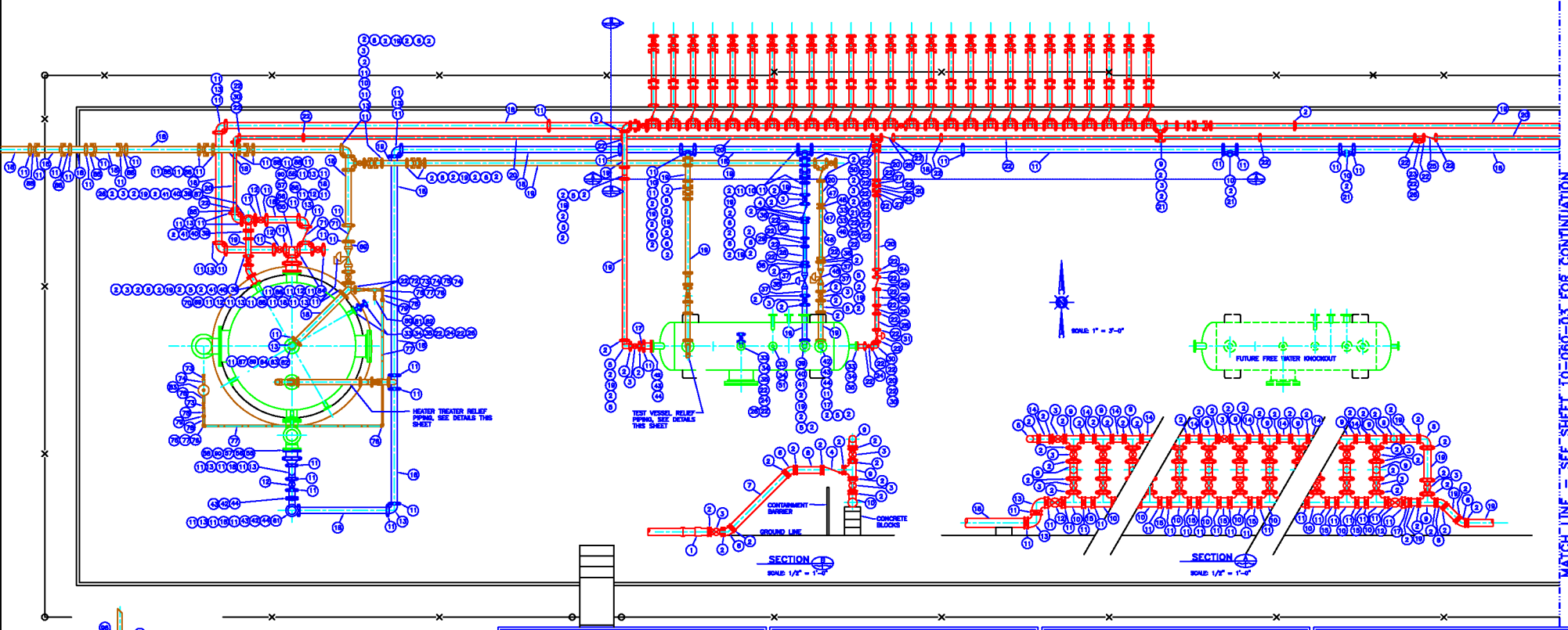
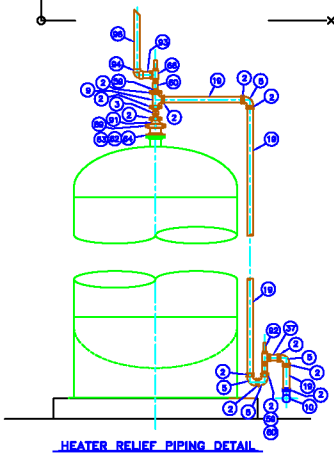
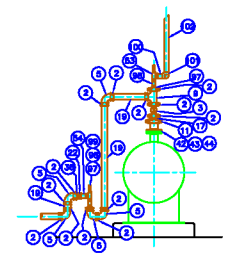




HEATER RELIEF PIPING DETAIL



TEST VESSEL RELIEF PIPING DETAIL

BILL OF MATERIAL

ITEM	QTY	DESCRIPTION
1	28	3" GROOVED STEEL X SCH-11 POLY ADAPTER
2	440	3" QUICK VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
3	92	3" SERIES 731 VICTAULIC BALL VALVE, 316SS, TRIM
4	27	3" SERIES 712 VICTAULIC CHECK VALVE, IPC, 316SS, TRIM
5	21	3" X 90° NO. 10 VICTAULIC ELL, IPC
6	73	3" X 90° NO. 11 VICTAULIC ELL, IPC
7	28	3" X 3'-0" LONG SCH. 40 STEEL GROOVED NIPPLE, IPC
8	28	3" X 1'-3" LONG SCH. 40 STEEL GROOVED NIPPLE, IPC
9	58	3" X 3" NO. 20 VICTAULIC TEE, IPC
10	32	4" X 4" X 3" NO. 25 VICTAULIC REDUCING TEE
11	130	4" QUICK VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
12	8	4" SERIES 721 VICTAULIC BALL VALVE, 316SS, TRIM
13	15	4" X 90° NO. 10 VICTAULIC ELL, IPC
14	26	3" X 6" LONG GROOVED END SCH. 40 STEEL PIPE NIPPLE, IPC
15	24	4" X 4 1/2" LONG GROOVED END SCH. 40 STEEL PIPE NIPPLE, IPC
16	1	4" X 8 1/4" LONG GROOVED END NIPPLE, IPC
17	3	4" X 3" NO. 30 VICTAULIC REDUCER, IPC
18	2307	4" SCH. 40 STEEL PIPE, IPC
19	1167	3" SCH. 40 STEEL PIPE, IPC
20	1167	3" SCH. 40 STEEL PIPE, IPC
21	4	3" NO. 50 VICTAULIC CAP, IPC
22	45	3" QUICK VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
23	2	3" X 2" NO. 20 VICTAULIC TEE, IPC
24	4	2" SERIES 721 VICTAULIC BALL VALVE, 316SS.
25	4	2" SERIES 712 VICTAULIC CHECK VALVE, IPC, 316SS. TRIM

ITEM	QTY	DESCRIPTION
26	4	2" NO. 60 VICTAULIC CAP, IPC
27	3	2" X 45° NO. 11 VICTAULIC ELL, IPC
28	4	2" X 12" LONG GROOVED END STEEL NIPPLE, SCH. 40, IPC
29	2	2" GROOVED END TURBINE METER W/MAGNETIC PICKUP & FLOW ANALYZER, 316SS.
30	3	2" X 90° NO. 10 VICTAULIC ELL, IPC
31	1	2" GROOVED END OIL DUMP VALVE
32		D E L E T E D
33	8	2"-150# ANSI RF GASKET, FLEX.
34	16	3/4"Ø X 3 1/4" LONG B-7 STUDS W/NUTS
35	3	2"-150# RF FLANGED X GROOVED VICTAULIC ADAPTER, IPC
36	4	3" X 2" NO. 60 VICTAULIC REDUCER, IPC
37	8	3" NO. 40 NPT X GROOVED VICTAULIC NIPPLE, 6" LONG, IPC
38	1	3" FNPT WATER DUMP VALVE
39	4	3"-150# ANSI RF GASKET, FLEX.
40	16	5/8"Ø X 3 1/2" LONG B-7 STUDS W/NUTS
41	4	3"-150# RF FLANGED X GROOVED VICTAULIC ADAPTER, IPC
42	8	4"-150# ANSI RF GASKET, FLEX.
43	40	5/8"Ø X 3 1/2" LONG B-7 STUDS W/NUTS
44	8	4"-150# RF FLANGED X GROOVED VICTAULIC ADAPTER, IPC
45	1	3" FNPT BACK PRESSURE VALVE
46	1	2" X 3"-4" LONG NPT X GROOVED STEEL PIPE NIPPLE, IPC
47	2	2"-150# ANSI RF THREADED FLANGE
48	1	2" HALLIBURTON GAS TURBINE FLOW METER, W/MAGNETIC PICKUP & FLOW ANALYZER
49	4	5/8"Ø X 8 1/4" LONG B-7 STUDS W/NUTS
50	1	3" X 3" X 2" NO. 25 VICTAULIC REDUCING TEE, IPC

ITEM	QTY	DESCRIPTION
51	1	3"-150# ANSI RF BLIND FLANGE
52		D E L E T E D
53	1	1" X 2" MNPT X FNPT RELIEF VALVE, SET @ 125 PSI
54	1	2" NO. 40 NPT X GROOVED VICTAULIC NIPPLE, 4" LONG, IPC
55	2	2"-150# ANSI RF GASKET, FLEX.
56	16	3/4"Ø X 4 1/4" LONG B-7 STUDS W/NUTS
57	2	2"-150# RF FLANGED X GROOVED VICTAULIC ADAPTER, IPC
58	2	2" X 2" NO. 60 VICTAULIC REDUCER, IPC
59	2	2" X 2" NO. 50 VICTAULIC REDUCER, THREADED SMALL, IPC
60	2	2" NPT PIPE COLLAR, 3000#, IPC
61	1	4"-150# ANSI RF TREATER WATER DUMP VALVE
62	2	6"-150# ANSI RF GASKET, FLEX.
63	16	3/4"Ø X 4" LONG B-7 STUDS W/NUTS
64	2	6"-150# RF FLANGED X GROOVED VICTAULIC ADAPTER, IPC
65		D E L E T E D
66	1	2" MNPT X 3" FNPT RELIEF VALVE, SET @ 125 PSI
67	1	3" X 6" NO. 50 VICTAULIC REDUCER, IPC
68	1	4" X 6" X 2" NO. 25 VICTAULIC REDUCING TEE, IPC
69	2	4" NO. NPT X GROOVED VICTAULIC NIPPLE, IPC, 6" LONG
70	1	4" FNPT BACK PRESSURE VALVE
71	2	4" SERIES 712 VICTAULIC CHECK VALVE, IPC, 316SS. TRIM
72	1	2" GROOVED X 1" MNPT SWAGE
73	3	1" FNPT BALL VALVE, 2000# WOG, 316SS.
74	3	1" X 4" LONG SCH. 40 NPT NIPPLE
75	1	1" X 1" NPT TEE, 3000#
76	8	1" X 90° NPT ELL, 3000#
77	40'	1" SCH. 40 STEEL PIPE, T&C

ITEM	QTY	DESCRIPTION
78	4	1" X 6" LONG SCH. 40 NPT NIPPLE
79	2	1" NPT HEX. UNION, 3000#
80	1	1" X 1/2" NPT HEX. REDUCING BUSHING, 3000#
81	1	1/2" X 4" LONG SCH. 40 NPT NIPPLE
82	1	1/2" FNPT BALL VALVE, 3000#
83	1	FUEL GAS SCRUBBER POT
84	1	4" NO. 50 VICTAULIC CAP, IPC
85	1	4" X 2" NO. 50 VICTAULIC REDUCER, IPC
86	2	4" X 4" NO. 30 VICTAULIC TEE, IPC
87	1	3"-150# ANSI RF TREATER DUMP VALVE
88	8	4" X 45° NO. 11 VICTAULIC ELL, IPC
89	1	6" QUICK VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
90	2	6" QUICK VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
91	1	6" X 3" NO. 50 VICTAULIC REDUCER, IPC
92	1	2" MNPT X 3" FNPT RELIEF VALVE, SET @ 150 PSI
93	1	3" X 6" LONG SCH. 40 NPT NIPPLE
94	1	3" X 90° NPT ELL, 3000# WITH 1/8" DIA. WEEP HOLE
95		D E L E T E D
96	1	3" X 36" LONG NPT X GROOVED VICTAULIC NIPPLE, IPC, 6" LONG
97	2	3" X 1" NO. 52 VICTAULIC REDUCER, THREADED SMALL, IPC
98	2	1" NPT PIPE COLLAR, 3000#, IPC
99	1	1" MNPT X 2" FNPT RELIEF VALVE, SET @ 120 PSI
100	1	2" X 4" LONG NPT NIPPLE, SCH. 40
101	1	2" X 90° NPT ELL, 3000# WITH 1/8" DIA. WEEP HOLE
102	1	2" X 36" LONG SCH. 40 NPT NIPPLE

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REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	REVISION	DESCRIPTION
1/19/11	1	REMOVE RELIEF LINE AND ROUTE VESSEL RELIEF VALVES INTO HEATER DUMP LINE
3/4/11	2	REMOVE VESSEL RELIEF PIPING

Apache CORPORATION

APACHE
ARTESIA AREA
STATE "A" LEASE BATTERY
EDDY COUNTY, NEW MEXICO

WEST END
PIPING PLAN LAYOUT

DRAWN BY: p.j.b.
CHECKED BY:
DATE: 1/19/11
DRAWING NO. 11-018-02