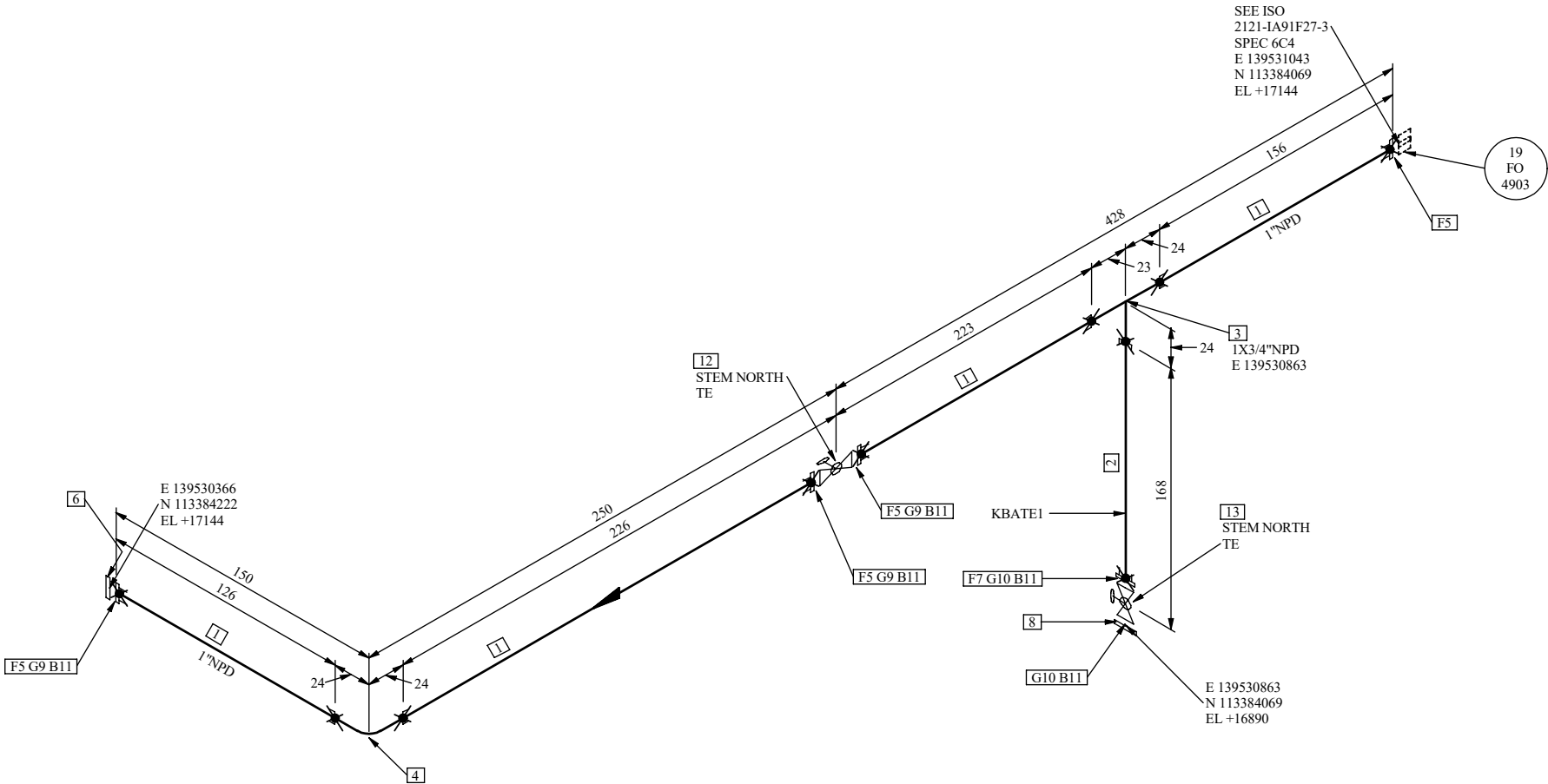


THIS DOCUMENT BELONGS TO REPSOL. IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT
PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).


EXTR. DATE: 22-11-2023 13:52:02 STREAM NO.: 3250 CWA NO.: 10 REV. CAUSE ID: 23



BILL OF MATERIAL					
PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
PIPE					
1	PIPE - A312-TP304/304L DUAL GR PE SMLS T01AL2CZ02 S-40S <PIPB04DA2140S> (L-PIP111).	1	12257939	0.6 M	
2	PIPE - A312-TP304/304L DUAL GR PE SMLS T01AL2CZ02 S-40S <PIPB04DA23/440S> (L-PIP111).	3/4	12257938	0.1 M	
FITTINGS					
3	REDUCING TEE ASME B16.11 3000# A182-F304/304L DUAL GR SWE SWE - R12FNL2A1101 NREQD <RTEB450LBK13/4> (L-RTE18).	1X3/4	12258205	1	
4	90 ELBOW ASME B16.11 3000# A182-F304/304L DUAL GR SWE SWE - R31FNL2A1103 NREQD <90FB450LBK1> (L-90F05).	1	12258117	1	
FLANGES					
5	SW FLANGE ASME B16.5 150# A182-F304/304L DUAL GR RFFE SWE 125 - 250 AARH F02CDL2AB105 S-40S <SWFB450R15140S> (L-SWF30).	1	12260363	4	
6	BLIND FLANGE ASME B16.5 150# A182-F304/304L DUAL GR RF NREQD 125 - 250 AARH F10CDL2AB005 <BLFB450R151> (L-BLF33).	1	12260397	1	
7	SW FLANGE ASME B16.5 150# A182-F304/304L DUAL GR RFFE SWE 125 - 250 AARH F02CDL2AB105 S-40S <SWFB450R153/440S> (L-SWF30).	3/4	12260362	1	
8	BLIND FLANGE ASME B16.5 150# A182-F304/304L DUAL GR RF NREQD 125 - 250 AARH F10CDL2AB005 <BLFB450R153/4> (L-BLF33).	3/4	12260396	1	
GASKETS					
9	SPIRAL WOUND GASKET ASME B16.20 150# RFTBE 304/GRAFOIL SS 304 SS 304 ASME B16.5 G03GDP1IS04 <N/A> (N/A)	1	11654482	3	
10	SPIRAL WOUND GASKET ASME B16.20 150# RFTBE 304/GRAFOIL SS 304 SS 304 ASME B16.5 G03GDP1IS04 <N/A> (N/A)	3/4	11654481	2	
BOLTS					
11	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B8M CL2/A194-8MA INCH SIZE I01OB1601 <SB2R58G1/221/2> - 2 NUTS PER BOLT - 65 mm Length	1/2	163801410	20	
VALVES / IN-LINE ITEMS					
12	BALL VALVE API 608 150# A351-CF8M RFFE 316/R-PTFE, GF A193-B8M CL2/8MA 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW ASME B16.5 V04JDL08B05C NREQD <B41L-AL082> (L-AL082).	1	163782954	1	
13	BALL VALVE API 608 150# A351-CF8M RFFE 316/R-PTFE, GF A193-B8M CL2/8MA 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW ASME B16.5 V04JDL08B05C NREQD <B43_4L-AL082> (L-AL082).	3/4	163782953	1	

REMARKS FOR MECHANICAL SUBCONTRACTOR:

- 1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED.
2) ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION.
3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL , ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT
4) FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603.
5) GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002.
6) CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED.
7) IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN.
8) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF.TO 4274-LZ-PC-00000603).
9) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/ 4274 -NN-DW-00000002 AND ASSEMBLY NO FEA005 AND FE019.

SUPPORTS LEGEND:  DENOTES PARTS LIST NO  PIPE SUPPORT  A=RESTING SUPPORT G=GUIDE F=AXIAL STOP B=ANCHOR M=SPRING S=TEFLON PAD
WHERE  WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.



REV.	DESCRIPTION	DATE	DRW. BY	CHECK BY	APPR. BY	APPR. CLIENT	STRESS CALC. N°
01	ISSUED FOR REFERENCE	24-NOV-23	M.YADAV	P.VAZE	G.PAGANONI		P & ID 19-A-19-000-1-01-00001 sheet 106
00	ISSUED FOR REFERENCE	30-JUN-23	U.CHAVAN	P.VAZE	G.PAGANONI		LINE LIST N° 19-L-19-000-2-00-80602
							PIPE LAYOUT N° 19-L-19-000-2-00-86196 sheet 5

ISSUED FOR
REFERENCE

Signature for construction is shown
on Iso list of relevant CWA

TITLE
**ISOMETRIC DRAWING
LINE**

1"-IA-91F27-6C4

PIPE MATERIAL		NOTES: 1. FOR TECHNICAL DETAILS SEE LINE LIST. 2. FOR VENT, DRAIN OR INSTRUMENT CONNECTION DETAILS SEE 45-L-45-000-2-00-80102. 3. WELDING ACCORDING TO 45-L-45-000-2-00-80021. 4. PAINTING ACCORDING TO 45-A-45-000-1-00-20160. 5. CODE SHOWN IN BOM BETWEEN "<" & ">" DENOTES REPSOL UNICODE. "<N/A>" MEANS UNICODE IS "NOT AVAILABLE".			
304, dual grade					
HEAT TREATMENT (PWHIT)					
N					
PAINTING SCHEME (3)			CONTRACTOR DRAWING NUMBER: 4274-XH-DL-2121IA91F27-4	PROJECT: 4001008	
NR					
PIPING CLASS					
6C4					
WELDING CLASS (4)		 <div>LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT</div> <div>CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX</div>			
M					
PED CATEGORY					
Art 4.3					
INSULATION CODE / THK. (mm)		ANNEX 19	SPEC. L	DRAWING NUMBER 19-000-2-02-00001 sheet 2121IA91F27-4	REV. 01
N 0					