



TYPICAL PUMP GREASE UNIT	SUMP PIT	LOCATION	SIGNAL TAG	HS TAG
	SU-001	SEPARATOR AREA	XSV-0681	HS-0681
			XSV-0682	HS-0682
	SU-002	CRUDE AREA	XSV-0683	HS-0683
			XSV-0684	HS-0684
	SU-003	TREATED WATER TANK AREA	XSV-0685	HS-0685
			XSV-0686	HS-0686
	SU-004	IA/PA	XSV-0687	HS-0687
			XSV-0688	HS-0688
	SU-005	SEPARATOR AREA	XSV-0689	HS-0689
			XSV-0690	HS-0690
	SU-006	SLOP TANK AREA	XSV-0691	HS-0691
			XSV-0692	HS-0692
	SU-007	SEPARATOR AREA	XSV-0693	HS-0693
			XSV-0694	HS-0694
	SU-008	DIESEL TANK AREA	XSV-0695	HS-0695
			XSV-0696	HS-0696
	SU-009	CRUDE AREA	XSV-0697	HS-0697
			XSV-0698	HS-0698

GENERAL NOTES:

- FOR SYMBOLS, GENERAL NOTES, SEE DRAWING NO. 50489-530-020-PID-1104.001 AND 50489-530-020-PID-1104.002.
- CASING VENT IS ROUTED TO BASE PLATE.
- HARD PIPING IS PROVIDED FOR ALL FILTER DRAINS. ONLY "Y" AND DUPLEX TYPE STRAINERS SHOWN FOR CLARITY.
- BLOCK VALVE TO BE INSTALLED HORIZONTAL.
- LOW PRESSURE DROP CHECK VALVE REQUIRED.
- THE COLLECTOR FOR HANDLING OIL SPILLAGE IN THE PUMP BASEPLATE IS PROVIDED. THIS COLLECTOR IS PROVIDED FOR EACH PUMP.
- FIRST DRAIN ISOLATION VALVE ARE FITTING TO FITTING. (MINIMUM DISTANCE) FROM HEADER OR PIPE TO REDUCE DEAD LEG CORROSION.
- DRAIN PIPES FROM DRIPTRAY & TUNDISHES ARE PROVIDED WITH LIQUID SEAL (MINIMUM SEAL HEIGHT 150mm).
- AT SPEC BREAK, MATERIAL DOWNSTREAM SPECIFICATION IS AS PER THE DRAIN PIPING CLASS, WHEREVER APPLICABLE.
- DELETED.
- FOR SELF VENT HORIZONTAL CENTRIFUGAL PUMPS (G-103A/B/C & G-203A/B/C) CASING VENT CONNECTIONS ARE NOT REQUIRED.
- INSULATION KIT IS PROVIDED FOR DISSIMILAR METAL FLANGE JOINTS AND AT METALLIC PIPING UG-AG INTERFACE.
- FOR PUMP DRAIN & VENT LINE NUMBER, REFER TO PID-1108.005.
- DRAIN LINE OF CHEMICAL TRANSFER PUMP RUNNING 600 mm DEEP IN RCC (REINFORCED CONCRETE CEMENT) COVERED TRENCH, REFER PID-1211.002.
- PUMP DRAIN OF FIRE WATER, BRACKISH WATER & POTABLE WATER SERVICE IS NOT CONNECTED TO CLOSED NETWORK (DD) AND DRAIN VALVE IS PROVIDED WITH BLIND FLANGE.
- BEFORE OPERATION OF DRAIN VESSEL PUMP, AUTO GREASING SHALL START FOR ~1.5 min AS BELOW
 - AUTO START GREASING BEFORE THE DRAIN PUMP REMOTE START.
 - AUTO RE-START GREASING AFTER EVERY 20 min DRAIN PUMP CONTINUOUS RUN.
 - MANUAL START/STOP GREASING BY DCS HAND SWITCH FOR MAINTENANCE/LOCAL START OF DRAIN PUMP.

AS-BUILT	
KOC APPROVAL	
NAME / KOC No:	
DESIGNATION :	
GROUP / TEAM :	
SIGNATURE :	
DATE :	

AS-BUILT	
LARSEN & TOUBRO LIMITED	
NAME :	VAIBHAV VERMA
DESIGNATION :	AGM
SIGNATURE :	
DATE :	28-Nov-2018
DEPT/ DIVISION :	ENGINEERING

21	ISSUED FOR AS-BUILT	BAK/AKG	AKG	SRA	RAK	28.11.18
20	ISSUED FOR AS-BUILT	BAK/AKG	AKG	SRA	RAK	24.09.18
01	ISSUED FOR CONSTRUCTION	BAK/AKG	AKG	SRA	RAK	06.01.17
0	ISSUED FOR CONSTRUCTION	PAK/ABY	AKG	SRA	RAK	28.04.16
D	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	05.01.16
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	28.10.15
0C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	08.09.15
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	20.01.15
A	ISSUED FOR APPROVAL	JSI/VSA	AKG	SRA	RAK	24.11.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
				APPRD.		

CONTRACTOR REVISION



CONTRACTOR DETAILS:-
LARSEN & TOUBRO LIMITED
FARIDABAD

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

DOCUMENT TITLE:-
PIPING & INSTRUMENTATION DIAGRAM
STANDARD DRAWING (PUMP DETAIL)

PROJECT NO.	DRAWING NO.
CONTRACTOR DRG. NO.	REV. KOC DRG. NO.
50489-530-020-PID-1108.004	Z1
SHEET NO. 4 OF 10	SHEET NO.
COMPANY DRG. NO.	REV.
EF1902-530-DCO-PID-0109.001	A1
SHEET NO.	