



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 030--.
- 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-1106.002, .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:

- G-097 A/B PUMPS ARE GAP CONTROLLED AS FOLLOWS:
 - LAH2 SET @ 1350 mm (4'-5") : START STANDBY PUMP BY SSLS
 - LAH1 SET @ 1200 mm (3'-11") : START DUTY PUMP BY SSLS
 - LAL SET @ 300 mm (1'-0") : STOP DUTY STANDBY PUMPS BY SSLS
- FAILURE OF DUTY PUMP : START STANDBY PUMP, DUTY PUMP IN LOCAL, START STANDBY PUMP ON DEMAND
- HHLL IN WET OR DRY/WET TANKS : INHIBIT START OF PUMPS
- STOP DUTY & STANDBY PUMPS
- CONNECTION FOR REMOVAL OF SLUDGE.
- DELETED.
- DELETED.
- DURING SHUTDOWN LEVEL-1 AND 2, EMERGENCY GENERATOR SUPPLIES POWER TO THESE PUMPS, AND ASSOCIATED CONTROLS SO PUMPS CAN RUN AFTER THE RELATIVE ESD LOGICS ARE RESET.
- USED FOR UTILITY CONNECTION.
- SPRING LOADED BALL VALVE.
- 2 x 100% PUMPS.
- A. TO PREVENT BACK FLOW VALVE TO OPEN WHEN UPSTREAM PRESSURE EXCEEDS DOWNSTREAM PRESSURE.
- B. WHEN PUMP(S) ARE RUNNING PDAL ACROSS XV SHALL NOT STOP THE PUMPS.
- C. NO PUMP RUNNING AUTOMATICALLY CLOSE THE XV.
- D. PUMP(S) RUNNING & IN FIXED TIME IF XV OPEN FEED BACK IS NOT RECEIVED, STOP THE PUMP.
- DELETED.
- VENT TO SAFE LOCATION SHALL BE AS PER KOC-G-002.
- DUPLEX STRAINER DRAINAGE TO DRAIN SYSTEM AS PER PID: 50489-530-020-PID-1108.014.
- PUMP SUCTION STRAINER PRESSURE DROP IN DIRTY CONDITION IS LESS THEN 0.05 bar.
- PUMP PURGE CONNECTION.
- STRAIGHT LENGTH REQUIREMENT FOR ORIFICE FLOW METER ARE 20D UPSTREAM & 5D DOWNSTREAM.
- INLET PIPE ELBOW DISTRIBUTOR WITH IMPINGEMENT PLATE.
- DRIP RING WITH BLEED VALVE IS PROVIDED BETWEEN ISOLATION VALVE & REMOVABLE SPOOL PIECE FLANGE CONNECTION FOR BLEED PURPOSE. BLIND FLANGE TO BE PROVIDED AFTER DISMANTLING OF REMOVABLE SPOOL PIECE DURING MAINTENANCE.

REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
Z0	ISSUED FOR AS-BUILT	BAK/SSI	AKG	SRA	RAK	26.08.18
01	ISSUED FOR CONSTRUCTION	BAK/SSI	AKG	SRA	RAK	08.12.16
0	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	29.03.16
D	ISSUED INCORPORATED CLIENT COMMENTS	JSI/CHS	AKG	SRA	RAK	23.12.15
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	16.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	01.06.15
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	20.02.15
A	ISSUED FOR APPROVAL	JSI/ABY	AKG	SRA	RAK	11.12.14

CONTRACTOR REVISION

KUWAIT OIL CO. K. S. C. **شركة النفط الكويتي ش.م.ك.**