

NOTES:

- CONTRACTOR TO DECIDE ON FIELD WELDS AND EXTRA SPOOL LENGTH WHEREVER NECESSARY.
- WELD NO. (1) TO (11)

BILL OF MATERIAL

FABRICATION MATERIALS

PT NO	COMPONENT DESCRIPTION	N. S. (INS)	PIPE SPEC.	QTY
1	PIPE SMLS BE XS A106 GR. B, NACE	14	B1	0.7M
2	PIPE SMLS BE SCH 80 A106 GR. B, NACE	2	B1	1.8M
3	WELDOLET XS A105, NACE	14 x 2	B1	1
4	WELDOLET XS x SCH 160 A105, NACE	14 x 3/4	B1	2
5	90 DEG LR ELBOW SMLS BW SCH 80 A234 GR. WPB, NACE	2	B1	2
6	FLANGE 300LB WN RF XS A105, NACE	14	B1	2
7	FLANGE 300LB WN RF SCH 80 A105, NACE	2	B1	2

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	N. S. (INS)	PIPE SPEC.	QTY
8	SPEC BLIND 300LB RF 34mm THK A105, NACE	14	B1	1
9	75mm LG PIPE NIPPLE TDE SCH 160 A106 GR. B, NACE	3/4	B1	1
10	PLUG SCRD 3000LB A105, NACE	3/4	B1	1
11	SPIRAL WOUND GASKET 300LB RF 4.5mm THK SS316 WINDING/GRAPHITE FILLER W/3mm THK CS CENTERING RING, ZINC COATED	14	B1	4
12	SPIRAL WOUND GASKET 300LB RF 4.5mm THK SS316 WINDING/GRAPHITE FILLER W/3mm THK CS CENTERING RING, ZINC COATED	2	B1	2
13	224 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	1.1/8	B1	20
14	185 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	1.1/8	B1	20
15	95 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	5/8	B1	16
16	BALL VALVE 300LB RF, BV-26 (FB)	14	B1	1
17	BALL VALVE THREADED (LC) PER PIPING SPEC. B1	3/4	B1	1
18	901SDV 110	14	B1	1
19	901SDV 111	2	B1	1

SUPPORTS

20	STD TTI CLAMP	14	B1	1
21	STD TTI CLAMP	2	B1	1

"AS - BUILT"

X0	AS BUILT	AR	RAGU	SD	09.04.12
3	AS BUILT	FT	BS	SD	07.06.10
2	REVISED DUE TO TIE-IN POINT LOCATION	FT	BS	SD	14.05.08
1	REVISED PER P&ID CHANGES	NN	CG	SD	17.04.08
0	APPROVED FOR CONSTRUCTION	SHU	CG	SD	27.03.08
REV. NO	DESCRIPTION OF REVISION	BY	CHK'D	APP'D	DATE

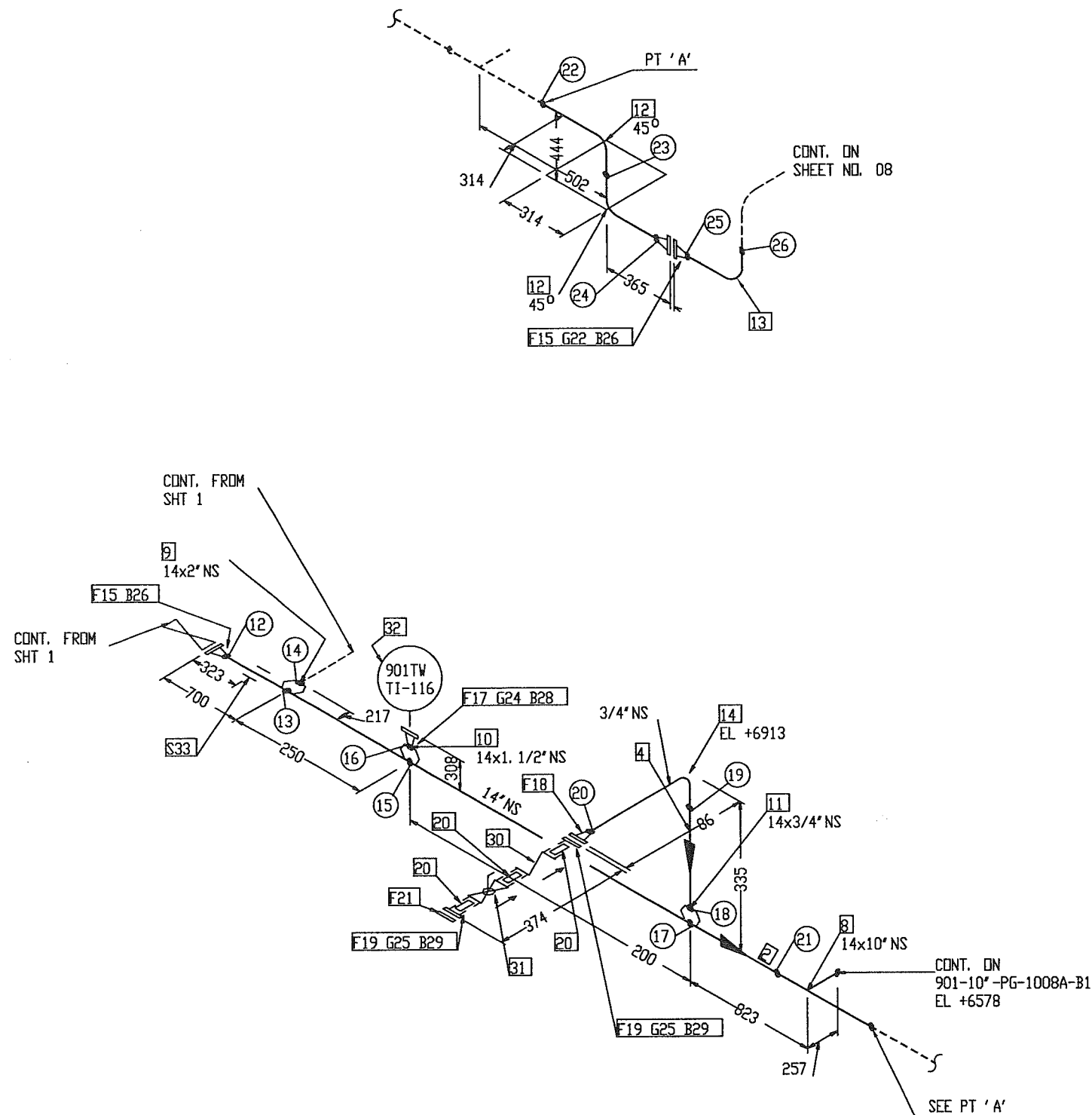
CLIENT :	OOG FPSO
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PROJECT :	FPSO CIDADE DEITAJAI	JOB NO.	21-9791
TITLE :	PIPING ISOMETRIC	QUANTITY :	1
LIE NO	901-14"-PG-1000A-B1 (SHT.1/2) 901-14"-PG-1000B-B1 (SHT.1/2)	CLASS :	ABS
PROJECT	ES	7000-04-L-26-XN-05121	

DESIGN DATA FOR MAIN LINE

1. DESIGN PRESSURE	: 43.8 BARG
2. OPERATING TEMPERATURE	: 49° C
3. HYDROSTATIC TEST PRESSURE	: 65.7 BARG
4. CORROSION ALLOWANCE	: 1/8"
5. RADIOGRAPHY	: 100%
6. INSULATION	: NO
7. INSPECTION BY	: GSI (QC)
8. PWHT	: NO

BSI DISCIPLINE SIGN	APPROVED BY	SD
PROCESS	AK	BS
MECHANICAL	VC	BS
PIPING	WCH	RAGU
STRUCTURAL	WCH	N.T.S
E & I	AK	
PROJECT	ES	G375-5121-06_X0
JOB NO.	G375	GSI-G375-5121
SHT	06	X0
WASCO	Gas Services International (S) Pte Ltd	
JSL	JURONG SHIPYARD PTE LTD	
ENGINEERING DEPARTMENT	XXX	SECTION



"AS - BUILT"

NOTES:

- CONTRACTOR TO DECIDE ON FIELD WELDS AND EXTRA SPOOL LENGTH WHEREVER NECESSARY.
- WELD NO. 12 TO 26

DESIGN DATA	
DESIGN PRESSURE	: 43.8 BARG
OPERATING TEMPERATURE	: 49° C
HYDROSTATIC TEST PRESSURE	: 65.7 BARG
CORROSION ALLOWANCE	: 1/8"
RADIOGRAPHY	: 100%
INSULATION	: NO
INSPECTION BY	: GSI (QC)
PWHT	: NO

BILL OF MATERIAL

PT NO	COMPONENT DESCRIPTION	N. S. (INS)	PIPE SPEC.	QTY
1	DELETED			
2	PIPE SMLS BE XS A106 GR. B, NACE	14	B1	3.8M
3	DELETED			
4	PIPE SMLS BE SCH 160 A106 GR. B, NACE	3/4	B1	0.1M
5	DELETED			
6	DELETED			
7	DELETED			
8	REDUCING TEE BW XS A234 GR. WPB, NACE	14 x 10	B1	1
9	WELDOLET XS A105, NACE	14 x 2	B1	1
10	WELDOLET XS x SCH 160 A105, NACE	14 x 1.1/2	B1	1
11	WELDOLET XS x SCH 160 A105, NACE	14 x 3/4	B1	1
12	45 DEG ELBOW SMLS BW XS A234 GR. WPB, NACE	14	B1	2
13	90 DEG ELBOW SMLS BW XS A234 GR. WPB, NACE	14	B1	1
14	90 DEG LR ELBOW SMLS BW SCH 160 A234 GR. WPB, NACE	3/4	B1	1
15	FLANGE 300LB WN RF XS A105, NACE	14	B1	3
16	DELETED			
17	FLANGE 600LB WN RF SCH 160 A105, NACE	1.1/2	B1	1
18	FLANGE 300LB WN RF SCH 160 A105, NACE	3/4	B1	1
19	FLANGE 300LB SCRD RF SCH 160 A105, NACE	3/4	B1	2

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	N. S. (INS)	PIPE SPEC.	QTY
20	75mm LG PIPE NIPPLE TBE S160 A106 GR. B, NACE	3/4	B1	3
21	BLIND FLANGE 300LB RF A105, NACE	3/4	B1	1
22	SPIRAL WOUND GASKET 300LB RF 4.5mm THK SS316 WINDING/GRAPHITE FILLER W/3mm THK CS CENTERING RING, ZINC COATED	14	B1	1
23	DELETED			
24	SPIRAL WOUND GASKET 600LB RF 4.5mm THK SS316 WINDING/GRAPHITE FILLER W/3mm THK CS CENTERING RING, ZINC COATED	1.1/2	B1	1
25	SPIRAL WOUND GASKET 300LB RF 4.5mm THK SS316 WINDING/GRAPHITE FILLER W/3mm THK CS CENTERING RING, ZINC COATED	3/4	B1	2
26	185 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	1.1/8	B1	40
27	DELETED			
28	115 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	3/4	B1	4
29	80 MM LG STUD BOLTS C/W NUTS A193 GR. B7/A194 GR. 2H HOT-DIP GALV. COATED	5/8	B1	8
30	CHECK VALVE THREADED PER PIPING SPEC. B1	3/4	B1	1
31	BALL VALVE THREADED PER PIPING SPEC. B1	3/4	B1	1
32	901TW TI-116	1.1/2		1
33	STD TTI CLAMP	14	B1	4

REV. NO	DESCRIPTION OF REVISION	BY	CHKD	APPD	DATE
1	REVISED PER P&ID CHANGES	NN	CG	SD	17.04.08
2	REVISED DUE TO TIE-IN POINT LOCATION	NN	CG	SD	14.05.08
3	AS BUILT	FT	BS	SD	07.06.10
4	MODIFIED & ISSUED FOR CONSTRUCTION	RAGU	BS	SD	02.03.11
X0	AS BUILT	AR	RAGU	SD	09.04.12

CLIENT: **OOG TK FPSO**

PROJECT:	FPSO CIDADE DEITAJÁ	JOB NO.	21-9781
TITLE:	PIPING ISOMETRIC	QUANTITY:	1
LINE NO	901-14"-PG-1000A-B1 (SHT.2/2) 901-14"-PG-1000B-B1 (SHT.2/2)	CLASS:	ABS
PROJECT	EG	TOP/REVISION NO.	7000-04-L-26-XN-05121

BSI DISCIPLINE SIGN	APPROVED BY	SD
PROCESS	AR	CHKD BY
MECHANICAL	VC	BS
PIPING	WH	RAGU
STRUCTURAL	WCH	SCALE
E & I	AK	N.T.S
PROJECT	EG	ACAD DIS
PROJECT	EG	G375-5121-07_JD
JOB NO.	6375	BSI DIS. NO.
BSI DIS. NO.	GSI-G375-5121	SHT
SHT	07	REV
REV	X0	

JURONG SHIPYARD PTE LTD
(A subsidiary of SembCorp Marine Ltd)
ENGINEERING DEPARTMENT XXX SECTION

