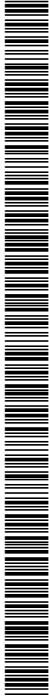


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EXTR. DATE: 29-06-2023 07:03:18

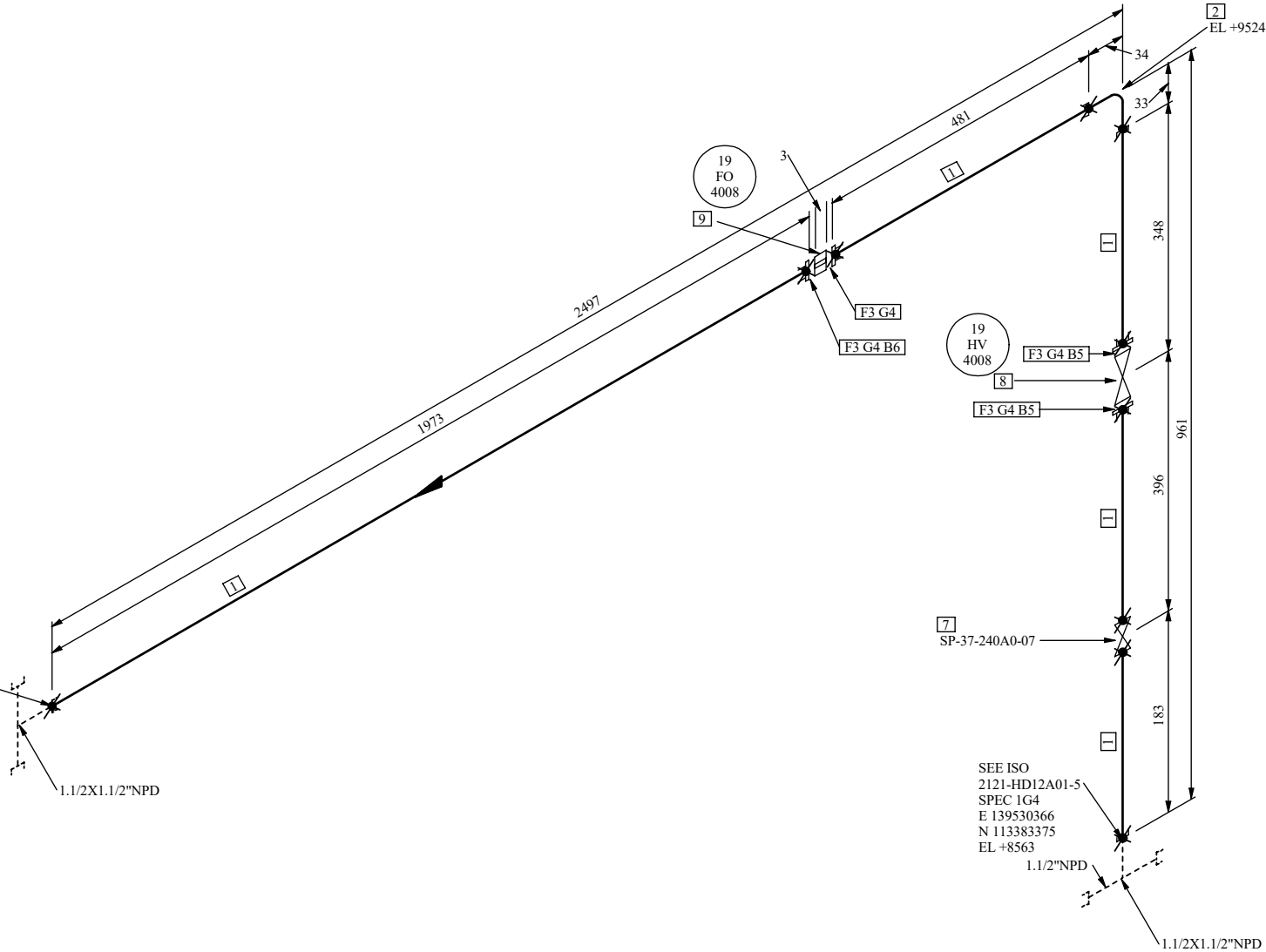
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REV. CAUSE ID:








SEE ISO  
2121-HD40A15-2  
SPEC 1G4  
E 139527870  
N 113383375  
EL +9524

1.1/2X1.1/2"NPD



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°                 |
|      |                      |           |          |          |            |              | -                               |
|      |                      |           |          |          |            |              | P & ID                          |
|      |                      |           |          |          |            |              | 19-A-19-000-1-01-00001 sheet 28 |
| 00   | ISSUED FOR REFERENCE | 30-JUN-23 | U.CHAVAN | P.VAZE   | G.PAGANONI |              | LINE LIST N°                    |
|      |                      |           |          |          |            |              | 19-L-19-000-2-00-80602          |
|      |                      |           |          |          |            |              | PIPE LAYOUT N°                  |
| REV. | DESCRIPTION          | DATE      | DRW. BY  | CHECK BY | APPR. BY   | APPR. CLIENT | 19-L-19-000-2-00-86196 sheet 3  |

ISSUED FOR  
REFERENCE



Signature for construction is shown  
on Iso list of relevant CWA

TITLE  
**ISOMETRIC DRAWING  
LINE**

1-1/2"-HD-40A15-1G4

BILL OF MATERIAL

| PT<br>NO                      | COMPONENT DESCRIPTION   | N.S.<br>(IN) | ITEM CODE      | QTY   | HOLD<br>STATUS |
|-------------------------------|---|--------------|----------------|-------|----------------|
| <b>PIPE</b>                   |   |              |                |       |                |
| 1                             | PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A111/2XS> (L-6679)  | 1.1/2        | I132809        | 3.0 M |                |
| <b>FITTINGS</b>               |   |              |                |       |                |
| 2                             | 90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK11/2> (L-178)  | 1.1/2        | I1651297       | 1     |                |
| <b>FLANGES</b>                |   |              |                |       |                |
| 3                             | SW FLANGE ASME B16.5 600# A105N RFFE SWE 125 - 250 AARH F02CHC44B105 S-XS <SWFA30046511/2XS> (L-376)                          | 1.1/2        | 19805899       | 4     |                |
| <b>GASKETS</b>                |   |              |                |       |                |
| 4                             | SPIRAL WOUND GASKET ASME B16.20 600# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GHB11G12 <SPAQ50546EA11/2> (L-SPA03)     | 1.1/2        | I63462938      | 4     |                |
| <b>BOLTS</b>                  |   |              |                |       |                |
| 5                             | 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     |                |
| 6                             | STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G3/441/2> - 2 NUTS PER BOLT - 115 mm Length | 3/4          | I53437466      | 4     |                |
| <b>VALVES / IN-LINE ITEMS</b> |   |              |                |       |                |
| 7                             | SPECIALTY COMPONENT   | 1.1/2        | SP-37-240A0-07 | 1     |                |
| <b>INSTRUMENTS</b>            |   |              |                |       |                |
| 8                             | INSTRUMENT COMPONENT  | 1.1/2        | 19-HV-4008     | 1     |                |
| 9                             | INSTRUMENT COMPONENT  | 1.1/2        | 19-FO-4008     | 1     |                |

|                                    |  |  |  |   |  |            |
|------------------------------------|--|--|--|---|--|------------|
| 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)<br>N         |  |  |  |   |  |            |
| PAINTING SCHEME (3)<br>I           |  | CONTRACTOR:<br>   | CONTRACTOR DRAWING NUMBER:<br>4274-XH-DL-2121HD40A15-1 | PROJECT:<br>4001008                                     |  |            |
| PIPING CLASS<br>1G4                |  |  |  |   |  |            |
| WELDING CLASS (4)<br>E-9           |  | <div><div>LOW LINEAL DENSITY POLYETHYLENE (PEL)<br/>AND POLYPROPYLENE (PP) PLANTS<br/>FOR PROJECT - ALBA PROJECT</div><div>CLIENT / COMPLEX<br/>REPSOL POLYMEROS/<br/>SINES INDUSTRIAL COMPLEX</div></div>  |  |   |  |            |
| PED CATEGORY<br>II                 |  |  |  |   |  |            |
| INSULATION CODE / THK. (mm)<br>N 0 |  | ANNEX<br>19  | SPEC.<br>L   | DRAWING NUMBER<br>19-000-2-02-00001 sheet 2121HD40A15-1 |  | REV.<br>00 |