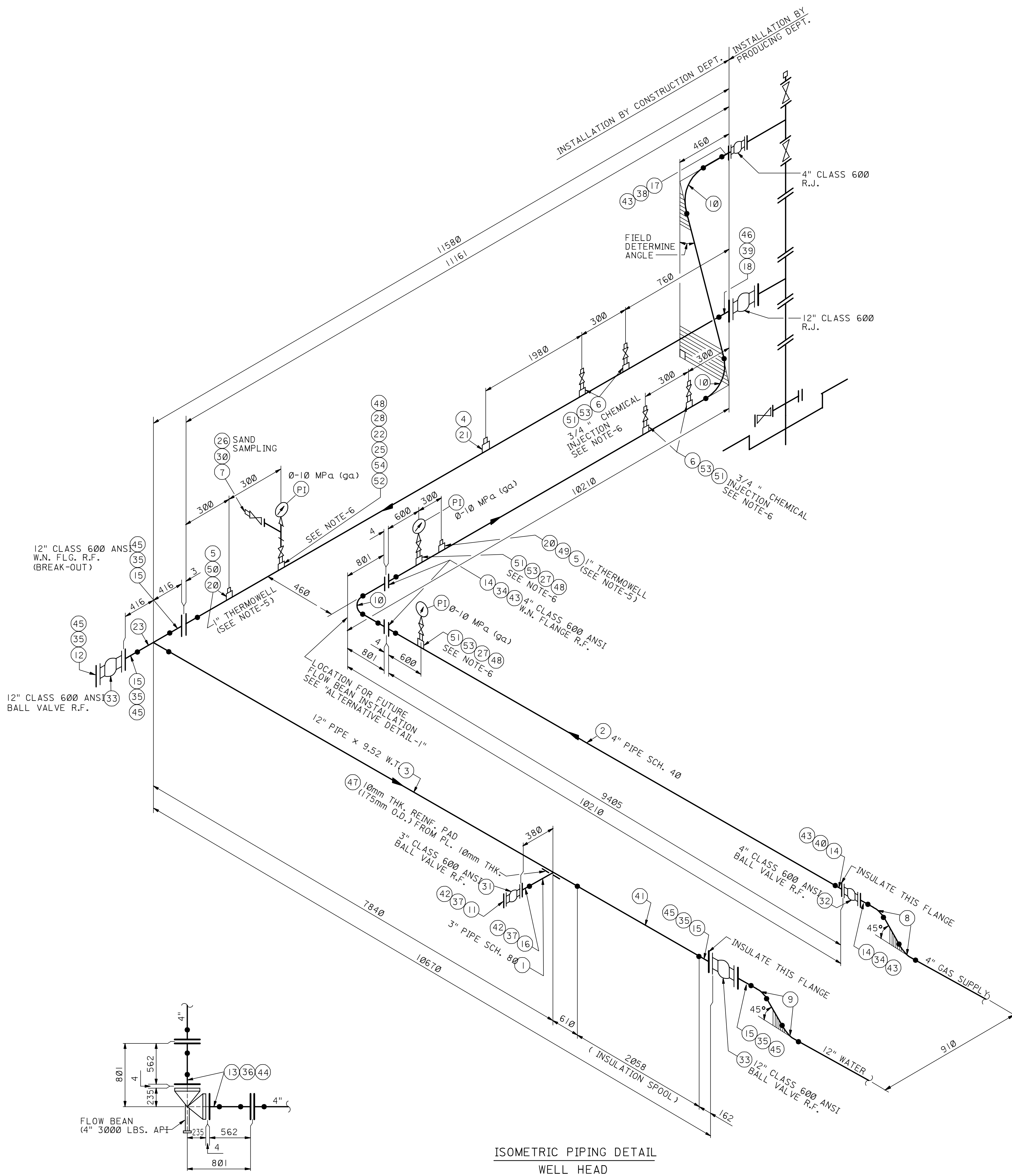


990	PLANT NO.	INDEX	DRAWING NUMBER	001	REV. NO.
-----	-----------	-------	----------------	-----	----------



LIST OF MATERIAL (FOR ONE WELLHEAD PIPING INSTALLATION ONLY)				
ITEM CODE	AMS STOCK NUMBER	QTY.	ISSUE UNIT	DESCRIPTION
1	01-167-275	1	FT.	PIPE: STL.; API 5-L; GR. B; 3" ; 7.5mm WT
2	01-167-390	75	FT.	PIPE: STL.; API 5-L; GR. B; 4" ; 8.425mm WT
3	01-167-785	72	EA.	PIPE: STL.; API 5-L; GR. B; 12" x 9.52mm W.T.
4	02-116-009	1	EA.	PLUG: BULL; SEAMLESS STEEL; 2"
5	02-120-458	2	EA.	PLUG: PIPE; BAR STOCK STEEL; 1/2 "
6	02-120-460	4	EA.	PLUG: PIPE; BAR STOCK STEEL; 3/4 "
7	02-120-461	1	EA.	PLUG: PIPE; BAR STOCK STEEL; 1"
8	02-276-842	2	EA.	ELBOW: B.W.; C.S.; STD.; 45°; 4"
9	02-276-866	2	EA.	ELBOW: B.W.; C.S.; STD.; 45°; 12"
10	02-277-227	3	EA.	ELBOW: B.W.; C.S.; STD.; 90°; L.R.; 4"
11	02-377-212	1	EA.	FLANGE: BLIND; F.S.; R.F.; CLASS 600;3"
12	02-377-232	1	EA.	FLANGE: BLIND; F.S.; R.F.; CLASS 600;12"
13	02-393-611	2*	EA.	FLANGE: W.N.; F.S.; R.J.F.; CLASS 3000 LBS.; API; 4" ; 3.624" BORE
14	02-395-450	6	EA.	FLANGE: W.N.; F.S.; R.F.; CLASS 600; 4"
15	02-395-466	5	EA.	FLANGE: W.N.; F.S.; R.F.; CLASS 600; 12"
16	02-395-446	1	EA.	FLANGE: W.N.; F.S.; R.F.; CLASS 600; 3"
17	02-389-967	1	EA.	FLANGE: W.N.; F.S.; R.J.F.; CLASS 600; 4"
18	02-395-987	1	EA.	FLANGE: W.N.; F.S.; R.J.F.; CLASS 600; 12"
19	02-455-404	6	EA.	BOSS: WELDING; C.S.; 3/4 "
20	02-455-408	3	EA.	BOSS: WELDING; C.S.; 1"
21	02-455-422	1	EA.	BOSS: WELDING; C.S.; 2"
22	02-592-724	1	EA.	TEE: THREADED; C.S.; 3000 LBS.; 1"
23	02-605-115	1	EA.	TEE: B.W.; C.S.; STD.; 12"
24	02-672-204	6	EA.	NIPPLE: PIPE;STEEL; EX. STG.; 3/4 " x 75mm LG.
25	02-672-246	2	EA.	NIPPLE: PIPE;STEEL; EX. STG.; 1" x 65mm LG.
26	02-672-258	1	EA.	NIPPLE: PIPE;STEEL; EX. STG.; 1" x 100mm LG.
27	02-698-460	2	EA.	NIPPLE: SWAGED; STEEL; CONC.; EX. STG.; 3/4 " x 1/2 "
28	02-698-479	1	EA.	NIPPLE: SWAGED; STEEL; CONC.; EX. STG.; 1" x 1/2 "
29	04-237-832	6	EA.	VALVE: GATE; THREADED; STEEL; CLASS 800; 3/4 "
30	04-237-834	2	EA.	VALVE: GATE; THREADED; STEEL; CLASS 800; 1"
31	04-XXX-XXX	1	EA.	VALVE: BALL; FLANGED;R.F.; CLASS 600; 3"
32	04-XXX-XXX	1	EA.	VALVE: BALL; FLANGED;R.F.; CLASS 600; 4"
33	04-XXX-XXX	1	EA.	VALVE: BALL; FLANGED;R.F.; CLASS 600; 12"
34	06-XXX-XXX	3	EA.	GASKET: RING; SP. WOUND; FOR 4" CLASS 600; R.F. FLANGE
35	06-XXX-XXX	5	EA.	GASKET: RING; SP. WOUND; FOR 12" CLASS 600; R.F. FLANGE
36	06-142-724	2*	EA.	GASKET: R.J.; NO. RX-37-S; FOR 4" CLASS 3000 LBS. API; R.J. FLANGE
37	06-XXX-XXX	2	EA.	GASKET: R.J.; NO. R31; FOR 3" CLASS 600 R.F. FLANGE
38	06-143-760	1	EA.	GASKET: R.J.; NO. R37; FOR 4" CLASS 600 R.J. FLANGE
39	06-143-789	1	EA.	GASKET: R.J.; NO. R57; FOR 12" CLASS 600 R.J. FLANGE
40	06-256-370	1	ST.	INSULATING SET: FLANGE; CLASS 600 R.F.; 4"
41	DIRECT CHARGE	1	ST.	INSULATING SPOOL: PER 02-AMSS-8
42	10-354-454	16	EA.	BOLT: STUD; STEEL; 3/4 " DIA. x 127mm LG.
43	10-354-550	40	EA.	BOLT: STUD; STEEL; 7/8 " DIA. x 152mm LG.
44	10-355-688	16*	EA.	BOLT: STUD; STEEL; 1 1/8 " DIA. x 178mm LG.
45	10-355-787	100	EA.	BOLT: STUD; STEEL; 1 1/4 " DIA. x 216mm LG.
46	10-355-793	20	EA.	BOLT: STUD; STEEL; 1 1/4 " DIA. x 229mm LG.
47	12-061-035	1	SF	PLATE: STEEL; CARBON; 10mm THK.; NON STD.
48	34-325-277	3	EA.	GAUGE: PRESS; 0-10 MPa (gax) 1/2 " BOTTOM CONNECTION
49	34-465-554	1	EA.	THERMOWELL: SST; 1" MALE; 1/2 " FEMALE; 140mm O/ALL LG.
50	34-465-582	1	EA.	THERMOWELL: SST; 1" MALE; 1/2 " FEMALE; 305mm O/ALL LG.
51	02-457-288	6	EA.	BOSS: WELDING; SOCKET; WELD; STEEL; CLASS 3000; 3/4 "
52	02-457-277	1	EA.	BOSS: WELDING; SOCKET; WELD; STEEL; CLASS 3000; 1"
53	04-XXX-XXX	6	EA.	VALVE: GATE; MALE SOCKET BY FEMALE THREAD; CLASS 600; 3/4 "
54	04-XXX-XXX	1	EA.	VALVE: GATE; MALE SOCKET BY FEMALE THREAD; CLASS 600; 1"

NOTES

1. GRIND FLUSH INSIDE WELD OF FLANGE ON 3" BRANCH OF KILL CONNECTION.

2. ORIENTATION OF WELLHEAD & CONNECTING PIPING TO BE DETERMINED IN FIELD.

3. INSTALL THERMOWELL IN ACCORDANCE WITH STD. DWG. AB-036019.

4. WELDING BOSS SOCKET-WELD WITH MALE SOCKET BY FEMALE THREADED GATE VALVE IS PREFERRED. USE WELDING BOSS FEMALE THREAD DRAWING CODE (19) OR (20) NIPPLE PIPE STEEL DRAWING CODE (24) OR (25) AND THREADED GATE VALVE DRAWING CODE (29) OR (30) AS AN ALTERNATIVE. SEAL WELD ALL THREADED FITTINGS UP TO AND INCLUDING THE FIRST BLOCK VALVE.

5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

ORE

REFERENCE DRAWINGS

ASSEMBLY & DETAIL OF THERMOWELL

AB-036019

STANDARD INSULATING SPOOL

AE-036455

NCE

4 "

TYPICAL INSTALLATION DRAWING

05

02-16-87

RLO

CONSOLIDATED SH. 1&2 INTO SH. 1 METRIC VERSION ONLY, ADDED TYP. INSTALL. DWG.

REV. NO.

DATE

BY

DESCRIPTION

CHKD

CERT.

APPD.

FOR ARABIAN AMERICAN OIL COMPANY

DRAWN BY F.U.B. CHECKED BY SCALE: NONE

DATE STARTED DATE COMPLETED 04-09-74

OPR'G. DEPT. ORIGINAL SIGNED ENG. DEPT.

APP'D. FOR CONST. 05-15-76

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNLESS CERTIFIED AND DATED

CERTIFIED DATE

WELLHEAD PIPING

GAS LIFT WATER SUPPLY

STD. DWG.

METRIC

PLANT NO.

INDEX

DRAWING NUMBER

SHT. NO.

REV. NO.

990

L

AA-036463

001

05

ARAMCO A-2515 111-84
CAD