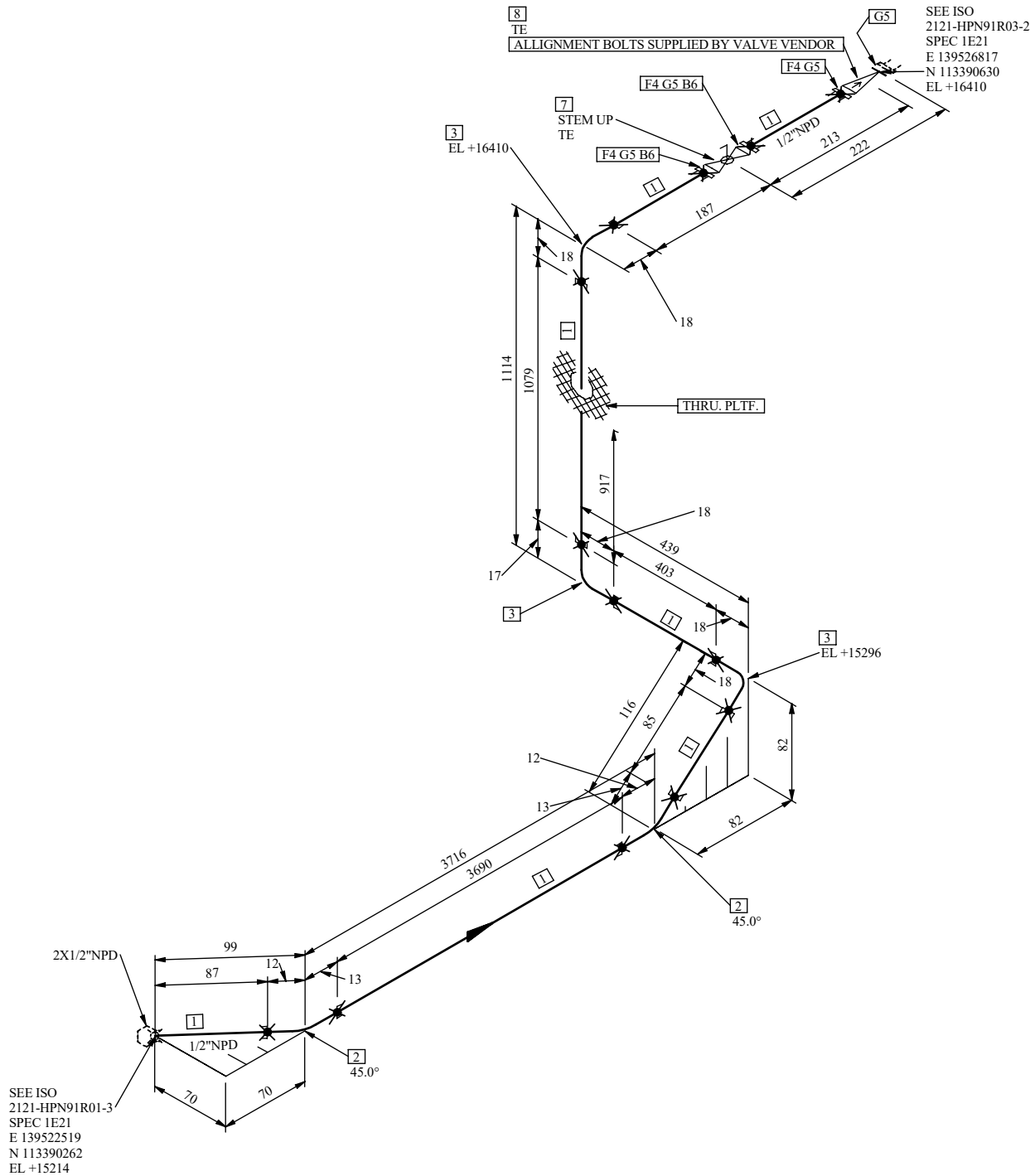


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EXTR. DATE: 04-09-2023 14:05:15

STREAM NO.: 3202

REV. CAUSE ID:



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 114
00	ISSUED FOR REFERENCE	01-SEP-23	U.CHAVAN	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 4

ISSUED FOR  
REFERENCE

Signature for construction is shown  
on Iso list of relevant CWA

ISOMETRIC DRAWING  
LINE

1/2"-HPN-91R03-1E21

BILL OF MATERIAL

PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
PIPE					
1	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A11/2XS> (L-6679)	1/2	I132777	5.6 M	
FITTINGS					
2	45 ELBOW ASME B16.11 3000# A105N SWE SWE - R32FNC441101 NREQD <45FA300LBK1/2> (L-184)	1/2	I1651291	2	
3	90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK1/2> (L-178)	1/2	I1651295	3	
FLANGES					
4	SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS <SWFA300R351/2XS> (L-375)	1/2	I9762189	3	
GASKETS					
5	SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 ASME B16.5 G03GFP1IS12 <N/A> (N/A)	1/2	I63508949	4	
BOLTS					
6	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G1/221/2> - 2 NUTS PER BOLT - 65 mm Length	1/2	I53437190	8	
VALVES / IN-LINE ITEMS					
7	BALL V-FLT-SS-FB API 608 300# A216-WCB RFFE 316/R-PTFE, GF B7/2H 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW TIGHT SHUT-OFF (TSO) ASME B16.5 V1FJFC29BZZH NREQD <N/A> (N/A)	1/2	I64812610	1	
8	DISC CHECK WFR VALVE ASME B16.34 300# A216-WCB RFTBE 316/R-PTFE, GF 125 - 250 AARH SL VERTICAL&HORIZONTAL CRACK. PRESS. 1/2 PSI ASME B16.5 V40JFC29P01 NREQD <N/A> (N/A)	1/2	I10208503	1	

PIPE MATERIAL

CS

HEAT TREATMENT (PWHT)

N

PAINTING SCHEME (3)

1

PIPING CLASS

1E21

WELDING CLASS (4)

E

PED CATEGORY

Art 4.3

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".



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 2121HPN91R03-1

REV.  
00