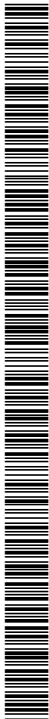


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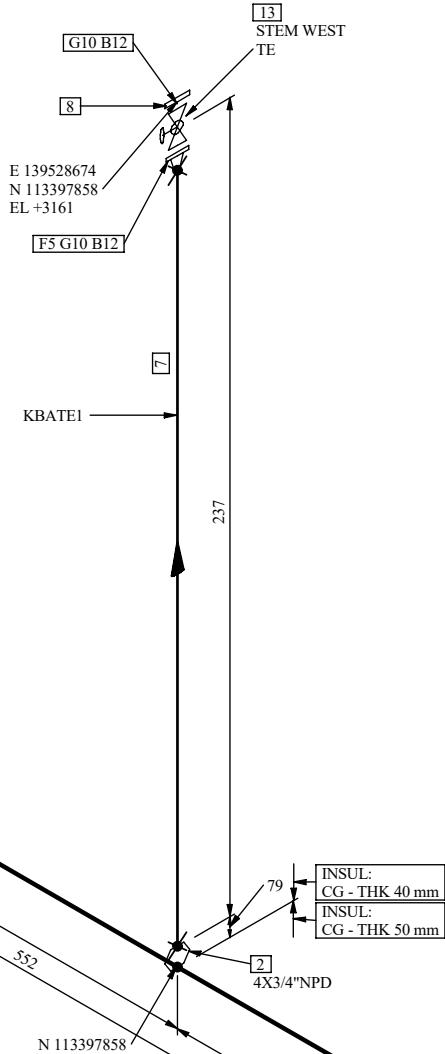
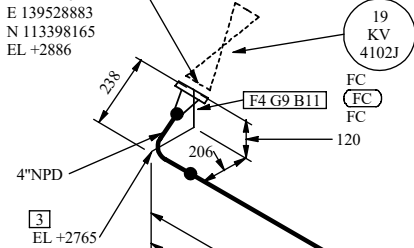
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STREAM NO.:4515

REV. CAUSE ID:



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SPEC 1E64
E 139528883
N 113398165
EL +2886




CLASS:
1E64
CLASS:
1E21

SEE ISO
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SPEC 1E21
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


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 <PIPA010B14STD> (L-7806)	4	I117953	0.4 M	
FITTINGS					
2	REDUCING WELDOLET MSS-SP-97 A105N BE - C35DC44V01 S-STD S-XS <WOLA300F016151116> (L-347)	4X3/4	19794347	1	
3	90 LR ELBOW ASME B16.9 A234-WPB BE SMLS C01DC04V01 S-STD <90LA200F34STD> (L-7955)	4	I128635	1	
FLANGES					
4	WN FLANGE ASME B16.5 300# A105N RFFE BE 125 - 250 AARH F01CFC44BV05 S-STD <WNFA300R354STD> (L-236)	4	I4272446	2	
5	WN FLANGE ASME B16.5 300# A105N RFFE BE 125 - 250 AARH F01CFC44BV05 S-XS <WNFA300R353/4XS> (L-236)	3/4	19805754	1	
INSTRUMENTS					
6	INSTRUMENT COMPONENT	4	19-FO-4108	1	
PIPE					
7	PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679)	3/4	I132785	0.2 M	
FLANGES					
8	BLIND FLANGE ASME B16.5 300# A105N RFFE NREQD 125 - 250 AARH F10CFC44B005 <BLFA300R353/4> (L-143)	3/4	I1652375	1	
GASKETS					
9	SPIRAL WOUND GASKET ASME B16.20 300# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GFB11G12 <SPAQ505R3EA4> (L-SPA05)	4	I63598770	2	
10	SPIRAL WOUND GASKET ASME B16.20 300# RFFE 304/PTFE CARBON STEEL SS 304 ASME B16.5 G03GFB11G12 <SPAQ505R3EA3/4> (L-SPA05)	3/4	I63598745	2	
BOLTS					
11	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	8	
12	STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/831/4> - 2 NUTS PER BOLT - 80 mm Length	5/8	I53437418	8	
VALVES / IN-LINE ITEMS					
13	BALL VALVE API 608 300# A216-WCB RFFE 316/R-PTFE, GF B7/2H 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW ASME B16.5 V04JFC29BZZG NREQD <B43_4L-AL084> (L-AL084)	3/4	I9918106	1	

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.

APPROVED FOR
CONSTRUCTION

Signature for construction is shown
on Iso list of relevant CWA

TITLE
ISOMETRIC DRAWING
LINE

4"-VRG-41D03-1E64 (CG)

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. 3. WELDING ACCORDING TO 45-L-45-000-2-00-80021. 4. PAINTING ACCORDING TO 45-A-45-000-1-00-20160. 5. CODE SHOWN IN BOM BETWEEN "<" & ">" DENOTES REPSOL UNICODE. "<N/A>" MEANS UNICODE IS "NOT AVAILABLE".		
CS			
HEAT TREATMENT (PWHT)			
N			
PAINTING SCHEME (3)	20	CONTRACTOR:	CONTRACTOR DRAWING NUMBER:
PIPING CLASS	1E64		4274-XH-DL-2121VRG41D03-1
WELDING CLASS (4)	A-1	 LOW LINEAL DENSITY POLYETHYLENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT	
PED CATEGORY	II		
INSULATION CODE / THK. (mm)	CG 50	ANNEX 19	SPEC. L
DRAWING NUMBER 19-000-2-02-00001 sheet 2121VRG41D03-1			REV. 00