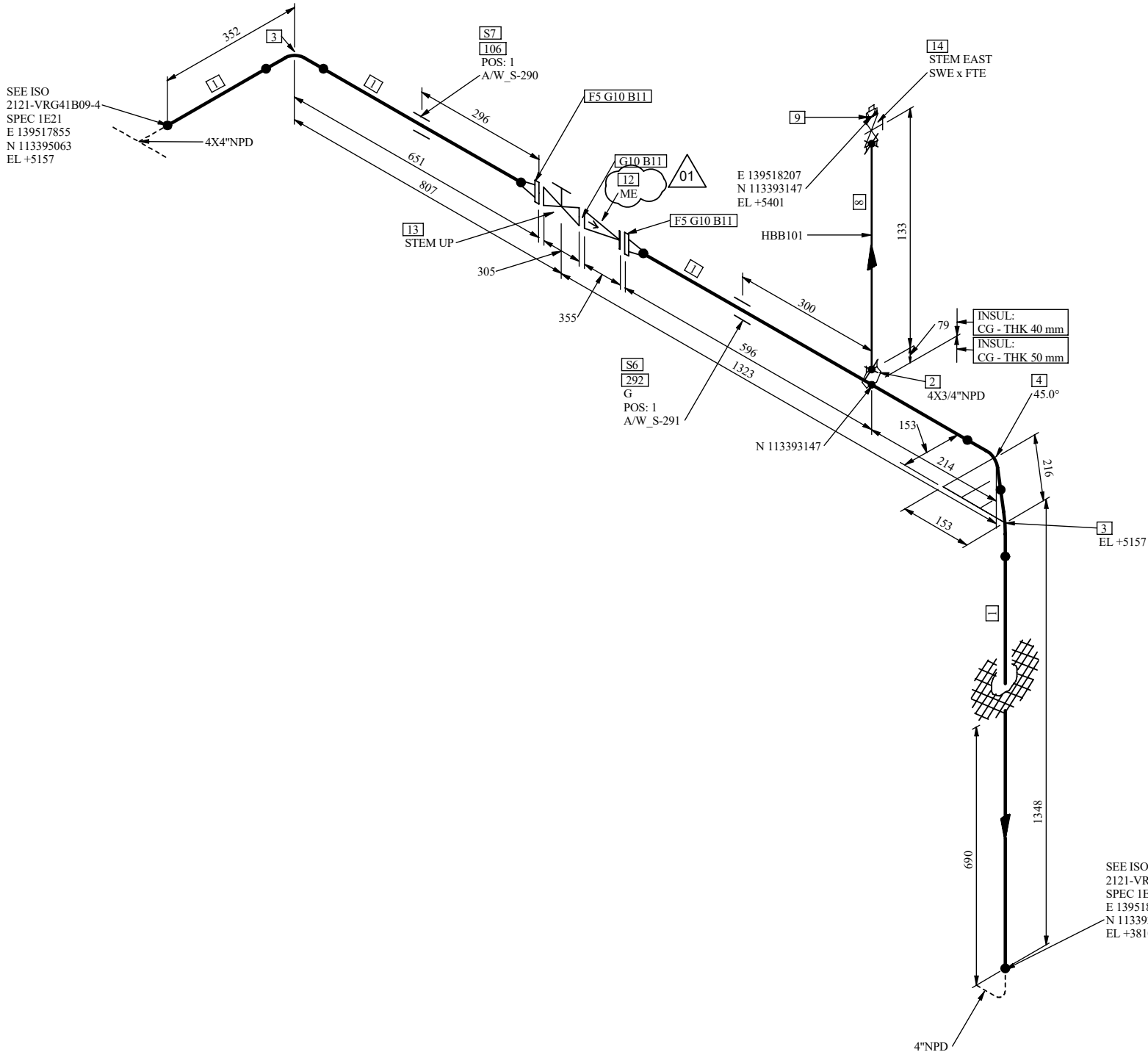


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

EXTR. DATE: 16-11-2023 20:16:51

STREAM NO.:4570 STREAM REV. NO. : 10 REV. CAUSE ID: 23



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 CONSTRUCTION	17-Nov-23	M.YADAV	P.VAZE	G.PAGANONI		P & ID 19-A-19-000-1-01-00001 sheet 53
00	ISSUED FOR CONSTRUCTION	17-FEB-23	M.YADAV	P.VAZE	G.PAGANONI		LINE LIST N° 19-L-19-000-2-00-80602
							PIPE LAYOUT N° 19-L-19-000-2-00-86197 sheet 2

APPROVED FOR
CONSTRUCTION

Signature for construction is shown
on Iso list of relevant CWA

TITLE
**ISOMETRIC DRAWING
LINE**

4"-VRG-41B09-1E21 (CG)

BILL OF MATERIAL

PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
PIPE					
1	PIPE - A106-B BE SMLS T01AC03V02 S-STD <PIPA010B14STD> (L-7806)	4	I117953	2.5 M	
FITTINGS					
2	REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD <SOKA300LB01611> (L-343)	4X3/4	I1651369	1	
3	90 LR ELBOW ASME B16.9 A234-WPB BE SMLS C01DC04V01 S-STD <90LA200F34STD> (L-7955)	4	I128635	2	
4	45 LR ELBOW ASME B16.9 A234-WPB BE SMLS C02DC04V01 S-STD <45LA200F34STD> (L-7956)	4	I201302	1	
FLANGES					
5	WN FLANGE ASME B16.5 300# A105N RFFE BE 125 - 250 AARH F01CFC44BV05 S-STD <WNFA300R354STD> (L-236)	4	I4272446	2	
PIPE SUPPORTS					
6	CLAMPED GUIDE,COLD INS.-F2G1 H=150 L=300	4	292	1	
7	RESTING SHOE CLAMPED,COLD INS. -F2A1 H=150 L=300	4	106	1	
PIPE					
8	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679)	3/4	I132785	0.2 M	
FITTINGS					
9	PLUG ROUND HEAD ASME B16.11 - A105N MTE NREQD - R42FQC44W001 NREQD <PLUA300CK3/4> (L-77)	3/4	I10088232	1	
GASKETS					
10	SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 ASME B16.5 G03GFP1HS12 <N/A> (N/A)	4	I63508975	3	
BOLTS					
11	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G3/441/2> - 2 NUTS PER BOLT - 115 mm Length	3/4	I53437466	24	
VALVES / IN-LINE ITEMS					
12	SWING CHECK VALVE ASME B16.34 300# A216-WCB RFFE 8-F6&HF API 600 B7/2H 125 - 250 AARH BC ASME B16.5 V21JFC29BZF NREQD <S44L-134> (L-134)	4	I45438363	1	
13	GATE VALVE API 600 300# A216-WCB RFFE 8-F6&HF API 600 B7/2H 125 - 250 AARH BB-OS&Y FLXW API 600 HW ASME B16.5 V01FFC29B167 NREQD <G44L-130> (L-130)	4	I5606092	1	
14	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	I10015410	1	

PIPE MATERIAL

CS

HEAT TREATMENT (PWHT)

N

PAINTING SCHEME (3)

20

PIPING CLASS

1E21

WELDING CLASS (4)

E

PED CATEGORY

II

INSULATION CODE / THK. (mm)

CG

50

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:
4274-XH-DL-2121VRG41B09-2

CONTRACTOR DRAWING NUMBER:

PROJECT:

4001008

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

CLIENT / COMPLEX
REPSOL POLYMERS/
SINES INDUSTRIAL COMPLEX

ANNEX
19

SPEC.
L

DRAWING NUMBER
19-000-2-02-00001 sheet 2121VRG41B09-2

REV.
01