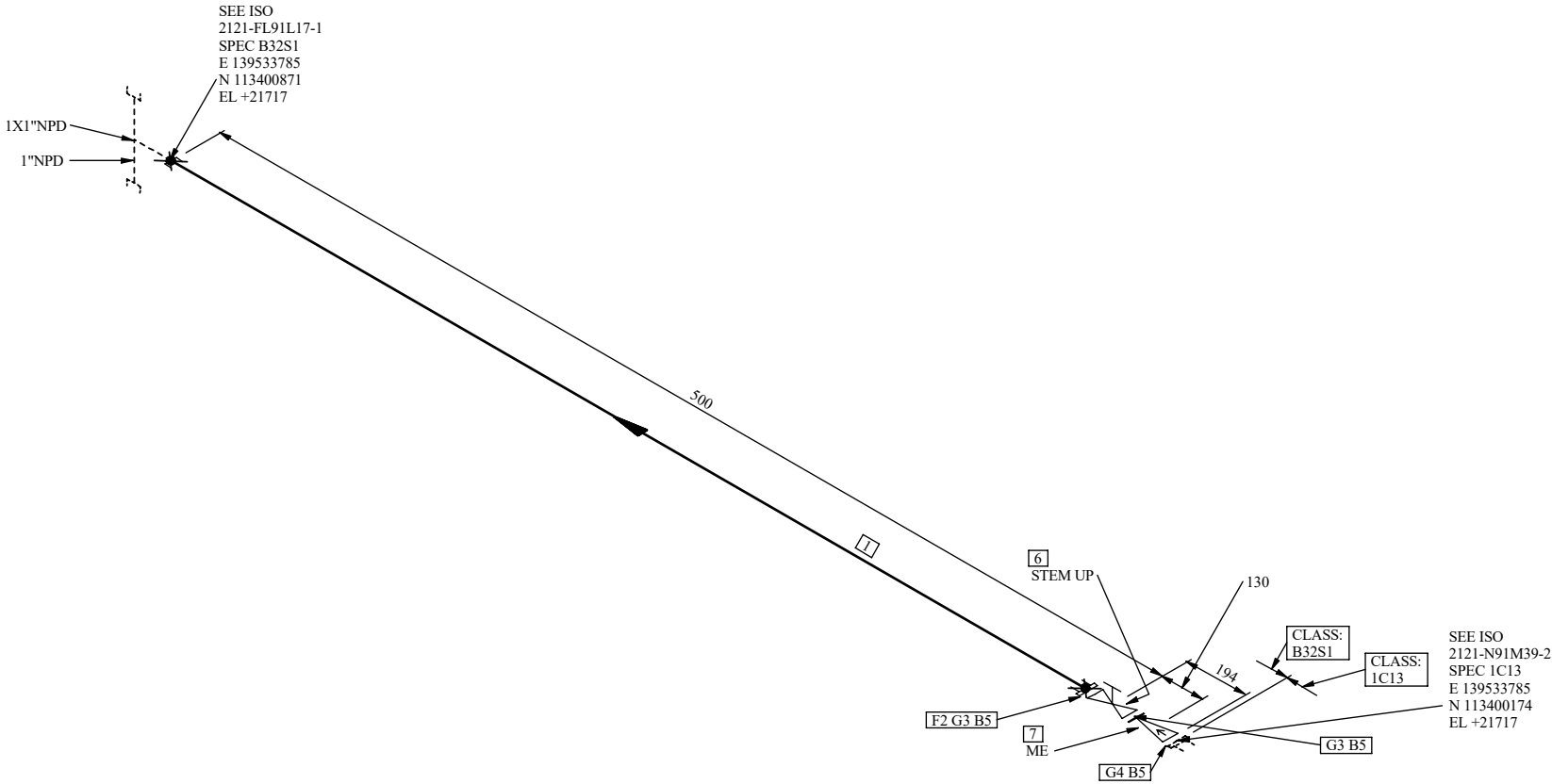


THIS DOCUMENT BELONGS TO REPSOL. IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT  
PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).






EXTR. DATE: 21-06-2023 12:03:45



STREAM NO.:3351

REV. CAUSE ID:



BILL OF MATERIAL					
PT NO	COMPONENT DESCRIPTION	N.S. (IN)	ITEM CODE	QTY	HOLD STATUS
PIPE					
1	PIPE - A333-6 PE SMLS T01AC22Z02 S-XS <PIPL020A11XS> (L-PIP01)	1	I146392	0.5 M	
FLANGES					
2	SW FLANGE ASME B16.5 150# A350-LF2 Class 1 RFFE SWE 125 - 250 AARH F02CDC07B105 S-XS <SWFL300R151XS> (L-7970)	1	I820467	1	
GASKETS					
3	FLAT RING GASKET ASME B16.21 150# RFTBE NA/CARBON/NBR ASME B16.5 G02HDP2QS01 <NMGQ102R1F1> (L-NMG17)	1	I1655197	2	
4	SPIRAL WOUND GASKET ASME B16.20 150# RFTBE 316/GRAP LTCS SS 316 ASME B16.5 G03GDP11AG8 <N/A> (N/A)	1	I46364672	1	
BOLTS					
5	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A320-L7/A194-7 INCH SIZE I01OB5301 <SB2R55G1/221/2> - 2 NUTS PER BOLT - 65 mm Length	1/2	I55704809	12	
VALVES / IN-LINE ITEMS					
6	GATE VALVE API 602 150# A350-LF2 Class 1 RFFE 10-316 API 602 L7/7 125 - 250 AARH BB-OS&Y SOW API 602 HW ASME B16.5 V01GDC07BHX1 NREQD <G41L-AL011> (L-AL011)	1	I63584654	1	
7	SWING CHECK VALVE BS 1868 150# A350-LF2 Class 1 RFFE 10-316 BS 1868 L7/7 125 - 250 AARH BC ASME B16.5 V21EDC07B0P6 NREQD <S41L-AL123> (L-AL123)	1	I63584754	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 WHERE  WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.		
				G=GUIDE F=AXIAL STOP B=ANCHOR M=SPRING S=TEFLON PAD		
						STRESS CALC. N° -
						P & ID 19-A-19-000-1-01-00001 sheet 109
00	ISSUED FOR REFERENCE	23-JUN-2023	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 6

ISSUED FOR REFERENCE	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, low temperature										
	HEAT TREATMENT (PWHT)										
	N										
Signature for construction is shown on Iso list of relevant CWA	PAINTING SCHEME (3)				CONTRACTOR DRAWING NUMBER:		PROJECT:				
	1				4274-XH-DL-2121FL91L17-2		4001008				
TITLE  ISOMETRIC DRAWING LINE  1"-FL-91L17-B32S1	PIPING CLASS										
	B32S1										
	WELDING CLASS (4)						LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX				
	M										
PED CATEGORY		Art 4.3									
INSULATION CODE / THK. (mm)		ANNEX 19		SPEC. L		DRAWING NUMBER				REV.	
N 0		0		L		19-000-2-02-00001 sheet 2121FL91L17-2				00	