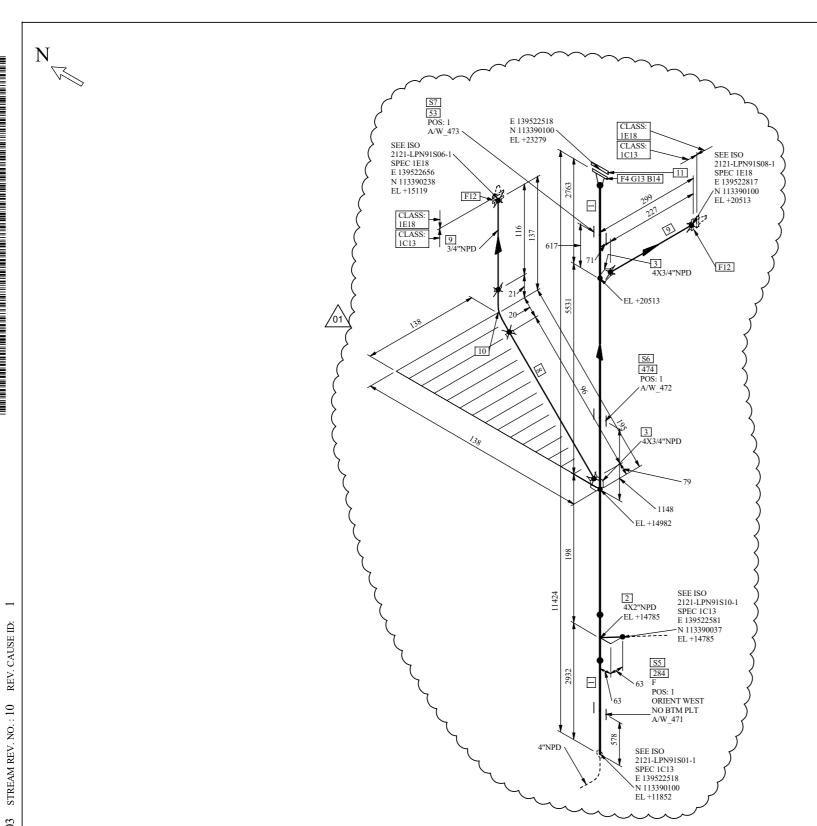
REMARKS FOR MECHANICAL SUBCONTRACTOR:

1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED.



BILL OF MATERIAL HOLD COMPONENT DESCRIPTION ITEM CODE STATUS (IN) PIPE - A106-B BE SMLS T01AC03V02 S-STD < PIPA010B14STD > (L-7806) I117953 11.2 M FITTINGS REDUCING TEE ASME B16.9 A234-WPB BE SMLS C32DC04V02 S-STD x I213040 <TRBA200F316151415> (L-9917) REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD I1651369 <SOKA300LB01611> (L-343) FLANGES WN FLANGE ASME B16.5 150# A105N RFFE BE 125 - 250 AARH F01CDC44BV05 S-STD I5355796 <WNFA300R154STD>(L-149) STOP HORIZ VERT FOR NOT INS. PIPING-N1F1 284 474 U BOLT (FOR GUIDE)-P02D U BOLT (FOR GUIDE)-P02D PIPE - A106-B PE SMLS T01AC03Z02 S-XS < PIPA010A13/4XS > (L-6679). I132785 PIPE - A106-B PE SMLS T01AC03Z02 S-XS < PIPA010A13/4XS > (L-6679) I132785 0.4 M 11651298 10 90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK3/4> (L-178) FLANGES 1 BLIND FLANGE ASME B16.5 150# A105N RFFE NREQD 125 - 250 AARH F10CDC44B005 I1652370 <BLFA300R154> (L-140) 12 SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS 19762190 <SWFA300R353/4XS> (L-375) FASKETS 3 SPIRAL WOUND GASKET ASME B16.20 150# RFFE 304/PTFE CARBON STEEL SS 304 ASME 4 I2230491 B16.5 G03GDB1IG12 < SPAQ505R1EA4 > (L-SPA04) 14 STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I010B0301 153437440 <SB2R51G5/831/2> - 2 NUTS PER BOLT - 90 mm Length

| ISSUED FOR CONSTRUCTION | 06-JAN-23 | M.YADAV | P.VAZE | G.PAGANONI | | 19-L-19-000-2-00-80602 | |
|--|---|--|--|---|---|--|--|
| ISSUED FOR CONSTRUCTION | 07-SEP-23 | M.YADAV | P.VAZE | G.PAGANONI | | 19-A-19-000-1-01-00001 sheet 115 | 1 |
| | | | | | | STRESS CALC. № - P & ID | TI |
| I CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS A CTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANIC HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM TO THE SHORT OF THE SHORT | AL SUBCONTRACTOR (I FORM IT BASED ON DOC RESTING SUPPORT G= | REF.TO 4274-LZ-I 2. 45-P-000-7-06-00 GUIDE F=AXIA | PC-00000603). 0902/ 4274 -NN-D ALSTOP B= | =ANCHOR M=S | SPRING S=TEI | FLONPAD | S |
| LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER OR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL 💢 , ONE W OR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. | SHALL BE CHECKED IN ELD FOR ADJUSTMENT | OF IN LINE COM | | | | | |
| | OR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE W OR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L- ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. ICASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS A CTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANIC HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERI PORTS LEGEND: DENOTES PARTSLIST NO PIPE SUPPORT WHERE ISSUED FOR CONSTRUCTION | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN DR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT: OR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-X ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. I CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOW CITUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (I HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOCUMENT OF A SHOW OF THE STREET OF THE SUPPORT O | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE OR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X , ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X , ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENTS MERCHANICAL SUPPORT OF THE STANDARD AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. SUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. SOSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. 1 CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST CITUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF. TO 4274-LZ-HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-0 PORTS LEGEND: 1 DENOTES PARTSLIST NO PIPE APPRICATION OF SUPPORT A RESTINGSUPPORT G GUIDE F-AXI WHERE WITHOUT NUMBERING IS INDICATED, THE SUPPORT SUPPORT OF SU | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION OR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST DREATH AND THE LENGTH REFER TO 4274-LZ-PC-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. 1 CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN. CTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF. TO 4274-LZ-PC-00000603). HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/ 4274 -NN-D PORTS LEGEND: DENOTES PARTSLIST NO PIPE A-RESING SUPPORT WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT TO SUPPORT WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT TO BISSUED FOR CONSTRUCTION 07-SEP-23 M.YADAV P.VAZE | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION. DR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT DR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. 1 CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN. CITUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF. TO 4274-LZ-PC-00000603). HERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/4274-NN-DW-00000002 AND PIPEL SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/4274-NN-DW-00000002 AND PIPE AND | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION. DR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT DR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. 1 CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN. CITUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF. TO 4274-LZ-PC-00000603). HERE 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 PORTS LEGEND: DENOTES PARTS LIST NO PIPE A-RESTING SUPPORT WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL ISSUED FOR CONSTRUCTION 07-SEP-23 M.YADAV P.VAZE G.PAGANONI | LL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION. DR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT REXTRA PIPE LENGTH REFIER TO 4274-LZ-P-C-00000603. USSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. ROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. CYASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN. CTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF.TO 4274-LZ-PC-00000603). HERE 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. PORTS LEGEND: DENOTES PARTSLIST NO PIPE AND STELL WELD ASSEMBLY NO FEA005 AND FE019. A RESTINGSUPPORT G GUIDE F-AXIALSTOP B-ANCHOR M-SPRING S-TEFLON PAD WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE. STRESS CALC. N° - ISSUED FOR CONSTRUCTION 07-SEP-23 M-YADAY P.VAZE G.PAGANONI 19-A-19-000-1-01-00001 sheet 115 |

CONSTRUCTION Signature for construction is shown on Iso list of relevant CWA

APPROVED FOR

CS

HEAT TREATMENT (PWHT)

PAINTING SCHEME (3)

ISOMETRIC DRAWING LINE 4"-LPN-91S01-1C13

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

ANNEX

3. WELDING ACCORDING TO 45-L-45-000-2-00-80021

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

PIPING CLASS 4001008 4274-XH-DL-2121LPN91S01-2 WELDING CLASS (4)

DRAWING NUMBER

LOW LINEAL DENSITY POLYETHILENE (PEL) AND POLYPROPYLENE (PP) PLANTS PED CATEGORY FOR PROJECT - ALBA PROJECT REPSQL INSULATION CODE / THK. (mm)

CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX

01

19-000-2-02-00001 sheet 2121LPN91S01-2