



SHT  
02 OF 03

AURELIAN  
ECUADOR S.A.

DESIGN TEMP (°C) / TEMPERATURA DE DISEÑO											
DESIGN PRESS (MPa) / PRESION DE DISEÑO		2	RE-ISSUED FOR FABRICATION	MR	PD	18-10-11	DESIGN/DISEÑO	M.ROCHE	18-04-02		
DESIGN CODE & CLASS / CODIGO Y CLASE DE DISEÑO		1	RE-ISSUED FOR FABRICATION	MR	PD	18-09-07	DRAWN/DIBUJADO	M.ROCHE	18-04-02		
INSULATION (TYPE/THK) / AISLACION (TIPO/ESPESOR)		0	ISSUED FOR FABRICATION	MR	PD	18-07-06	CHECKED/VERIFICADO	A.CHARLEB	18-04-05		
TRACING / TRAZADO		C	ISSUED FOR TENDER	MR	PD	18-05-08	ENGINEER/INGENIERO	P.DUMONT	18-04-05		
NDE		B	ISSUED FOR PROJECT REVIEW	MR	PD	18-04-05					
TEST TYPE / PRUEBA TIPO		A	ISSUED FOR INTERNAL REVIEW	MR	PD	18-04-05					
TEST PRESS (MPa) / PRUEBA DE PRESION		REV	DESCRIPTION / DESCRIPCION	BY / DE	ENG	DATE/FECHA					

Ausenco  
Montréal, Québec,  
Canada

T +1 514 866 1221  
W www.ausenco.com

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## BILL OF MATERIALS / LISTA DE MATERIALES

PT No	QTY CANT.	SIZE DIM.	DESCRIPTION DESCRIPCIÓN
1	16034 MM	300	PIPE, CS, ERW, PLAIN, GROOVED ENDS C/W 6mm RUBBER LINED GROOVED AS PER VICTAULIC 25.03
			A53 Gr.B STD, ERW
2	200 MM	300	100MM NIPPLE, GROOVED END AS PER 25.03 + BW END, ASTM A53 GR B. RUBBERLINED 6MM
3	1	300X100	TEE, RED, VICTAULIC NO. 25 GROOVED TO VICTAULIC 25.01, 6MM RUBBER DUCTILE IRON, A536
4	1	300X50	TEE, RED, VICTAULIC NO. 25 GROOVED TO VICTAULIC 25.01, 6MM RUBBER DUCTILE IRON, A536
5	1	300	90 DEG 3D BEND TRIMMED, CARBON STEEL, BW, ASTM A53 GR B. RUBBERLINED 6MM
6	1	100	FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536
7	1	50	FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536
8	1	300	SINGLE TRUNNION
9	3	300	CLAMPED SLOPED MEDIUM PIPE SHOE - 3 DEGREE SLOPE
10	5	300	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
11	3	300	COUPLING, RIGID, STYLE 07 ZERO-FLEX RIDGID COUPLING DUCTILE IRON, A536
12	1	100	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
13	1	50	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
14	1	100	GASKET, 1.5MM RING or FULL FACE TO SUIT FLANGES GARLOCK 3000
15	1	50	GASKET, 1.5MM RING or FULL FACE TO SUIT FLANGES GARLOCK 3000
16	4	16	BOLT, HEX HD BOLTS c/w HEX HEAD NUT A193 Gr.B7, A194 Gr.2H - 88.9 mm Length
17	24	16	WASHER, ROUND, FLAT, STEEL, GALV, for 0.625in bolt
18	8	16	BOLT, HEX HD BOLTS c/w HEX HEAD NUT A193 Gr.B7, A194 Gr.2H - 101.6 mm Length
19	1	100	KNIFE GATE VALVE, CLARKSON KGA, FLANGE TYPE (KG01)
20	1	50	KNIFE GATE VALVE, CLARKSON KGD, WAFER TYPE (KG03)



### GENERAL NOTES

- FOR PROJECT PIPING STANDARDS, REFER TO DRAWING ECFN-AUS-PI-6000-STD-01001.
- ALL ISOMETRICS ARE DRAWN TO VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01.
- ALL DIMENSIONS INDICATED ARE TO THE FACE OF STEEL.
- GAPS WHERE VICTAULIC COUPLINGS WILL BE ADDED RESPECTS VICTAULIC STANDARD DIMENSIONS FOR MAXIMUM SEPARATION ALLOWANCE.

### FOR RUBBERLINING MANUFACTURING PURPOSE

- STRAIGHT PIPE SPOOLS AND CUSTOM FITTINGS ARE TO BE FABRICATED TO VICTAULIC STANDARD GROOVE DIMENSIONS FOR RUBBER LINING 25.03.
- FOR PIPE-TO-FITTING JOINT, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01 (3 MM RUBBER TO BE ADDED).
- FOR FITTING-TO-FITTING JOINT, 12 INCH AND LESS, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01 (1.6 TO 3 MM RUBBER TO BE ADDED).
- FOR FITTING-TO-FITTING JOINT, 14 INCH AND LARGER, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.03.

LINE NUMBER NÚMERO DE LINEA	6210-300-SPR-L03-0114	SPEC ESP.	L03	P&ID NUMBER NÚMERO P&ID	6210-PID-00001
TITLE / TÍTULO			FRUTA DEL NORTE PROJECT PIPING ISOMETRIC		SUB-PROJECT / SUB-PROYECTO: ENGINEERING CONSTRUCTION / INGENIERIA Y CONSTRUCCIÓN
			PROYECTO FRUTA DEL NORTE ISOMÉTRICOS DE TUBERÍAS		ALL DIMENSIONS IN MM / TODAS LAS DIMENSIONES EN MM
					SIZE / TAMA NO A3
					REV. 2
					DRAWING No ECFN-AUS-PI-6210-ISO-01013