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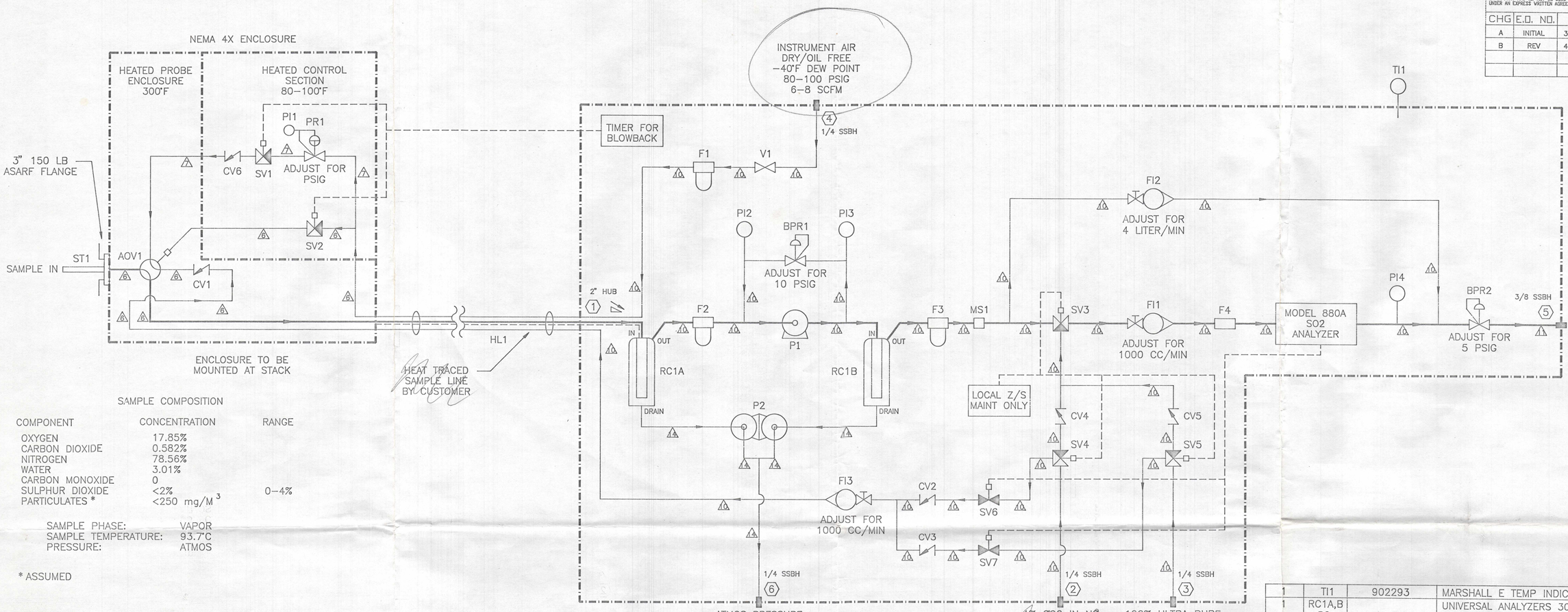
CHG	E.O. NO.	DATE	BY	ENGR
A	INITIAL	3-11-97	GRL	
B	REV	4-18-97	GRL	



SAMPLE COMPOSITION

COMPONENT	CONCENTRATION	RANGE
OXYGEN	17.85%	
CARBON DIOXIDE	0.582%	
NITROGEN	78.56%	
WATER	3.01%	
CARBON MONOXIDE	0	
SULPHUR DIOXIDE	<2%	0–4%
PARTICULATES *	<250 mg/M^3	

SAMPLE PHASE: VAPOR
SAMPLE TEMPERATURE: 93.7°C
PRESSURE: ATMOS

* ASSUMED

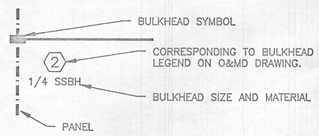
NOTES:

1. NEC AREA CLASSIFICATION:
   - ☒ NON–HAZARDOUS
   - ☐ CLASS I, DIVISION 2, GROUPS B, C & D
   - ☐ CLASS I, DIVISION 1, GROUPS B, C & D
2. MAINTAIN ENTIRE SYSTEM ABOVE SAMPLE DEWPOINT TEMPERATURE.
3. DO NOT ALLOW CONDENSIBLES TO COLLECT IN SYSTEM.
4. ALL SAMPLE WETTED TUBE FITTINGS SHALL BE STAINLESS STEEL GYROLOK COMPRESSION TYPE UNLESS OTHERWISE NOTED
5. USE CORROSION RESISTANT TUBING FOR INTERCONNECTING SAMPLE LINE.
6. MATERIALS IN CONTACT WITH SAMPLE TO INCLUDE:
   ☐ BRASS ☒ STAINLESS STEEL ☒ TEFLON ☒ KYNAR
   ☐ POLYPROPYLENE ☒ GLASS ☒ VITON–A
7. ZERO AND SPAN GASES TO BE INTRODUCED AT SAME FLOWRATE AND SENSOR PRESSURE AS SAMPLE.
8. SPAN GAS VALUE IS SELECTED TYPICALLY TO CONTAIN THE COMPONENT OF INTEREST AT A LEVEL OF 80–90% OF SELECTED RANGE IN A BACKGROUND OF PREPURIFIED NITROGEN AND SHOULD BE CALIBRATED ON THE NORMAL OPERATING RANGE.
9. NOMINAL BYPASS FLOWRATE. MAY BE ADJUSTED AS REQUIRED FOR DESIRED SAMPLE LAG TIME.
10. ITEMS TO THE LEFT OF THE SYMBOL ⏚ ARE TO BE LOCATED AS CLOSE TO SAMPLE AS PRACTICAL USUALLY WITHIN 2–5 FEET (.6–1.54 METER). ITEMS TO THE RIGHT OF THE SYMBOL ⏚ ARE TO BE LOCATED NEAR ANALYZER.
11. THE SYSTEM WILL BE APPROVED BY CSA.

NOTES:

- ⚠3 1/8" O.D. x .020 WALL 316 STAINLESS STEEL TUBING
- ⚠4 1/4" O.D. x .035 WALL 316 STAINLESS STEEL TUBING
- ⚠5 3/8" O.D. x .035 WALL 316 STAINLESS STEEL TUBING
- ⚠6 1/2" O.D. x .035 WALL 316 STAINLESS STEEL TUBING
- ⚠9 1/8" O.D. x .030 WALL TEFLON (FEP) TUBING
- ⚠10 1/4" O.D. x .062 WALL TEFLON (FEP) TUBING
- ⚠11 3/8" O.D. x .062 WALL TEFLON (FEP) TUBING
- ⚠12 1/2" O.D. x .062 WALL TEFLON (FEP) TUBING
- ⚠13 NORPRENE 6402–15 1/4 I.D. TUBING

BULKHEAD



REFERENCE DWG'S
D–775268 O&MD
D–775269 WIRING DIAGRAM
D–775270 O&MD PROBE BOX

QTY	ITEM	PART NO	DESCRIPTION
1	TI1	902293	MARSHALL E TEMP INDICATOR 0–130°F
1	RC1A,B P2 MS1		UNIVERSAL ANALYZERS 3080–P–WCO THERMOCOOLER W/PERISTALTIC PUMP AND MOISTURE SENSOR
1	P1		AIR DIMENSIONS 19310T SAMPLE PUMP
1	BPR2		GO BP31D11I5C114 BACK PRESSURE REGULATOR
1	BPR1		GO BP31D11I5D114 BACK PRESSURE REGULATOR
1	PI2		PACIFIC SCIENTIFIC G425BSD02S PRESS GAUGE
2	PI3,4		PACIFIC SCIENTIFIC G425BSD09S PRESS GAUGE GLYCERINE FILL
2	F2,3 FE		POROUS MEDIA IF10GN02V–RA FILTER POROUS MEDIA IE10024E03–RA ELEMENT
1	F4		NURPO SS–4F–7 GUARD FILTER
1	FI2		BROOKS 1350EFC1CKF1A FLMTR 0–10 LIT/M
2	FI1,3		BROOKS 1350ECA5CKE1A FLMTR 200–2400 CC
1	PR1	902238	WILKERSON R00–02–L00 PRESS REGULATOR
1	PI1	902222	WILKERSON GRP–95–228 PRESS GAUGE
1	F1 FE		POROUS MEDIA FILTER POROUS MEDIA 1C10024E03–DS ELEMENT
1	V1	901518	NUPRO SS–8P6T VALVE
2	SV6,7		ASCO 8262G38/120VAC SOL VAL 2–WAY
6	CV1–6	901503	NUPRO SS–4C–1 CHECK VALVE
5	SV1–5		ASCO 8320G201/120VAC SOL VAL 3–WAY
1	AOV1		CONANT 4316–1/4 4–WAY VALVE W/MS–131–DA–HT AIR OPERATOR MTG. MS–MB–43–(25.20)

	BY	DATE
DR	G R LYEN	3-11-97
ENGR		3-11-97

RMT–CANADA
P.O. 5010667
ROSEMOUNT ANALYTICAL
SY 10206

Rosemount Analytical Inc. — ROSEMOUNT ANALYTICAL INC. LA HABRA, CALIFORNIA 90631

TITLE
FLOW DIAGRAM
SO2 MONITORING
SYSTEM

D SIZE | DWG NO. — 775267

SCALE NONE | SHEET 1 OF 1

DWG. NO. | D SIZE