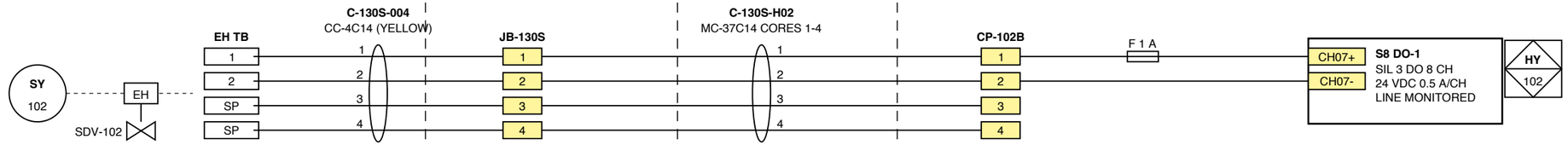
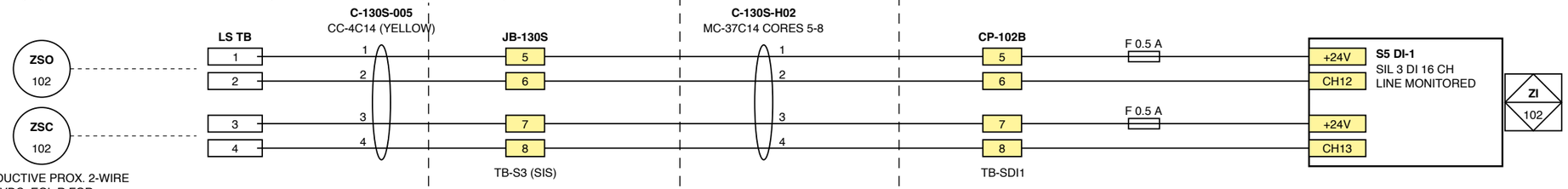
FIELD	FIELD JUNCTION BOX	HOMERUN	CONTROL BUILDING B-102 (PANEL)	POINT DATA

LOOP (c1) SDV-102 DUMP SOLENOID SY-102, DE-ENERGIZE TO TRIP (S8 DO-1 CH07); PARTIAL STROKE BY TIMED SY-102 PULSE



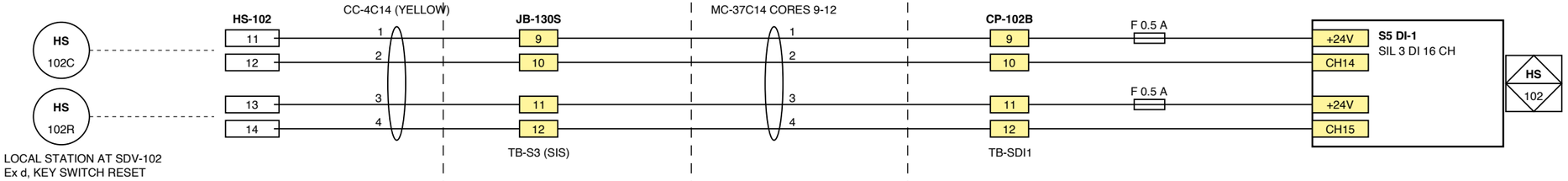
SY-102: ENERGIZED = SDV-102 HELD OPEN
DE-ENERGIZED = SPRING CLOSES
STROKE <= 4 s
PST (QUARTERLY, MANDATORY): SIS DROPS SY-102
UNTIL ZSO-102 CLEARS (ABOUT 10-15 %)
OR 3 s TIMEOUT, THEN RE-ENERGIZES
VOLT DROP: #14 (2.53 ohm/kft),
300 ft RUN, 0.33 A = 0.5 V (2 %)
SOLENOID ON UPS (BASIS 9.8)

LOOP (c2) SDV-102 LIMIT SWITCHES ZSO-102 (S5 DI-1 CH12), ZSC-102 (S5 DI-1 CH13)



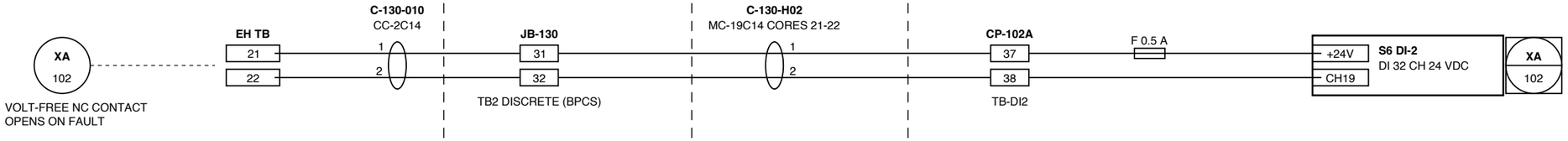
ZSO-102 = 1 WHEN OPEN
ZSC-102 = 1 WHEN CLOSED
TRAVEL ALARM: NOT CLOSED
5 s AFTER TRIP (P2)
BOTH / NEITHER > 25 s:
DISCREPANCY ALARM

LOOP (c3) HS-102 LOCAL STATION: CLOSE PB HS-102C (NC, S5 DI-1 CH14), KEY RESET HS-102R (S5 DI-1 CH15)



HS-102C: NC, OPEN = CLOSE SDV-102
HS-102R: OPSS RESET PERMISSIVE
RESET ONLY IF 2oo3 CLEAR AND
PT-134 < 1150 psig (RPT-001)

LOOP (c4) XA-102 EH POWER UNIT FAULT / LOW HYDRAULIC PRESSURE TO RTU (S6 DI-2 CH19)



BPCS ALARM ONLY (P3)
NOT PART OF SIF-01
EH PUMP MOTOR POWER BY ELE

NOTES / REFERENCES

1. CABLE NOS: C-<JB>-NNN FIELD, C-<JB>-HNN HOMERUN, C-200-NNN DIRECT. FINAL NOS PER LST-002.
2. SHIELD GROUNDED AT PANEL IE BAR ONLY; FIELD END CUT AND TAPED (/); OWN TERMINAL IN JB.
3. SIS TERMINALS AND CABLES YELLOW, SEGREGATED FROM BPCS (IEC 61511-1 CL. 11.2).
4. CARD/CH PER CARD MAP ON SHEETS 1 AND 2. HOMERUN = USED PAIRS + 20 %, NEXT STD SIZE.
5. WIRE COLOURS: PAIR BK(+)/WH(-); TRIAD BK/WH/RD; MULTICORES NUMBERED; DRAIN SLEEVED.
6. TYPICALS: OTHER LOOPS OF THE SAME TYPE FOLLOW THESE SHEETS WITH TAGS PER LST-002.

REF: [redacted]INS-LST-002 I/O LIST
REF: [redacted]INS-DWG-005 PANEL LAYOUT

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP
A	2026-09-29	ISSUED FOR REVIEW (IFR)			

PRELIMINARY - ISSUED FOR REVIEW - NOT FOR CONSTRUCTION

ENGINEER OF RECORD SEAL

NOT SEALED
PRELIMINARY

[redacted] PE NO. _____

PROJECT

[redacted]
120 MMSCFD RECEIPT INTO [redacted]
[redacted] COUNTY, [redacted]

DISCIPLINE: INSTRUMENTATION
SCALE: NTS

TYPICAL LOOP DIAGRAMS

SDV OUTPUT WITH LIMIT SWITCHES (SDV-102)

DRAWN: ____ CHECKED: ____ APPROVED: ____

DWG NO.

[redacted]**INS-DWG-002**

SHEET 3 OF 5 REV A