



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, SBVD, XY, 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:

- ALL THE DRAINS FROM THE COMPRESSOR PACKAGE/VESSELS ARE COMBINED INTO A COMMON HEADER AND ROUTED TO THE NEAREST SWALE/SOAKAWAY.
- PACKAGE TO INCLUDES AFTER/INTERCOOLERS, MOISTURE SEPARATORS AND ALL NECESSARY INSTRUMENTATION AND CONTROLS. ALL COOLING BY AMBIENT AIR.
- VENT TO SAFE LOCATION.
- INTERCOOLER, AFTERCOOLER & THE LUBE OIL COOLER ARE INSTALLED ON THE SAME BAY. FANS PHILOSOPHY IS 3x50% FANS ARE COMMON TO INTERCOOLER/AFTERCOOLER/LUBE OIL COOLER.
- DELETED
- DELETED
- WEEP HOLE AT LOW POINT OF PSV OUTLET LINE
- DELETED
- THESE ARE THE IN-LINE SILENCERS.
- FOR CONTINUATION, SEE DRAWING 50489-530-020-PID-1220.009.
- XV-6592 OPENS DURING AN EMERGENCY SHUT DOWN.
- IN CASE OF FAULT OF ONE AIR COOLER OR IN CASE OF HIGH TEMPERATURE ON INTER COOLER OUTLET TIT-6587/ AFTER COOLER OUTLET TIT-6590, SPARE COOLER FAN WILL START.
- IF CASE OF ONE COOLER FAN FAILS, THE SPARE COOLER FAN WILL START & IF ANOTHER COOLER FAN FAILS, THEN COMPRESSOR WILL TRIP.
- RELIEF VALVE INLET VALVES ARE KEY INTERLOCKED SUCH THAT ONE RELIEF VALVE IS ALWAYS ON-LINE.
- FOR SET POINTS OF ALARM, REFER TO VENDOR DOCUMENT "50489-530-020-00048-LST-V002 ALARM & TRIP SET-POINT SUMMARY FOR INSTRUMENT AIR COMPRESSOR AND DRYER PACKAGE".
- DURING COMPRESSOR RUNNING THE VALVES XV-6591 AND XV-6594 WILL OPEN EVERY 5 MINUTES AND KEEP OPEN FOR 10 SECONDS. IN CASE OF HIGH LEVEL LAH-6585 AND LAH-6586, THE RELEVANT VALVE (XV-6591 / XV-6594) WILL OPEN.
- FOR MORE DETAIL, REFER 50489-530-020-PID-1220.016.
- PACKAGE LOGIC IS IMPLEMENTED IN PACKAGE PLC. ALL RELEVANT SIGNALS ARE TRANSFERRED TO DCS FOR SMOOTH OPERATION FROM DCS.
- MECHANICAL PREDISPOSITION FOR TEMPORARY INSTALLATION OF PRESSURE AND TEMPERATURE INSTRUMENTS ARE INSTALLED ON COOLERS. THESE CONNECTIONS ARE NPT TYPE AND ARE 3/4" FOR PRESSURE INSTRUMENTS AND 1" FOR THERMOWELL. FOR MORE INFORMATION REFER TO VENDOR DOCUMENT "50489-530-040-00048-DIT-V005 FABRICATION DRAWING FOR INSTRUMENT & PLANT AIR COOLERS".
- VENDOR PID NO: 50489-530-020-00048-PID-V001 SHEET 1 OF 3.

AS-BUILT		AS-BUILT	
KOC APPROVAL		LARSEN & TOUBRO LIMITED	
NAME / KOC No:		NAME :	VAIBHAV VERMA
DESIGNATION :		DESIGNATION :	AGM
GROUP / TEAM :		SIGNATURE :	
SIGNATURE :		DATE :	20-Sep-2018
DATE :		DEPT/ DIVISION :	ENGINEERING

REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
00	ISSUED FOR AS-BUILT	HSB/ABY	AKG	SRA	RAK	20.09.18
01	ISSUED FOR CONSTRUCTION	HSB/ABY	AKG	SRA	RAK	22.08.16
0	ISSUED FOR CONSTRUCTION	PAK/ABY	AKG	SRA	RAK	10.06.16
B	ISSUED INCORPORATED CLIENT COMMENTS	PAK/ABY	AKG	SRA	RAK	13.05.16
A	ISSUED FOR APPROVAL	JSI/ABY	AKG	SRA	RAK	29.10.15

CONTRACTOR REVISION						
<div><div><div><div><div><div></div><div>KUWAIT OIL CO.</div><div>K. S. C.</div></div></div><div><div><div></div><div>شركة نفط الكويت</div><div>ش.م.ك.</div></div></div><div><div><div></div><div>Kuwait Oil Company</div><div>A Subsidiary of Kuwait Petroleum Corporation</div></div></div></div></div></div>						

CONTRACTOR DETAILS:-	
<div><div><div></div><div>LARSEN & TOUBRO LIMITED</div><div>FARIDABAD</div></div></div>	
PROJECT TITLE:-	
NEW GATHERING CENTRE GC-30 IN NORTH KUWAIT	

DOCUMENT TITLE:-			
PIPING & INSTRUMENTATION DIAGRAM			
IA COMPRESSOR (K-102C) FINAL STAGE SEPARATOR			
PROJECT NO.	DRAWING NO.		
EF1902	CONTRACTOR DRG. NO.	REV.	KOC DRG. NO.
	50489-530-020-PID-1220.010	20	
	SHEET NO. 10 OF 16	REV.	SHEET NO.
	COMPANY DRG. NO.	REV.	
EF1902-530-DCO-PID-0220.001		A3	
SHEET NO.			