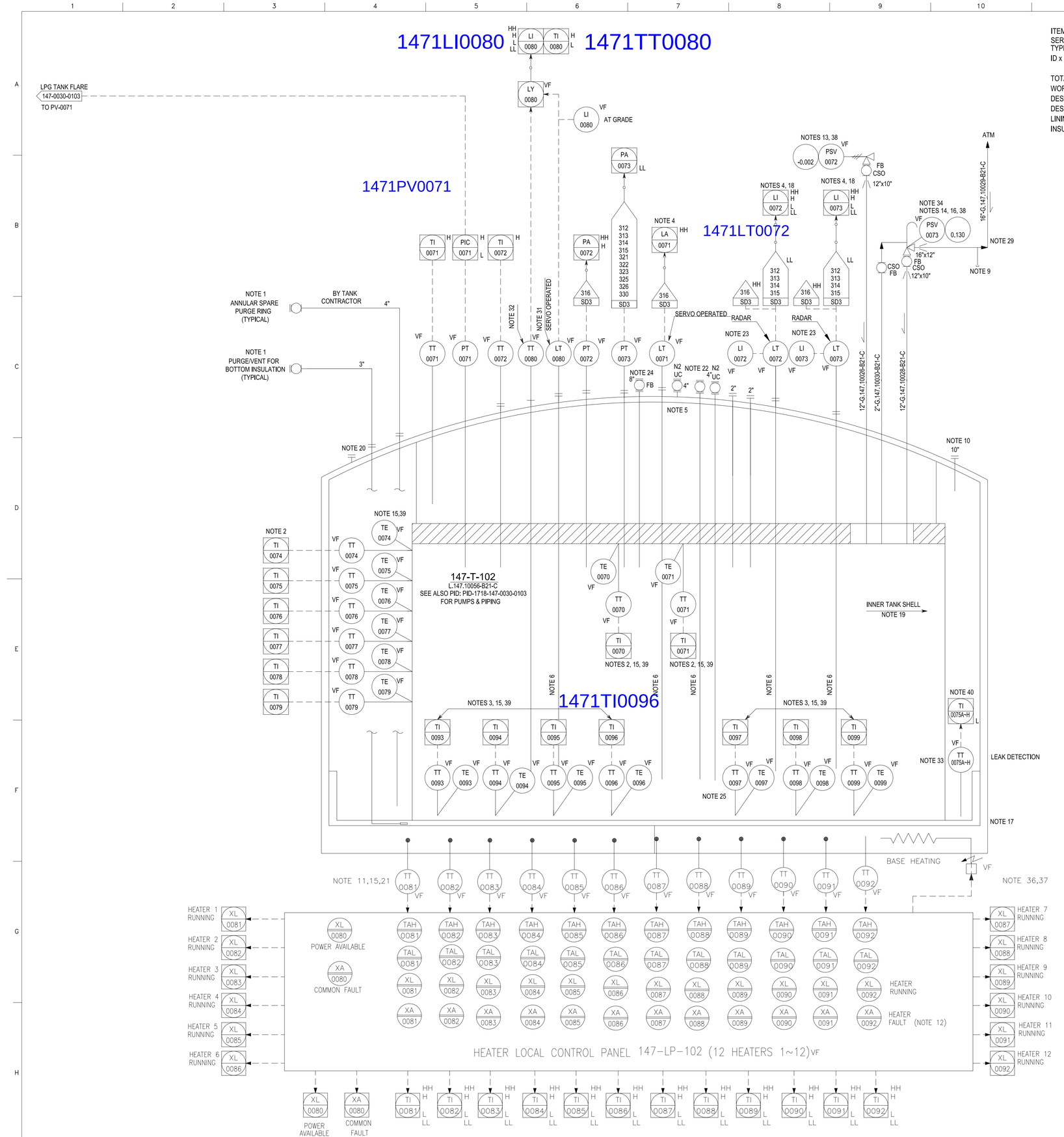

ITEM	147-T-102
SERVICE	PROPANE STORAGE TANK
TYPE	FULL CONTAINMENT
ID x HEIGHT	48000 mm x 28100 mm NOTE 30
TOTAL VOL.	50850 m³
WORKING VOL.	45000 m³
DESIGN PRESS.	-5/130 mbarg
DESIGN TEMP.	Min: -50 °C/Max: 55 °C
LINING	NONE
INSULATION	C

INSTRUMENTS	SET PRESSURE
RELIEF VALVES	130 mbarg
HIGH HIGH PRESSURE TRIP	110 mbarg
PRESSURE LETDOWN FROM BOG HEADER TO FLARE	70 mbarg
BOG COMPRESSOR CAPACITY CONTROL	35 mbarg

INSTRUMENTS	SET PRESSURE
VACUUM PREVENTION GAS VALVES	10 mbarg
LOW LOW PRESSURE TRIP	5 mbarg
VACUUM BREAKER	-2 mbarg

NOTES

1. TYPICAL NITROGEN PURGE AND VENT CONNECTION. TANK CONTRACTOR, TO ENSURE THE CONFIGURATION ALLOWS PURGING DURING COMMISSIONING/OPERATION/DECOMMISSIONING.
2. SKIN TYPE TEMP. INDICATORS. POINTS ATTACHED TO INNER SURFACE OF INNER TANK EQUALLY SPACED OVER SHELL HEIGHT (6 TOTAL). AND ON THE SUSPENDED DECK (2 TOTAL).
3. SEVEN SKIN TEMPERATURE INDICATORS LOCATED EVENLY ON THE INNER TANK BOTTOM SURFACE.
4. HIGH-HIGH LEVEL SHUTDOWN SHALL OCCUR ONLY IF 2 OF 3 LEVEL INSTRUMENTS AGREE. ONE OF THE THREE PRIMARY INSTRUMENTS TO BE OF DIFFERENT TYPE.
5. TO BE LOCATED AT THE CENTER OF TANK DOME.
6. STILLING WELL.
7. DELETED.
8. DELETED.
9. PROVIDE WEEP HOLES AT LOW POINT OF PSV (DIA 13 mm). ORIENTATE TO SAFE LOCATION.
10. NOZZLE FOR INSERTION OF TEMPERATURE DETECTOR/THERMOCOUPLE EXTENSION CABLE.
11. TEMPERATURE SENSORS LOCATED UNDER THE INNER TANK.
    12 ZONES ARE CONSIDERED. ONE TEMPERATURE TRANSMITTERS FOR EACH ZONE FOR BOTH CONTROL AND TRIP.
12. COMMON ALARM FOR POWER FAILURE AND EARTH LEAKAGE CIRCUIT BREAKER TRIP IN EACH HEATER POWER SUPPLY.
13. TYPICAL FOR ONE OF 3 VACUUM BREAKERS (INCLUDING ONE SPARE), VALVE ON SPARE TO BE CSC, OTHERS CSO. PROVISION SHOWN IS A MINIMUM. FINAL DESIGN IS THE TANK CONTRACTOR'S RESPONSIBILITY.
14. TYPICAL FOR ONE OF 3 PILOT OPERATED PSV (INCLUDING ONE SPARE). VALVE ON SPARE TO BE CSC, OTHERS CSO. PROVISION SHOWN IS A MINIMUM. FINAL DESIGN IS THE TANK CONTRACTOR'S RESPONSIBILITY.
15. JUNCTION BOX TO CONTAIN A SPARE RTD'S FOR EACH TRANSMITTER.
16. TAIL PIPE CONFIGURATION IS PRELIMINARY. FINAL DESIGN, RESPECTING DISPERSION/IGNITED VENT DESIGN CRITERIA BY TANK CONTRACTOR.
17. TWO INCLINOMETER CONDUITS SHALL BE PEOVIDED IN BASE AT 90 ° TO EACH OTHER.
18. ONE OF TWO LOW LEVELS TO TRIP THE PUMPS.
19. ONE INNER TANK DEFLECTION METER MEASURING VERTICAL AND HORIZONTAL DEFLECTION SHALL BE PROVIDED.
20. TYPICAL PERLITE FILL CONNECTION: ONE EVERY 6 m OR LESS AROUND TANK CIRCUMFERENCE.
21. ALL TEMPERATURE ELEMENTS FOR FOLLOWING SHALL BE DUAL ELEMENT TYPE: TE-0081 TO TE-0092.
22. FOR INSTALLATION OF TRAVERSING DENSITY MONITORING INSTRUMENT.
23. LI-0072/0073 TO BE LOCATED CLOSE TO PUMP PLATFORM TO BE EASILY ACCESSIBLE BY OPERATOR.
24. FOR DIRECTIONAL VIDEO CAMERA WITH INTERNAL LIGHTING, TO VIEW INNER TANK DURING OPERATION. NOZZLE AT CENTER OF TANK DOME.
25. NITROGEN PURGE HEADER TO BE FITTED WITH PERFORATED DISTRIBUTOR RING.
26. DELETED.
27. DELETED.
28. DELETED.
29. INSULATION OF PSV IN CRYOGENIC SERVICE TO BE FORECAST IN ACCORDING TO TYPICAL N. 7 OF PID-1718-999-0030-0005.
30. DIMENSIONS REFER TO THE INNER TANK.
31. CONNECTED TO TGS VIA FIELDBUS.
32. MULTI ELEMENT AVERAGE TEMPERATURE.
33. SKIN TEMPERATURE LEAK DETECTOR SYSTEM.
34. PSV-0073 TAIL PIPE WILL BE PROVIDED WITH DRY POWDER CONNECTION FOR SNUFFING.
35. FOR NUMBER, SIZE AND POSITION OF MANWAYS REFER TO VENDOR DRAWING NO. VP-1718-147-T-101-2-121.
36. HEATER ON-OFF-TRIP WITH FOLLOWING LOGIC:
    -ON: TT OF EACH ZONE REACH AT LOW TEMPERATURE.
    -OFF: TT OF EACH ZONE REACH AT HIGH TEMPERATURE.
    -TRIP: TT OF EACH ZONE REACH AT HIGH-HIGH TEMPERATURE.
37. BASE HEATING LOCAL CONTROL PANEL ARRANGEMENT WILL BE FINALIZED AFTER RECEIVING VENDOR INFORMATION.
38. IN TANK VENDOR SCOPE OF SUPPLY.
39. ALL TEMPERATURE ELEMENTS FOR FOLLOWING SHALL BE DUAL ELEMENT TYPE: TE-0074 TO TE-0079
    TE-0070 TO TE-0071
    TE-0093 TO TE-0099
40. THE NUMBER OF LEAK DETECTIONS SHALL BE CONSIDERED 8. (IN TANK VENDOR SCOPE OF SUPPLY.)

GENERAL NOTES

ALL INSTRUMENT TAGS TO READ:

	LETTERS	NUMBER
1471	FFF	NNNN

FOR CONSTRUCTION

EQUIPMENT LIST

TANK			
147-T-102			

M.S. S.G. S.

REV.	DATE	DESCRIPTION	ORIG.	PREP.	CHKD.	APPD.	AUTH.
8	25.SEP.2013	APPROVED FOR CONSTRUCTION	IDRO	MS	GS	GS	MD
7	11.JUN.2013	APPROVED FOR CONSTRUCTION	IDRO	RS	NS	MF	MD
6	22.JAN.2013	APPROVED FOR CONSTRUCTION	IDRO	RS	NS	MF	AKH
5	07.DEC.2010	ISSUED FOR APPROVAL	IDRO	NA	NS	MF	AKH
4	10.JAN.2010	ISSUED FOR APPROVAL	IDRO	AD	AD	MF	AKH
3	15.DEC.2008	ISSUED FOR COMMENT	IDRO	NB	NZ	MF	AKH
2	01/02/08	APPROVED FOR DESIGN	WP	RI	AF	RPW	MS
1	26/10/07	ISSUED FOR HAZOP	WP	RI	AB	RPW	MS
0	10/08/07	ISSUED FOR COMPANY APPROVAL	WP	RI	AF	RPW	MS

SOUTH PARS GAS FIELD DEVELOPMENT–
PHASES 17 & 18, ASSALUYEH–IRAN
ONSHORE FACILITIES

NIOC
PARS OIL AND GAS COMPANY

PROJECT No.: POGC–84–801–244 | DOC. CLASS. 1 | SCALE : N/A

WorleyParsons | IDRO | OIEC | IOEC

TITLE: UNIT 147:PROPANE STORAGE AND EXPORT
PROPANE TANK INSTRUMENTATION
PIPING AND INSTRUMENT DIAGRAM

DWG No. PID–1718–147–0030–0105 | SHEET No. 1 OF 1 | REV. 8 | SIZE: A1

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