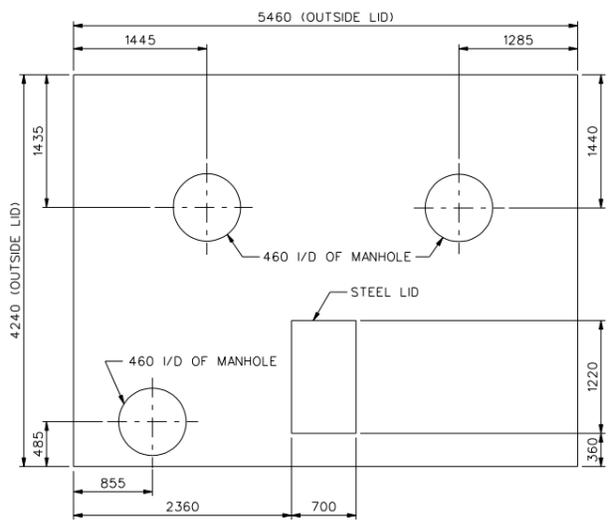


NOZZLE SCHEDULE				
MARK	NPS	CLASS	FACING	SERVICE
D1	1 1/2	150	LWN RF	DRAIN
D2	3	300	LWN RF	DRAIN
D3	3	150	LWN RF	DRAIN
D4	3	150	LWN RF	DRAIN
D5	3	300	LWN RF	DRAIN
V1	1 1/2	150	LWN RF	VENT
V2	1 1/2	150	LWN RF	VENT
V3	1 1/2	150	LWN RF	VENT

- NOTES**
- ALL DIMENSIONS GIVEN FROM FLANGE RF.
  - VALVE & ACTUATORS IS NOT DRAWN IN DETAIL.
  - MANHOLE 457 I/D.
  - EXISTING EQUIPMENT IS DRAWN IN DASHED LINES.
  - BELLOW WILL BE STRETCH INITIALLY APPROXIMATELY 10mm FOR FITMENT.
  - PARTS LIST BELOW ONLY SHOW MODIFIED ITEMS, ALL THE BOLTS, NUTS & GASKETS IN CHAMBER ALSO NEED TO BE REPLACED.
  - MATERIAL CERTIFICATION TO EN 10204, 3.1 IS REQUIRED FOR PRESSURE BEARING ITEMS.
  - DESIGN DATA IS ONLY APPLICABLE TO MODIFICATIONS (INSTALLATION OF BELLOW & PIPE MODIFICATIONS) INSIDE CHAMBER.
  - ENSURE PROPER WASHER FITMENT AT BACK OF VALVE FLANGES DURING BOLT-UP.
  - PIPE SUPPORTS (ITEMS 9) TO BE FIXED TO CONCRETE FLOOR (PERMANENTLY).
  - BELLOW & VALVE MUST BE INSTALLED & SUPPORT FROM GROUND BEFORE FITMENT OF PIPING.
  - LOCALIZED HYDRO TEST TO BE CONDUCTED ON MODIFICATION WELD (PIPE MODIFICATION) AT A PRESSURE OF 2925 kPa FOR FOUR (4) HOURS.
  - PIPE FITMENT TO BE DONE ON SITE
  - TIGHTNESS PRESSURE TEST TO BE DONE FOR ONE (1) HOUR ON PIPE LINE.
  - THE TRUE ANGLE OF SPOOL PIECE (ITEM 10) WITH THE HORIZONTAL PLANE IS 23.08°
  - PAINTING TO BE ACCORDING ACSA SPECIFICATIONS.

DESIGN DATA		
DESIGN CODE (RELEVANT TO MODIFICATION)		ASME B 31.4 2006
DESIGN PRESSURE	kPa (g)	1950
OPERATING PRESSURE	kPa (g)	1200 (MAX)
DESIGN TEMPERATURE	°C	40
OPERATING TEMPERATURE	°C	AMBIENT
TIGHTNESS TEST	kPa (g)	2000
HYDROSTATIC PRESSURE TEST	kPa (g)	(SEE NOTE 12)
SERVICE		AVIATION KEROSEEN

NO.	QTY	DESCRIPTION	MATERIALS
19	1	GASKET TO SUIT NPS 16 CL 150	GRAFTECH
18	1	BLIND FLANGE NPS 3 CL 300 RF	SA 105
17	16	WASHER NS 3/4"	MILD STEEL
16	8	STUDBOLT 3/4" x 10 UNC x 115 LG	SA 193 GR B7
15	16	HEX NUT 3/4" x 10 UNC	SA 194 GR 2H
14	1	GASKET TO SUIT NPS 3 CL 300	GORE UNIVERSAL PIPE GASKET
13	2	FLANGE NPS 16 CL 150 WN RF (HUB THK: SCH STD)	SA 105
12	1	ELBOW NPS 16 SCH STD 90° LR (TRIM TO 74.8°)	SA 234 GR WPB
11	1	ELBOW NPS 16 SCH STD 45° LR (TRIM TO 28.1°)	SA 234 GR WPB
10	1	PIPE NPS 16 SCH STD x 382 LG (API 5L SEAMLESS)	SA 106 GR B
9	1	ADJUSTABLE PIPE SUPPORT	
8	1	BLIND FLANGE NPS 16 CL 150 RF	SA 105
7	2	SPECTACLE BLIND NPS 16 CL 150 x 25 THK	SA 516 GR 70
6	144	WASHER NS 1"	MILD STEEL
5	32	STUDBOLT 1" x 8 UN x 175 LG	SA 193 GR B7
4	48	STUDBOLT 1" x 8 UN x 145 LG	SA 193 GR B7
3	144	HEX NUT 1" x 8 UN	SA 194 GR 2H
2	7	GASKET TO SUIT NPS 16 CL 150	GORE UNIVERSAL PIPE GASKET
1	1	SPOOL PIECE SEE KOG DRG. 1483-DBFPT-09F485-0010-00	



POSITION OF ACCESS MANHOLE  
SCALE 1:35

PLAN VIEW

THE VALVE CHAMBER NUMBER INDICATED ON THE VALVE CHAMBER ON SITE AT TIME OF PRODUCING THIS DRAWING WAS VCF4D

REFERENCE DRAWINGS	
DRAWING NUMBER	DESCRIPTION
MC2610879-VCD4-DWG-002-SHT02	DETAILS OF VALVE CHAMBER VCD4
1483-DBFPT-09F485-0010-00	BELLOW SPOOL PIECE

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No.	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED	ENGINEER	DATE
07	AS-BUILT (MC2610879) MEGCHEM	J. KEMP	P.F. ARIA	P.L. VAN DEN BERG	G. BLIGNAUT	2010-10-27

DATE	UNIT/SECTION
2009-07-13	
2009-07-13	
2009-07-13	
2009-07-13	
2009-07-13	

**MEG CHEM**

MEGCHEM ENGINEERING AND DRAFTING SERVICES (PTY) LTD  
TEL: (016) 981 4806  
FAX: (016) 981 3816  
P O BOX 394 SASOLBURG 1947

DETAIL OF MODIFICATIONS ON VALVE CHAMBER VCD4

MEGCHEM OLD DRG No.	MEGCHEM NEW DRG No.	SHEET No.	REV No.
MC2610879-VCF4D-DWG-002	MC2610879-VCD4-DWG-002	001	07