



GENERAL NOTES:

- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & .002.
- ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530--.
- ALL INSTRUMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 030--.
- FOR TYPICAL INSTRUMENT CONNECTION SBDV, XV, MOV & ESDV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001, 002, 003, 004, 005, 006 & 007.
- FOR MISCELLANEOUS PIPING TYPICAL VALVING, DRAINAGE & GENERAL ARRANGEMENT OF LEVEL INSTRUMENTS, PUMPS, STRAINERS & CONTROL VALVES SEE DRAWINGS 50489-530-020-PID-1108.001 TO 1108.010.
- DRAWING NUMBERS SHOWN IN P&ID CONTINUATION BOXES ARE ABBREVIATED SHOWING DRAWING SEQUENTIAL NUMBERS ONLY. THE FULL FORM OF THE DRAWING NUMBER IS 50489-530-020-PID-XXXX.SHT.NO.
- FOR MATERIAL SELECTION DIAGRAM SEE DRAWINGS 50489-530-020-MSD-1001.001 TO 1023.
- DETAIL NUMBERING FOR CI, SC, CC & CP SEE DRAWING 50489-530-020-PID-1108.003.
- PAINTING & COATING ARE IN ACCORDANCE WITH KOC-P-001.
- LOW POINT DRAIN & HIGH POINT VENT ARE INDICATED IN P&ID.
- FOR CAUSE & EFFECT REFER DOC. NO. 50489-530-020-PHL-1009.
- FOR ALARM VALUES REFER DOC. NO. 50489-530-020-SUM-1006.

NOTES:

- PILOT BURNER MOUNTED ON FLARE TIP.
- TEMPERATURE ELEMENT FAILURE.
- BREAK FLANGE AT BASE OF STACK (BOS).
- EACH TE IS DUAL ELEMENT TYPE. ONE ELEMENT OF EACH THERMOCOUPLE IS USED. THE OTHER IS TERMINATED AT JUNCTION BOX AT BASE OF STACK AND AVAILABLE AS A SPARE.
- OPEN PERMISSIVE OF MOV-2565 TO BE LINKED WITH PURGE COMPLETED VALUE OF FOI-2569.
- TRAIN-B IS 100% SPARE FOR TRAIN-A.
- MOV-1565 (PID NO. 1177.003) AND MOV-2565 SHALL BE NOT BE CLOSED SIMULTANEOUSLY SIL RATED LIMIT SWITCHES TO BE USED.
- TV FLARE IS A 100% SMOKELESS AIR-ASSISTED TYPE WITH 2 AIR BLOWERS.
- MOV ARE LOCATED CLOSE TO THE DISTRIBUTION POINT (PID-1176.001) TO AVOID THE DEAD LEG.
- VELOCITY SEAL IS INTEGRATED WITH FLARE TIP.
- PILOT MIXER ASSEMBLY WITH ORIFICE AND STRAINER LOCATED TO AVOID SAND INGRESS.
- DRAIN PIT LOCATED OUTSIDE OF STERILE AREA (SAFE LOCATION).
- TV FLARE LINES TO F-030A/B ARE SLOPED BACK TO THE TV FLARE K.O DRUM V-017.
- DRAIN POINT IS MINIMUM LENGTH FROM VERTICAL PILOT GAS LINE FLANGE NOZZLE.
- CLOSURE POSITION OF PCV-2569 IS DICTATED BY MOV-2565, IF MOV-2565 IS CLOSED, PCV-2569 SHALL BE CLOSED.
- VALVE IS ACCESSIBLE WHEN FLARE IS OPERATING.
- MOV (MOV-1565, MOV-2565) OPEN STATUS IS USED TO INDICATE FLARE TRAIN SERVICE STATUS. AND IT IS USED FOR AIR BLOWER START-UP AND CONTROL PERMISSIVE IN AUTOMATIC MODE.
- MOV AND DRAIN VALVE ARE INSTALLED OUT OF RADIATION ZONE.
- FFG FLAME PIPE WITH LONG RADIUS BEND ONLY TO EACH PILOT.
- ONE IR SCANNER PER FLARE IS PROVIDED FOR MAIN FLAME MONITORING.
- STRAIGHT LENGTH REQUIREMENT FOR ORIFICE FLOWMETER ARE 20D UPSTREAM & 5D DOWNSTREAM AS PER VENDOR GAD (50489-530-080-08847-GAD-V003) & THE SAME IS PART OF ORIFICE METER RUN SPOOL.
- DELETED.
- REFERENCE VENDOR PID NO. 50489-530-020-00052-PID-V002 SHEET 4 OF 8.
- JUNCTION BOXES AT BASE OF FLARE ARE PROTECTED BY RADIATION SHIELD.
- PILOT THERMOCOUPLE ARE INCONEL SHEATHED.
- OPERATOR TO ENSURE THAT BOTH MOV-1565 (PID-1177.003) & MOV-2565 SHALL NOT CLOSED SIMULTANEOUSLY. REFER OPERATOR & MAINTENANCE MANUAL (50489-530-020-MAN-1001) FOR PROCEDURE OF OPEN/CLOSE OF MOV-1565 & MOV-2565.
- MOV-2565 TYPICAL IS TYP-4B. THIS WILL BE ONLY FOR INDICATION PURPOSE, AS LOGIC HAS BEEN IMPLEMENTED IN ESD, NO LEVEL SHUTDOWN IS TAKEN FROM MOV-2565.

HEI HIGH ENERGY IGNITION
IG IGNITION GAS.
FFG FLAME FRONT GENERATOR.
Ex'd FLAME PROOF ENCLOSURE
Ex'e INCREASED SAFETY ENCLOSURE

Z1	RE-ISSUED FOR AS-BUILT	VPA/CHS	AKG	SRA	RAK	10.10.18
Z0	ISSUED FOR AS-BUILT	VPA/CHS	AKG	SRA	RAK	17.09.18
04	ISSUED FOR CONSTRUCTION	VPA/CHS	AKG	SRA	RAK	06.01.18
03	ISSUED FOR CONSTRUCTION	BAK/SSI	AKG	SRA	DER	13.05.17
02	ISSUED FOR CONSTRUCTION	BAK/SSI	AKG	SRA	DER	16.12.16
01	ISSUED FOR CONSTRUCTION	BAK/VSA	AKG	SRA	RAK	26.09.16
0	ISSUED FOR CONSTRUCTION	HSH/VSA	AKG	SRA	RAK	22.06.16
B	ISSUED INCORPORATED CLIENT COMMENTS	PAK/VSA	AKG	SRA	RAK	09.05.16
A	ISSUED FOR APPROVAL	HSH/VSA	AKG	SRA	RAK	18.03.16
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

CONTRACTOR REVISION



CONTRACTOR DETAILS:-
LARSEN & TOUBRO LIMITED
FARIDABAD

PROJECT TITLE:-
NEW GATHERING CENTRE GC-30
IN NORTH KUWAIT

DOCUMENT TITLE:- **PIPING & INSTRUMENTATION DIAGRAM**
TANK VAPOUR FLARE (Z-030B) TRAIN B
(TV FLARE STACK F-030B)

PROJECT NO.	DRAWING NO.	REV.	KOC DRG. NO.	REV.
EF1902	CONTRACTOR DRG. NO.	50489-530-020-PID-1177.006	Z1	
	SHEET NO. 6 OF 7			
	COMPANY DRG. NO.	EF1902-530-DCO-PID-0177.001	A4	
	SHEET NO.			