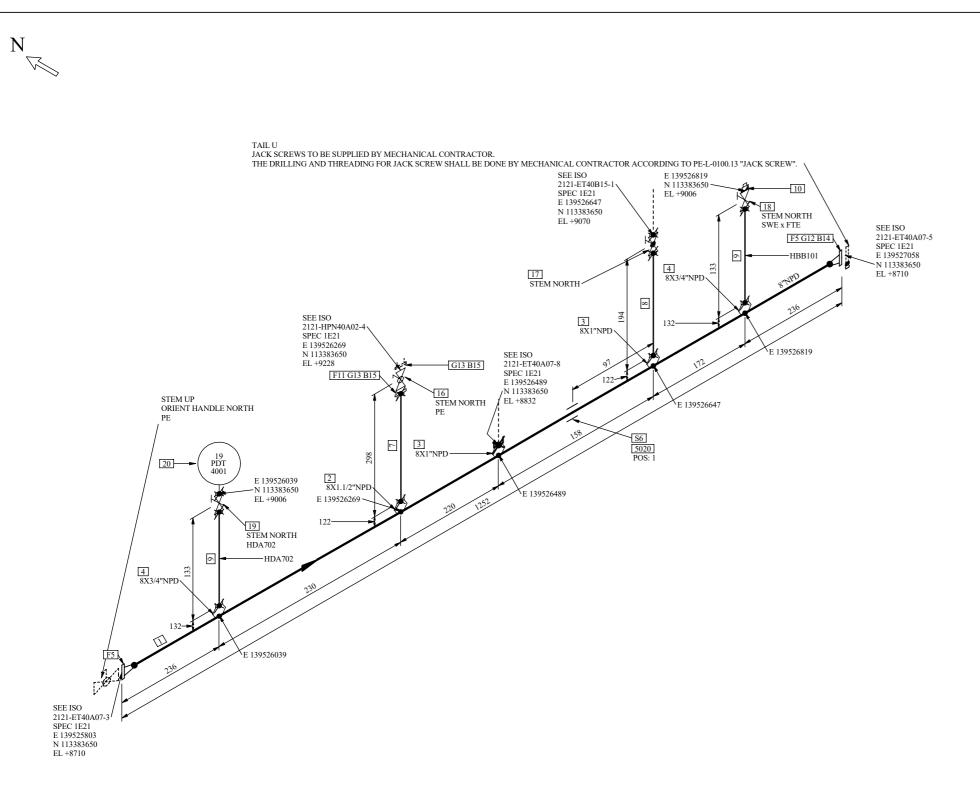
REV. CAUSE ID:

STREAM REV.



BILL OF MATERIAL HOLD COMPONENT DESCRIPTION ITEM CODE QTY (IN) STATUS PIPE - A106-B BE SMLS T01AC03V02 S-STD < PIPA010B18STD > (L-7806) I117995 FITTINGS REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD I1651325 <SOKA300LB01813> (L-343) REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD I1651356 <SOKA300LB01812> (L-343) REDUCING SOCKOLET MSS-SP-97 3000# A105N BE SWE - R13DNC44V101 NREQD I1651372 8X3/4 <SOKA300LB01811> (L-343) FLANGES WN FLANGE ASME B16.5 300# A105N RFFE BE 125 - 250 AARH F01CFC44BV05 S-STD I4274966 <WNFA300R358STD>(L-236) PIPE SUPPORTS STAKES SUPPORTS ST01 HEA140 5020 PIPE - A106-B PE SMLS T01AC03Z02 S-XS < PIPA010A111/2XS > (L-6679) 1.1/2 I132809 0.2 M PIPE - A106-B PE SMLS T01AC03Z02 S-XS < PIPA010A11XS > (L-6679) I132793 0.2 M PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679) I132785 0.3 M FITTINGS 10 PLUG ROUND HEAD ASME B16.11 - A105N MTE NREQD - R42FQC44W001 NREQD 110088232 <PLUA300CK3/4> (L-77) FLANGES 11 SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS 1.1/2 19762192 <SWFA300R3511/2XS>(L-375) 2 SPIRAL WOLIND GASKET ASME B16 20 300# RETBE 304/GRAFOIL CARBON STEEL SS 304 - 8 163508997 ASME B16.5 G03GFP1IS12 < N/A> (N/A) SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 1.1/2 163508953 ASME B16.5 G03GFP1IS12 < N/A > (N/A) 153437673 14 STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G7/863/4> - 2 NUTS PER BOLT - 170 mm Length 5 STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I010B0301 153437635 <SB2R51G3/431/2> - 2 NUTS PER BOLT - 90 mm Length ALVES / IN-LINE ITEMS 6 BALL V-FLT-SS-FB API 608 300# A216-WCB RFFE 316/PEEK B7/2H 125 - 250 AARH 164812609 1.1/2 2PSB-FULL BORE FLOATING BALL OHW TIGHT SHUT-OFF (TSO) ASME B16.5 V1FJFC29B01L NREOD <N/A> (N/A) GLOBE VALVE API 602 800# A105N SWE SWE 8-F6&HF WB-OS&Y API 602 HW I63564624 V02GIC44115S1 NREOD < A61L-AL044> (L-AL044) GATE VALVE API 602 800# A105N SWE FTE 8-F6&HF WB-OS&Y SOW API 602 HW I10015410 V01GIC4412BL NREOD < N/A > (N/A) 9 GATE VALVE API 602 800# A105N SWE SWE 8-F6&HF WB-OS&Y SOW API 602 HW I10015418 V01GIC4411BL NREQD < G63\_4L-GA1313-B > (L-GA1313-B) INSTRUMENTS 20 INSTRUMENT COMPONENT 19-PDT-4001

REMARKS FOR MECHANICAL SUBCONTRACTOR:  1) LINES 1.12" 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.							APPROVED FOR CONSTRUCTION
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  A RESING SUPPORT  A RESING SUPPORT  G GUIDE  F - AXIAL STOP  B - BANCHOR  M - SPRING  S - TIFLON PAD  WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.							Signature for construction is sho on Iso list of relevant CWA
						STRESS CALC. N° REP-PE-01	ICOMETRIC DRAWIN
						P & ID 19-A-19-000-1-01-00001 sheet 28	ISOMETRIC DRAWIN
ISSUED FOR CONSTRUCTION	18-NOV-22	U.CHAVAN	P.VAZE	G.PAGANONI		LINE LIST N° 19-L-19-000-2-00-80602	LINE
EV. DESCRIPTION	DATE	DRW. BY	CHECK BY	APPR. BY	APPR. CLIENT	PIPE LAYOUT N° 19-L-19-000-2-00-86196 sheet 3	8"-ET-40A07-1E21
	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATE ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHAIFOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603.  GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-00 CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED.  IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLIA ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICALS WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM  PPORTS LEGEND:  IDENOTES PARTSLISTNO  PIPE	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT: FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-X CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOW ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (I) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC  PPORTS LEGEND:  IDENOTES PARTSLISTNO  PIPE A-RESTINGSUPPORT G= WHERE AWITHOUT NUMBERING B.  ISSUED FOR CONSTRUCTION  18-NOV-22	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE C FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL X, ONE WELD FOR ADJUSTMENT OF IN LINE COMI FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED. IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF.TO 4274-LZ-PWHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-0007-70-600  PPORTS LEGEND:  IDENOTES PARTSLIST NO  PIPE A-RESTINGSUPPORT G-GUIDE F-AXIA WHERE AWITHOUT NUMBERING IS INDICATED, THIS  ISSUED FOR CONSTRUCTION  18-NOV-22  U.CHAVAN	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION 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 X , ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002. CROSSING BETWEEN WELDS ON PIPELINE SHALL 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-0000603). WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/ 4274-NN-D  PPORTS LEGEND:    DENOTES PARTS LIST NO	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION 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 X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-000000002. CROSSING BETWEEN WELDS ON PIPELINE SHALL 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-000-7-06-09002/4274-NN-DW-00000002 AND  PPORTS LEGEND:    DENOTES PARTS LIST NO	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION 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 X, ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603. GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-000000002. CROSSING BETWEEN WELDS ON PIPELINE SHALL 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. 457-0007-706-00902 4274 -NN-DW-00000002 AND ASSEMBLY NO  PPORTS LEGEND:    DENOTES PARTSLIST NO	LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED. ALL DIMENSION 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 X ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603.  GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002.  CROSSING BETWEEN WELDS ON PIPELINE SHALL 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-000-7-06-09002 4274 -NN-DW-00000002 AND ASSEMBLY NO FEA005 AND FE019.  PPORTS LEGEND:  DENOTES PARTSLIST NO  PIPE  A-RESTING SUPPORT  A-RESTING SUPPORT  A-RESTING SUPPORT  WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.  STRESS CALC. N°  REP-PE-01  P & ID  19-A-19-000-1-01-00001 sheet 28  ISSUED FOR CONSTRUCTION  18-NOV-22  U.CHAVAN  P.VAZE  G.PAGANONI  LINE LIST N°  19-L-19-000-2-00-80602  PIPE LAYOUT N°

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

PIPE MATERIAL

HEAT TREATMENT (PWHT)

INSULATION CODE / THK. (mm)

CS

DMETRIC DRAWING LINE

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

5. CODE SHOWN IN BOM BETWEEN "<" & ">" DENOTES REPSOL UNICODE. "<N/A>" MEANS UNICODE IS "NOT AVAILABLE" PAINTING SCHEME (3) CONTRACTOR: CONTRACTOR DRAWING NUMBER: PROJECT:

DRAWING NUMBER

4001008 PIPING CLASS 4274-XH-DL-2121ET40A07-4 1E21 WELDING CLASS (4) LOW LINEAL DENSITY POLYETHILENE (PEL) AND POLYPROPYLENE (PP) PLANTS PED CATEGORY

REPSQL

ANNEX

CLIENT / COMPLEX REPSOL POLYMEROS/ FOR PROJECT - ALBA PROJECT

SINES INDUSTRIAL COMPLEX 00 19-000-2-02-00001 sheet 2121ET40A07-4