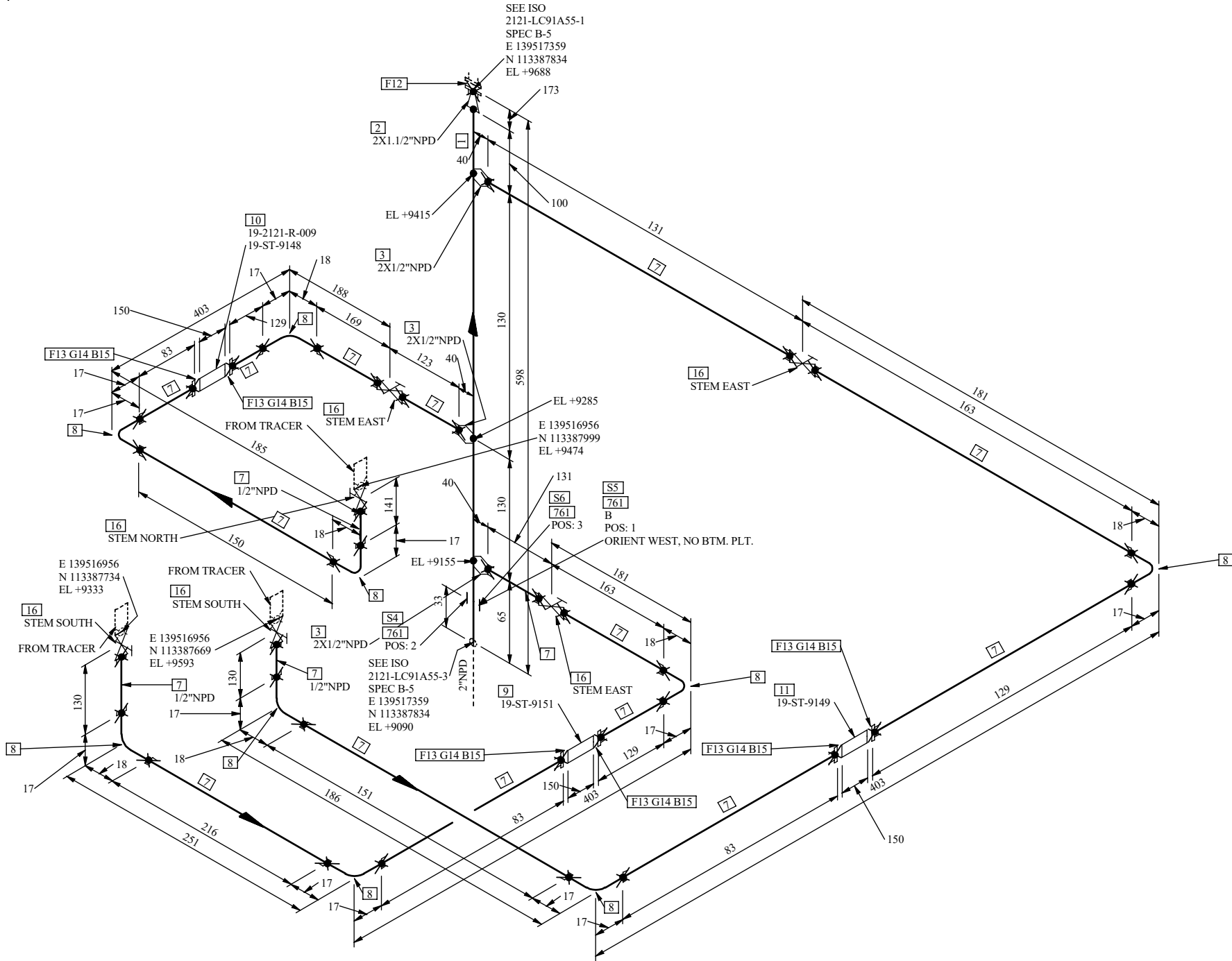


THIS DOCUMENT BELONGS TO REPSOL. IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).

EXTR. DATE: 25-01-2024 22:39:05

STREAM NO.:3151


REV. CAUSE ID:












BILL OF MATERIAL

PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
PIPE					
1	PIPE - A106-B BE SMLS T01AC03V02 S-XS <PIPA010B12XS> (L-6679)	2	I117863	0.5 M	
FITTINGS					
2	CONCENTRIC SWAGE MSS SP-95 - A234-WPB BE PE SMLS SCH1-XS SCH2-XS R21FQC04VZ01 <CSWA010GR14161316> (L-CSW29)	2X1.1/2	1919590	1	
3	REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD <SOKA300LB01410> (L-343)	2X1/2	11651331	3	
PIPE SUPPORTS					
4	STAKES SUPPORTS ST01 HEA100	2	761	1	
5	WELDED ANCHOR -C1B2 H = 100 L = 120	2	761	1	
6	PIPING SUPPORT - BEAMS- BE03 HEA100	2	761	1	
PIPE					
7	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A11/2XS> (L-6679)	1/2	1132777	2.2 M	
FITTINGS					
8	90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK1/2> (L-178)	1/2	11651295	9	
9	SPECIALTY COMPONENT	1/2	19-ST-9151	1	
10	SPECIALTY COMPONENT	1/2	19-ST-9148	1	
11	SPECIALTY COMPONENT	1/2	19-ST-9149	1	
FLANGES					
12	SW FLANGE ASME B16.5 150# A105N RFFE SWE 125 - 250 AARH F02CDC44B105 S-XS <SWFA300R1511/2XS> (L-295)	1.1/2	15378345	1	
13	SW FLANGE ASME B16.5 150# A105N RFFE SWE 125 - 250 AARH F02CDC44B105 S-XS <SWFA300R151/2XS> (L-295)	1/2	15378341	6	
GASKETS					
14	SPIRAL WOUND GASKET ASME B16.20 150# RFTBE 316/GRAP CARBON STEEL SS 316 ASME B16.5 G03GDP11A01 <SPWQ400R11/2> (L-1527)	1/2	11256089	6	
BOLTS					
15	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G1/221/2> - 2 NUTS PER BOLT - 60 mm Length	1/2	153437179	24	
VALVES / IN-LINE ITEMS					
16	GATE VALVE API 602 800# A105N SWE SWE 5-HARDFACED API 602 B7/2H BB-OS&Y SOW API 602 HW V01GIC441111 NREQD <G61_2L-6566> (L-6566)	1/2	I11426463	6	

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°
							-
							P & ID
							19-A-19-000-1-01-00001 sheet 117
							LINE LIST N°
							19-L-19-000-2-00-80602
							PIPE LAYOUT N°
							19-L-19-000-2-00-86196 sheet 3
00	ISSUED FOR CONSTRUCTION	29-JAN-24	M.YADAV	P.VAZE	G.PAGANONI		
REV.	DESCRIPTION	DATE	DRW. BY	CHECK BY	APPR. BY	APPR. CLIENT	

APPROVED FOR
CONSTRUCTION

Signature for construction is shown
on Iso list of relevant CWA

TITLE
**ISOMETRIC DRAWING
LINE**

2"-LC-91A55-B-5 (P)

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".			
CS					
HEAT TREATMENT (PWHT) N					
PAINTING SCHEME (3) 6		CONTRACTOR:	CONTRACTOR DRAWING NUMBER:	PROJECT:	
PIPING CLASS B-5			4274-XH-DL-2121LC91A55-2	4001008	
WELDING CLASS (4) E		<div>LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT</div> <div>CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX</div>			
PED CATEGORY Art 4.3					
INSULATION CODE / THK. (mm) P 50		ANNEX 19	SPEC. L	DRAWING NUMBER 19-000-2-02-00001 sheet 2121LC91A55-2	REV. 00