

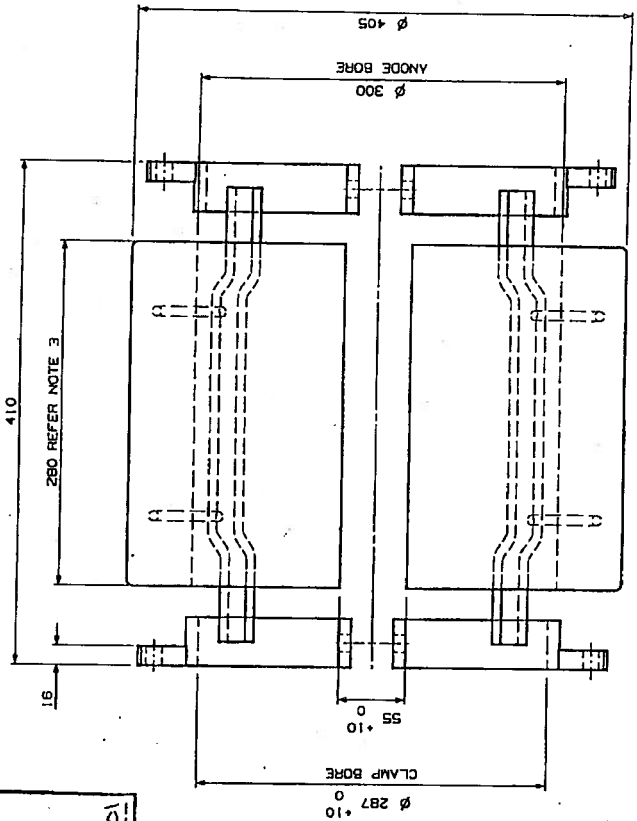
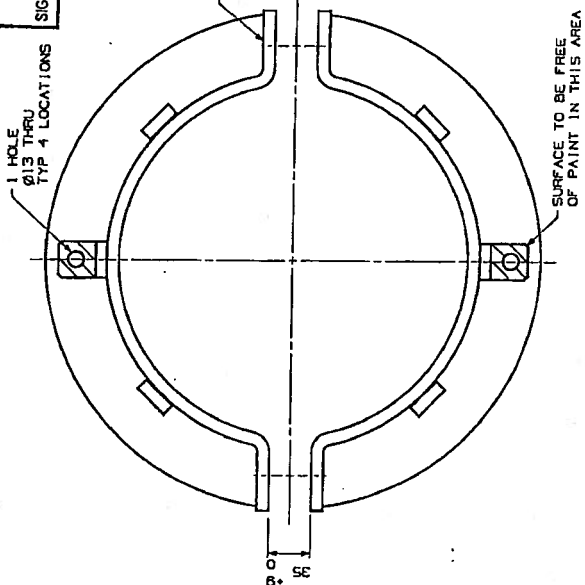
Woodside Energy

DRAWING NUMBER	REVISION
5210007040	0

(1) No comments - Submit Certified Final
 (2) Comment as noted - Revise and submit Certified Final
 (3) Unacceptable - Revise and Resubmit
 (4) Comments as Noted - Resubmission Not Required
 (5) Approved Final
 (6) As Built

Acceptance in any of these categories in no way releases the Contractor / Supplier of his responsibility for the due and proper performance of the Works in accordance with the Contract / Purchase Order.

for
 Woodside Energy
 SIG *R. D. Duncan* DATE 15/10



NOTES:

1. STEEL INSERT MATERIAL SHALL BE AS PER ASTM A36 OR EQUIVALENT.
2. THE INSIDE OF THE ANODES FACING THE PIPE SHALL BE PAINTED WITH EPOXY PAINT OF MINIMUM DRY THICKNESS OF 100 MICRONS.
3. ANODE LENGTH TO BE ADJUSTED TO GIVE A NET ANODE MATERIAL WEIGHT OF 42.2kg ± 1
4. THE NET AND GROSS WEIGHT INCLUDING TOLERANCE, AND DIMENSIONAL TOLERANCE OF FINISHED ANODES AS PER PURCHASE SPECIFICATION, SHALL BE INCLUDED ON THE DEFINED ANODE DRAWINGS SUPPLIED BY THE VENDOR

111 No comments - Submit Certified Final.
 112 Comment as noted - Revise and Submit Certified Final.
 113 Unacceptable - Revise and Resubmit.
 114 Comments as Noted - Resubmission Not Required.
 115 Approved Final.
 116 As Built.

Signature: _____
 Date: _____

DESIGNER	DATE	REVISION	BY
1	15/10	0	

REVISIONS

NO.	DATE	DESCRIPTION
1	15/10	ISSUED FOR CONSTRUCTION
2		ISSUED FOR APPROVAL
3		ISSUED FOR TENDER/PRICE

APPROVED FOR CONSTRUCTION

DATE	BY	FOR
15/10		

APPROVED FOR APPROVAL

DATE	BY	FOR

APPROVED FOR TENDER/PRICE

DATE	BY	FOR

APPROVED FOR CONSTRUCTION

LEGENDRE LEG. Doc. No: LR-14-DL-011
 5210007040 Rev: 0

COFLEXIP STENA OFFSHORE
ASIA PACIFIC PTY. LTD.

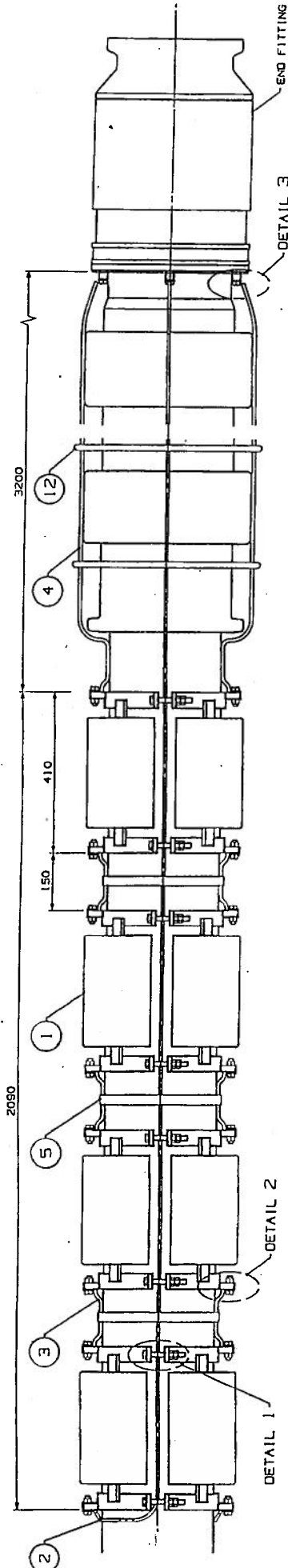
TITLE: GENERAL ARRANGEMENT BRACELET ANODE PRODUCTION FLOW LINE

SCALE: 1:1

DATE: 15/10

PROJECT: 71054-DWG-20-0003

NOTES:
1. LENGTHS ARE NOMINAL.



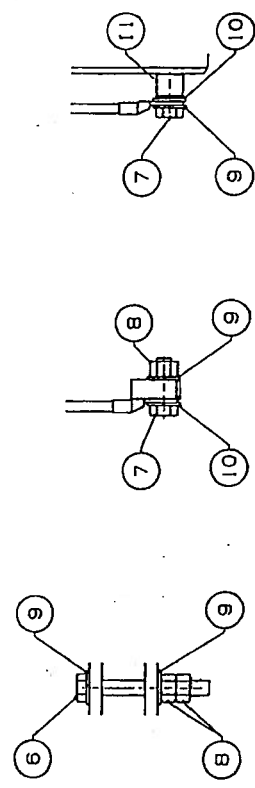
Woodside Energy
DRAWING NUMBER: **221001-5071** REVISION: **0**

(1) No comments - Submit Certified Final
(2) Comment as noted - Revise and submit Certified Final
(3) Unacceptable - Revise and Resubmit
(4) Comments as Noted - Resubmission Not Required
(5) Approved Final
(6) AS BUILT

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for
Woodside Energy

SIG: *[Signature]* DATE: **12/29**



QTY	DESCRIPTION	UNIT	AS REQUIRED
12	POLY ROPE		AS REQUIRED
11	1 SPACER	STEEL PIPE	ZINC COATED
10	20 4 WASHER	10 SUIT M12 BOLT	ZINC COATED
9	52 12 FLAT WASHER	10 SUIT M12 BOLT	ZINC COATED
8	48 12 NUT M12	AS LISTED	ZINC COATED
7	20 4 HEX HEAD SCREW M12 X 40 LONG	AS LISTED	ZINC COATED
6	16 4 HEX HEAD SCREW M12 X 100 LONG	AS LISTED	ZINC COATED
5	ADHESIVE TAPE	CLASS 4.5	AS REQUIRED
4	1 CABLE L-4000mm	COPPER WIRE 25mm ²	
3	1 CABLE L-3000mm	COPPER WIRE 25mm ²	
2	1 CABLE L-6500mm	COPPER WIRE 25mm ²	
1	1 BRACELET ANODE	AL-ZN-IN	AS REQUIRED

LEGENDRE LEG. Doc. No: **LR-18-05-009** Rev: **0**

COFLEXIP STENA OFFSHORE ASIA PACIFIC PTY. LTD.

TITLE: **ANODE INSTALLATION DRAWING**

SCALE: **8.5" PRODUCTION FLOWLINE**

DATE: **7/10/2017**

PROJECT: **71064-DWG-20-0033**

NO.	DESCRIPTION	DATE	BY	CHKD	APP'D
1	ISSUED FOR CONSTRUCTION	20/06/17	JL	JL	JL
2	ISSUED FOR APPROVAL	20/06/17	JL	JL	JL
3	ISSUED FOR APPROVAL	20/06/17	JL	JL	JL
4	ISSUED FOR APPROVAL	20/06/17	JL	JL	JL

REFER TABLE: **C2**

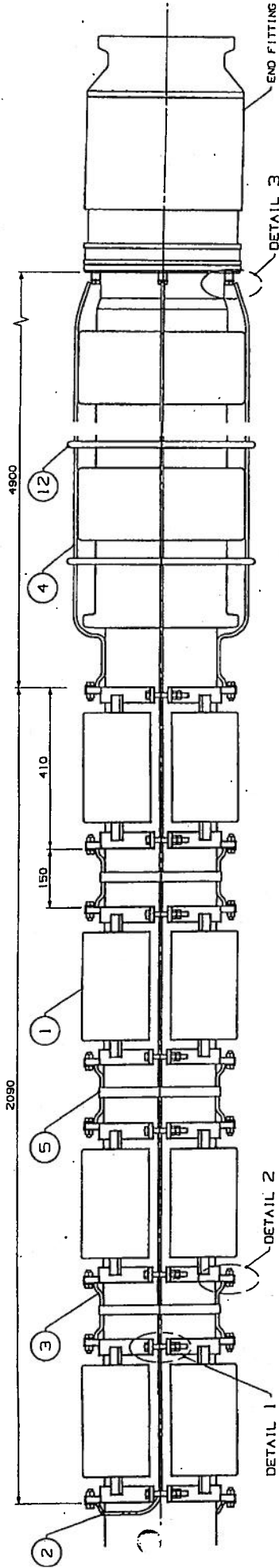
REVISION: **0**

111 No comments - Submit Certified Final
112 Comment as noted - Revise and submit Certified Final
113 Unacceptable - Revise and Resubmit
114 Comments as Noted - Resubmission Not Required
115 Approved Final
116 AS BUILT

Signature: _____
Date: _____

NOTES:

1. LENGTHS ARE NOMINAL.
2. SPARE BRACKET ANODE IS FOR COMPLETE FLOWLINE AND MAY BE USED AT MOPU OR PLEM END.



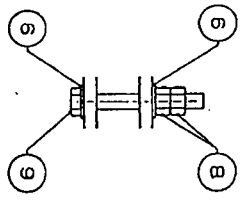
Woodside Energy
DRAWING NUMBER 22100DM041
REVISION 0

(1) No comments - Submit Certified Final
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 (3) Unacceptable - Revise and Resubmit
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 (6) As Built

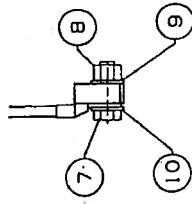
Acceptance in any of these categories in no way releases the Contractor / Supplier of his responsibility for the due and proper performance of the Works in accordance with the Contract / Purchase Order.

for
Woodside Energy

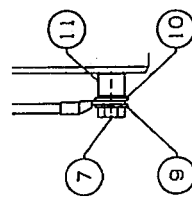
SIG: *[Signature]* DATE: *[Date]*



DETAIL 1
TYP 16 LOCATIONS



DETAIL 2
TYP 16 LOCATIONS



DETAIL 3
TYP 4 LOCATIONS

Drawn No.	Rev	Part	Description	Material	Remarks
7104-066-20-003	11	4	1	POLY ROPE	AS REQUIRED
7104-066-20-003	11	4	1	SPACER	STEEL PIPE ZINC COATED
7104-066-20-003	10	20	4	WASHER TO SUIT M12 BOLT	ZINC COATED
7104-066-20-003	9	52	12	FLAT WASHER TO SUIT M12 BOLT	ZINC COATED
7104-066-20-003	8	48	12	NUT M12	AS 1110 ZINC COATED
7104-066-20-003	7	20	4	WASHER TO SUIT M12 BOLT	AS 1110 ZINC COATED
7104-066-20-003	6	16	4	WASHER TO SUIT M12 BOLT	AS 1110 ZINC COATED
7104-066-20-003	5			ADHESIVE TAPE	AS REQUIRED
7104-066-20-003	4	2	1	CABLE L:5500mm	COPPER WIRE 35mm ²
7104-066-20-003	3	6	1	CABLE L:300mm	COPPER WIRE 35mm ²
7104-066-20-003	2	2	1	CABLE L:1800mm	COPPER WIRE 35mm ²
7104-066-20-003	1	4	1	BRACKET TO SUIT M12 BOLT	AL-ZN-IN REF: 7104-066-20-002

LEGENDRE
 LEG. Doc. No: LR-14-DL-012
 22100DM041
COFLEXIP STENA OFFSHORE
ASIA PACIFIC PTY. LTD.

TITLE ANODE INSTALLATION DRAWING
SCALE 8.5" MOPU END
PRODUCTION NUMBER 71064-DWG-20-0004

DATE 1/1
REV 0

NO.	DESCRIPTION	DATE	BY	CHKD	APP'D
1	DESIGNED FOR CONSTRUCTION	2008/04/04	ACE	ACE	
2	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
3	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
4	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
5	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
6	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
7	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
8	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
9	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
10	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
11	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	
12	DESIGNED FOR APPROVAL	2008/04/04	ACE	ACE	

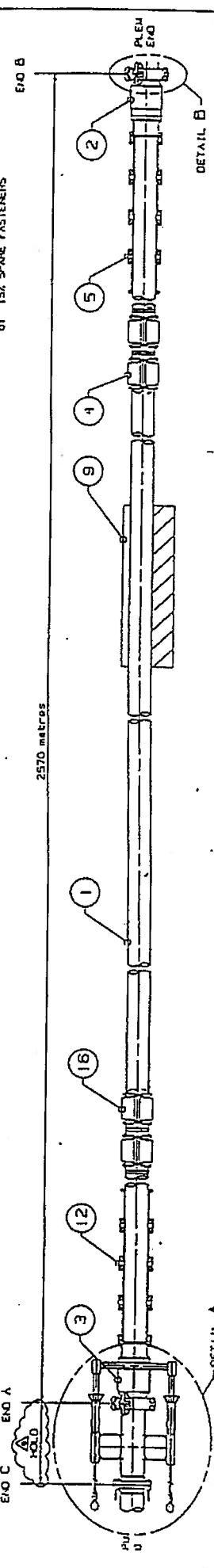
REVISION TABLE
 C2

SIGNATURE

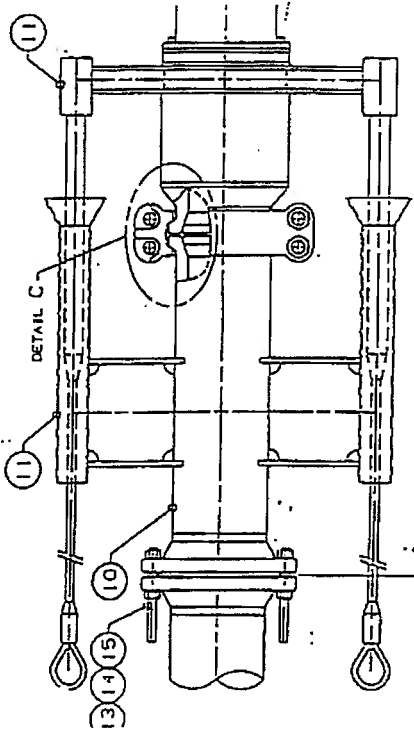
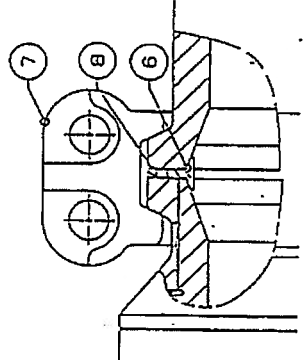
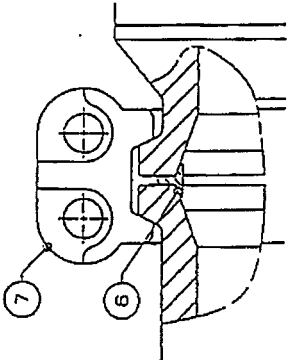
DATE

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 (4) Comments as Noted - Resubmission Not Required
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 (6) As Built

- FASTENERS
 b1 25% SPARE FASTENERS
 c1 25% SPARE BRADIS
 d1 25% SPARE SPACERS
 2. BEAD RESTRICTOR SPACERS 1
 a1 1 - OFF HALF QUINER RING EXCLUDING FASTENERS.
 b1 15% SPARE FASTENERS



- HOLDS LIST:**
1. FLANGE CLASS, STUD BOLTS & NUTS TO BE CONFIRMED BY MOPU CONTRACTOR.
 2. QUANTITY OF STABILITY SADDLES TO BE DEFINED AT DETAIL DESIGN.
 3. FLANGE MATERIAL TO BE CONFIRMED BY MOPU CONTRACTOR.
 4. GASKET MATERIAL AND COATING TO BE CONFIRMED BY MOPU CONTRACTOR.
 5. GROOVE OVERLAY TO BE CONFIRMED BY MOPU CONTRACTOR.
 6. TRANSITION SPOOL LENGTH TO BE CONFIRMED AT DETAIL DESIGN.



CSOAP SCOPE OF SUPPLY
 .DETAIL A

ITEM NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	BEAD RESTRICTOR	1	PC	
2	BEAD RESTRICTOR SPACER	1	PC	
3	FLANGE	1	PC	
4	STUD BOLT	1	PC	
5	NUT	1	PC	
6	SPACER	1	PC	
7	FLANGE	1	PC	
8	STUD BOLT	1	PC	
9	NUT	1	PC	
10	SPACER	1	PC	
11	FLANGE	1	PC	
12	STUD BOLT	1	PC	
13	NUT	1	PC	
14	SPACER	1	PC	
15	FLANGE	1	PC	
16	STUD BOLT	1	PC	

LEGEND

LEG. Doc. No: LR-14-DC-013

COFLEXIP STENA OFFSHORE
 ASIA PACIFIC PTY. LTD.

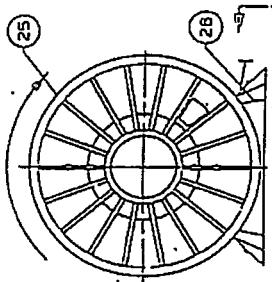
SCOPE OF SUPPLY - PERMANENT ITEMS

71064-DWG-20-0005

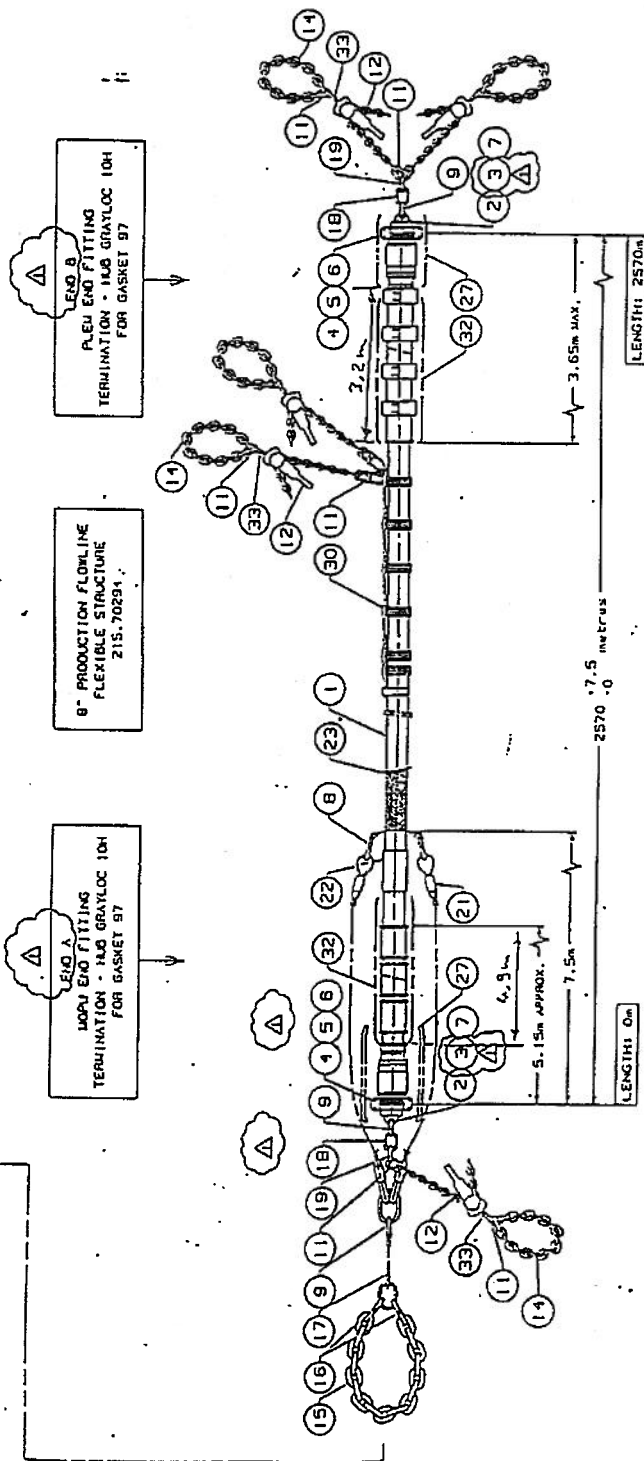
SECTION	ITEM	DESCRIPTION	QTY	UNIT	REMARKS
TRANSITION SPOOL	10	TRANSITION SPOOL	1	PC	
215-70281	B	GRATLOC 101 B7	1	PC	
215-70281	A	GRATLOC 101 B7	1	PC	

SECTION	ITEM	DESCRIPTION	QTY	UNIT	REMARKS
TRANSITION SPOOL	10	TRANSITION SPOOL	1	PC	
215-70281	B	GRATLOC 101 B7	1	PC	
215-70281	A	GRATLOC 101 B7	1	PC	
		TERMINATION MATERIAL			
		CLADDING			
		GASKET MATERIAL			
		GASKET COATING			
		STUO MATERIAL			
		NUT MATERIAL			
		STUO 4 NUT COATING			
		CLAMP MATERIAL			
		CLAMP COATING			
		POT DIP GALVANISE			
		POT DIP GALVANISE			

REELING



Lashing radius = 2,8m (15 x 100R)



NOTES:

1. FLEXIBLE LINE TO BE PACKED UNDER TENSION. LINE TENSION FOR PACKING MIN. 1000 kg.f. MAX. ALLOWABLE 1700 kg.f.
2. REEL MARKINGS:
 - STRUCTURE 1 215-70294
 - PIPE I/D 1 215mm 1B-485"1
 - LENGTH 1 2570m
 - WEIGHT 1 182t EMPTY / 205.2t FLOODED
 - MANUFACTURED IN LE TRAIL, FRANCE
 - DIRECTION OF REELING
3. STANDARD MARKING PROCEDURE REFER TO 09 NET 010.
4. TOTAL HEIGHT OF PACKED REEL IN AIR WITH PIPES EMPTY, APPROX. 230 TO 25m.
5. TOTAL HEIGHT OF PACKED REEL IN AIR FLOODED, APPROX. 328.5 TO 345m.
6. FLOWLINE TO BE SUPPLIED EMPTY.
7. GRAYLOC STOPVALS TO BE TIGHTENED TO 315 FT.-LB. BY BANGIT STRAPS ATTACHED TO FITTING AND EACH SLEEVE. SWEATHING TO BE MIN. 10 THICK AND MAX. 80 WIDE.
8. GRAYLOC STOPVALS TO BE TIGHTENED TO 315 FT.-LB. BY BANGIT STRAPS ATTACHED TO FITTING AND EACH SLEEVE. SWEATHING TO BE MIN. 10 THICK AND MAX. 80 WIDE.
9. EXTERNAL WEATH VENT HOLES TO BE SEALED WITH CONTRASTING COLOURED TAPE TO PREVENT WATER INGRESS PRIOR TO INSTALLATION.

DATE: 11/08/2004
 DRAWING NO.: 71064-1-702
 PROJECT: COFLEXIP STENA OFFSHORE ASIA PACIFIC PTY. LTD.
 SHEET NO.: 1 OF 1
 TITLE: LINE PLAN FOR PACKING 8" PRODUCTION FLOWLINE
 SCALE: 1:1
 DRAWN BY: A1
 CHECKED BY: A1
 APPROVED BY: A1
 SIGNATURE: _____
 DATE: 11/08/2004

PA 01120004	33	5	SEA-1-LOT	SPL 1 4.2t
	32	1	BEAD RESTRICTOR SECTION	
	31	1	NOT USED	
PA 03160204	30	1	EXCESS SOFT S.LING LENGTH 1 TLM	SPL 1 8t
	29	1	NOT USED	
	28	1	NOT USED	
	27	1	TERMINATION PROTECTION	
	26	2	GASKET	FOR REEL 92 - S10
	25	1	HEEL - 92.51.50	WITH 1/4" ACCESS DOWEL
PA 00270300	24	1	FORM PACKING BLOCKS	1/4" DIA. ACCESS DOWEL
	23	1	OUTSIDE FINGER TO FIT	SPL 1 20.0t
PA 13102066	22	1	SWIFT STRAP SECTION OF OUTER SHEATH PROTECTION	1" X 1/2" X 1/4" GALV. STEEL
	21	1	NOT USED	
PA 01000500	19	2	SAFETY PIN DOG SWIVBLE	SPL 1 6.5t
PA 03100001	18	2	MASTER LINK 834 SECTION	SPL 1 18t
PA 13102033	17	1	WIRE ROPE 1 1/2" DIA	STEEL WIRE ROPE 1 1/2" DIA
PA 03100017	16	2	LOCK-A-LID	SPL 1 22.0t
PA 14100001	15	1	2" DIA CHAIN LINK	SPL 1 17t
PA 14100004	14	5	1 1/2" DIA CHAIN LINK	SPL 1 17t
PA 09003000	13	18	SAFETY PIN DOG SWIVBLE	SPL 1 4.2t
PA 01001700	11	10	SAFETY PIN DOG SWIVBLE	SPL 1 4.2t
	10	1	NOT USED	
PA 01017000	9	3	SAFETY PIN DOG SWIVBLE	SPL 1 17t
PA 01017002	8	2	SAFETY PIN DOG SWIVBLE	SPL 1 17t
	7	2	GASKET SIZE 87	ASTM A 184 2PH
	6	16	SPHERICAL JOINT	ASTM A 184 2PH
	5	8	STANDARD	ASTM A 184 2PH
	4	2	1" DIA PLUGS	ASTM A 184 2PH
	3	2	1" DIA PLUGS	ASTM A 184 2PH
	2	2	1" DIA PLUGS	ASTM A 184 2PH
	1	1	FLEXIBLE PIPE	ASTM A 184 2PH

LEGENDRE
 LEG. Doc. No. LA-XX-XX-XXX
 Rev: X

COFLEXIP STENA OFFSHORE ASIA PACIFIC PTY. LTD.

TITLE: LINE PLAN FOR PACKING 8" PRODUCTION FLOWLINE

SCALE: 1:1

DRAWING NO.: 71064-0WG-30-0004