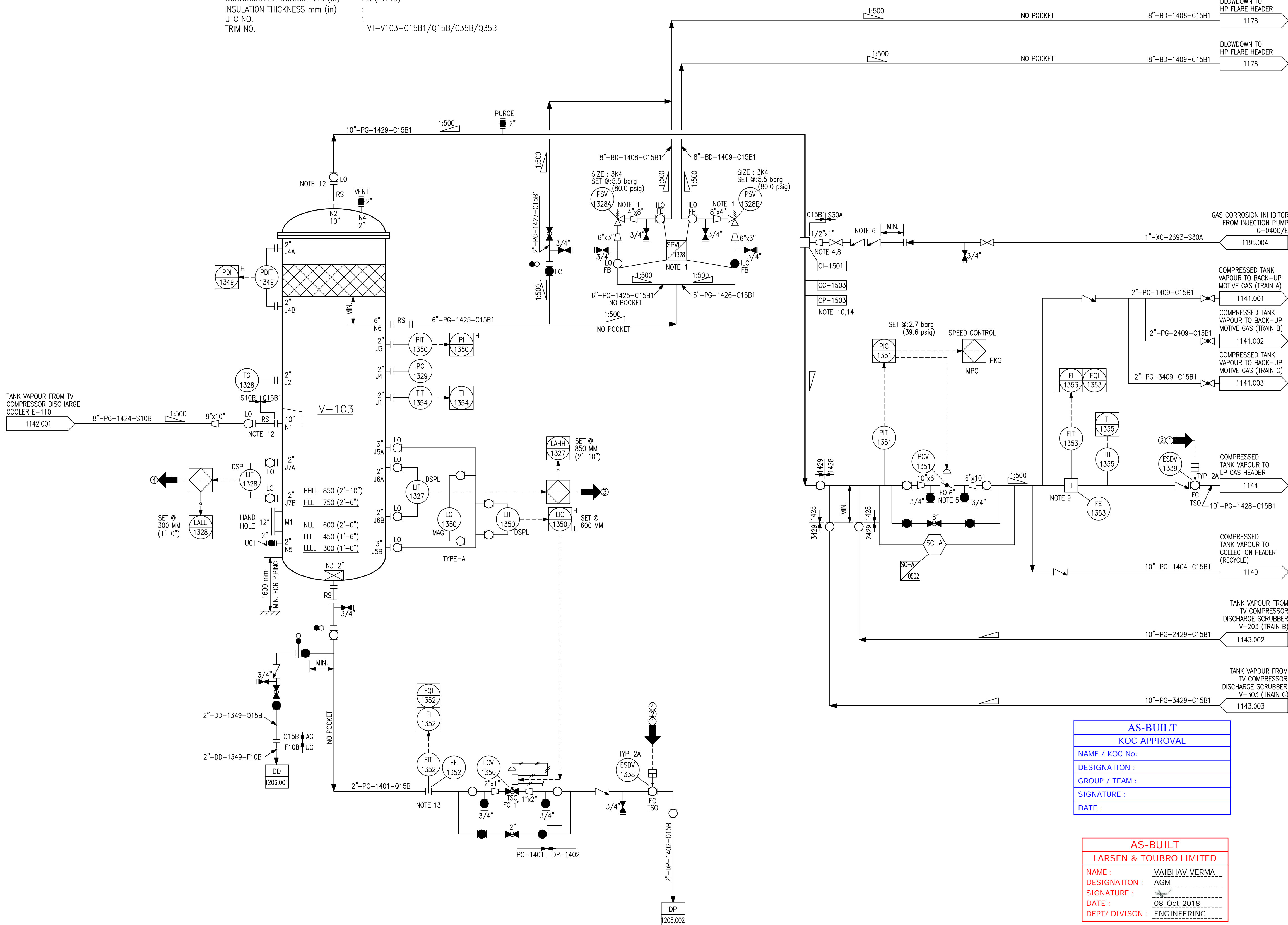


V-103
TANK VAPOUR COMPRESSOR DISCHARGE SCRUBBER (TRAIN A)
DUTY: VAPOUR - Nm3 (MMSCFD) : 7245.3 (6.5)
LIQUID - m3/hr (BPD) : 0.739 (111.5)
OD mm (ft.-in) : 914 (3'-0")
HEIGHT (TL-TL) mm (ft.-in) : 3012 (9'-10")
OP PRESS /DES PRESS barg (PSIG) : 2.6 (37.7)/5.5 (80)
OP TEMP/DESIGN TEMP °C (°F) : 15~60/-3/140 (59~140/27/284)
CORROSION ALLOWANCE mm (in) : 3 (0.118)
INSULATION THICKNESS mm (in) :
UTC NO. :
TRIM NO. : VT-V103-C15B1/Q15B/C35B/Q35B



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

AS-BUILT
LARSEN & TOUBRO LIMITED
NAME : VAIBHAV VERMA
DESIGNATION : AGM
SIGNATURE :
DATE : 08-Oct-2018
DEPT/ DIVISION : ENGINEERING

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:

- RELIEF VALVE INLET AND DISCHARGE VALVES ARE KEY INTERLOCKED SUCH THAT ONE RELIEF VALVE IS ALWAYS ON LINE AT ANY TIME.
- DELETED.
- DELETED.
- FOR CHEMICAL INJECTION NOZZLE DETAILS SEE STANDARD DWG. 50489-530-020-1108.001.
- LOW PRESSURE DROP CONTROL VALVE TO PREVENT COMPRESSOR GOING INTO STONERWALL.
- DISSIMILAR CHECK VALVES.
- DELETED.
- CHEMICAL INJECTION POINT IS LOCATED AS NEAR AS POSSIBLE FROM GAS OUTLET OF THE SCRUBBER.
- STRAIGHT LENGTH REQUIRED FOR THERMAL MASS FLOW METER ARE 10D UPSTREAM & 5D DOWNSTREAM.
- FOR CORROSION MONITORING STATIONS (CMS):-
 - CMS ARE INSTALLED AS PER KOC-MP-035.
 - PROPER ACCESS PIT OR PLATFORM ARE PROVIDED FOR RETRIEVAL OF COUPEN/PROBE.
 - MATERIAL FOR CMS ARE PROCURED FROM KOC APPROVED VENDOR LIST.
 - CMS ARE LOCATED IN BOTTOM 6 O'CLOCK POSITION.
 - TAG NUMBERING OF CMS IS AS PER APPENDIX-C OF KOC-MP-035.
- COMPRESSOR IS PROVIDED WITH COMMON MASTER PRESSURE CONTROLLER & LOAD SHARING CONTROLLER TO SHARE THE LOAD BETWEEN TWO ONLINE COMPRESSOR TRAINS & MAINTAIN EACH COMPRESSOR AT AN EQUAL DISTANCE FROM ITS SURGE CONTROL LINE.
- DRIP RING WITH BLEED VALVE IS PROVIDED BETWEEN ISOLATION VALVE & REMOVABLE SPOOL PIECE FLANGE CONNECTION FOR BLEED PURPOSE. BLIND FLANGE TO BE PROVIDED AFTER DISMANTLING OF REMOVABLE SPOOL PIECE DURING MAINTENANCE.
- STRAIGHT LENGTH REQUIRED FOR ORIFICE FLOW METER ARE 20D UPSTREAM & 5D DOWNSTREAM.
- ONE ADDITIONAL INTERNAL CORROSION MONITORING POINT IS INSTALLED AT THE TOP AT 12 O'CLOCK POSITION.

Z1	ISSUED FOR AS-BUILT	BAK/SSI	AKG	SRA	RAK	08.10.18
Z0	ISSUED FOR AS-BUILT	BAK/SSI	AKG	SRA	RAK	28.08.18
01	ISSUED FOR CONSTRUCTION	BAK/SSI	AKG	SRA	RAK	30.11.16
0	ISSUED FOR CONSTRUCTION	HSB/VSA	AKG	SRA	RAK	25.03.16
D	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	22.12.15
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	15.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	30.05.15
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/VSA	AKG	SRA	RAK	17.02.15
A	ISSUED FOR APPROVAL	JSI/VSA	AKG	SRA	RAK	05.12.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

CONTRACTOR REVISION

KUWAIT OIL CO. **شركة نفط الكويت**
K. S. C. **ش.م.ك.**
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
TANK VAPOUR COMPRESSOR DISCHARGE SCRUBBER (V-103) TRAIN A

PROJECT NO.	DRAWING NO.	REV.	KOC DRG. NO.	REV.
EF1902	CONTRACTOR DRG. NO.	50489-530-020-PID-1143.001	Z1	
	SHEET NO. 1 OF 3			
	COMPANY DRG. NO.	EF1902-530-DCO-PID-0143.001	A4	
	SHEET NO.			