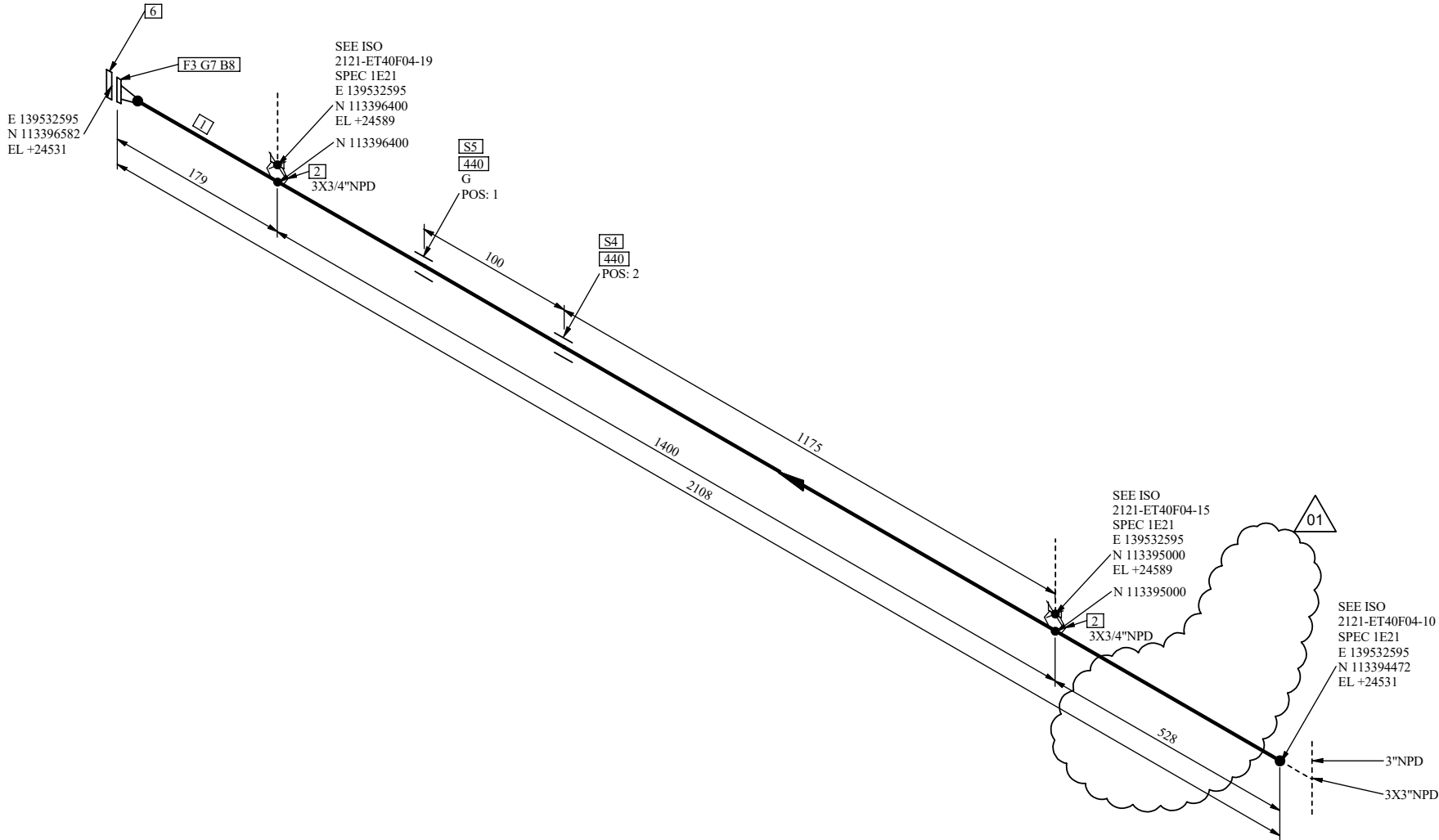


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EXTR. DATE: 07-09-2023 10:52:46

STREAM NO.:4005

REV. CAUSE ID: 8



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 <PIPA010B13STD> (L-7806)   | 3         | I117921   | 2.1 M |             |
| FITTINGS      |   |           |           |       |             |
| 2             | REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD <SOKA300LB01511> (L-343)                                  | 3X3/4     | I1651368  | 2     |             |
| FLANGES       |   |           |           |       |             |
| 3             | WN FLANGE ASME B16.5 300# A105N RFFE BE 125 - 250 AARH F01CFC44BV05 S-STD <WNFA300R353STD> (L-236)                            | 3         | I4217853  | 1     |             |
| PIPE SUPPORTS |   |           |           |       |             |
| 4             | VERTICAL STAKES WELDED TO STR. ST42 L100X100X10   | 3         | 440       | 1     |             |
| 5             | STANDARD GUIDE FOR NOT INS. PIPING-N1G1   | 3         | 440       | 1     |             |
| FLANGES       |   |           |           |       |             |
| 6             | BLIND FLANGE ASME B16.5 300# A105N RFFE NREQD 125 - 250 AARH F10CFC44B005 <BLFA300R353> (L-143)                               | 3         | I1652388  | 1     |             |
| GASKETS       |   |           |           |       |             |
| 7             | SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 ASME B16.5 G03GFP1IS12 <N/A> (N/A)                 | 3         | I63508968 | 1     |             |
| BOLTS         |   |           |           |       |             |
| 8             | STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G3/441/4> - 2 NUTS PER BOLT - 110 mm Length | 3/4       | I53437465 | 8     |             |

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.

| REV. | DESCRIPTION             | DATE      | DRW. BY | CHECK BY | APPR. BY   | APPR. CLIENT | STRESS CALC. N°                                  |
|------|-------------------------|-----------|---------|----------|------------|--------------|--|
| 01   | ISSUED FOR CONSTRUCTION | 07-SEP-23 | M.YADAV | P.VAZE   | G.PAGANONI |              | P & ID<br>19-A-19-000-1-01-00001 sheet 36        |
| 00   | ISSUED FOR CONSTRUCTION | 09-DEC-22 | M.YADAV | P.VAZE   | G.PAGANONI |              | LINE LIST N°<br>19-L-19-000-2-00-80602           |
|      |                         |           |         |          |            |              | PIPE LAYOUT N°<br>19-L-19-000-2-00-86197 sheet 6 |

APPROVED FOR CONSTRUCTION

Signature for construction is shown on Iso list of relevant CWA

ISOMETRIC DRAWING LINE

3"-ET-40F04-1E21

|                             |  |  |                            |  |
|-----------------------------|--|--|----------------------------|--|
| PIPE MATERIAL               | NOTES: 1. FOR TECHNICAL DETAILS SEE LINE LIST.<br>2. FOR VENT, DRAIN OR INSTRUMENT CONNECTION DETAILS SEE 45-L-45-000-2-00-80102.<br>3. WELDING ACCORDING TO 45-L-45-000-2-00-80021.<br>4. PAINTING ACCORDING TO 45-A-45-000-1-00-20160.<br>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  |  |                            |  |
| PIPING CLASS                | 1E21   |  |                            |  |
|                             |  | CONTRACTOR:  | CONTRACTOR DRAWING NUMBER: | PROJECT:   |
|                             |  |  | 4274-XH-DL-2121ET40F04-9   | 4001008  |
|                             |  | LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT |                            |  |
|                             |  | CLIENT / COMPLEX REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX                                    |                            |  |
| WELDING CLASS (4)           | E  |  |                            |  |
| PED CATEGORY                | II   |  |                            |  |
| INSULATION CODE / THK. (mm) | N 0  | ANNEX 19   | SPEC. L                    | DRAWING NUMBER 19-000-2-02-00001 sheet 2121ET40F04-9 |
|                             |  |  |                            | REV. 01  |