

1 HIGH PRESSURE AIR TEST CELL FLOW DIAGRAM
403 SCALE: N.T.S.

BILL OF MATERIALS

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ITEM	TYPE	MANUFACTURER	PART NUMBER	SIZE/CONNECTION	QUANTITY
1	6 mm (1/4" OD FRACTIONAL)	PARKER	SST04X.049-20 FOOT	1/4", 0.049" WALL THICKNESS	230 ft
2	6 mm (1/4" OD FRACTIONAL)	PARKER	SST04X.065-20 FOOT	1/4", 0.065" WALL THICKNESS	25 ft
3	MOUNTING RAIL (FOR TUBING SUPPORTS)	PARKER	R	AS REQUIRED FOR SITE CONDITIONS	12
4	CLAMP HALVES (FOR TUBING SUPPORTS)	PARKER	1064A-PP	1/4"	80
5	COVER PLATE (FOR TUBING SUPPORTS)	PARKER	CP-1A	N/A	80
6	HEXAGON HEAD BOLT FOR COVER PLATE (FOR TUBING SUPPORTS)	PARKER	BCP-1	N/A	160
7	HEXAGON RAIL NUT (FOR TUBING SUPPORTS)	PARKER	HRN	N/A	160
8	UNION	PARKER	4HLO-SS	1/4"	20
9	MECHANICALLY ATTACHABLE SLEEVE	PARKER	4TPL-S	1/4"	140
10	TUBE NUT	PARKER	4BL-SS	1/4"	140
11	COPPER TYPE L OR M COMPLETE WITH FLARED FITTINGS	N/A	N/A	1/4"	AS REQ'D
12	UNION TEE	PARKER	4JLO-SS	1/4"	13
13	UNION CROSS	PARKER	4KLO-SS	1/4"	3
14	MALE PIPE CONNECTOR	PARKER	4-FLO-SS	1/4"	70
15	FEMALE PIPE CONNECTOR	PARKER	4-FGLO-S	1/4"	12
16	U SERIES NEEDLE VALVE	PARKER	4F-U12LR-T-SS-QC311	1/4" FNPT CONNECTIONS	16
17	APR66 SERIES REGULATOR (2000 PSIG RANGE)	PARKER	APR66S2P2XX4	1/4" FNPT CONNECTIONS	2
18	APR66 SERIES REGULATOR (8000 PSIG RANGE)	PARKER	APR66S2P4XX4	1/4" FNPT CONNECTIONS	2
19	RH4 SERIES RELIEF VALVE (1250 PSIG SET PRESSURE)	PARKER	4M4F-RH4A-BN-T-SS-K3	INLET, 1/4" MNPT & OUTLET, 1/4" FNPT	2
20	RH4 SERIES RELIEF VALVE (3500 PSIG SET PRESSURE)	PARKER	4M4F-RH4A-BN-T-SS-K6	INLET, 1/4" MNPT & OUTLET, 1/4" FNPT	1
21	RH4 SERIES RELIEF VALVE (6500 PSIG SET PRESSURE)	PARKER	4M4F-RH4A-BN-T-SS-K8	INLET, 1/4" MNPT & OUTLET, 1/4" FNPT	1
22	BRASS BALL VALVE (150 PSIG RANGE)	PARKER	V500P-04	1/4" FNPT PORTS	3
23	3-WAY HB SERIES BALL VALVE W/ PNEUMATIC ACTUATOR (6,000 PSIG RANGE)	PARKER	4F-HB4KK-BN-SSP-ACX82-3-1X	1/4" FNPT	4
24	2-WAY HB SERIES BALL VALVE (10,000 PSIG RANGE)	PARKER	4F-HB4LKR-BN-SSP	1/4" FNPT	2
25	2-WAY HB SERIES BALL VALVE (6,000 PSIG RANGE)	PARKER	4F-HB4LK-BN-SSP	1/4" FNPT	8
26	ANALOG PRESSURE GAUGE (1500 PSIG RANGE)	ASHCROFT	45-1009-SL-02D-1500#	1/4" MNPT	1
27	ANALOG PRESSURE GAUGE (5000 PSIG RANGE)	ASHCROFT	45-1009-SL-02D-5000#	1/4" MNPT	1
28	ANALOG PRESSURE GAUGE (7500 PSIG RANGE)	ASHCROFT	45-1009-SL-02D-7500#	1/4" MNPT	2
29	DIGITAL PRESSURE GAUGE (1000 PSIG RANGE)	ASHCROFT	45-2274-SD-02E-XBL-1000#	1/4" MNPT	2
30	DIGITAL PRESSURE GAUGE (3000 PSIG RANGE)	ASHCROFT	45-2274-SD-02E-XBL-3000#	1/4" MNPT	1
31	DIGITAL PRESSURE GAUGE (6000 PSIG RANGE)	ASHCROFT	45-2274-SD-02E-XBL-5000#	1/4" MNPT	1
32	PRESSURE TRANSMITTER (10,000 PSIG RANGE)	SIEMENS	7MF1567-3EA00-7EA1	1/4"	1
33	SITRANS RD300 (DISPLAY)	SIEMENS	7ML5744-1AA00-0A	N/A	1
34	NUMBER NOT USED				
35	NUMBER NOT USED				
36	NUMBER NOT USED				
37	A-LOK FEMALE CONNECTOR	PARKER	4FSC4N	1/4"	2
38	A-LOK MALE CONNECTOR	PARKER	4MSC4N	1/4"	6
39	A-LOK UNION TEE	PARKER	4ET4-316	1/4"	3
40	JIC CONNECTION	N/A	N/A	AS REQ'D	AS REQ'D
41	19 mm (3/4" OD FRACTIONAL)	PARKER	SST12X.049-20 FOOT	3/4", 0.049" WALL THICKNESS	5
42	NPT ADAPTERS	PARKER	15M49N6	MALE END 1/4" NPT, FEMALE END SF562CX	1
43	RVS SERIES RELIEF VALVE	PARKER	10RVS9072	INLET SF562CX, OUTLET 3/4" FNPT	1
44	MALE PIPE CONNECTOR	PARKER	12-FLO-SS	3/4"	1
45	NEEDLE VALVE W/ PNEUMATIC ACTUATOR (15,000 PSI RANGE)	PARKER	15P4XXX-OIS	1/4" FNPT PORTS	2
46	A-LOK UNION	PARKER	4SC4-316	1/4"	1

GENERAL NOTES

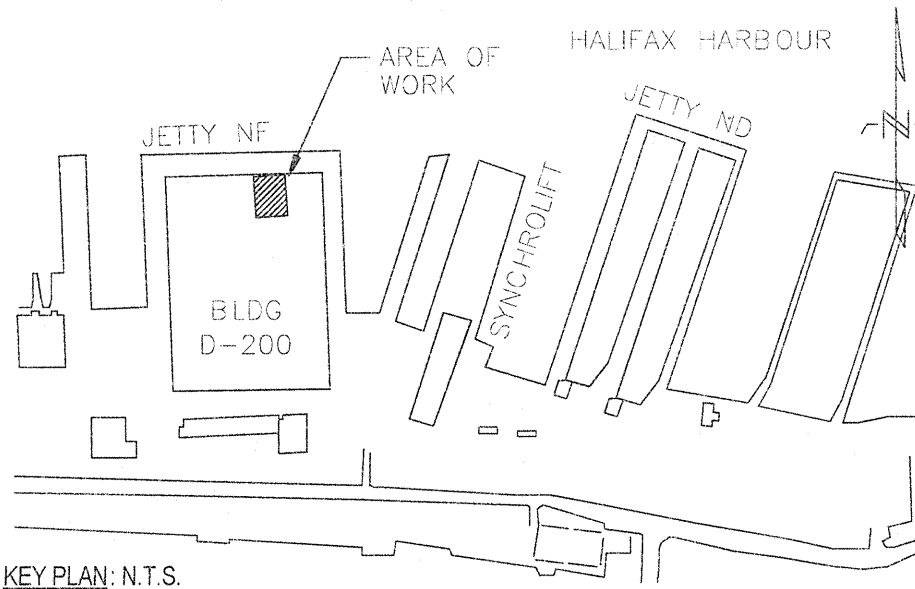
- BILL OF MATERIALS LIST ON DRAWING 403 IS TO BE USED AS A GUIDE ONLY. ALLOW EXTRA FOR CUTTING, WELDING AND BENDING. CONTRACTOR TO VERIFY QUANTITIES AND FITTINGS REQUIRED PRIOR TO INSTALLATION. THE BILL OF MATERIALS INCLUDES COMPONENTS ON DWG 401, 402 AND 403.
- CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF MECHANICAL WORK UNLESS NOTED OTHERWISE. REFINISH AFFECTED SURFACES TO MATCH ADJACENT FINISH.
- NO WELDING SHALL BE DONE ON STAINLESS STEEL TUBING.
- CONTRACTOR TO CONFIRM QUANTITIES ON SITE.

AIR PRESSURE PIPING NOTES

- ALL PIPING AND TUBING TO CONFORM TO ASME B31.3.
- NEW PIPING, FITTINGS, VALVES AND COMPONENTS. IT IS IMPORTANT THAT FRACTIONAL, NOT METRIC, SS TUBING, FITTINGS AND VALVES ARE USED TO ENSURE PROPER SIZES AND FIT. DO NOT MIX MATERIALS OR FITTING COMPONENTS FROM VARIOUS MANUFACTURERS.
- ALL TUBING, GAUGES, SUPPORTS, VALVES AND OTHER SYSTEM COMPONENTS SHALL BE NEW. REUSE OF EXISTING COMPONENTS IS NOT PERMITTED.

MECHANICAL LEGEND

	1000 PSIG STAINLESS STEEL TUBING
	3000 PSIG STAINLESS STEEL TUBING
	5000 PSIG STAINLESS STEEL TUBING
	10,000 PSIG STAINLESS STEEL TUBING
	ANALOG PRESSURE GAUGE
	DIGITAL PRESSURE GAUGE
	PRESSURE REGULATOR
	NEEDLE VALVE
	PROPORTIONAL RELIEF VALVE
	FACE SEAL UNION FITTINGS
	3-WAY BALL VALVE WITH PNEUMATIC ACTUATOR
	2-WAY BALL VALVE
	NEEDLE VALVE WITH PNEUMATIC ACTUATOR
	BOOSTER PUMP
	PRESSURE TRANSMITTER
	DISPLAY FOR PRESSURE TRANSMITTER
	TEE FITTING
	CROSS FITTING
	ELBOW UP
	ELBOW DOWN
	HOSE CONNECTION
	JIC CONNECTION
	DIRECTION OF FLOW



KEY PLAN: N.T.S.



C02	2017/01/24	RE-ISSUED FOR TENDER	NFB
C01	2016/10/14	ISSUED FOR TENDER	
NO.	DATE	REVISION	APPR.

SCALE | ÉCHELLE

AS INDICATED

LOCATION | EMPLACEMENT

BLDG. D200
CFB HALIFAX
NS

PROJECT | PROJET

D-200 HIGH PRESSURE
AIR TEST FACILITY

TRADE | MÉTIER
MECHANICAL

DATE
2016/05/02

SUBJECT | SUJET
MECHANICAL FLOW DIAGRAMS,
BILL OF MATERIALS AND LEGEND

PRODUCTION	REVIEWED REVU	DESIGN ÉTUDIÉ	ENG O O ING	DES O AGENT CONC
JD				
DRAWN DESSINÉ				PROJ MGR GEST PROJ
JD				DES MGR GEST CONC
CHECKED VÉRIFIÉ				
KBIMD				
COORDINATION				FIRE INCENDIE

WBS NO. | NO. OTP
T1-15-003

PF NO. | NO. DP
R.077547.001

DWG. NO. | NO. DESSIN
4476681-403