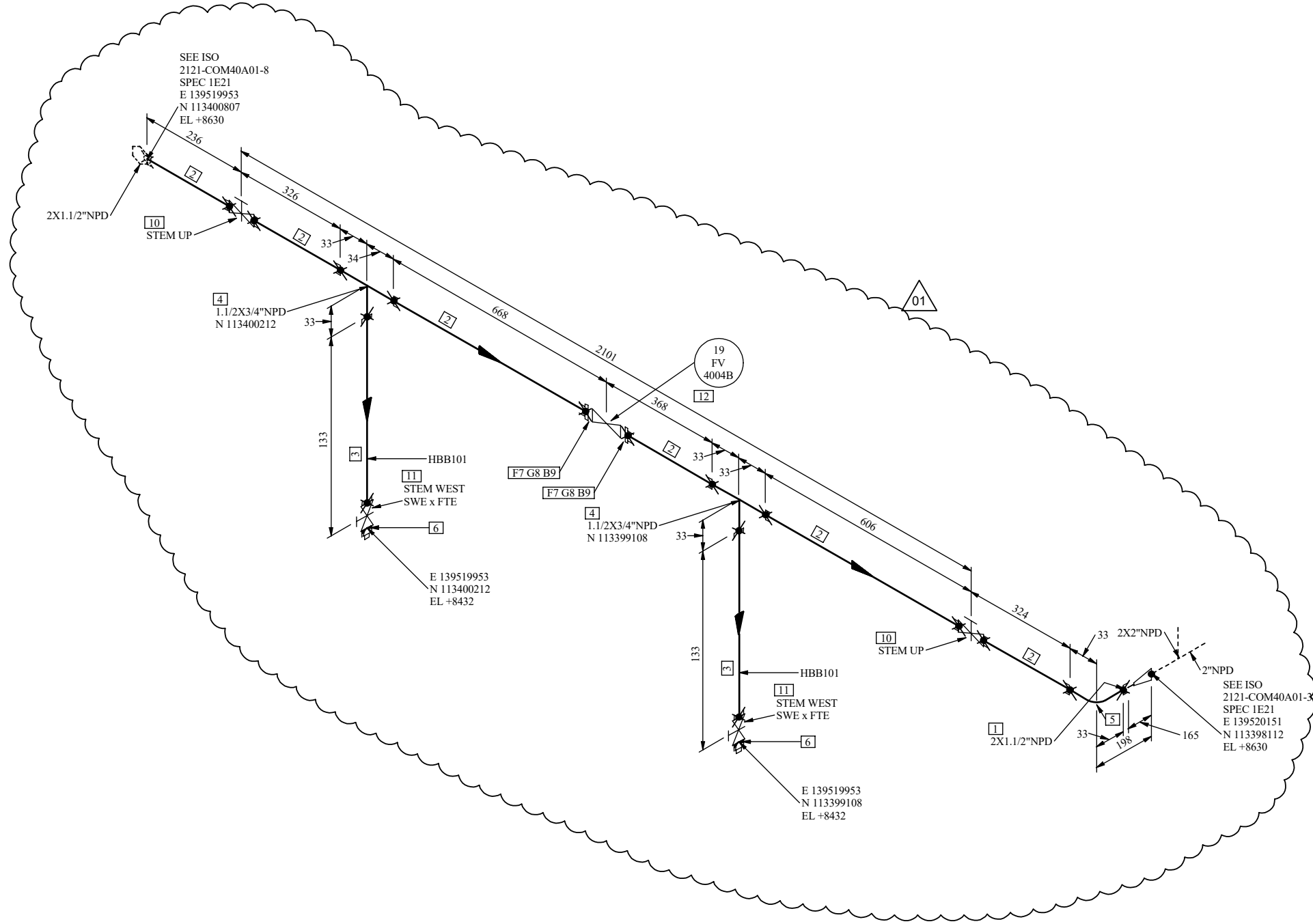


THIS DOCUMENT BELONGS TO REPSOL. IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT
PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).

EXTR. DATE: 10-08-2023 10:30:34





STREAM NO.:4004

REV. CAUSE ID: 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.

							STRESS CALC. N°
01	ISSUED FOR CONSTRUCTION	10-AUG-23	M.YADAV	P.VAZE	G.PAGANONI		P & ID 19-A-19-000-1-01-00001 sheet 28
00	ISSUED FOR CONSTRUCTION	03-FEB-23	M.YADAV	P.VAZE	G.PAGANONI		LINE LIST N° 19-L-19-000-2-00-80602
REV.	DESCRIPTION	DATE	DRW. BY	CHECK BY	APPR. BY	APPR. CLIENT	PIPE LAYOUT N° 19-L-19-000-2-00-86197 sheet 3

APPROVED FOR
CONSTRUCTION

Signature for construction is shown
on Iso list of relevant CWA

TITLE
**ISOMETRIC DRAWING
LINE**
2"-COM-40A01-1E21

BILL OF MATERIAL

PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
FITTINGS					
1	CONCENTRIC SWAGE MSS SP-95 - A234-WPB BE PE SMLS SCH1-STD SCH2-XS R21FQC04VZ15 <CSWA010GR14151316> (L-CSW29)	2X1.1/2	1919723	1	
PIPE					
2	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A111/2XS> (L-6679)	1.1/2	1132809	2.1 M	
3	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679)	3/4	1132785	0.3 M	
FITTINGS					
4	REDUCING TEE ASME B16.11 3000# A105N SWE SWE - R12FNC441101 NREQD <RTEA300KBK11/23/4> (L-RTE15)	1.1/2X3/4	11651306	2	
5	90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK11/2> (L-178)	1.1/2	11651297	1	
6	PLUG ROUND HEAD ASME B16.11 - A105N MTE NREQD - R42FQC44W001 NREQD <PLUA300CK3/4> (L-77)	3/4	110088232	2	
FLANGES					
7	SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS <SWFA300R3511/2XS> (L-375)	1.1/2	19762192	2	
GASKETS					
8	SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 ASME B16.5 G03GFP11S12 <N/A> (N/A)	1.1/2	163508953	2	
BOLTS					
9	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE 101OB0301 <SB2R51G3/431/2> - 2 NUTS PER BOLT - 90 mm Length	3/4	153437635	8	
VALVES / IN-LINE ITEMS					
10	GATE VALVE API 602 800# A105N SWE SWE 8-F6&HF WB-OS&Y SOW API 602 HW V01GIC4411BL NREQD <G611_2L-GA1313-B> (L-GA1313-B)	1.1/2	110015421	2	
11	GATE VALVE API 602 800# A105N SWE FTE 8-F6&HF WB-OS&Y SOW API 602 HW V01GIC4412BL NREQD <N/A> (N/A)	3/4	110015410	2	
INSTRUMENTS					
12	INSTRUMENT COMPONENT	1.1/2	19-FV-4004B	1	

PIPE MATERIAL

CS

HEAT TREATMENT (PWHT)

N

PAINTING SCHEME (3)

1

PIPING CLASS

1E21

WELDING CLASS (4)

E

PED CATEGORY

II

INSULATION CODE / THK. (mm)

N

0

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".



CONTRACTOR:

CONTRACTOR DRAWING NUMBER:

PROJECT:

4274-XH-DL-2121COM40A01-7

4001008

LOW LINEAL DENSITY POLYETHYLENE (PEL)
AND POLYPROPYLENE (PP) PLANTS
FOR PROJECT - ALBA PROJECT

CLIENT / COMPLEX
REPSOL POLYMEROS/
SINES INDUSTRIAL COMPLEX

ANNEX
19

SPEC.
L

DRAWING NUMBER
19-000-2-02-00001 sheet 2121COM40A01-7

REV.
01