

BILL OF MATERIAL										
PT NO COMPONENT DESCRIPTION PIPE	N.S. (IN)	ITEM CODE	QTY .	HOLD						
1 PIPE - A53-B GALV MTE SMLS T01AC11W02 S-XS <pipg010c11xs> (N/A) FITTINGS</pipg010c11xs>	1	1145594	8.0 M							
2 UNION ASME B16.11 3000# A105 GALV FTE FTE - R43FNC022201 NREQD <n a=""> (N/A)</n>	1	145867360	1							
3 90 ELBOW ASME B16.11 3000# A105 GALV FTE FTE - R31FNC022203 NREQD <90TG300KBK1> (L-8907)	1	I214920	2							
4 45 ELBOW ASME B16.11 3000# A105 GALV FTE FTE - R32FNC022201 NREQD <45TG300KBK1> (L-8908)	1	I214932	1							

REMARKS FOR MECHANICAL SUBCONTRACTOR:												
2) ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION.												
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.												
nne												
WHEREJAWITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.												
							STRESS CALC. Nº	TIT				
							-					
							D & ID	1				
1	ISSUED FOR REFERENCE	15-DEC-23	M.YADAV	P.VAZE	G.PAGANONI			ª				
			+					4				
	ISSUED FOR REFERENCE	30-JUN-2023	M.YADAV	P.VAZE	G.PAGANONI		LINE LIST Nº					
0							19-L-19-000-2-00-80602					
							PIPE LAYOUT Nº	1				
REV.	DESCRIPTION	DATE	DRW. BY	CHECK BY	APPR. BY	APPR. CLIENT	19-L-19-000-2-00-86197 sheet 3					
1 2 3 4 5 6 7 8 9	1) LINI 1) LINI 2) ALL 4) FOR 5) GUSSS FOR 60 CRO 60 CRO 7) IN C 70 IN C 80 ACT 10 DE SE 10 DE	1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. 2) ALD IMMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1.2" AND SMALLER SHALL E 3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL ✗ , ONE WELD FOR 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- 5) GUSSETING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. 7) IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICAE 3) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR TO PERFORM IT 2) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT 2) UPPORTS LEGEND: □DENOTES PARTS LIST NO PIPE A-RESTINS WHERE A-WITHOUT A-RESTINGS WHERE A-RESTINGS 3 WHERE A-RESTINGS SUPPORT A-RESTINGS WHERE A-RESTINGS 4 - RESTINGS 4 - RESTINGS 5 - REFERENCE 5 ISSUED FOR REFERENCE	1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. 2) ALD IMMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1.1/2" AND SMALLER SHALL BE CHECKED IN F. 3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL ✗ , ONE WELD FOR ADJUSTMENT (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-X1 5) GUROSSING 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 SHOW S) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (2) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 20 LUPPORTS LEGEND: □DENOTES PARTS LIST NO PIPE A-RESTINGSUPPORT G-C 30 LISSUED FOR REFERENCE 15-DEC-23 30-JUN-2023	1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. 2) ALD IMMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE C 3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL 4) FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. 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. 5) 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 (S) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF-TO 4274-LZ-1) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00 WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00 WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00 WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00 WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00 WHERE EARTHING SINDICATED, THIS WHERE A WITHOUT NUMBERING IS INDICATED, THIS SUPPORT SUPP	1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. 2) ALD IMMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION SPORTH FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. 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. 5) 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. 3) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF. TO 4274-LZ-PC-00000603). 2) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-09902/4274-NN-D 20 POPORTS LEGEND: □ DENOTES PARTS LIST NO PIPE WHERE A SHALL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-09902/4274-NN-D 30 WHERE AWAITHOUT NUMBERING IS INDICATED, THIS MEANS THAT TI ■ ISSUED FOR REFERENCE 15-DEC-23 M.YADAV P.VAZE 1 ISSUED FOR REFERENCE 30-JUN-2023 M.YADAV P.VAZE	1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. 2) ALD IMMENSION 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. 5) GROSSING 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. 3) 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-000-7-06-09902/4274-NN-DW-00000002 AND 10 PROPERTY OF A SHALL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-09902/4274-NN-DW-00000002 AND 11 PROPERTY OF A SHALL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-09902/4274-NN-DW-00000002 AND 12 PROPERTY OF A SHALL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-09902/4274-NN-DW-00000002 AND 13 SUED FOR REFERENCE 15-DEC-23 M.YADAV P.VAZE G.PAGANONI 14 ISSUED FOR REFERENCE 15-DEC-23 M.YADAV P.VAZE G.PAGANONI 15 SUED FOR REFERENCE 30-JUN-2023 M.YADAV P.VAZE G.PAGANONI	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. 5) GROSSING 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. 3) 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 IT BASED ON DOC. 45-P-000-7-06-000000202 AV74-NN-DW-00000002 AND ASSEMBLY NO **UPPORTS** LEGEND:** **DENOTES PARTSLIST NO** **PIPE** **A-RESTINGSUPPORT** **B-ANGLOR** **WHERE** **WHERE** **WHERE** **WHERE** **WHERE** **WHERE** **WHERE** **WHERE** **WHADAV** **P.VAZE** **G.PAGANONI* **ISSUED FOR REFERENCE** **15-DEC-23** **M.YADAV** **P.VAZE** **G.PAGANONI* **15-DEC-23** **M.YADAV** **P.VAZE* **G.PAGANONI* **15-DEC-23** **M.YADAV* **P.VAZE* **G.PAGANONI* **15-DEC-23** **M.YADAV* **P.VAZE* **G.PAGANONI* **15-DEC-23* **M.YADAV* **P.VAZE* **G.PAGANONI	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. LINE LIDIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION. FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L45-000-2-00-80004 / 4274-XH-SG-00000002. GOOGNING BETWEEN WELDS ON PIPELINES HALL NOT BE ADMITTED. IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN. ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF TO 4274-LZ-PC-00000603). WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-0007-06-00902 4274-NN-DW-00000002 AND ASSEMBLY NO FEA005 AND FE019. The DEPORTS LEGEND:				

Signature for construction is shown on Iso list of relevant CWA

ISSUED FOR

REFERENCE

ISOMETRIC DRAWING LINE 1"-IA-68W27-B-13

NOTES: 1. FOR TECHNICAL DETAILS SEE LINE LIST.

ANNEX 19

PIPE MATERIAL

CS, Galvanized

HEAT TREATMENT (PWHT)

PAINTING SCHEME (3)

INSULATION CODE / THK. (mm)

PIPING CLASS

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.

DRAWING NUMBER 19-000-2-02-00001 sheet 2121IA68W27-2

5. CODE SHOWN IN BOM BETWEEN "<" & ">" DENOTES REPSOL UNICODE. "<N/A>" MEANS UNICODE IS "NOT AVAILABLE" CONTRACTOR: CONTRACTOR DRAWING NUMBER: PROJECT:

4274-XH-DL-2121IA68W27-2

WELDING CLASS (4) LOW LINEAL DENSITY POLYETHILENE (PEL) AND POLYPROPYLENE (PP) PLANTS PED CATEGORY FOR PROJECT - ALBA PROJECT REPSQL Art 4.3

CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX

4001008

01

FILENAME: 19-000-2-02-00001 sheet 2121IA68W27-2.dwg