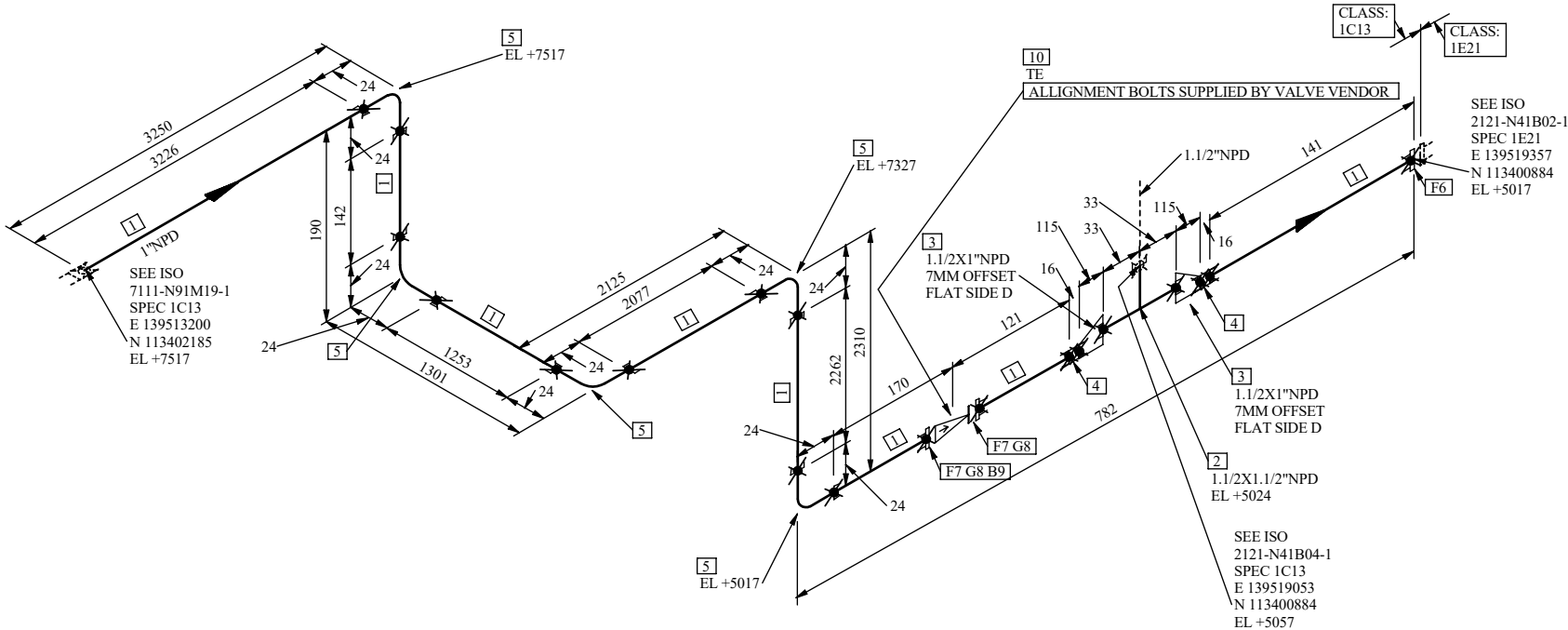
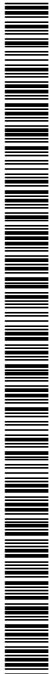


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EXTR. DATE: 09-12-2023 09:10:46

STREAM NO.:3200

REV. CAUSE ID: 9



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 <PIPA010A11XS> (L-6679)	1	I132793	9.4 M	
FITTINGS					
2	TEE ASME B16.11 3000# A105N SWE SWE - R11FNC441101 NREQD <TESA300LBK11/2> (L-179)	1.1/2X1.1/2	I1651302	1	
3	ECCENTRIC SWAGE MSS SP-95 - A105N PE PE SMLS SCH1-XS SCH2-XS R22FQC44ZZ01 <ESWA010AR13161216> (L-ESW31)	1.1/2X1	I62946435	2	
4	COUPLING ASME B16.11 3000# A105N SWE SWE - R01FNC441101 NREQD <FCPA300LBK1> (L-180)	1	I1651677	2	
5	90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK1> (L-178)	1	I1651296	5	
FLANGES					
6	SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS <SWFA300R351XS> (L-375)	1	I4217823	1	
7	SW FLANGE ASME B16.5 150# A105N RFFE SWE 125 - 250 AARH F02CDC44B105 S-XS <SWFA300R151XS> (L-295)	1	I5378343	2	
GASKETS					
8	SPIRAL WOUND GASKET ASME B16.20 150# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GDB11G12 <SPAQ505R1EA1> (L-SPA04)	1	I2230476	2	
BOLTS					
9	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE 101OB0301 <SB2R51G1/231/2> - 2 NUTS PER BOLT - 90 mm Length	1/2	I53437245	4	
VALVES / IN-LINE ITEMS					
10	DISC CHECK WFR VALVE ASME B16.34 150# A216-WCB RFTBE 316/R-PTFE, GF 125 - 250 AARH SL VERTICAL&HORIZONTAL CRACK. PRESS. 1/2 PSI ASME B16.5 V40JDC29P01 NREQD <N/A> (N/A)	1	I10016148	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 REFERENCE	08-DEC-23	M.YADAV	P.VAZE	G.PAGANONI		P & ID 19-A-19-000-1-01-00001 sheet 110
00	ISSUED FOR REFERENCE	12-MAY-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 2

ISSUED FOR REFERENCE

Signature for construction is shown on Iso list of relevant CWA

ISOMETRIC DRAWING LINE

1-1/2"-N-91M19-1C13

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)	1	CONTRACTOR:	CONTRACTOR DRAWING NUMBER:
PIPING CLASS	1C13		4274-XH-DL-2121N91M19-1
WELDING CLASS (4)	E	 LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT	
PED CATEGORY	Art 4.3		
INSULATION CODE / THK. (mm)	N 0	ANNEX 19	SPEC. L
DRAWING NUMBER 19-000-2-02-00001 sheet 2121N91M19-1			REV. 01