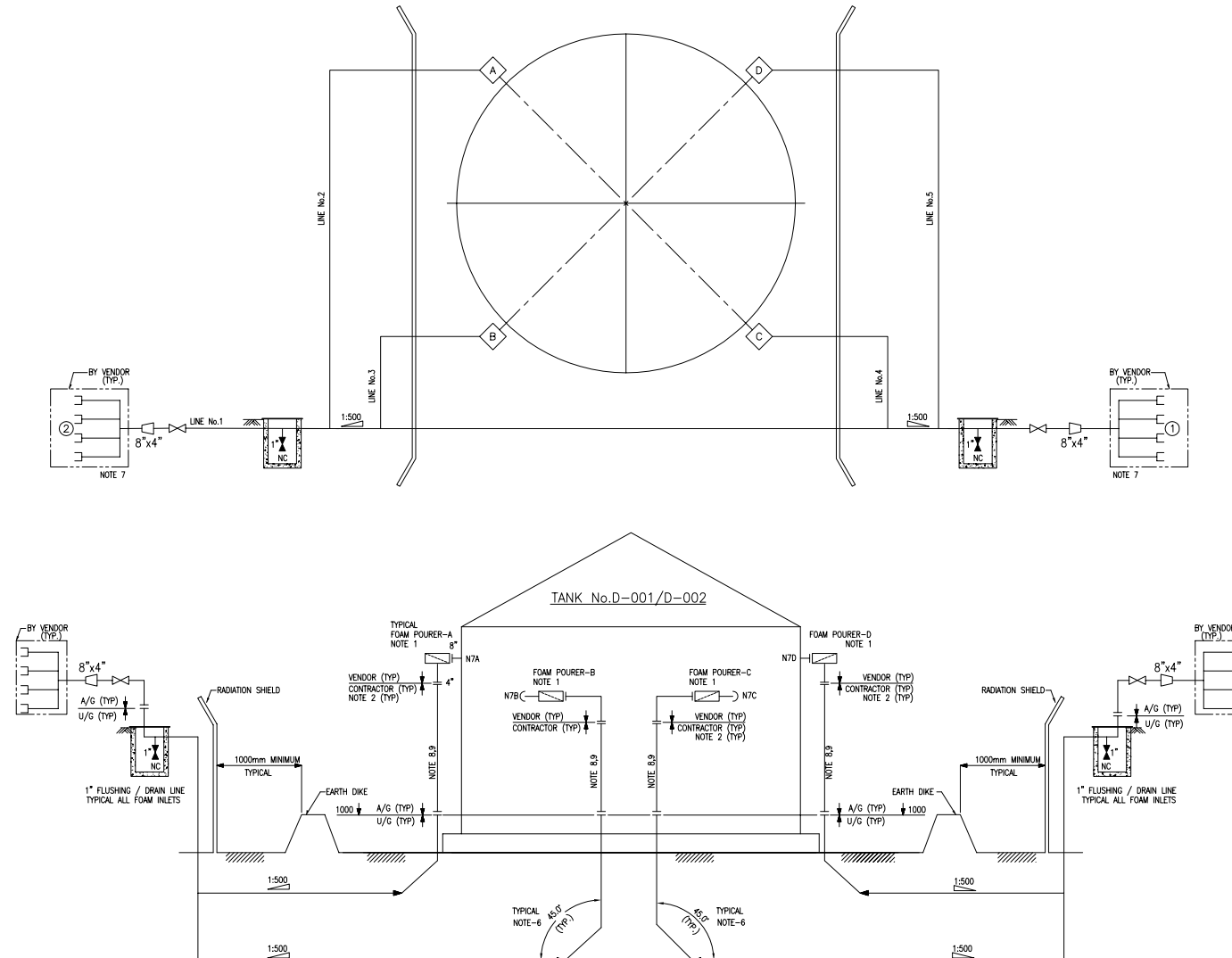


D-001/D-002
(DUAL CRUDE STORAGE TANK)
(WET CRUDE STORAGE TANK)
TYPE : FIXED CONE ROOF TANK
SIZE m (ft-in) : 45.425 (149'-1") ID x 13.000 (42'-8") H



TANK No.	I/D (M)	SURFACE AREA (M²)	SOLUTION 34.1 (LPM/M²)	FOAM 33X (LPM)	TOTAL FOAM 55 MINUTES (LITRES)	TANK NOZZLE NOS.	POURERS USED	LINE No. 1	LINE No. 2	LINE No. 3	LINE No. 4	LINE No. 5
D-001	45.425	1621	6645	199	10964	N7 A/B/C/D	A B C D	8"-FF-9001-Q15A	4"-FF-9002-Q15A	4"-FF-9003-Q15A	4"-FF-9004-Q15A	4"-FF-9005-Q15A
D-002	45.425	1621	6645	199	10964	N7 A/B/C/D	A B C D	8"-FF-9009-Q15A	4"-FF-9010-Q15A	4"-FF-9011-Q15A	4"-FF-9012-Q15A	4"-FF-9013-Q15A

GENERAL NOTES:

- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001.
- ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530-.
- FOR ESDV, SBOV AND MOV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001.
- FOR MISCELLANEOUS PIPING DETAILS SEE DRAWING 50489-530-020-PID-1108.001.
- DELETED.
- DELETED.

NOTES:

- FOAM POURER IS LOCATED JUST BELOW TANK RIM BEAM AT TOP OF THE TANK SHELL AND IS FITTED WITH AN INTERNAL SPLIT DEFLECTOR PLATE. FOR MORE DETAILS OF FOAM POURER SEE APPENDIX 1.3 KOC-L-009, REV.4.
- VENDOR TO SUPPLY FOAM MAKER AND ENTRANCE ORIFICE PLATE.
- 20" x 4 WAY SUCTION HEADERS ON SKID ARE POSITIONED 90° TO THE PREVAILING WIND DIRECTION.
- DELETED.
- ACCESS PLATFORM FOR FOAM POURER ARE PROVIDED.
- 45° FITTINGS TO FOAM POURER LINES AS PER SECTION 7.4.2.3 OF KOC-L-009, REV.4.
- FOR DETAILS OF TYPICAL FOAM SYSTEM AND 4 WAY SUCTION COLLECTING HEAD SEE APPENDIX 1.3 OF KOC STANDARD KOC-L-009, REV.4.
- THE SIZE OF THE RISERS ARE MIN. 4" DIAMETER FOR WET, DRY AND DUAL CRUDE OIL STORAGE TANKS.
- FOAM LINES AND CONNECTION TO TANKS ARE ALSO SHOWN ON P&ID 50489-530-020-PID-1122.001 FOR TANK D-001 AND P&ID 50489-530-020-PID-1123.001 FOR TANK D-002.

REFERENCE DOCUMENT:

NFPA-11	STANDARD FOR LOW, MEDIUM AND HIGH EXPANSION FOAM SYSTEM
50489-530-041-GAD-1101-001	GA DRAWING FOR WET CRUDE STORAGE TANK
50489-530-041-GAD-1001	GA DRAWING FOR DUAL CRUDE STORAGE TANK
50489-530-000-DAT-1501	DATASHEET FOR FIXED FIRE PROTECTION EQUIPMENT

AS-BUILT

KOC APPROVAL

NAME / KOC No:
DESIGNATION:
GROUP / TEAM:
SIGNATURE:
DATE:

AS-BUILT

LARSEN & TOUBRO LIMITED

NAME: VAIBHAV VERMA
DESIGNATION: AGM
SIGNATURE:
DATE: 30-SEP-2018
DEPT/DIVISION: ENGINEERING

Z1	RE-ISSUED FOR AS-BUILT	HSH/ASA	NIJ	SRA	RAK	30.09.18
Z0	ISSUED FOR AS-BUILT	HSH/ASA	NIJ	SRA	RAK	09.08.18
O	ISSUED FOR CONSTRUCTION	HSH/ASA	NIJ	SRA	RAK	02.03.16
C	ISSUED "INCORPORATED CLIENT COMMENTS"	HSH/ASA	NIJ	SRA	RAK	07.08.15
B	ISSUED "INCORPORATED CLIENT COMMENTS"	HSH/ASA	NIJ	SRA	RAK	21.07.15
A	ISSUED FOR APPROVAL	PAK/ASA	NIJ	SRA	RAK	06.01.15
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

CONTRACTOR REVISION

KUWAIT OIL CO. K. S. C.  **شركة نفط الكويت ش.م.ك.**

CONTRACTOR DETAILS:-
 **LARSEN & TOUBRO LIMITED FARIDABAD**

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

DOCUMENT TITLE:- PIPING & INSTRUMENTATION DIAGRAM
FOAM SYSTEM FOR DUAL /WET CRUDE STORAGE TANKS (D-001/D-002)

PROJECT NO.	DRAWING NO.	REV.	KOC DRG. NO.	REV.
EF1902	CONTRACTOR DRG. NO.			
	50489-530-000-PID-1105.001	Z1		
	SHEET NO. 1 OF 2			
	COMPANY DRG. NO.			
	EF1902-530-DB0-PID-0104.001	A1		
	SHEET NO.			