



NOZZLE SCHEDULE				
MARK	NPS	CLASS	FACING	SERVICE
D1	3	150	LWN RF	DRAIN
D2	1 1/2	150	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 ITEM 8.
  - DESIGN DATA IS ONLY APPLICABLE TO MODIFICATIONS (INSTALLATION OF BELLOW & ITEM B) INSIDE CHAMBER.
  - LOCALIZED HYDRO TEST TO BE CONDUCTED ON MODIFICATION WELD (ITEM B) AT A PRESSURE OF 2925 kPa, USING A MECHANICAL HYDRO TEST PLUG.

- NDE REQUIREMENTS
- 100% MT ON ALL COMPLETED WELDS.
  - 100% RT ON BUTTWELDS.
  - WELDING TO BE TESTED AT SPECIFIED PRESSURE FOR A PERIOD OF 4 HRS.
  - 100% MT ON ALL WELDS AFTER PRESSURE TEST.

DESIGN DATA (SEE NOTE 8)

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
HYDRO STATIC PRESSURE TEST	kPa (g)	(SEE NOTE 9)
SERVICE	AVIATION KEROSEEN	

8	1	FLANGE NPS 16 CL 150 WN RF	SA 105
7	2	SPECTACLE BLIND NPS 16 CL 150	SA 516 GR 70
6	80	WASHER NS 1"	MILD STEEL
5	32	STUDBOLT 1" x 8 UN x 175 LG	SA 193 B7
4	16	STUDBOLT 1" x 8 UN x 145 LG	SA 193 B7
3	80	HEX NUT 1" x 8 UN	SA 194 GR 2H
2	5	GASKET TO SUIT NPS 16 CL 150	UNIVERSAL PIPE GASKET
1	1	SPOOL PIECE SEE KOG DRG. 1495-BFPT-09F485-0010-00	SA 516 GR 70
MK	QTY	DESCRIPTION	MATERIALS

PARTS LIST

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7	2	SPECTACLE BLIND NPS 16 CL 150	SA 516 GR 70
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MK	QTY	DESCRIPTION	MATERIALS

DETAIL OF MODIFICATIONS ON VALVE CHAMBER VCD3

DATE	BY	DESCRIPTION
2009-07-16	J. KEMP	DRAWN
2009-07-16	P. FARIA	CHECKED
2009-07-16	P. L. VAN DEN BERG	REVIEWED
2009-07-16	G. BLIGNAUT	ENGINEER
2009-07-16	P. L. VAN DEN BERG	APPROVED

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

MEGHEM OLD DRG No. \_\_\_\_\_ SHEET No. \_\_\_\_\_ REV No. \_\_\_\_\_  
 MEGHEM NEW DRG No. MC2610879-VCD3-DWG-002 001 03

REFERENCE DRAWINGS

DRAWING NUMBER	DESCRIPTION
1495-BFPT-09F485-0010-00	BELLOW SPOOL PIECE

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

ORIGINAL CONTRACT / CHARGE NO.: MC2610879 CAD No.: MC2610879\_VCD4\_DWG\_002\_SHT01.DGN DIMENSIONS IN mm UNLESS OTHERWISE STATED

ACSA ENGINEERING AND DRAFTING SERVICES (PTY) LTD

MEGHEM ENGINEERING AND DRAFTING SERVICES (PTY) LTD

SCALE: 1:10 DWG. SIZE: A1

□ DENOTES 'AS-BUILT' DIMENSIONS

THE VALVE CHAMBER NUMBER INDICATED ON THE VALVE CHAMBER ON SITE AT TIME OF PRODUCING THIS DRAWING WAS VCD3