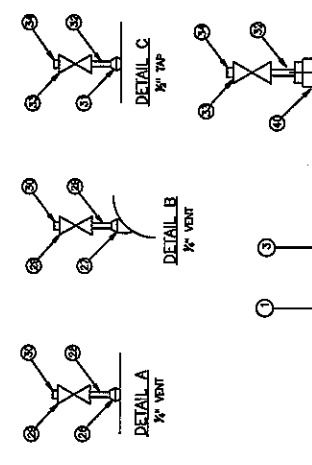


BILL OF MATERIAL FOR PSMS-014

ITEM	QTY	DESCRIPTION
1	4	PIPE, STEEL, 3/4" DIA, GRADE B, ANS I 100
2	10	4" PIPE, STEEL, 0.2376", ANS I, GRADE B, SA333B
3	6	4" PIPE, STEEL, 0.2376", ANS I, GRADE B, SA333B
4	4	4" ELBOW, LR, 0.2376", ANS I, GRADE B, SA333B
5	2	4" FLANGE, STEEL, WN, RF, 0.2376", GRADE B, ANS I 100
6	4	WELD TEE, 2.376", GRADE B
7	7	4" REGULATOR, GRADE B, ANS I 100
8	1	4" CHECK VALVE, FLANGED, 100 ANS, 2764 WOOD, RF, STEEL
9	2	4" REGULATOR, FLANGED, ANS I 100, AS SPECIFIED BY DOMINION
10	1	POSITIVE SHUT-OFF DRIP, SEE DWG. PSMS-20 FOR DETAILS
11	1	CONPRESSION FITTER, IF APPLICABLE
12	1	CONPRESSION FITTER, IF APPLICABLE
13	1	CONPRESSION FITTER, IF APPLICABLE
14	1	CONPRESSION FITTER, IF APPLICABLE
15	1	CONPRESSION FITTER, IF APPLICABLE
16	2	4" INSULATION KIT, ANS I 100, FULL FACE, DOUBLE WASHERS
17	1	2" PIPE COUPLING, STEEL, FULL THREAD, 3000#
18	1	2" ROOF VALVE, NOT INVENTORY OUTLET
19	1	2" ELBOW, SCHEDULE 80, 2000#, SA106 B
20	1	2" CAP, ALL WEATHER
21	2	2" WELD FLANGE, ANS I 100, 218 W
22	2	BOLT STUD, 1/2" DIA, 1/2" NUTS, A194 ZH
23	2	GUSSET, 1/4" TH, ANS I 100, NON-SENSITIVE
24	2	3/4" THROUGHLET, SA106, 3000#
25	3	3/4" ELBOW, STEEL, SA106, 3000#
26	11	3/4" RIFLE, 4" LONG, STEEL, GRADE B, TEE, AS
27	1	3/4" BALL VALVE, SCHEDULE 80, FULL PORT, LEVER
28	1	3/4" THROUGHLET, SA106, 3000#
29	1	3/4" THROUGHLET, SA106, 3000#
30	1	3/4" THROUGHLET, SA106, 3000#
31	2	3/4" THROUGHLET, SA106, 3000#
32	4	3/4" RIFLE, 4" LONG, STEEL, GRADE B, TEE, AS
33	4	3/4" BALL VALVE, SCHEDULE 80, WOOD TAIL, FULL PORT, LEVER
34	4	3/4" PIPE PLUG, STEEL, SA 106, SA106
35	1	3/4" WELD FLANGE, ANS I 100
36	1	3/4" WELD FLANGE, ANS I 100
37	2	3/4" SOCKET
38	2	2" ELBOW, LR, 218W, GRADE B
39	2	2" CAP, 218W, GRADE B
40	2	1 1/2" REDUCER, SCHEDULE 80, 3000#
41	1	1 1/2" ELBOW, SOCKET WELD, 80#, 3000# SA106
42	1	1 1/2" ELBOW, SOCKET WELD, 80#, 3000# ANS I 100
43	1	1 1/2" ELBOW, SOCKET WELD, 80#, 3000# ANS I 100
44	1	1 1/2" SOCKET-LET, 3000#, FOR OUTLET PIPE SIZE
45	1	VALVE, BUTTERFLY, 100MM, STEEL, FULL PORT, W/WORKING DEVICE
46	1	2" WELD FLANGE, ANS I 100, 218 W
47	1	2" WELD FLANGE, ANS I 100, 218 W

NOT SHOWN ON DRAWING



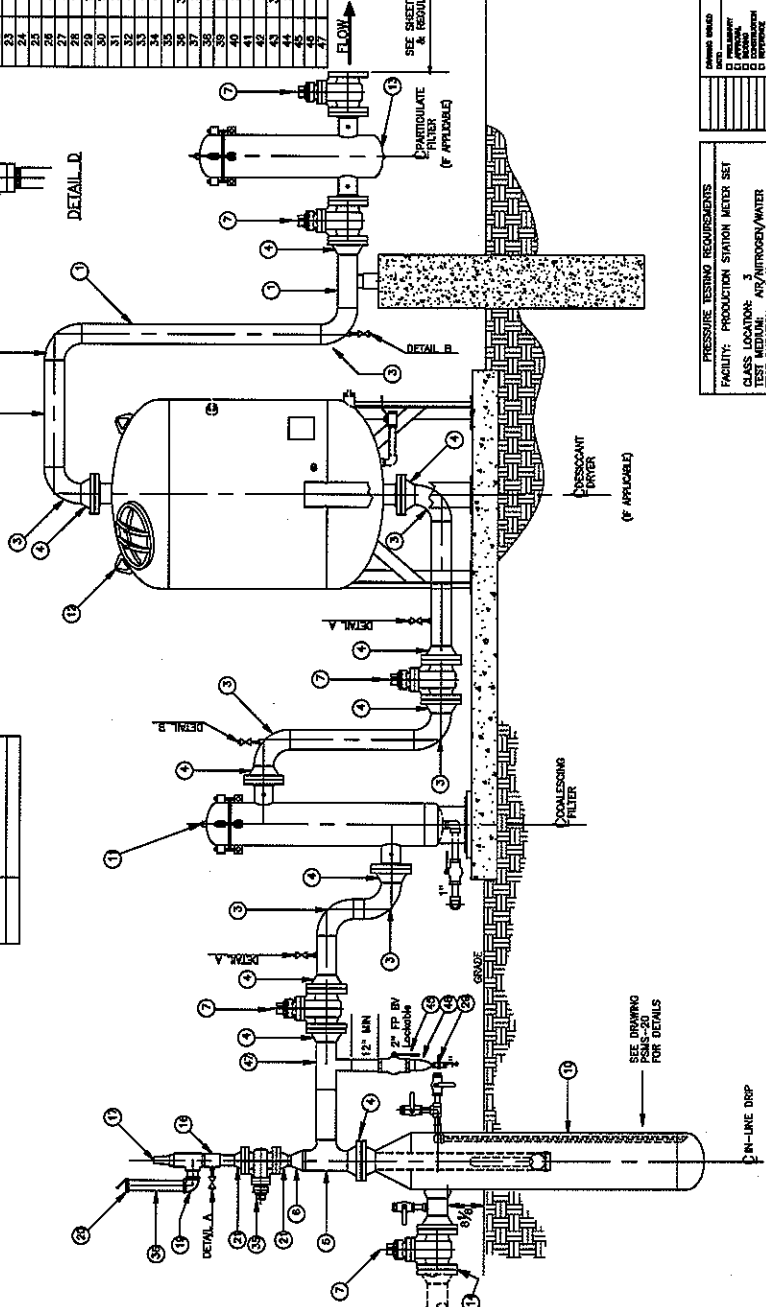
GENERAL NOTES:

1. ALL FITTINGS MUST BE INSULATED
2. BALL AND OUTLET VALVES TO BE WRAPPED IF ABOVE
3. PROTECT WITH ANS I 100 INSULATION
4. SUFFICIENT PROTECTIVE DEVICES MUST BE CONSTRUCTED
5. ALL WELDS TO BE WELDED TO TIGHTEN
6. PRODUCTION SET TO BE PRESSURE TESTED PER DOMINION SPECIFICATIONS
7. INSTALL SUFFICIENT PIPE HANGERS AND SUPPORTS
8. MAINTAIN SUFFICIENT CLEARANCE AROUND MATERIAL
9. DESSICANT DRYER AND PARTICULATE FILTER TO BE USED ONLY IF NECESSARY TO MEET WATER VAPOR REQUIREMENTS
10. INSTALL RESTRICTOR PLATE IN LOCATIONS WITH INADEQUATE FLOW (SHORT WELLS)

METER	RESTRICTOR PLATE BORE
7/8"	1 1/2"/6"

FABRICATION NOTES:

- 1) DRILL 1/4" HOLES FOR PRESSURE TAPS, (TYPICAL)
- 2) DRILL 1/4" HOLES FOR 3/4" THERMOWELLS
- 3) ALL FLANGES MUST HAVE 200 PSI MINIMUM CONTRASTRESS
- 4) ALL FITTING TO FITTING WELDS INCLUDE 1" ROOT GAP



SEE SHEET 2 FOR MEASUREMENT & REGULATION ARRANGEMENT

PRESSURE TESTING REQUIREMENTS

FACILITY: PRODUCTION STATION METER SET

CLASS LOCATION: ANY AIR/GAS/WATER

TEST DURATION: 1 HOUR

WAMP: 285 PSIG

MINIMUM TEST PRESSURE: 450 PSIG

MINIMUM TEST PRESSURE: 600 PSIG

REMARKS: NOT REQUIRED

DOMINION

PRODUCTION STANDARD METER SET

GENERAL ARRANGEMENT

3" ANS I 100 W/ ROTARY METER

DRAWING PAGE 1 OF 2

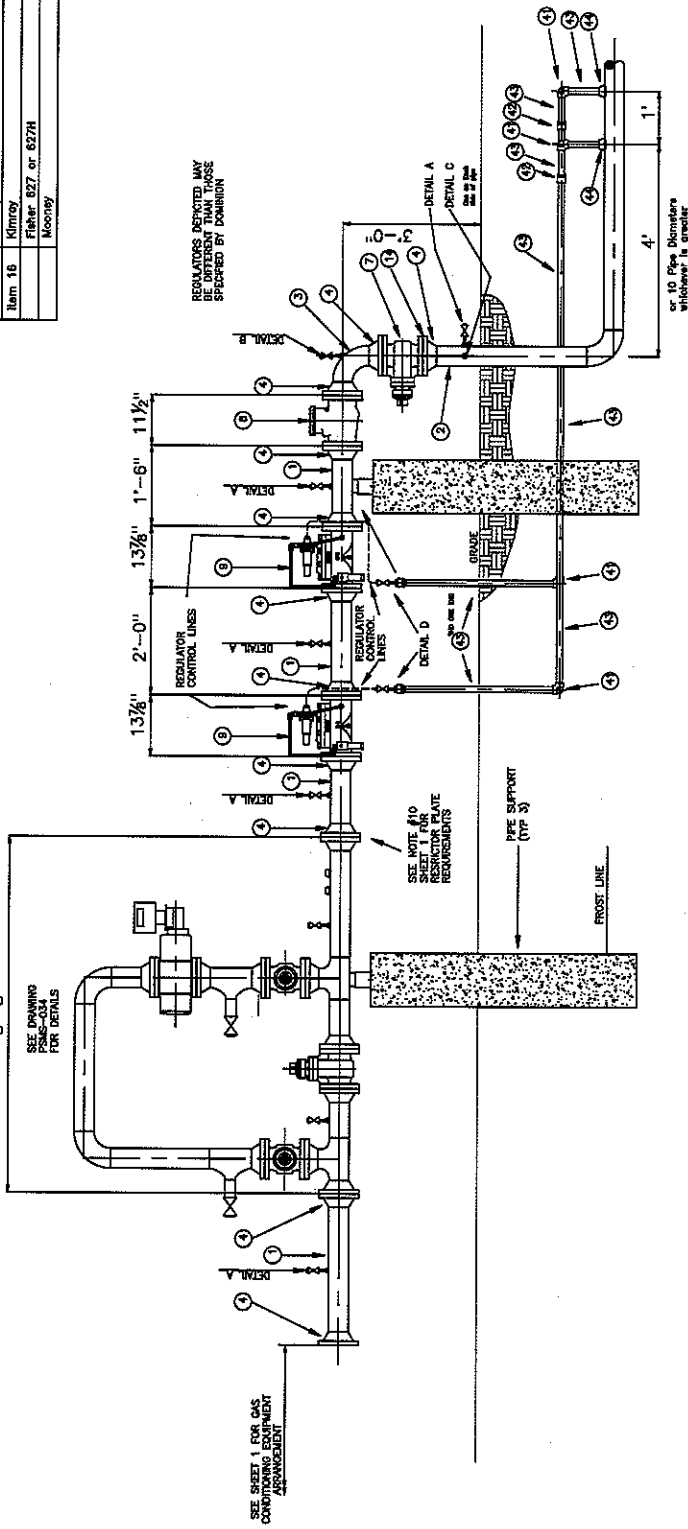
SCALE: 1"=1'-0" 12/14/05

PSMS-033

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Recommended Regulators	
Item 15	Kimray
	Fisher 627M or 627H-M
	Mooney
Item 16	Kimray
	Fisher 627 or 627H
	Mooney

ROTARY METER RUN
5'-8"



REGULATORS ASSEMBLED BY
REPUTABLE MANUFACTURER
SPECIFIED BY DOMINION

or 10 Pipe Diameter
whichever is greater

SEE SHEET 1 FOR GAS
CONDITIONING EQUIPMENT
ARRANGEMENT

SEE NOTE #10
SHEET 1 FOR
PIPE SUPPORT
REQUIREMENTS

SEE DRAWING
PSMS-034
FOR DETAILS

PRESSURE TESTING REQUIREMENTS	
FACILITY:	PRODUCTION STATION METER SET
CLASS LOCATION:	ANY AIR/GAS/WATER
TEST MEDIA:	ANY AIR/GAS/WATER
TESTING PERIOD:	1 Hour
MINIMUM TEST PRESSURE:	430 PSIG
MAXIMUM TEST PRESSURE:	600 PSIG
TEST REQUIRED:	TEST REQUIRED
SHEET:	1 OF 1

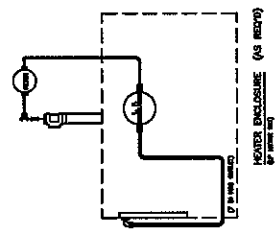
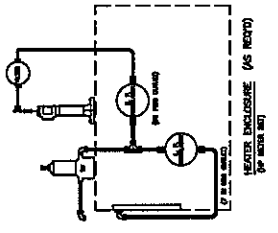
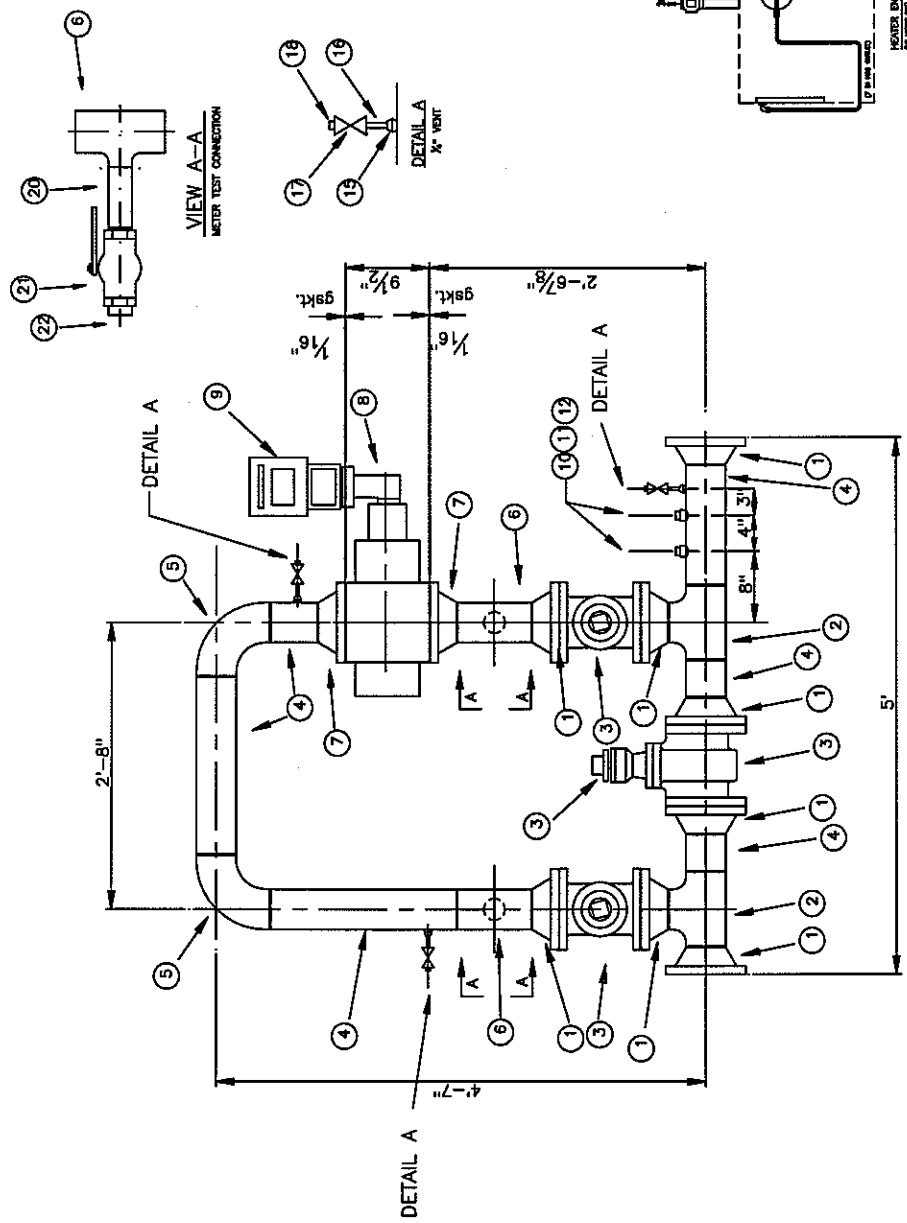
DOMINION	
PRODUCTION STATION METER SET	GENERAL ARRANGEMENT
4" GAS 150' W/ ROTARY METER	
SCALE: 1/2"=1'-0"	DATE: 03/27/05
PROJECT: PSMS-033	

BILL OF MATERIAL FOR PSMS-034.

ITEM	QTY.	DESCRIPTION
1	6	4" FLANGE, STEEL, WN. PT. 0.237IN. GRADE B, ANSI 150
2	2	4" x 4" TEE, WELD, 0.237IN. GAGE B
3	3	4" VALVE GATE OF BALL, 150, ANSI 150
4	2	4" BALL VALVE, 150, ANSI 150
5	2	4" TEE, WELD, 0.237IN. GAGE B
6	2	4" x 4" TEE, WELD, 0.237IN. GAGE B
7	2	4" x 4" TEE, WELD, 0.237IN. GAGE B
8	2	4" x 4" TEE, WELD, 0.237IN. GAGE B
9	2	4" x 4" TEE, WELD, 0.237IN. GAGE B
10	1	ROTARY METER, PRESSURE, 175 PSIG
11	1	ROTARY METER, PRESSURE, 175 PSIG
12	1	ROTARY METER, PRESSURE, 175 PSIG
13	1	ROTARY METER, PRESSURE, 175 PSIG
14	1	ROTARY METER, PRESSURE, 175 PSIG
15	1	ROTARY METER, PRESSURE, 175 PSIG
16	1	ROTARY METER, PRESSURE, 175 PSIG
17	1	ROTARY METER, PRESSURE, 175 PSIG
18	1	ROTARY METER, PRESSURE, 175 PSIG
19	1	ROTARY METER, PRESSURE, 175 PSIG
20	1	ROTARY METER, PRESSURE, 175 PSIG
21	1	ROTARY METER, PRESSURE, 175 PSIG
22	1	ROTARY METER, PRESSURE, 175 PSIG
23	1	ROTARY METER, PRESSURE, 175 PSIG
24	1	ROTARY METER, PRESSURE, 175 PSIG
25	1	ROTARY METER, PRESSURE, 175 PSIG

- FABRICATION NOTES:**
- 1) DRILL 1/4" HOLES FOR PRESSURE TAPS (TYPICAL)
 - 2) DRILL 1/4" HOLES FOR 3/4" THERMOWELLS. THERMOWELLS TO BE CENTERED ON HOLE.
 - 3) ALL FLANGE BOLT HOLES TO STRADDLE CENTERLINES.
 - 4) ALL FITTING TO FITTING WELDS INCLUDE 1/8" ROOT GAP
 - 5) FOR SOCKET WELDS LEAVE 1/16" GAP BETWEEN PIPE AND FITTING/WAVE

ELECTRONIC CORRECTOR SPECIFICATION:
MERCURY MINI-MAX AT-PT



ROTARY METER SET
(MAOP: 175 PSIG)

LEAK TEST AT 150 PSIG BEFORE
INCREASING TO FINAL TEST PRESSURE

PRESSURE TESTING REQUIREMENTS

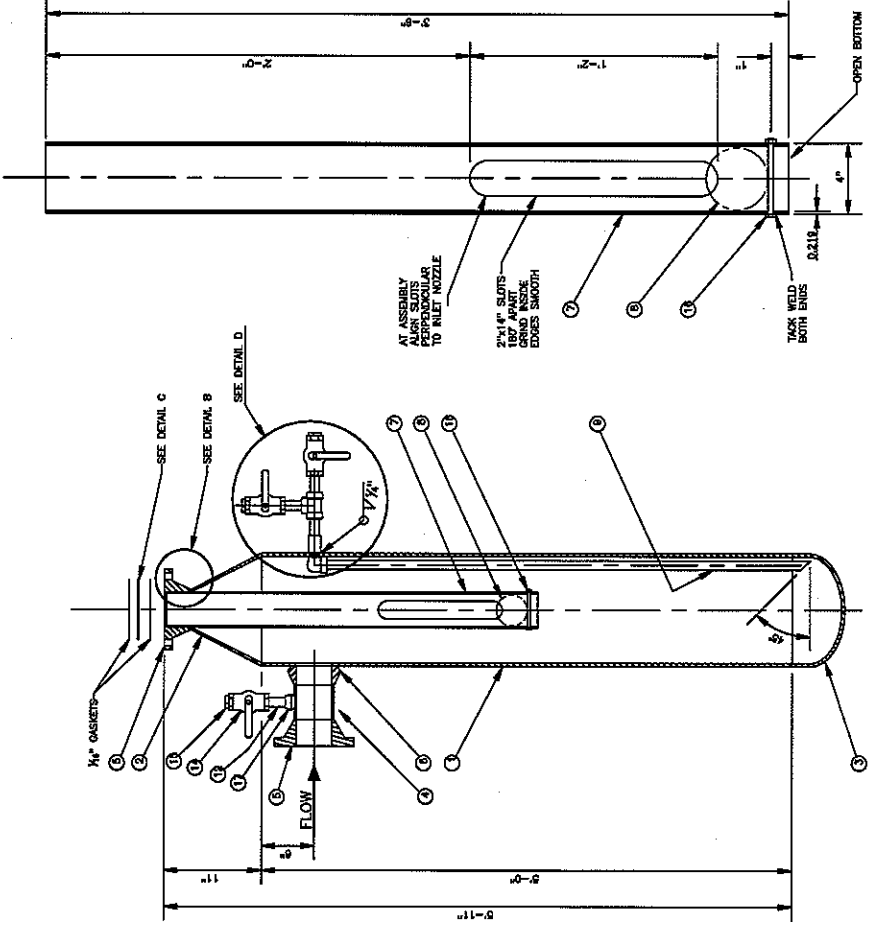
FACILITY: 2" 175 PSIG ROTARY METER RUN
CLASS LOCATION: 3" ROTACEY/WATER
TEST DURATION: 15 MIN
MAOP: 175 PSIG
TEST PRESSURE: 270 PSIG
MAXIMUM TEST PRESSURE: 400 PSIG
NOTE: NOT REQUIRED

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PROJECT NO.	111501	REV. NO.	03/07/03
DATE	03/07/03	SCALE	1" = 1'-0"
DESIGNER	...	CHECKED	...
DRAWN	...	APPROVED	...
PROJECT NAME	DOMINION		
PROJECT LOCATION	...		
PROJECT NUMBER	...		
PROJECT DESCRIPTION	...		
PROJECT STATUS	...		
PROJECT PHASE	...		
PROJECT TYPE	...		
PROJECT CLASS	...		
PROJECT CODE	...		
PROJECT ID	...		
PROJECT NO.	PSMS-034		

BILL OF MATERIAL FOR L.I.N.N. OPERATING DRIP

ITEM	QTY.	ITEM CODE	DESCRIPTION
1	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
2	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
3	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
4	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
5	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
6	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
7	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
8	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
9	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
10	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
11	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
12	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
13	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
14	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
15	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
16	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B
17	1	02027462	1/2" PIPE, STEEL, 0.375" GRADE B



SECTION THROUGH DRIP

DETAIL A
FLOAT BALL GUIDE
SCALE: 2"=1'-0"

DETAIL D
VALVE AND BLEED
SCALE: 1 1/2"=1'-0"

DETAIL B
FLOAT BALL GUIDE
& FLANGE JOINT
SCALE: 4"=1'-0"

DETAIL C
VALVE SEAT PLATE
SCALE: 3"=1'-0"

LEAK TEST AT 250 PSIG BEFORE
INCREASING TO FINAL TEST PRESSURE

NOTE: FOR SOCKET WELDS LEAVE 1/16" GAP
BETWEEN PIPE & FITTING OR VALVE

NOTE: DESIGNED TO DOT PART 192, ASME CODE STAMP IF
REQUIRED BY LOCAL, STATE, OR OTHER JURISDICTION

TESTING REQUIREMENTS
FACILITY: 12" Drip Tank - ANSI 150
CLASSIFICATION: 3
TEST MEDIA: AIR/NITROGEN/WATER
TEST PRESSURE: 1000 PSIG
MINIMUM TEST PRESSURE: 430 PSIG
MAXIMUM TEST PRESSURE: 600 PSIG
MATERIAL: NOT ASSUMED

DOMINION
PRODUCTION STATION METER SET
POSITIVE SHUT-OFF DRIP TANK
TEST PRESSURE: 1000 PSIG
12" Drip Tank - ANSI 150
SCALE: 1 1/2"=1'-0"

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PSMS-020