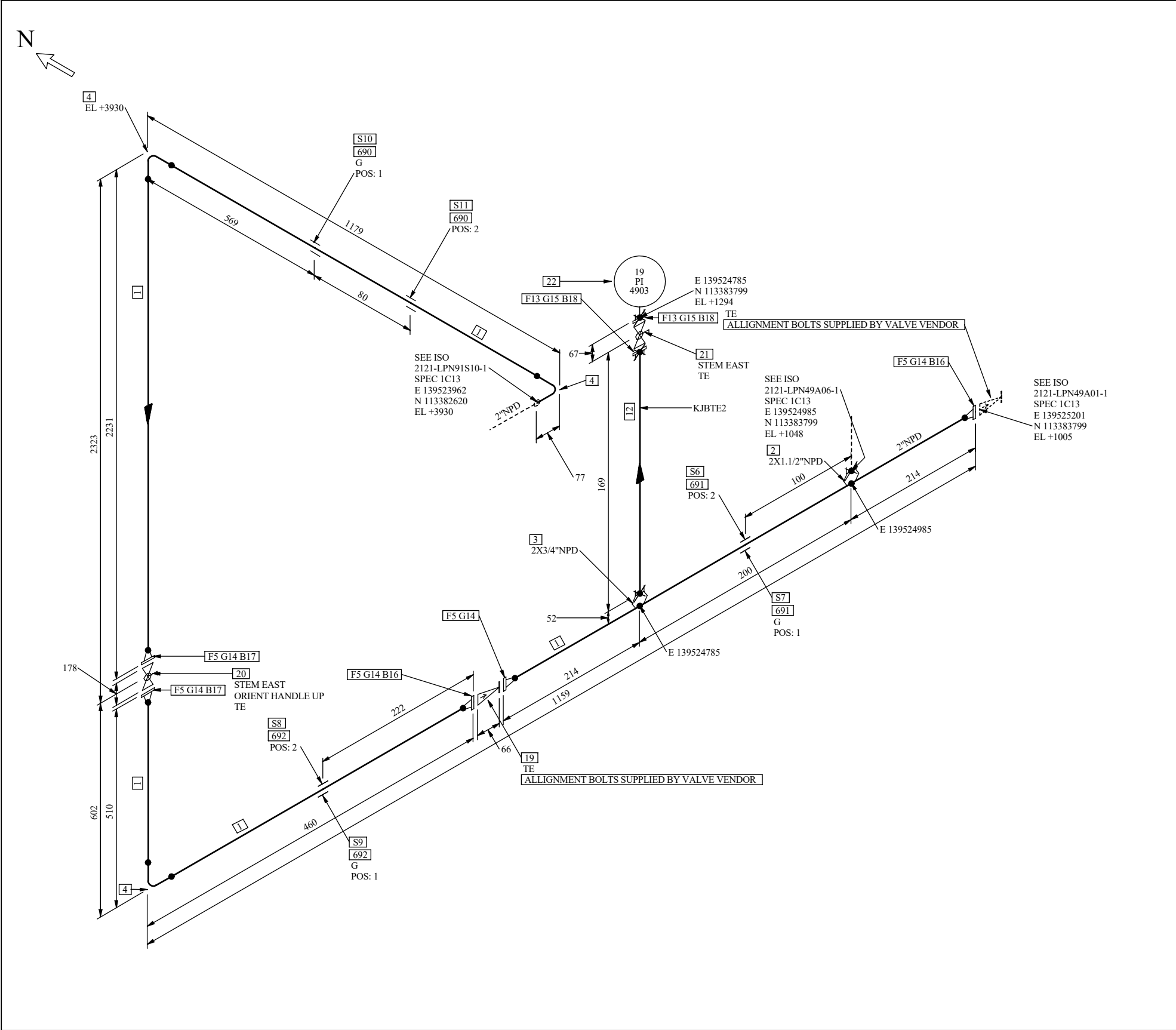












THIS DOCUMENT BELONGS TO REPSOL. IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).

EXTR. DATE: 07-04-2023 11:27:44

STREAM NO.:4203

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 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 115
00	ISSUED FOR CONSTRUCTION	07-APR-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-19-000-2-00-86196 sheet 1

APPROVED FOR CONSTRUCTION

Signature for construction is shown on Iso list of relevant CWA

ISOMETRIC DRAWING LINE

2"-LPN-91S10-1C13

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 <PIPA010B12STD> (L-7806).		2	I117862	4.4 M	
FITTINGS						
2	REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD <SOKA300LB01413> (L-343).		2X1.1/2	I7843413	1	
3	REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD <SOKA300LB01411> (L-343).		2X3/4	I7843411	1	
4	90 LR ELBOW ASME B16.9 A234-WPB BE SMLS C01DC04V01 S-STD <90LA200F32STD> (L-7955).		2	I128529	3	
FLANGES						
5	WN FLANGE ASME B16.5 150# A105N RFFE BE 125 - 250 AARH F01CDC44BV05 S-STD <WNFA300R152STD> (L-149).		2	I5355795	5	
PIPE SUPPORTS						
6	STAKES SUPPORTS ST09 L100X100X10		2	691	1	
7	STANDARD GUIDE FOR NOT INS. PIPING-N1G1		2	691	1	
8	STAKES SUPPORTS ST09 L100X100X10		2	692	1	
9	STANDARD GUIDE FOR NOT INS. PIPING-N1G1		2	692	1	
10	STANDARD GUIDE FOR NOT INS. PIPING-N1G1		2	690	1	
11	VERTICAL STAKES WELDED TO STR. ST42 L80X80X10		2	690	1	
PIPE						
12	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679).		3/4	I132785	0.2 M	
FLANGES						
13	SW FLANGE ASME B16.5 150# A105N RFFE SWE 125 - 250 AARH F02CDC44B105 S-XS <SWFA300R153/4XS> (L-295).		3/4	I5378342	2	
GASKETS						
14	SPIRAL WOUND GASKET ASME B16.20 150# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GDB11G12 <SPAQ505R1EA2> (L-SPA04)		2	I2230484	5	
15	SPIRAL WOUND GASKET ASME B16.20 150# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GDB11G12 <SPAQ505R1EA3/4> (L-SPA04)		3/4	I2230475	2	
BOLTS						
16	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/86> - 2 NUTS PER BOLT - 155 mm Length		5/8	I53437279	8	
17	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/831/2> - 2 NUTS PER BOLT - 85 mm Length		5/8	I53437429	8	
18	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						
19	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).		2	I10016150	1	
20	BALL VALVE API 608 150# A216-WCB RFFE 316/R-PTFE, GF B7/2H 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL LE ASME B16.5 V04JDC29BTR NREQD <B42L-BA1434> (L-BA1434).		2	I8683137	1	
21	BALL VALVE API 608 150# A216-WCB RFFE 316/R-PTFE, GF B7/2H 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW ASME B16.5 V04JDC29BZZG NREQD <N/A> (N/A).		3/4	I10013686	1	
INSTRUMENTS						
22	INSTRUMENT COMPONENT		3/4	I9-PI-4903	1	
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)		CONTRACTOR:	CONTRACTOR DRAWING NUMBER:	PROJECT:		
1						
PIPING CLASS			4274-XH-DL-2121LPN91S10-2	4001008		
IC13						
WELDING CLASS (4)		LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT				
E						
PED CATEGORY		CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX				
Art 4.3						
INSULATION CODE / THK. (mm)		ANNEX 19	SPEC. L	DRAWING NUMBER 19-000-2-02-00001 sheet 2121LPN91S10-2		
N 0				REV. 00		