055A094P10-ELC-3000 | SHT 1 OF 2 | REV 0



DRAWING#	REFERENCE DRAWING TITLE

REV	DATE	DESCRIPTION	DWN	CHKD	APPR
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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

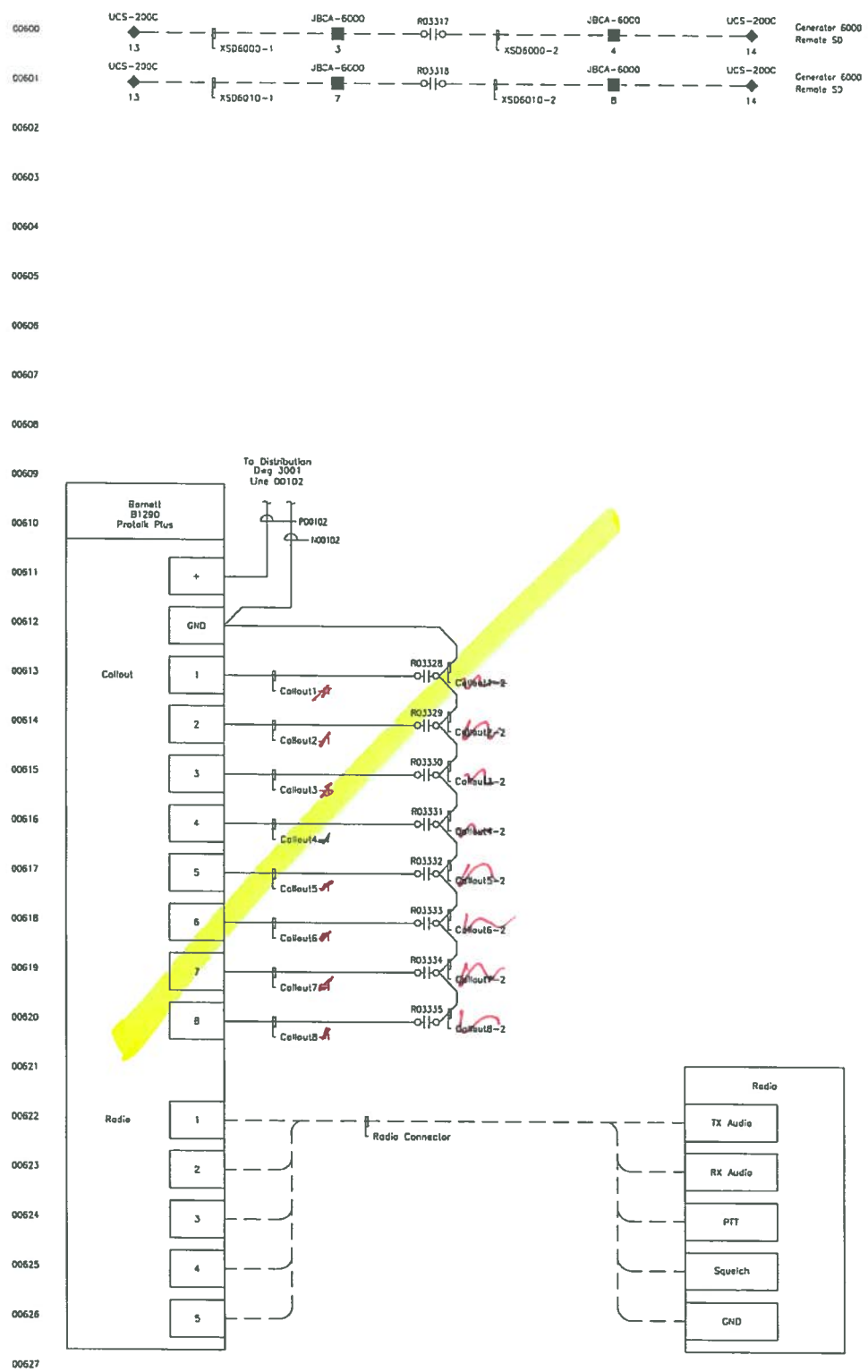
SCALE: AS SHOWN | SIZE: D

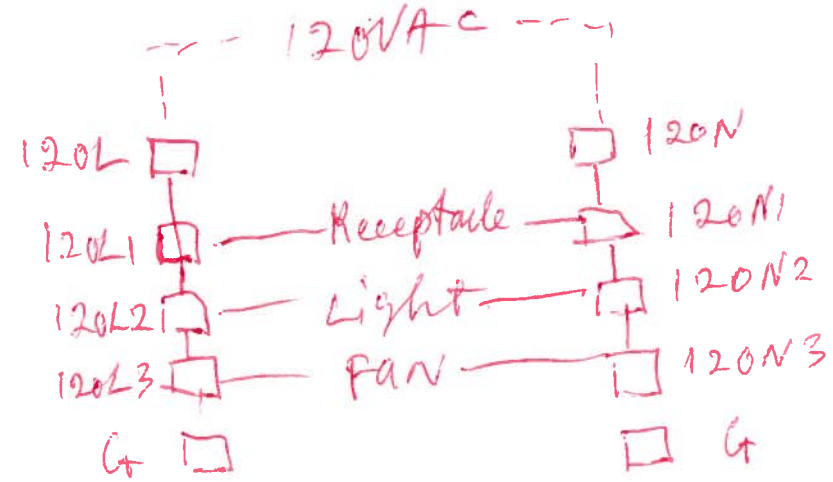
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
24VDC DISTRIBUTION

DWG# d055A094P10-ELC-3001 | SHT 1 OF 2 | REV 0





DRAWING#	REFERENCE DRAWING TITLE

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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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THIRD PARTY LOGO

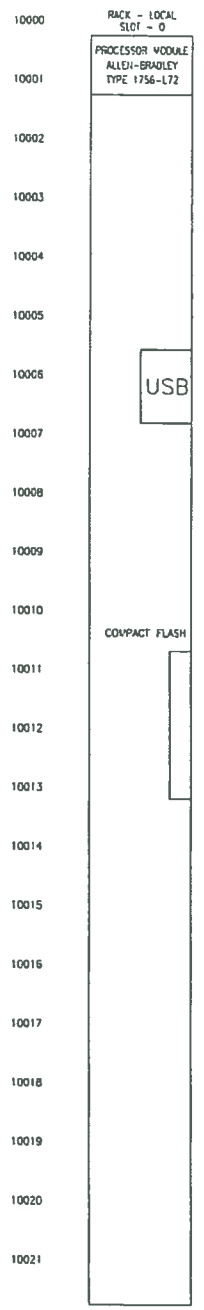
SCALE: AS SHOWN | SIZE: D

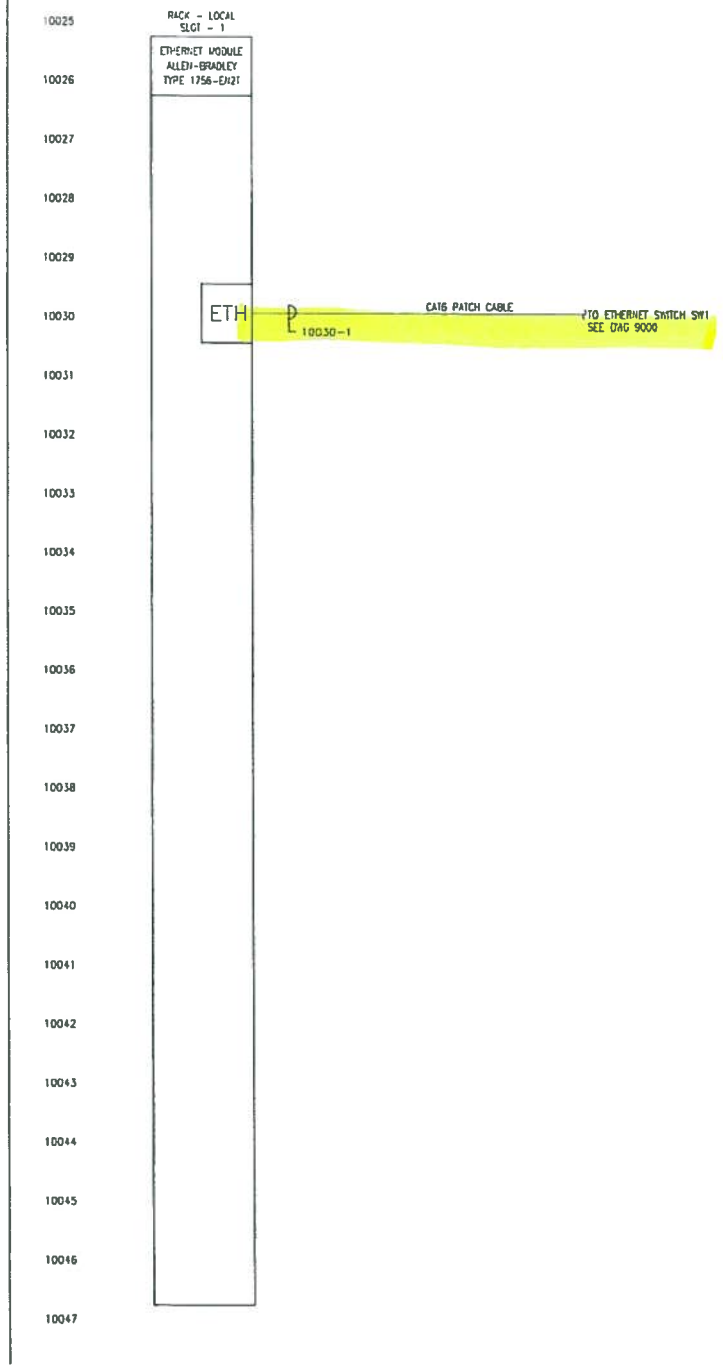
EPCM PROJECT#: 13053

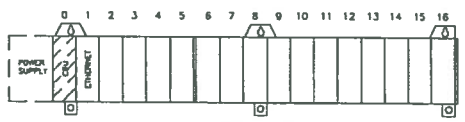
PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
24VDC SCHEMATIC

DWG# d055A094P10-ELC-3006 | SHT 2 OF 2 | REV 0







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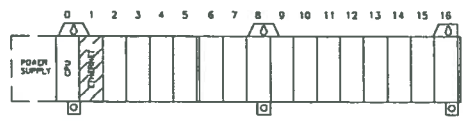

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PROVINCE OF BRITISH COLUMBIA
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THIRD PARTY LOGO

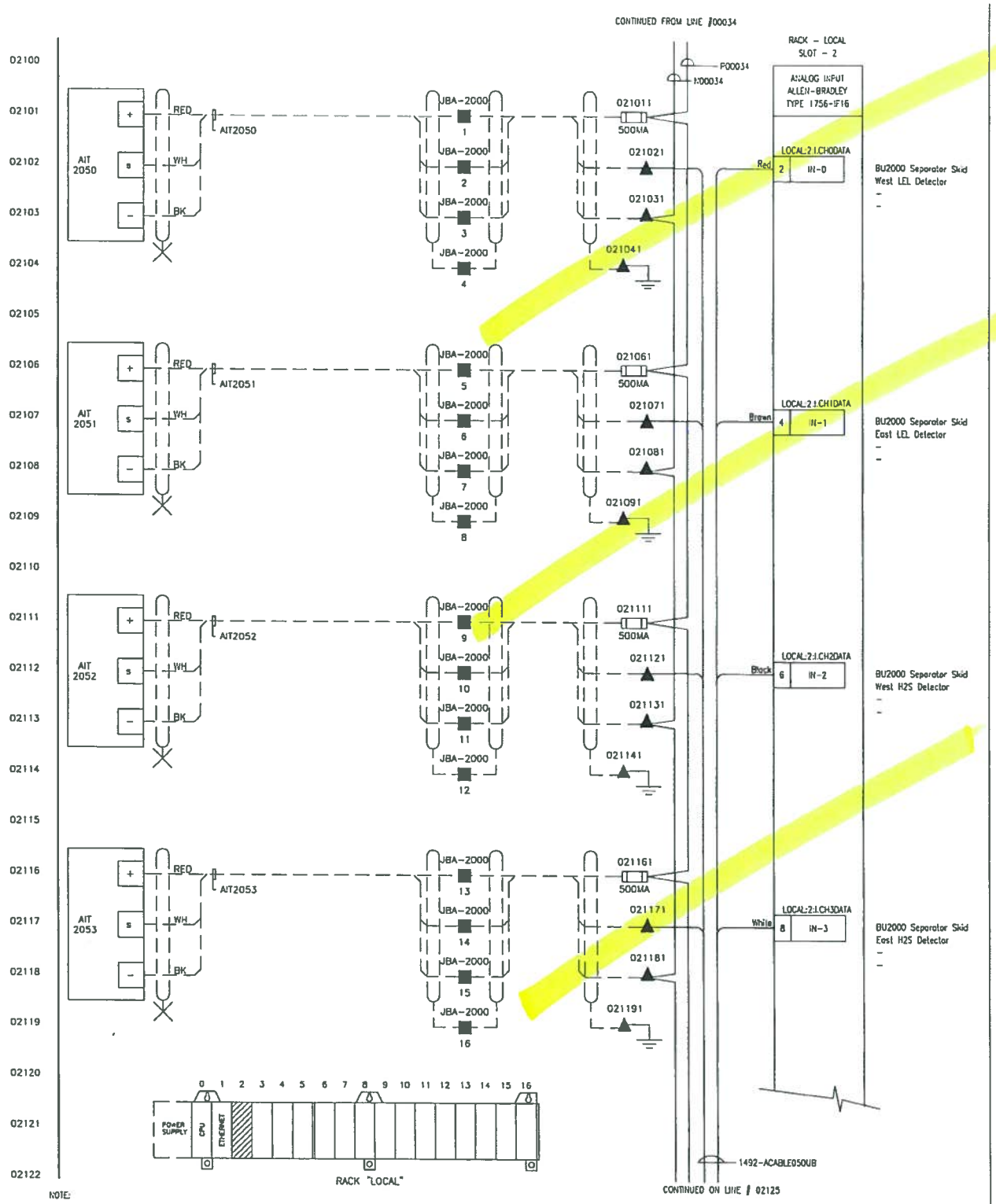
SCALE: AS SHOWN | SIZE: D

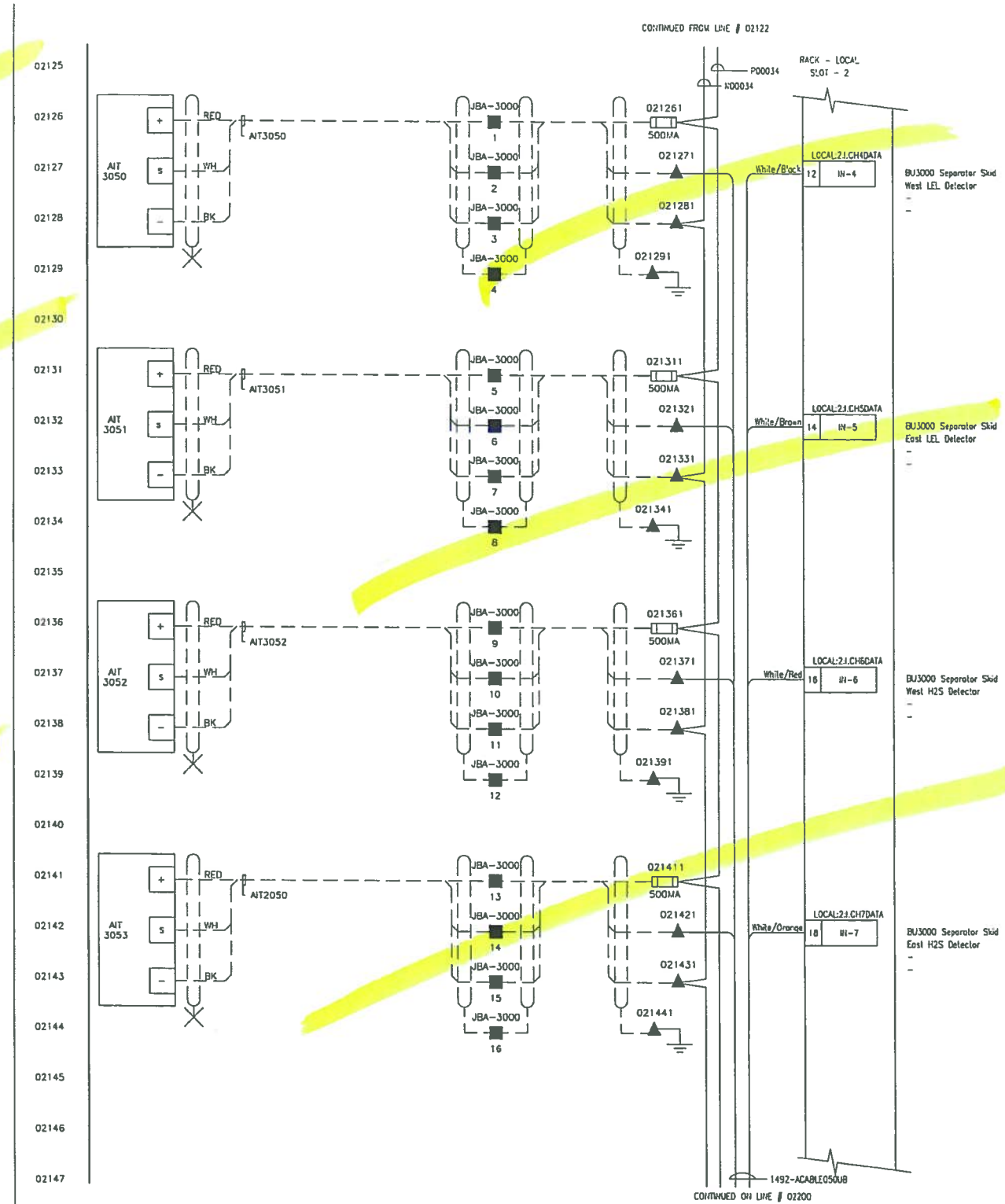
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3020 | SHT 1 OF 17 | REV 0





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0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA M. A. GHALY # 38913

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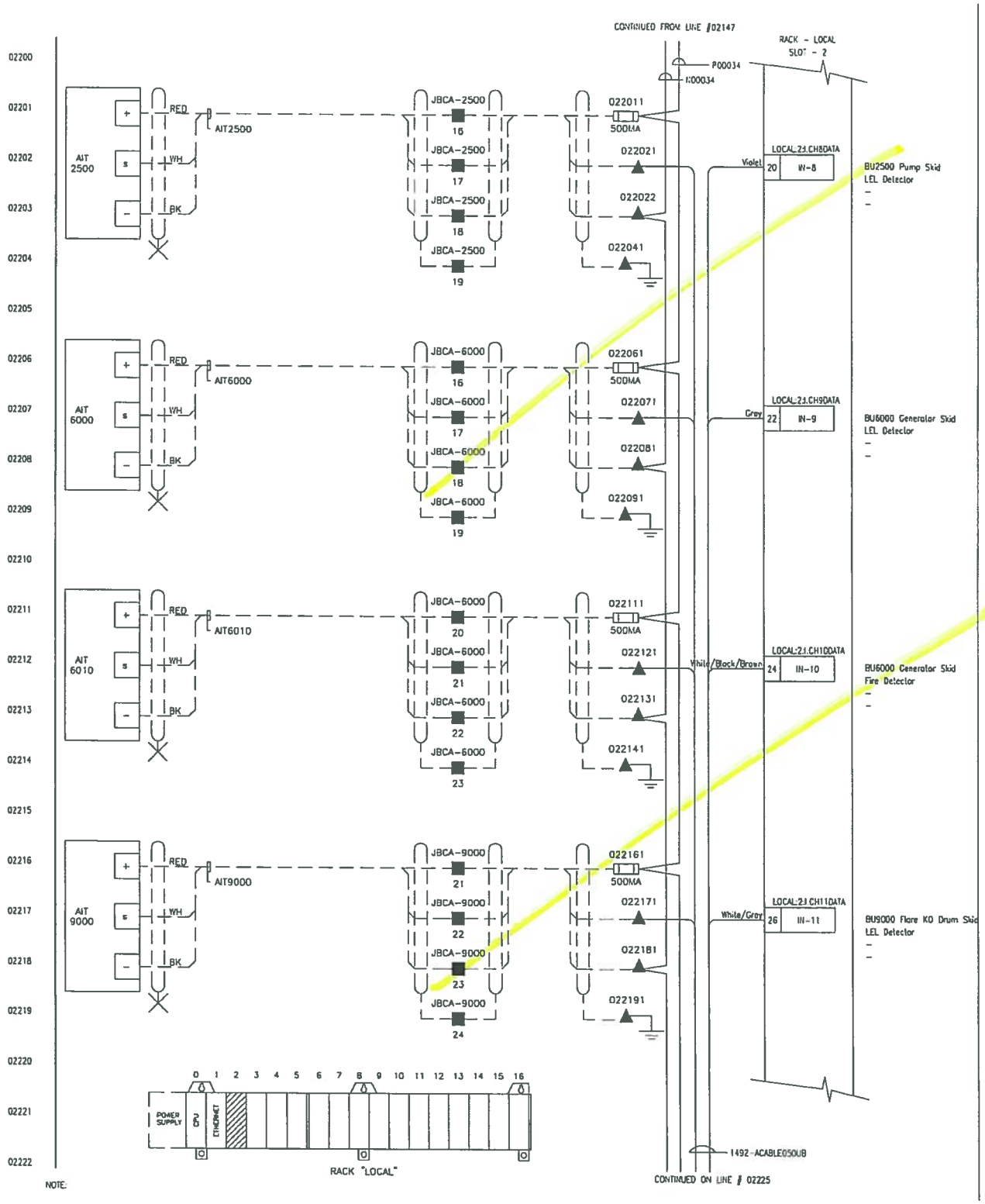
THIRD PARTY LOGO

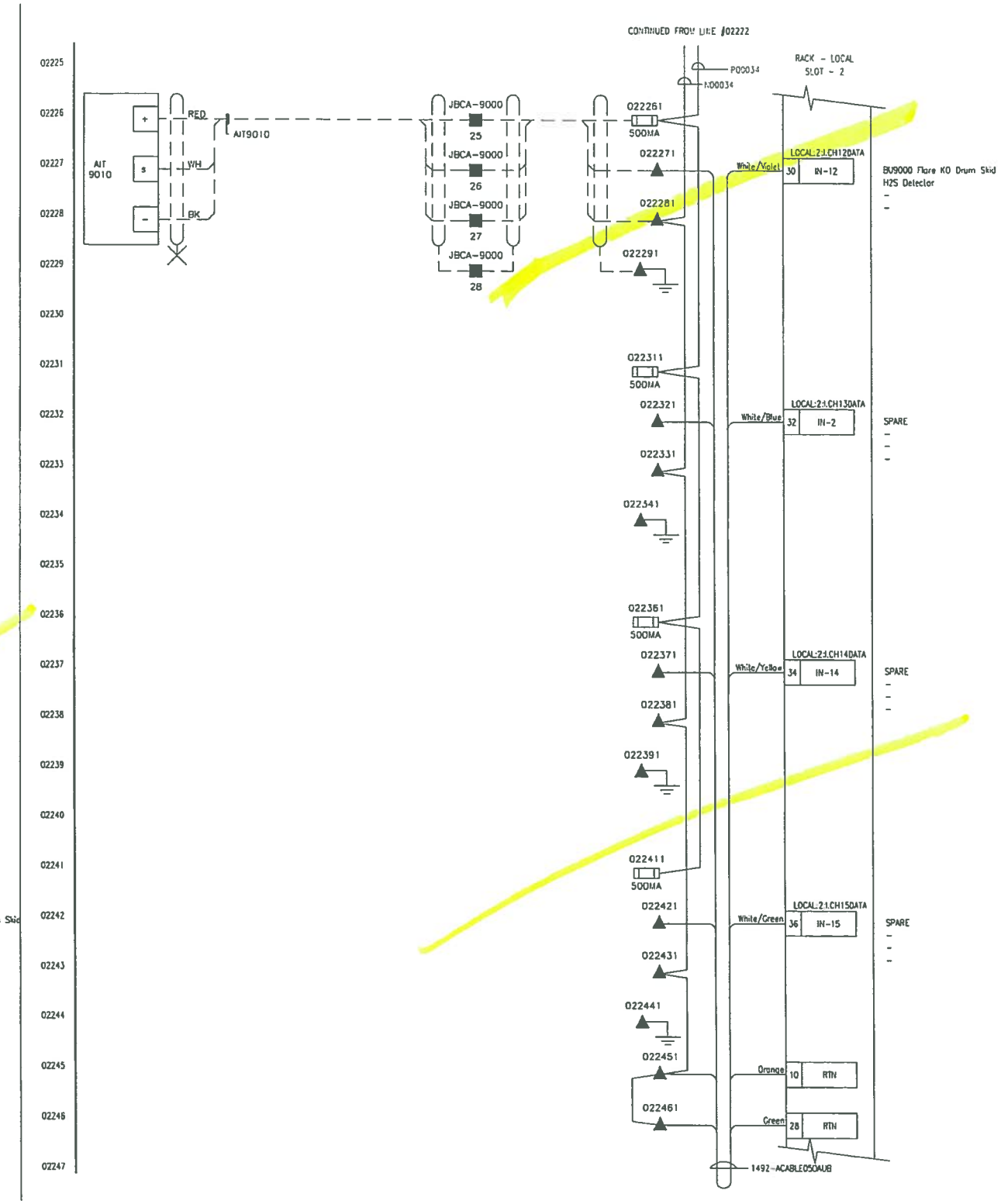
SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA - MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3021 | SHT 2 OF 17 | REV 0





DRAWING#	REFERENCE DRAWING TITLE

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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
M. A. GHALY
38913

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

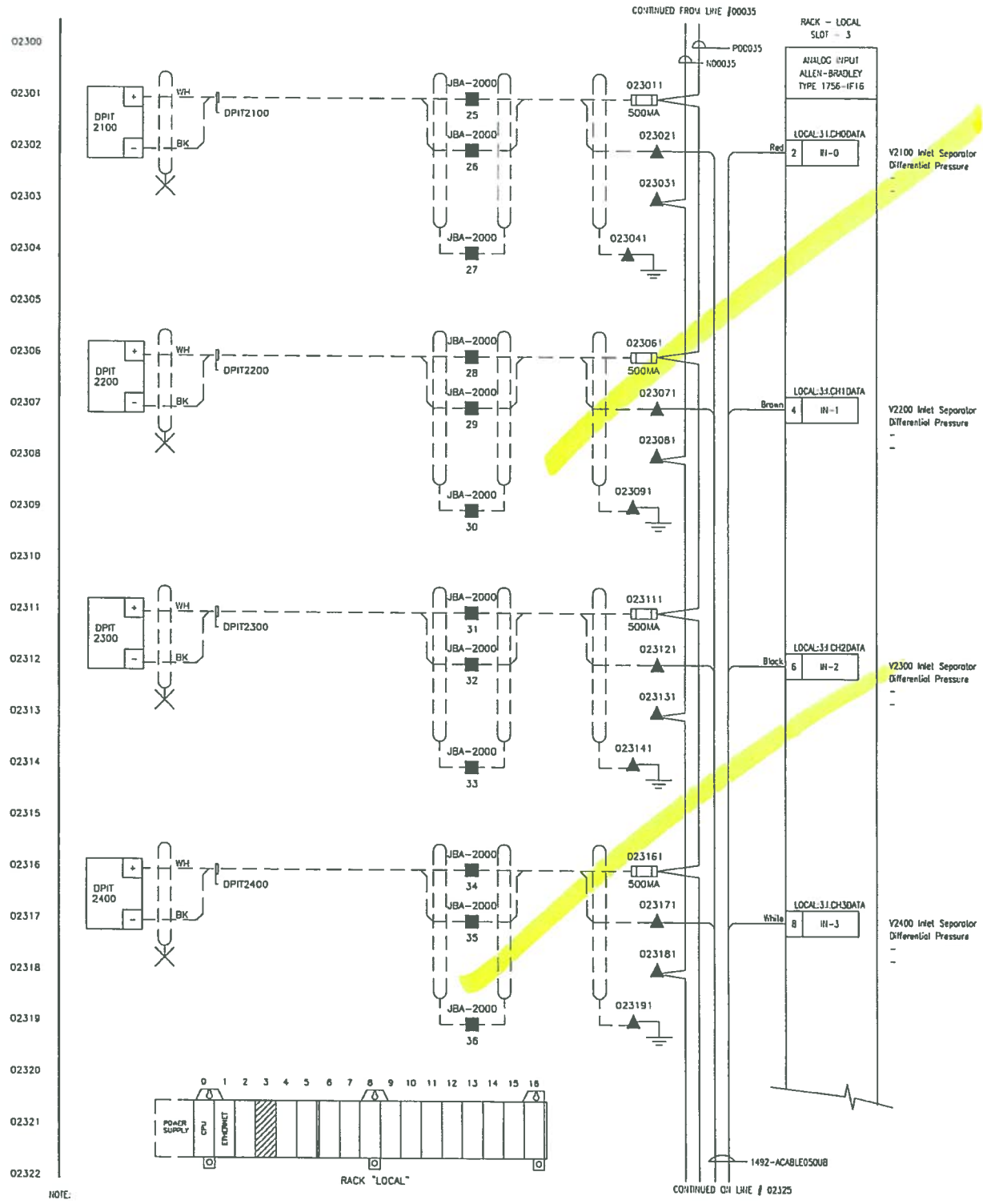
SCALE: AS SHOWN | SIZE: D

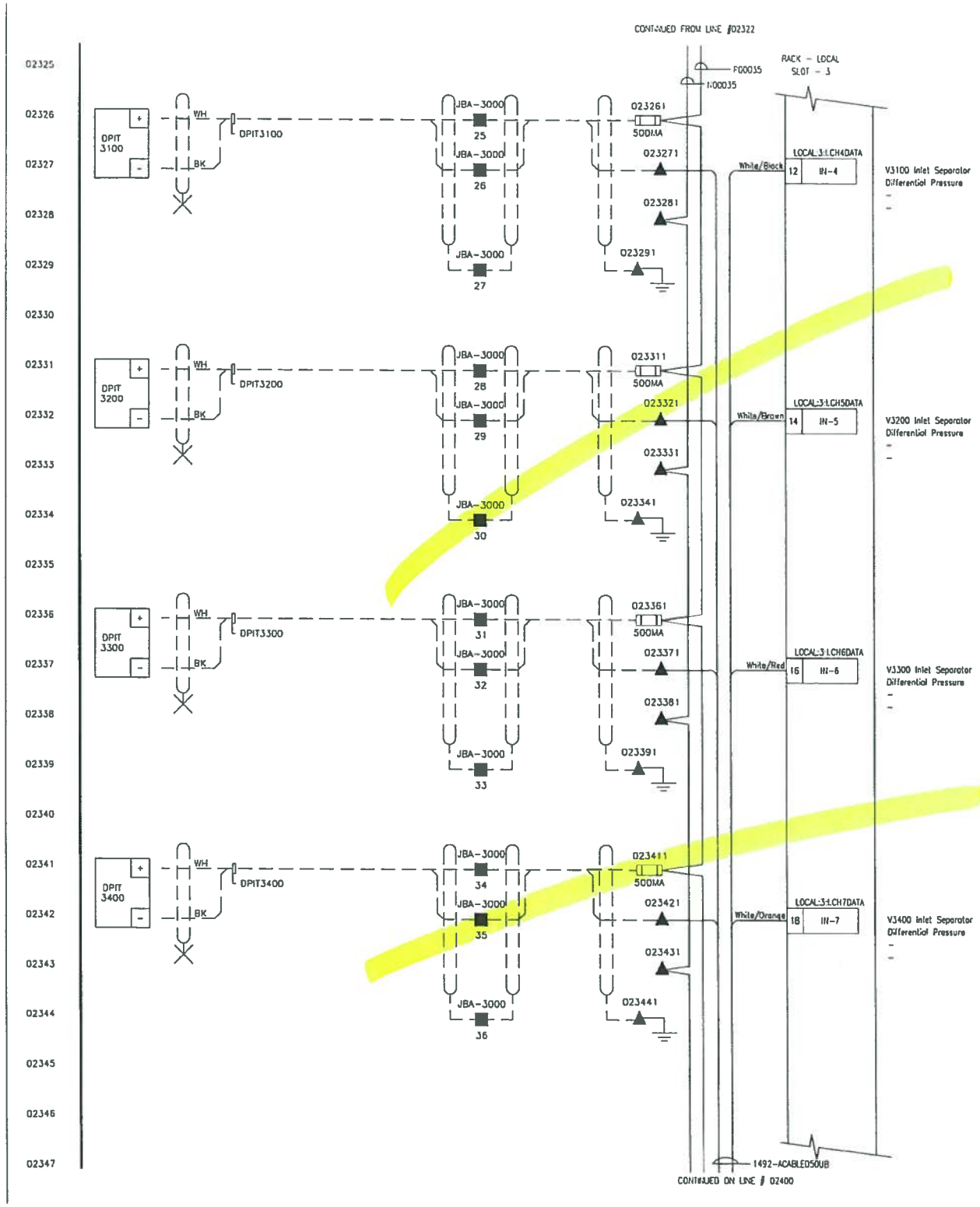
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3022 | SHT 3 OF 17 | REV 0





DRAWING#	REFERENCE DRAWING TITLE

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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

ENGINEER STAMP

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – M. A. GHALY # 38913

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

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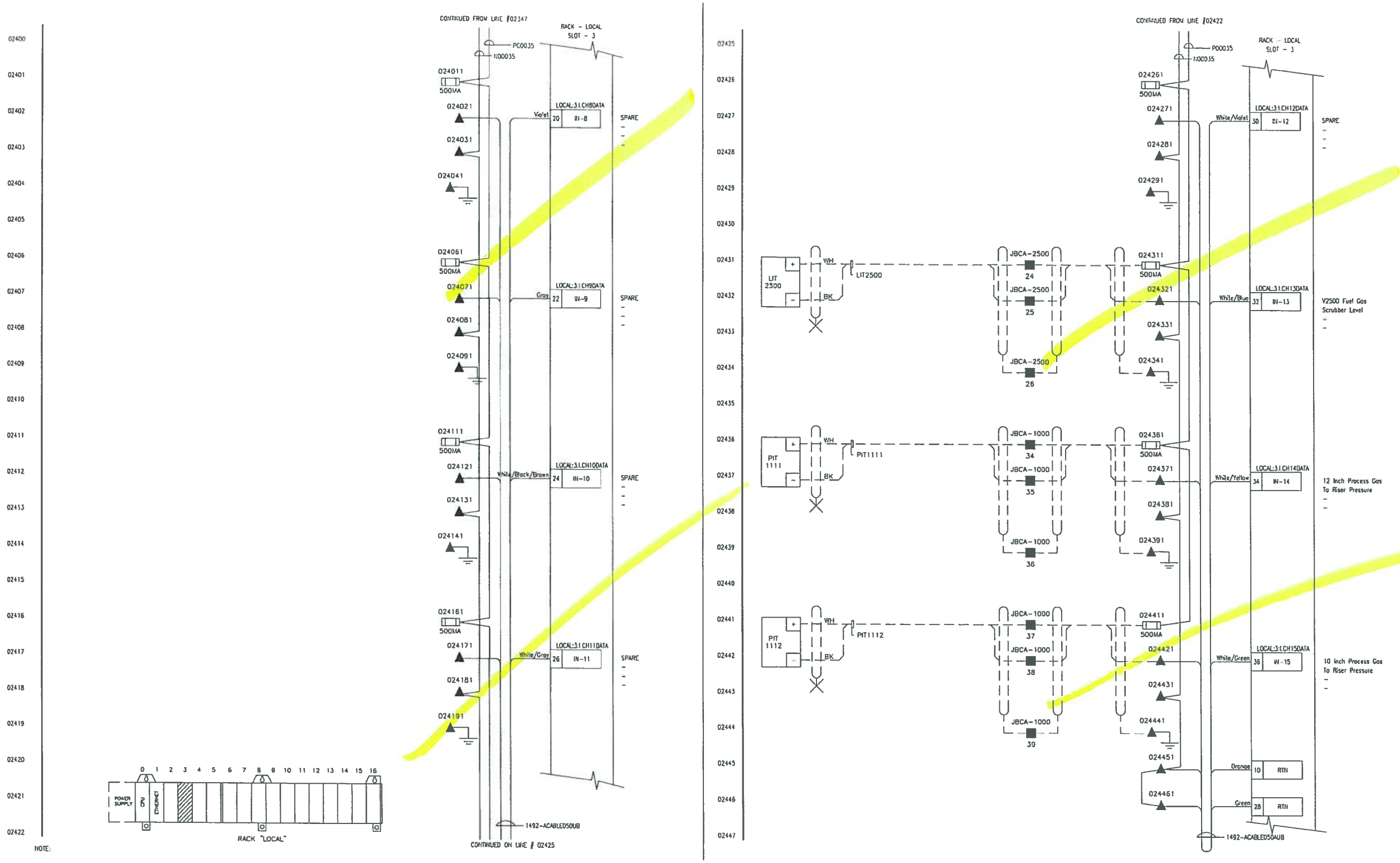

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0	21OCT2013	ISSUED FOR CONSTRUCTION	R.R	MG	MG

ENGINEER STAMP

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — M. A. GHALY # 38913

OCT 2 4 2013

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PIONEER ENGINEERING INC.

THIRD PARTY LOGO

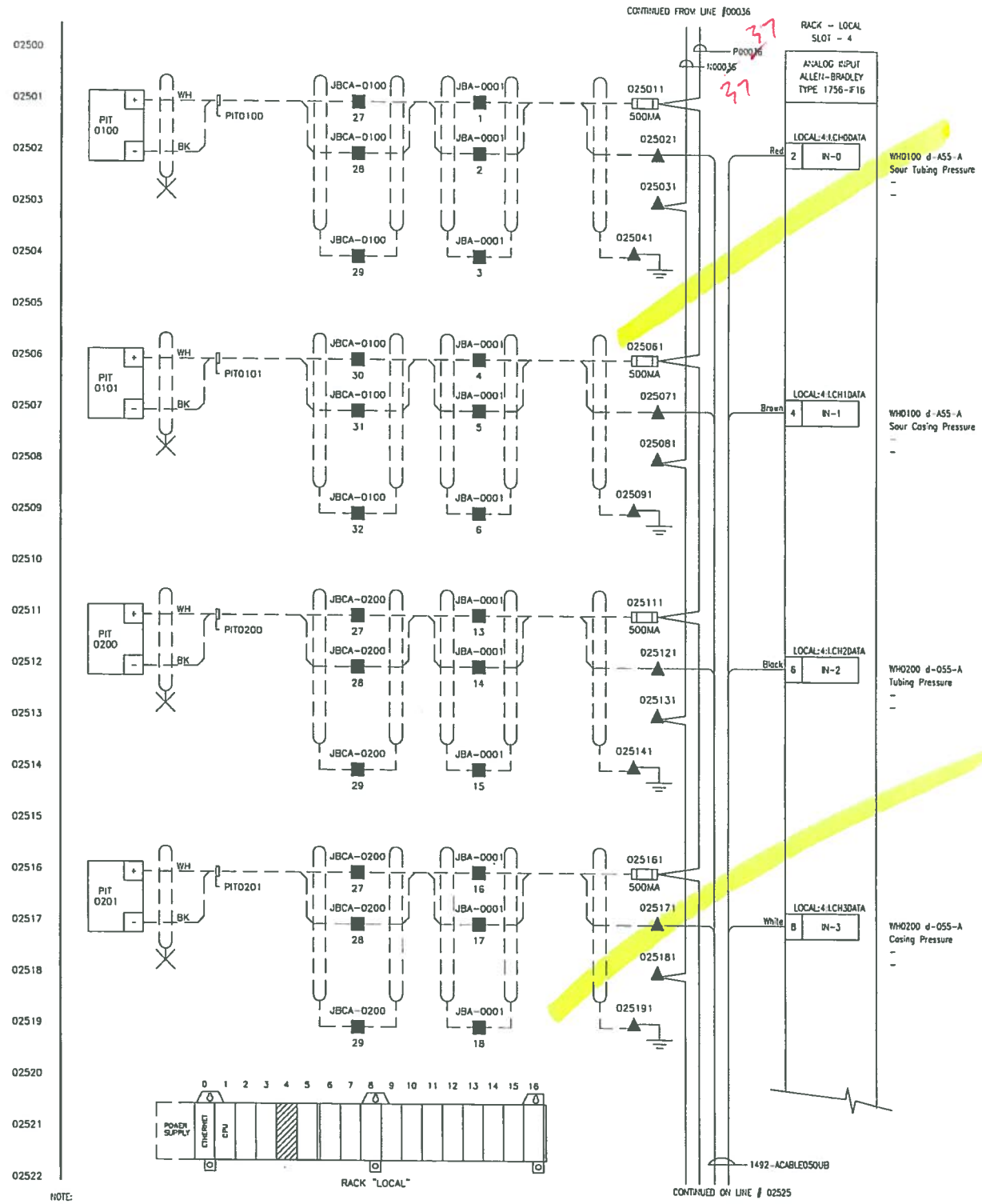
SCALE: AS SHOWN | SIZE: D

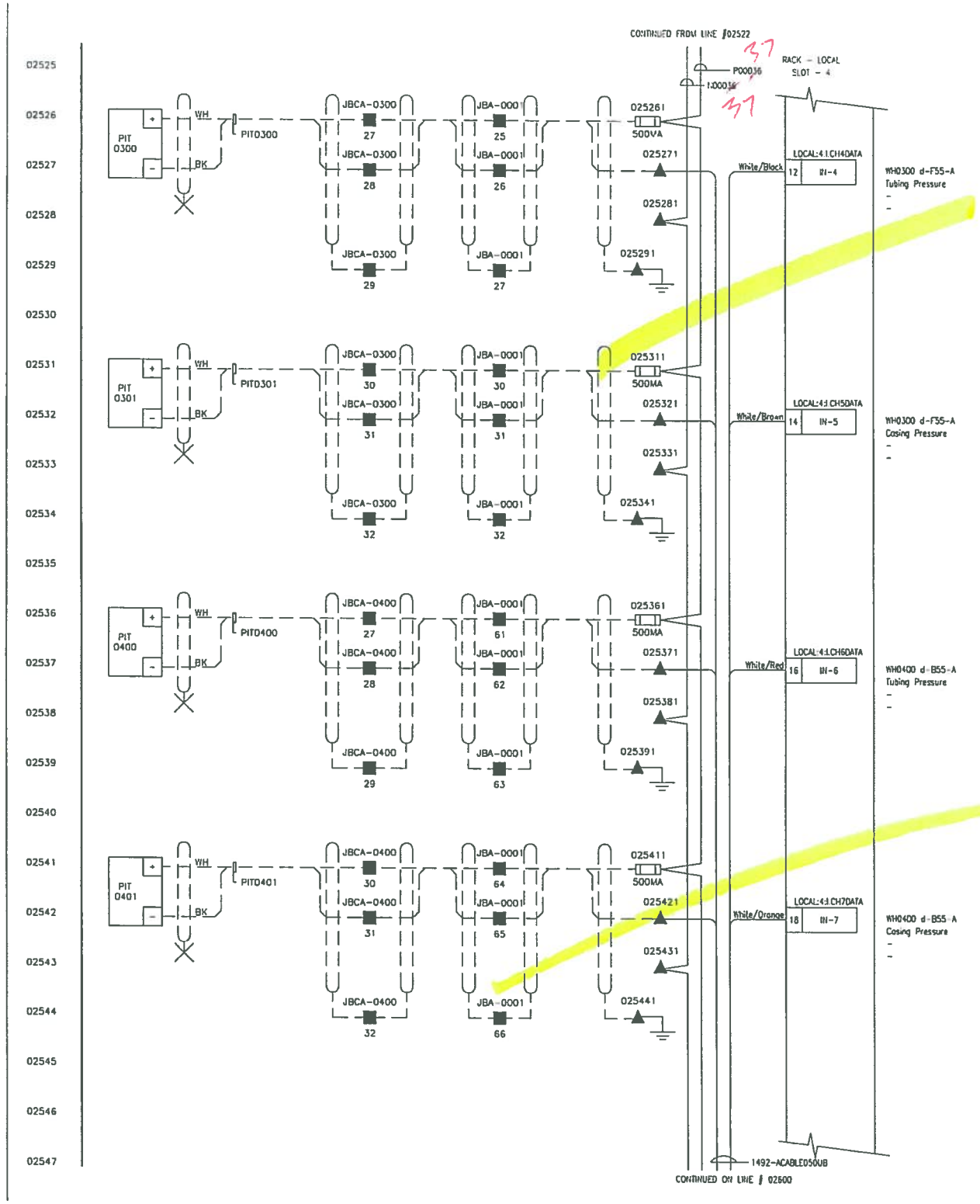
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3024 | SHT 5 OF 17 | REV 0





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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
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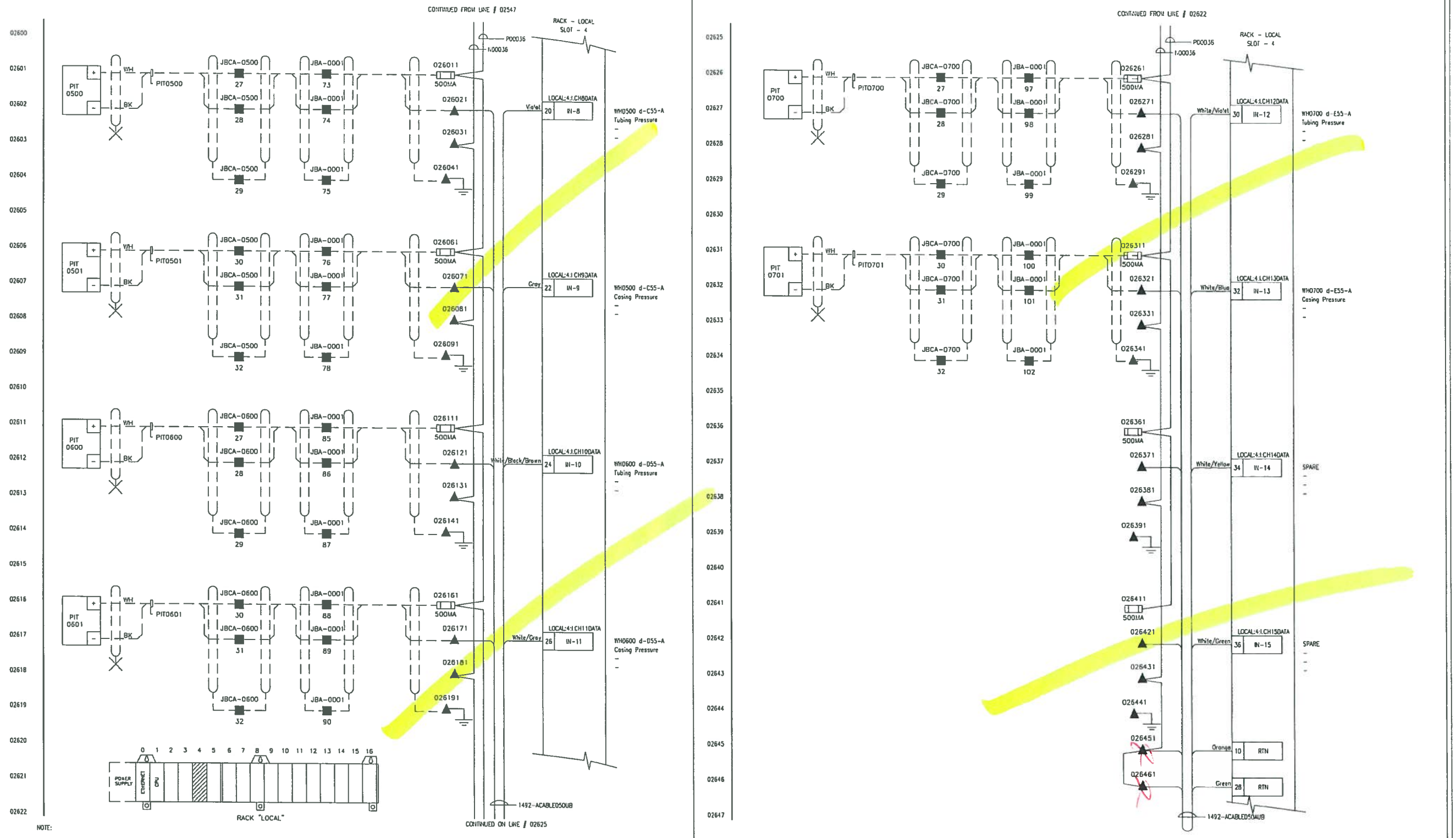
THIRD PARTY LOGO

SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3025 | SHT 6 OF 17 | REV 0



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B	08OCT2013	ISSUED FOR APPROVAL	R.R	MG	MG
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THIRD PARTY LOGO

SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3026 | SHT 7 OF 17 | REV 0

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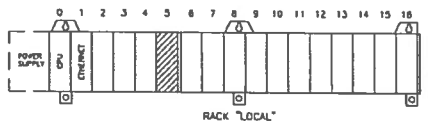

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THIRD PARTY LOGO

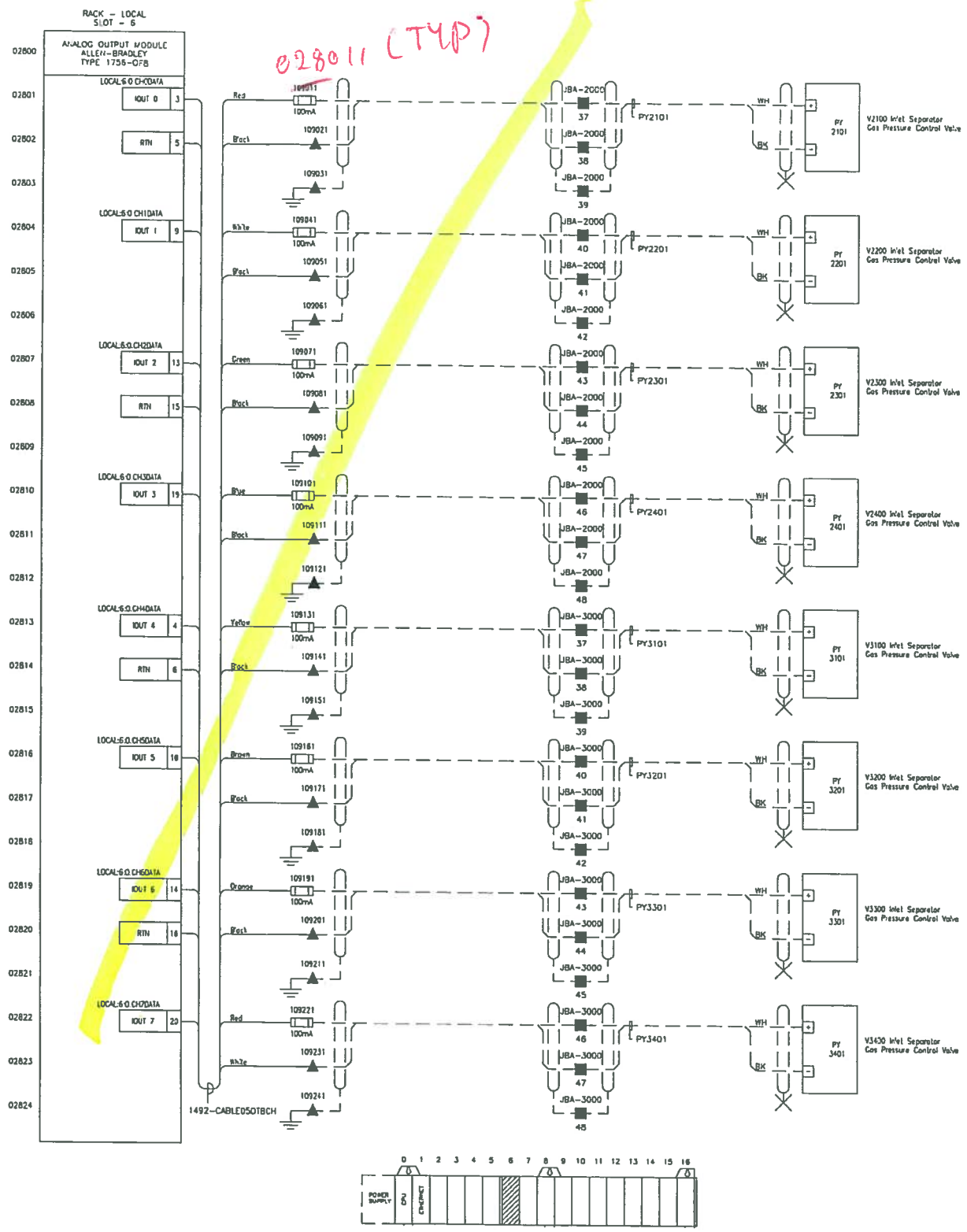
SCALE: AS SHOWN | SIZE: D

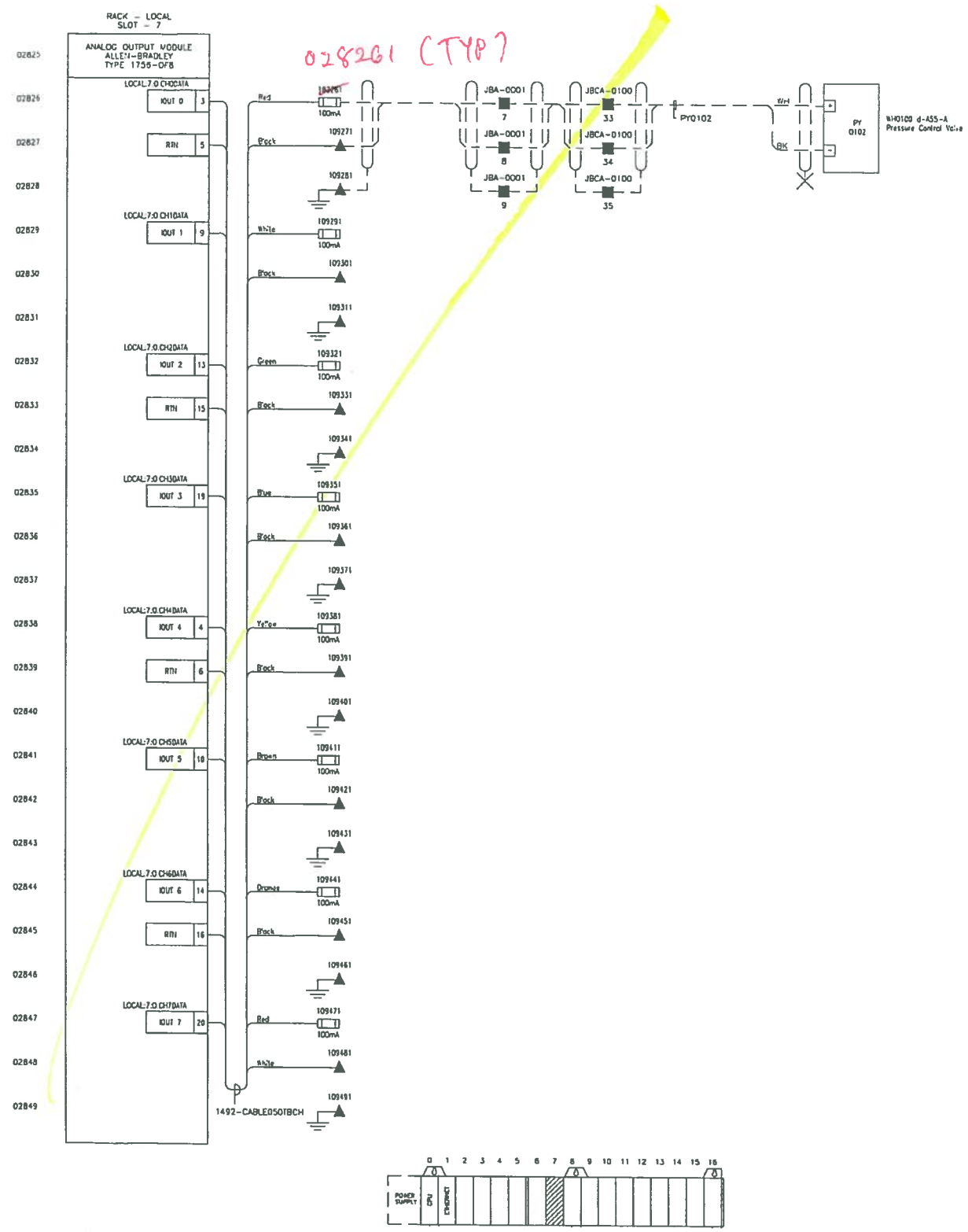
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE–IN
PENN WEST WELLSITE
d–055–A/094–P–10
IO SCHEMATICS

DWG# d055A094P10–ELC–3027 | SHT 8 OF 17 | REV 0





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THIRD PARTY LOGO

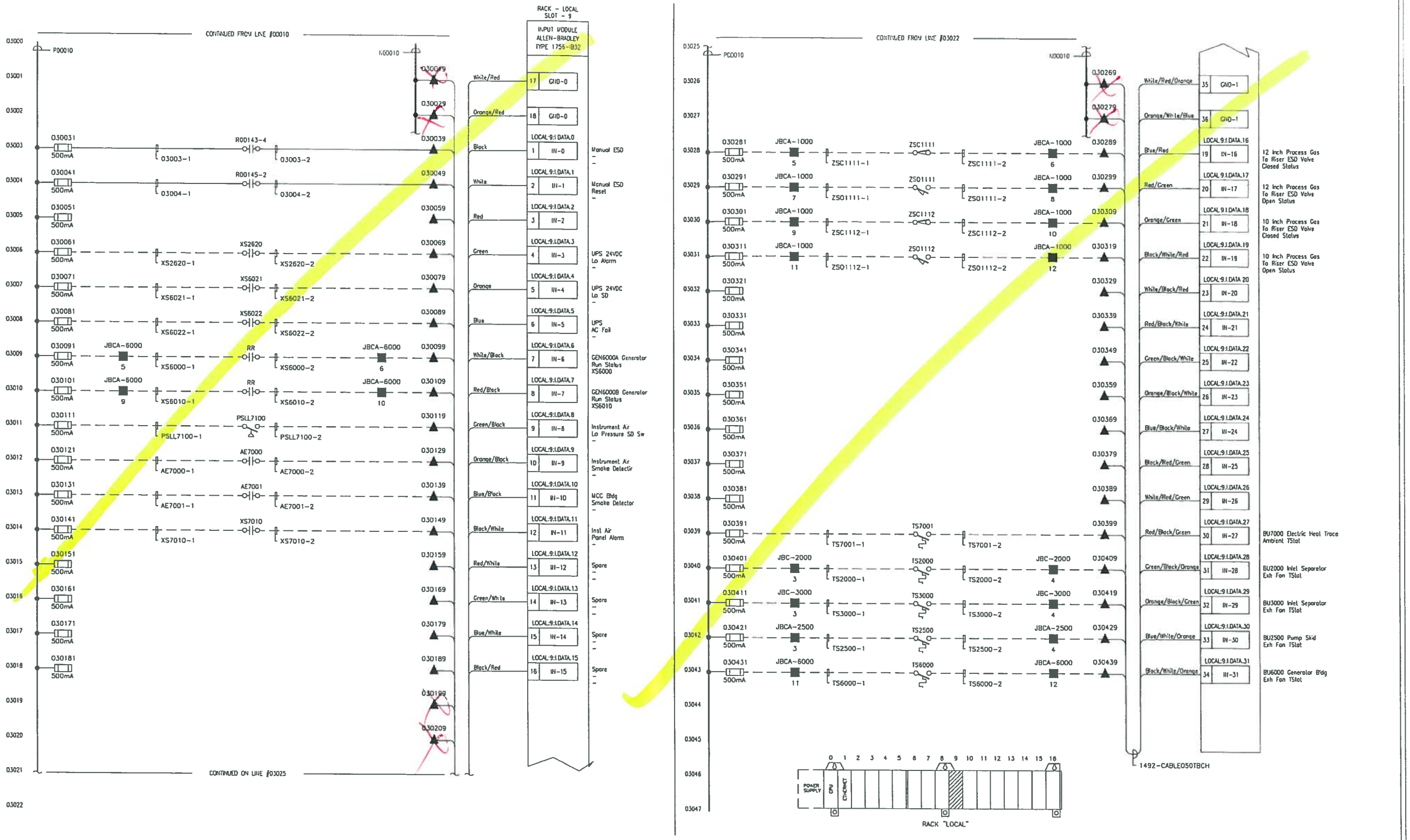
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3028 | SHT 9 OF 17 | REV 0



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PROVINCE OF BRITISH COLUMBIA
M. A. GHALY
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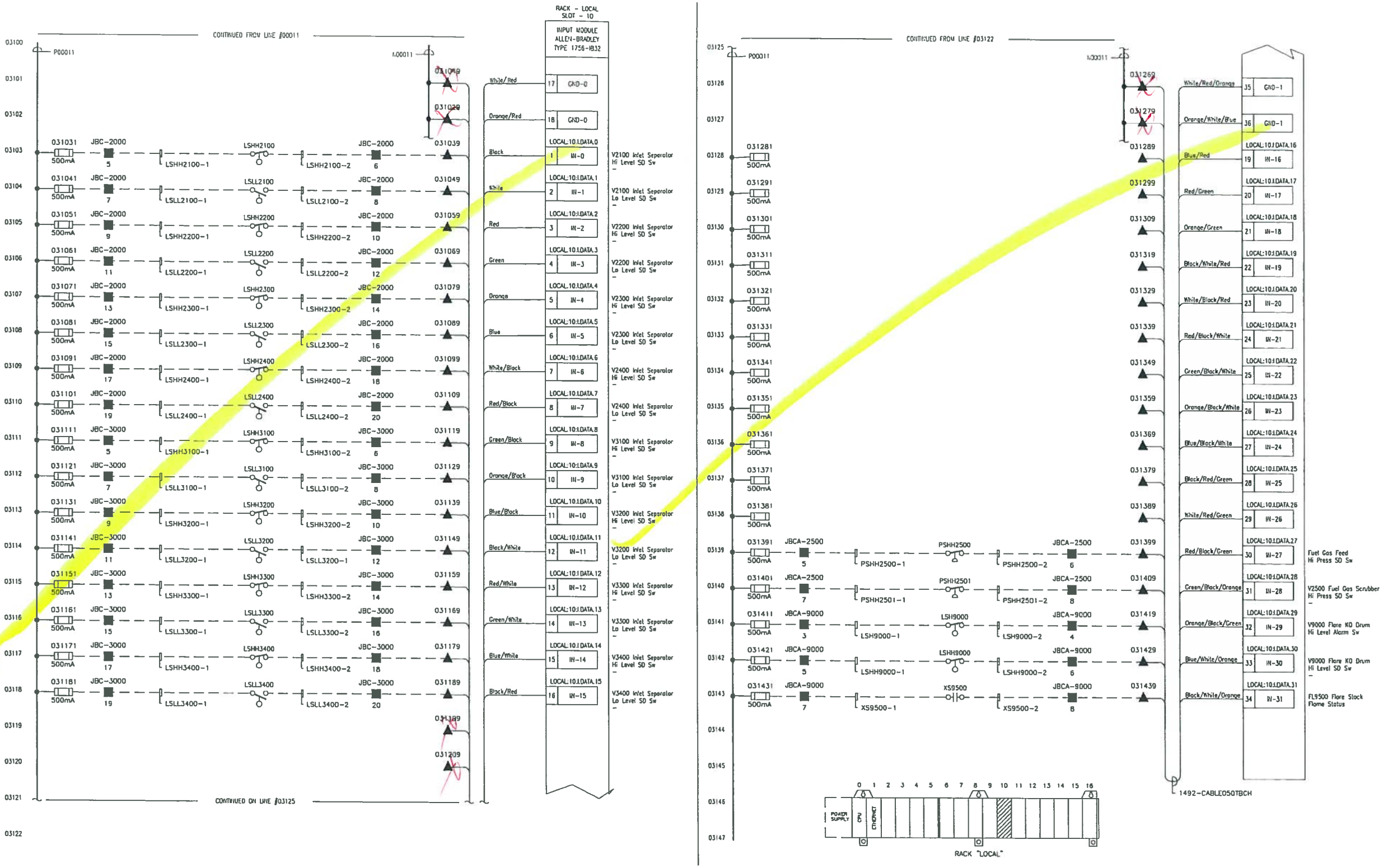
THIRD PARTY LOGO
SCALE: AS SHOWN | SIZE: D
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3030 | SHT 11 OF 17 | REV 0



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THIRD PARTY LOGO

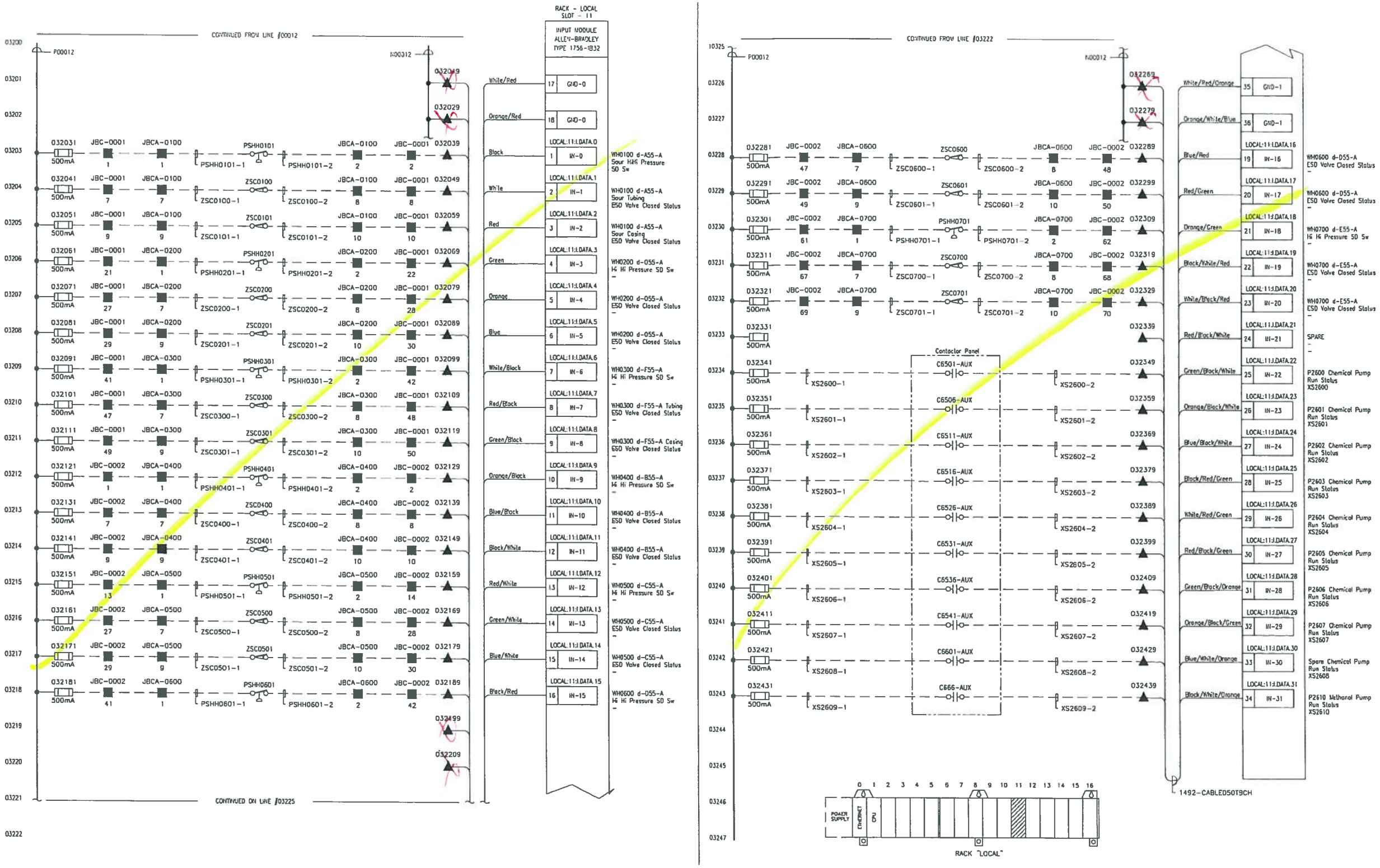
SCALE AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3031 | SHT 12 OF 17 | REV 0



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THIRD PARTY LOGO

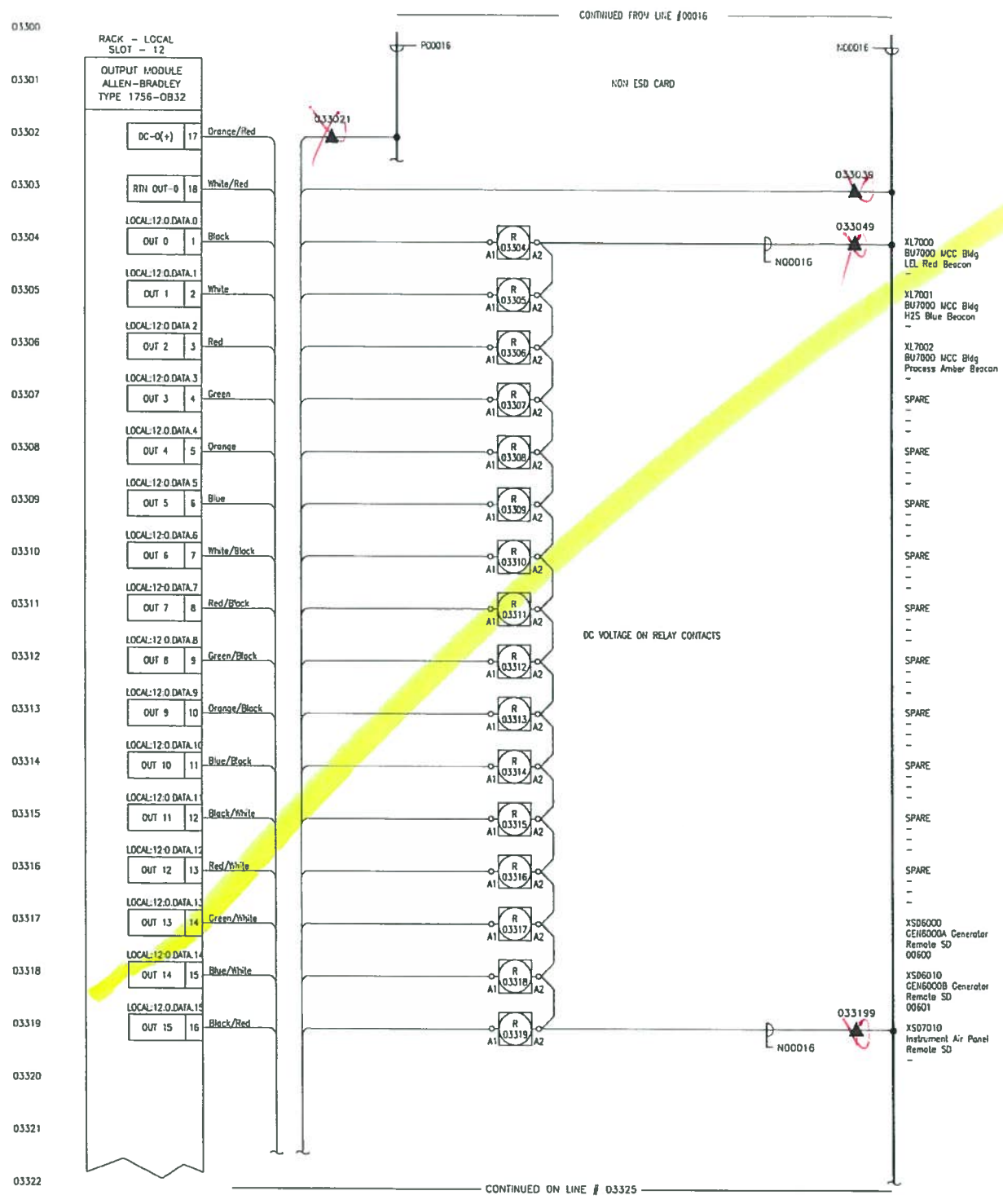
SCALE: AS SHOWN | SIZE: D

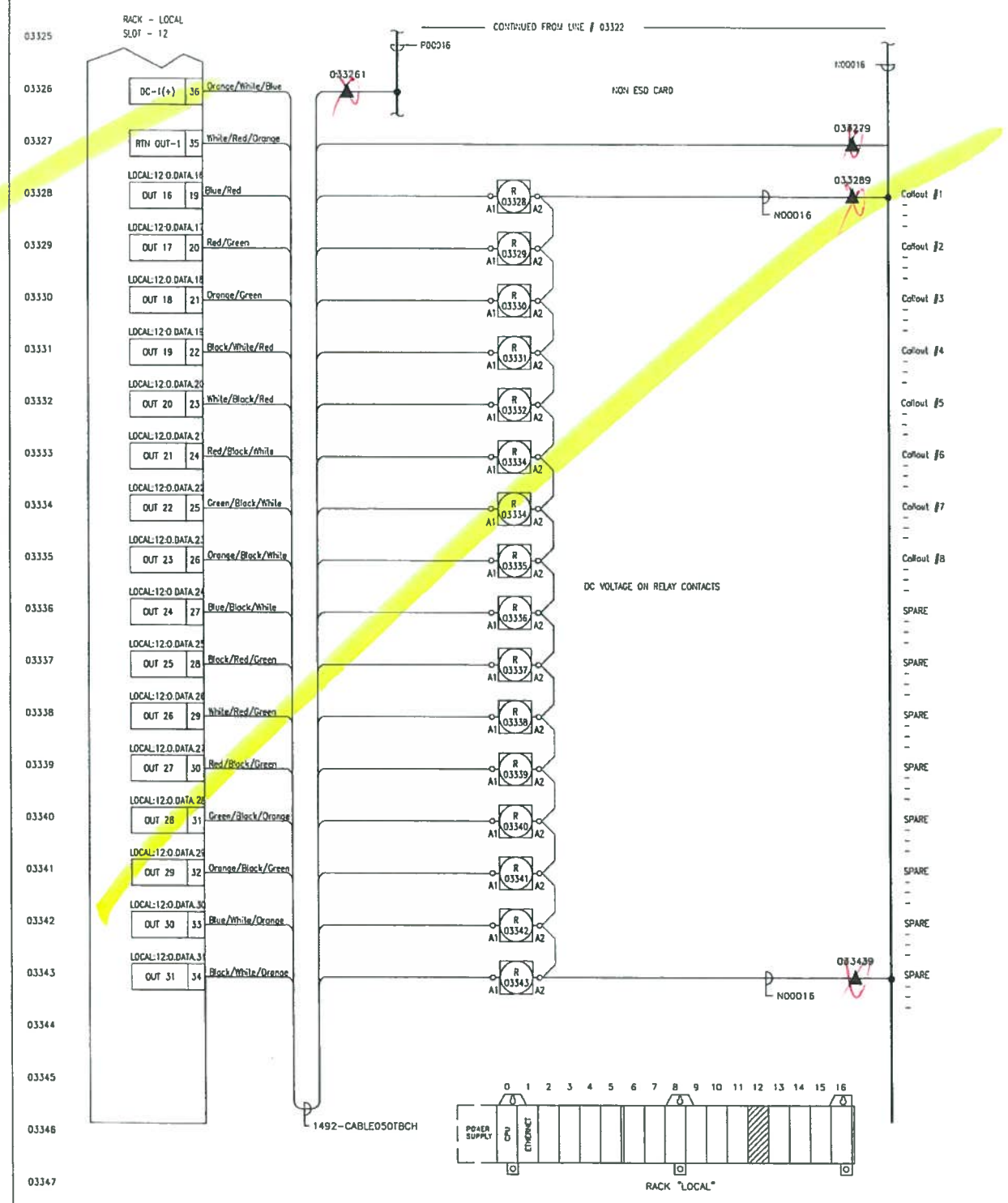
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3032 | SHT 13 OF 17 | REV B





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PIONEER ENGINEERING INC.

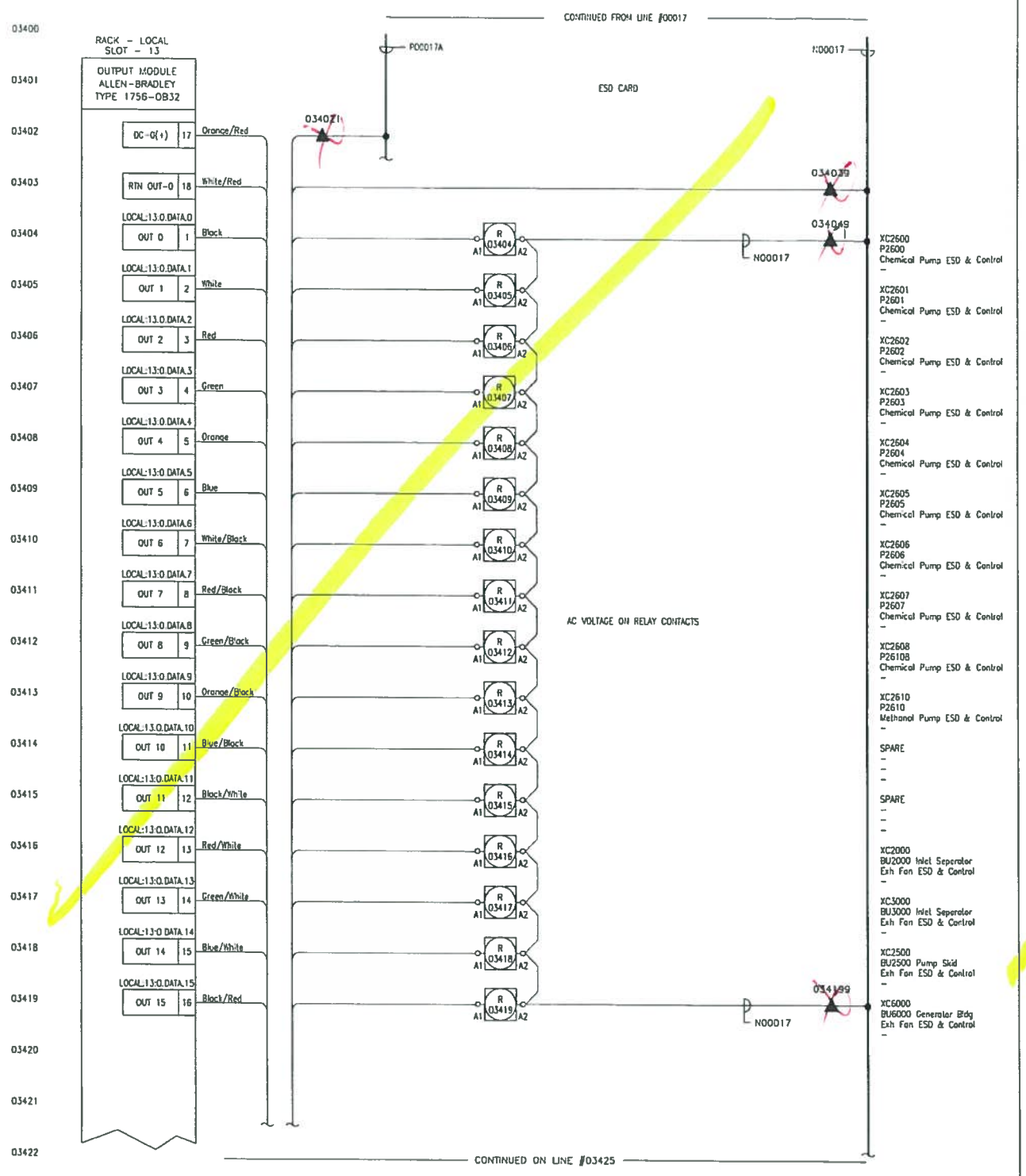
THIRD PARTY LOGO

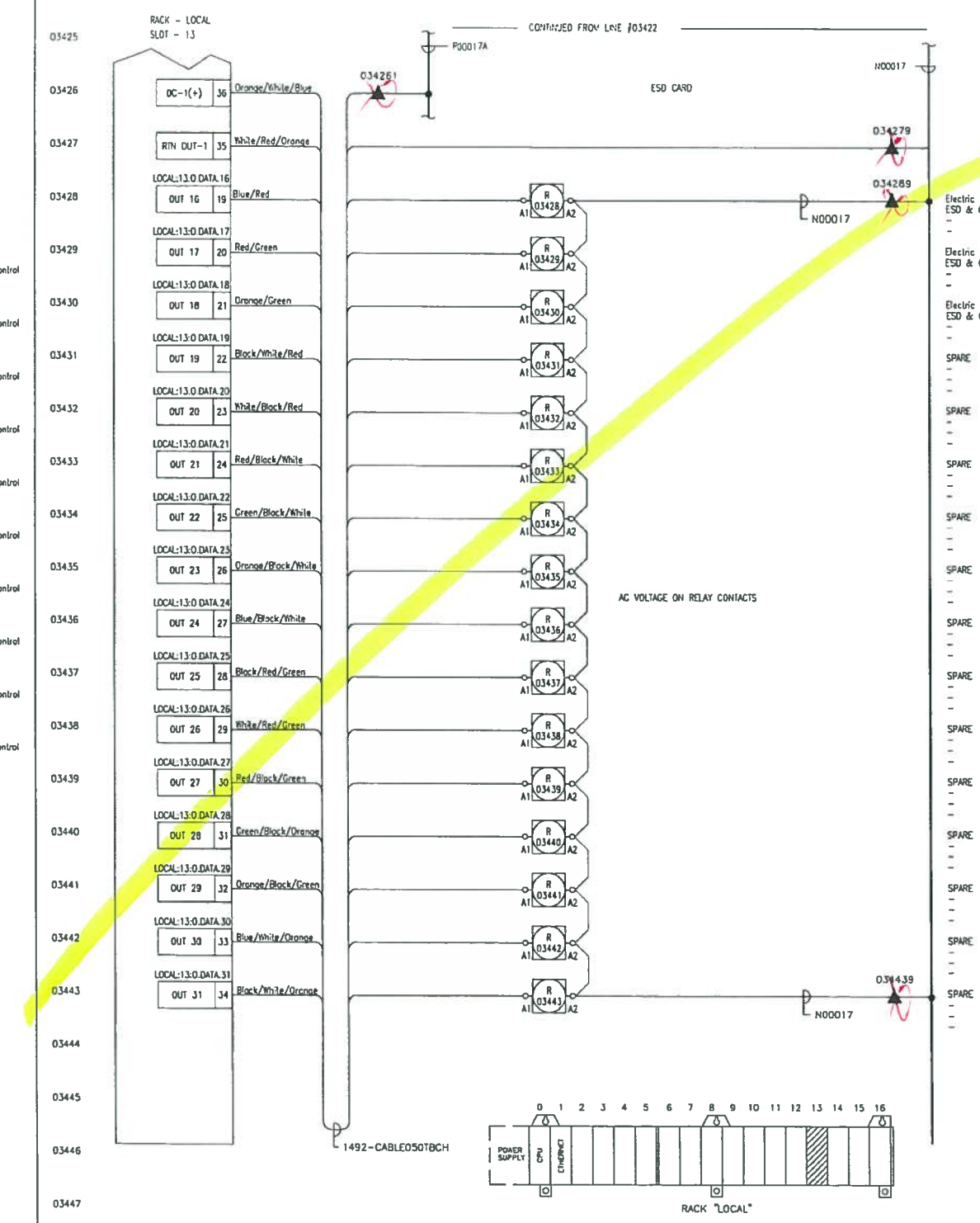
SCALE	AS SHOWN	SIZE: D
EPCM PROJECT#: 13053		

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3033 | SHT 14 OF 17 | REV B





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THIRD PARTY LOGO

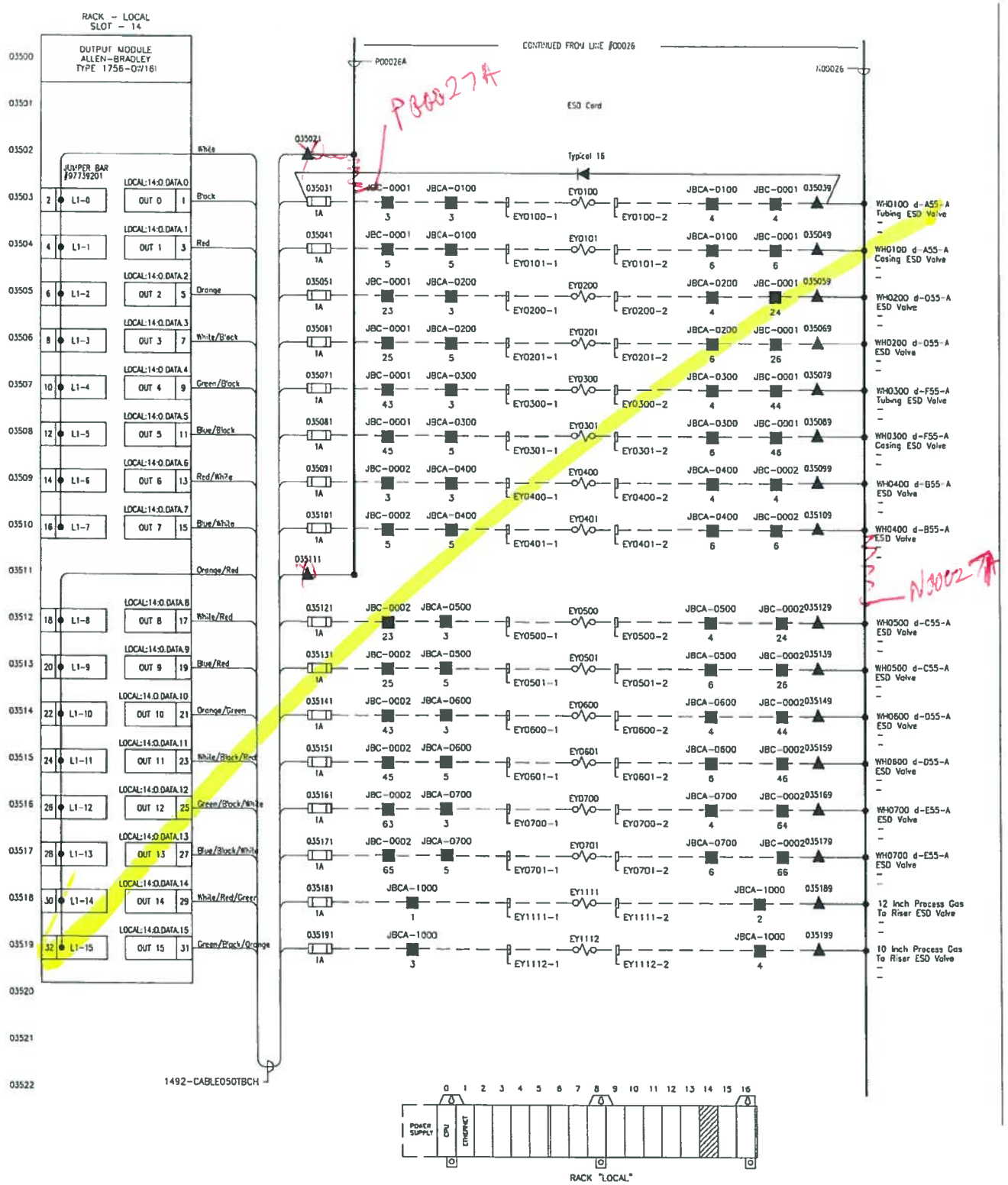
SCALE: AS SHOWN | SIZE: D

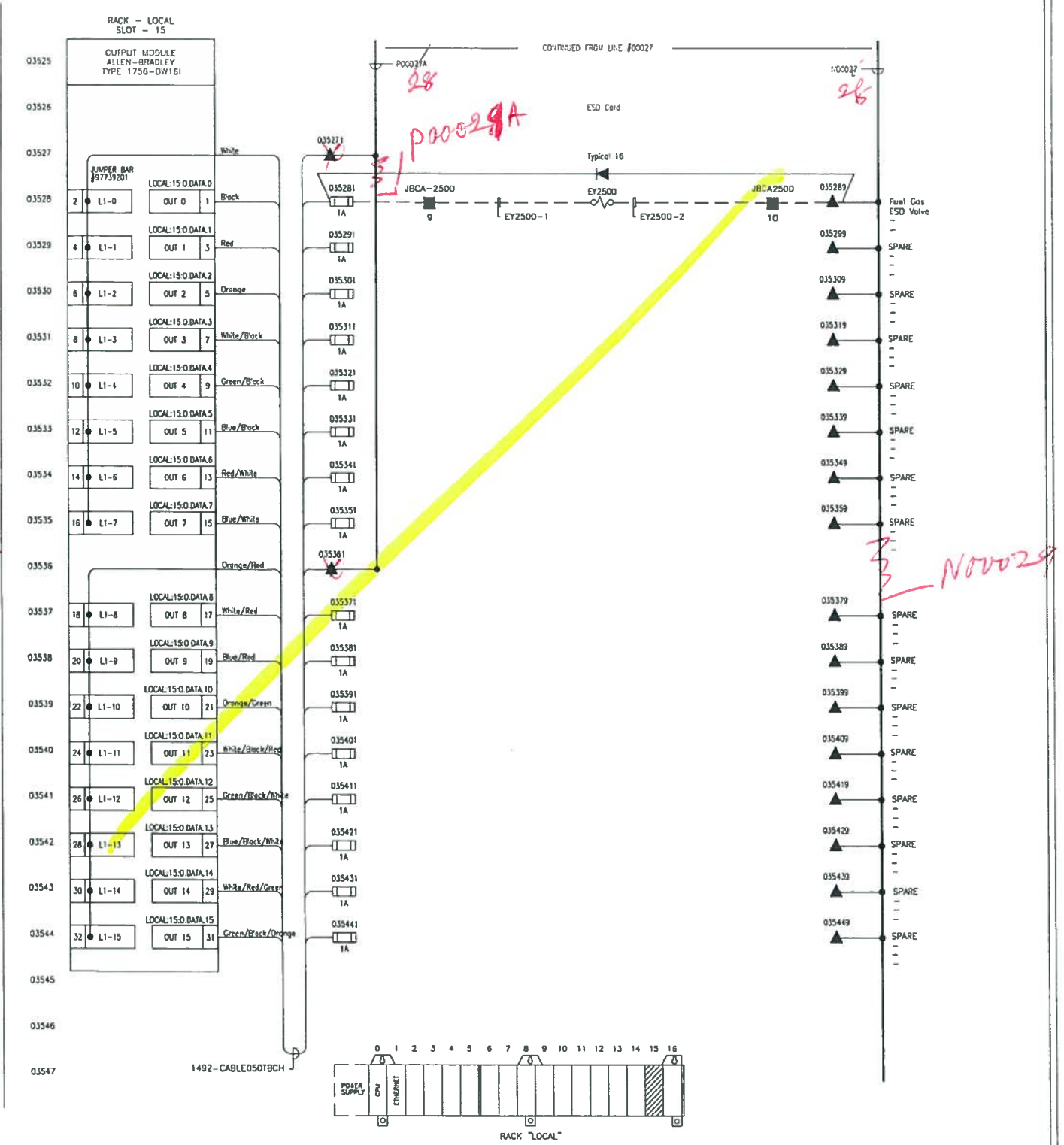
EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3034 | SHT 15 OF 17 | REV 0





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OCT 24 2013

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THIRD PARTY LOGO

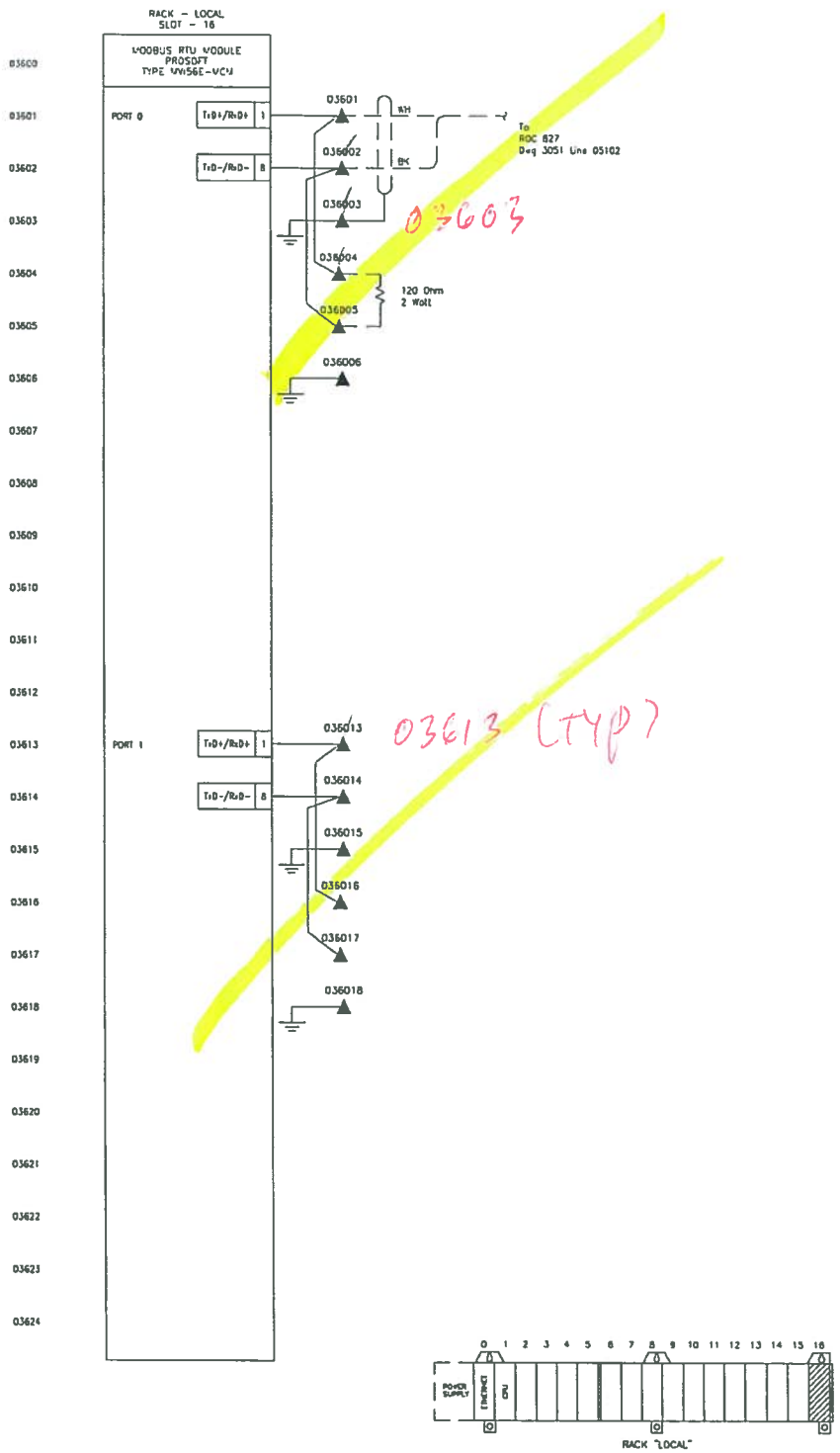
SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3035 | SHT 16 OF 17 | REV 0



DRAWING#	REFERENCE DRAWING TITLE

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PROVINCE OF BRITISH COLUMBIA
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SCALE: AS SHOWN | SIZE: D

EPCM PROJECT#: 13053

PennWest Exploration

CORDOVA – MULTI WELL TIE-IN
PENN WEST WELLSITE
d-055-A/094-P-10
IO SCHEMATICS

DWG# d055A094P10-ELC-3036 | SHT 17 OF 17 | REV 0