



1. FLEXIBLE HOSE WITH LONG PIPE END IS INSERTED INTO CHEMICAL DRAIN FOR UNLOADING.
2. UTILITY STATION IS PROVIDED IN DRUM UNLOADING AREA.
3. COMBINATION FILTER, REGULATOR, PRESSURE GAUGE AND LUBRICATOR.
4. FLEXIBLE HOSE WITH DRY BREAK COUPLING IS CONNECTED TO HARD PIPE WITH 2"x1 1/2" REDUCING FLANGE FOR CONNECTION TO DRUM / SEMI-BULK CONTAINER (APPLICABLE FOR ALL BULK STORAGE TANK).
5. TWO SPARE PUMPS G-080 AND G-081 WITH ALL THE ANCILLARIES ARE LOCATED IN THE MAINTENANCE BUILDING.
6. GWR TYPE LEVEL TRANSMITTER.
7. LOW LOW LIQUID LEVEL STOPS DEMULSIFIER TRANSFER PUMPS.
8. LOCATE VALVE WITHIN SIGHT OF LEVEL GAUGE.
- 9.11. DELETED.
12. A. CHEMICAL TANKER LOADING CONNECTION.  
B. TRANSMITTER IS PROVIDED WITH LOCAL COUNTER WHICH IS RESETTABLE INSTANTANEOUS AND NON-RESETTABLE TOTAL INDICATIONS.
13. CHEMICAL PUMP OUT CONNECTION TO BE EASILY ACCESSIBLE.
14. PROVIDE ANNUNCIATOR SCHEME TO SUIT REQUIREMENTS AS INDICATED. TANK HIGH LEVEL ALARM IS DEDICATED TO A SPECIFIC LEVEL.  
(A) ONE TEST (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA FLASHER & HORNS.  
ONE RESET (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA FLASHERS.  
ONE ACCEPT (IN DCS) FOR ALL CHEMICAL BULK DELIVERY & DRUMS UNLOADING / TRANSFER AREA HORNS.  
(B) TANK (D-021) AREA HAS INDIVIDUAL FLASHING RED LIGHT ON TANK LEVEL HIGH. TWO (2) COMMON PUMPS G-6215B/YA-60629A ON ANY TANK LEVEL HIGH-HIGH.  
(C) UNLOADING AREA-ONE COMMON FLASHER ON ANY TANK HIGH LEVEL (LAH-6034A) ONE COMMON HORN XA-6035A ON ANY TANK LEVEL HIGH HIGH.
15. EYEWASH & SAFETY SHOWERS ARE TO BE INSTALLED AT LOADING CONNECTION OUTSIDE FENCE, CHEMICAL TRANSFER PUMP SHELTER AND BULK CHEMICAL STORAGE TANK/INJECTION PUMP SHELTER AREAS.
16. DELETED.
17. (A) HLLL IN D-032 OR D-037 STOPS DUTY AND STANDBY TRANSFER PUMPS G-0215B/YA-60629A BY SLSL LOGIC CLOSING XV-6001A/B.  
(B) PAH-6001 STOPS BOTH DUTY AND STANDBY PUMPS BY DCS CLOSING XV-6001A/B.  
(C) PA11-6001 STARTS DUTY TRANSFER PUMP BY DCS OPENING XV-6001A OR B.  
(D) PAL2-6001 STARTS STANDBY PUMP BY DCS OPENING XV-6001A OR B.  
(E) ZSC OF LCV-6062 & ZSC OF LCV-6067 STOPS DUTY & STANDBY TRANSFER PUMP G-021A/B BY SLSL LOGIC.  
(F) PUMP IN CASE OF DUTY PUMP DISCREPANCY (START COMMAND & NO FEEDBACK) OR RAPTURE OF TRANSFER PUMP.
18. DEMULSIFIER SUPPLY TANK AND ALL PUMP DISCHARGE AND SUCTION PIPING ARE ELECTRICALLY HEAT TRACED ELECTRICAL TRACING TEMPERATURE TO BE MAINTAINED AT 20°C
19. PUMPS ARE LOCATED IN CURBED AREA TO CONTAIN SPILLAGES.
20. TANK CONCENTRIC BUND IS 115% CONTAINMENT OF D-021.
21. NEAREST POSSIBLE BYPASS CONNECTION FOR BULK STORAGE TANK TO DEMULSIFIER TRANSFER PUMP DISCHARGE HEADER.
- 22,23,24,25,26. DELETED.
27. ANTI-RESISTANT CHEMICAL FLOOR IS REQUIRED.
28. PUMPS ARE PROVIDED WITH RUPTURE ALARM.
29. OVERFLOW NOZZLE IS LOCATED ABOVE HLLL.
30. PUMP & TANK AREA ARE PAVED. FLOOR IS SLOPED TOWARDS BUND PIT.
31. VENT TO SAFE LOCATION ARE AS PER KOC-G-002.

Z1	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	RAK	08.10.18
Z0	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	RAK	01.09.18
O1	ISSUED FOR CONSTRUCTION	BAK/CHS	AKG	SRA	RAK	23.11.16
O	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	01.04.16
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	21.10.13
OC	ISSUED INCORPORATED CLIENT COMMENTS	JSI/SSI	AKG	SRA	RAK	03.06.13
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	21.02.15
A	ISSUED FOR APPROVAL	BAK/ABY	AKG	SRA	RAK	12.12.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
				APPRD.		

CONTRACTOR REVISION


**KUWAIT OIL CO.**  
**K. S. C.**  
 شركة نفط الكويت  
 ش.م.ك.  
 إيسو شركة نفط الكويت  
 A Subsidiary of Kuwait Petroleum Corporation

CONTRACTOR DETAILS:—

LARSEN & TOUBRO LIMITED  
FARIDABAD

PROJECT TITLE:-

NEW GATHERING CENTRE GC-30  
IN NORTH KUWAIT

DOCUMENT TITLE:

# PIPING & INSTRUMENTATION DIAGRAM

## DEMULSIFIER STORAGE TANK (D-021) AND DISTRIBUTION

PROJECT NO.	DRAWING NO.		
EF1902	CONTRACTOR DRG. NO. 50489-530-020-PID-1185	REV. Z1	KOC DRG. NO.
	SHEET NO. 1 OF 1		SHEET NO.
	COMPANY DRG. NO.	REV.	
	EF1902-530-DC0-PID-0185.001	A4	
	SHEET NO.		