



- 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:**
- DELETED
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 - MCC IS NOT IN PUMP VENDOR SCOPE OF SUPPLY. WIRING FROM LCS TO MCC IS NOT IN PUMP VENDOR SCOPE OF SUPPLY.
 - PUMP CASING DRAIN/VENT & PUMP BASE PLATE DRAIN ARE CONNECTED TO PLANT DRAIN SYSTEM.
 - OFF SKID LUBE OIL COOLER INTERCONNECTING PIPEWORK NOT IN PUMP VENDOR SCOPE OF SUPPLY. REFERENCE VENDOR DRAWING NUMBER: 50489-530-020-07262-PID-V001 SHEET 1.2.3.4.
 - LUBE OIL HEATER WILL NOT START WHEN LUBE OIL RESERVOIR LEVEL IS LOW.
 - REFER VENDOR ALARM & TRIP LIST DOC. NO. 50489-530-080-07262-LST-V001 FOR SET POINT INFORMATION.
 - LUBE OIL HEATER START TEMP. <10°C
 - LUBE OIL PRESSURE START PERMISSIVE FOR AUXILIARY LUBE OIL PUMP @1.7 BARG.
 - LUBE OIL RETURN LINE WILL ALWAYS GRADE DOWNWARDS FOR DRAIN AND UPWARDS FOR VENT.
 - VALVE CONTAINS 3MM ORIFICE TO ALLOW PRIMING OF THE AUXILIARY LUBE OIL PUMP.

TERMINATION POINT LIST (PROVISIONAL)					
TP No.	SIZE/TYPE	DESCRIPTION			
TP1C	14" 300 R.F.	PUMP SUCTION			
TP2C	10" 300 R.F.	PUMP DISCHARGE			
TP3C	2" 150 R.F.	PUMP CASING DRAIN			
TP4C	2" 150 R.F.	BASE PLATE DRAIN			
TP8C	2" 150 R.F.	LUBE OIL RESERVOIR DRAIN			
TP9C	FILLER / BREATHER	LUBE OIL RESERVOIR FILLER			
TP10C	1.5" 150 R.F.	LUBE OIL SUPPLY			
TP11C	1.5" 150 R.F.	LUBE OIL RETURN			
TP12C	1.5" 150 R.F.	LUBE OIL SUPPLY			
TP13C	1.5" 150 R.F.	LUBE OIL RETURN			
TP14C1/C2/C3	1" 150 R.F.	LUBE OIL COOLER VENT			
TP15C	1" 150 R.F.	LUBE OIL COOLER RESERVOIR			

Z1	ISSUED FOR AS-BUILT	HSB/VSA	AKG	SRA	RAK	16.10.18
Z0	ISSUED FOR AS-BUILT	HSB/VSA	AKG	SRA	RAK	20.09.18
02	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	22.09.16
01	ISSUED FOR CONSTRUCTION	HSB/CHS	AKG	SRA	RAK	28.07.16
0	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	01.07.16
D	ISSUED INCORPORATED CLIENT COMMENTS	HSB/VSA	AKG	SRA	RAK	18.05.16
C	ISSUED INCORPORATED CLIENT COMMENTS	PAK/VSA	AKG	SRA	RAK	13.10.15
B	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	19.02.15
A	ISSUED FOR APPROVAL	BAK/VSA	AKG	SRA	RAK	05.12.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

CONTRACTOR REVISION

REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
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CONTRACTOR DETAILS:-

LARSEN & TOUBRO LIMITED
FARIDABAD

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

DOCUMENT TITLE:-
PIPING & INSTRUMENTATION DIAGRAM
LUBE OIL SYSTEM FOR TREATED WATER TRANSFER
PUMP (G-011C)

PROJECT NO.	DRAWING NO.	REV.	KOC DRG. NO.	REV.
EF1902	CONTRACTOR DRG. NO.	50489-530-020-PID-1153.012	Z1	
	SHEET NO. 12 OF 25			
	COMPANY DRG. NO.	EF1902-530-DCO-PID-0153.004		
	SHEET NO.		A1	