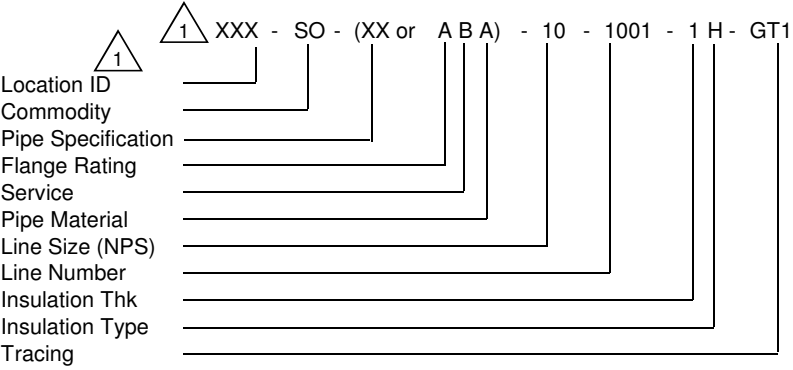


CHRISTINA LAKE SPECS: LINE DESIGNATION AND NUMBERING (REV. 1):



LOCATION ID: 1

CL1 - Christina Lake Phase 1 Commercial Plant. 1

A01 - Production Pad (A Pod) 1

A02 - Production Pad (A Pod) 1

B00 - General offsites and pipelines associated with "B Pod" 1

B01 - Production Pad (B Pod) 1

B02 - Production Pad (B Pod) 1

COMMODITIES:

AG	Acid Gas	GC	Glycol Cooling Medium	PS	Process Steam
AL	Alum	GH	Glycol Heating Medium	PW	Produced Water
AS	Soda Ash	HA	Hydrochloric Acid	RA	Rich Amine
BD	Blowdown	HO	Heating Oil	RF	Flare/Relief
BF	Boiler Feed Water	HS	High Pressure Steam	RG	Rich Glycol
BL	Blended Crude	IA	Instrument Air	RS	Recycle Slop
BR	Brine	IS	Injection Steam	RW	Raw Water
BU	Butane	LA	Lean Amine	SC	Steam Condensate
BW	Brackish Water	LG	Lean Glycol	SO	Sales Oil
CA	Caustic	LO	Lube Oil	SP	Soft Produced Water
CD	Closed Drain	LS	Lime Slurry	SR	Soft Raw Water
CG	Casing Gas	MS	Magox Slurry	SS	Softening Sludge
CH	Chemicals	NC	Caustic-Concentrated	UA	Utility Air
CO	Condensate	NI	Nitrogen	US	Utility Steam
CR	Crude Oil	PA	Produced Air	UW	Utility Water
CW	Cooling Water	PE	Produced Emulsion	VS	Varsol
DE	Diesel	PF	Produced Fluids	VT	Vent
DL	Diluent	PG	Produced Gas	WP	Potable Water
FG	Fuel Gas	PO	Polymer	WR	Regen Waste
FM	Foam	PR	Propane	WW	Waste Water
FW	Filtered Water				

XX PIPE SPECIFICATION: * Refer to Piping Material Specification Document SPC-114026-P-001

AB	150#, CS, Sweet Fluids
AC	150#, CS, General Process, Corrosive
AL	150#, CS, Sweet Fluids, Low Temp
AP	150#, PVC, Utilities/Chemicals
AS	150#, CS, Sour Fluids
AV	150#, CS, Steam, Boiler Feed Water, Steam Condensate
AW	150#, HDPE, Raw Water, Buried
BA	300#, CS, Sweet Fluids
BS	300#, CS, Sour Fluids
BV	300#, CS, Steam, Boiler Feed Water, Steam Condensate
CA	600#, CS, Sweet Fluids
CC	600#, CS, General Process, Corrosive
CL	600#, CS, Low Temp.
DA	900#, CS, Sweet Fluids
DB	900#, CS, General Process, Corrosive
DS	900#, CS, Sour Fluids
EJ	1500#, SS, Chem. Inj., Sodium Sulphite, Caustic, Demulsifier, Reverse Demulsifier
EV	1500#, CS, Steam, Boiler Feed Water, Steam Condensate
EX	1500#, CS, Steam, Boiler Feed Water, Steam Condensate

ABA type spec for CL to be based on: 1

FLANGE RATING:

A	ANSI 150#	D	ANSI 900#
B	ANSI 300#	E	ANSI 1500#
C	ANSI 600#	F	ANSI 2500#

SERVICE:

A	Non-corrosive Hydrocarbons	Q	Caustics
B	Corrosives	S	Sour Hydrocarbons
C	Chemicals	U	Utilities
D	Acid, Hydrochloric and Sulphuric	V	Steam
E	Brine	W	Produced Water/Brackish Water
F	Cryogenics	X	Low Temperature Sour
H	Instrument Air	Z	Low Temperature Corrosives
L	Low Temperature Non-corrosives		

PIPE MATERIAL:

A	Carbon Steel A106B	F	Fibreglass Reinforced Pipe	L	Polypropylene Lined Pipe
B	Carbon Steel A333 Gr. 6	G	Carbon Steel Galvanized	M	Polytetraflouroethylene (PTFE) Lined Pipe
C	Stainless Steel 316/316L	H	Internally Coated	N	High Density Polyethylene (HDPE) Pipe
D	Stainless Steel 304/304L	J	Copper	P	Polyvinyl Chloride (PVC)
E	Unspecified	K	PE Tubing	Z	Carbon Steel Z245.1 (Z662)

LINE SIZE

Indicates the Nominal Pipe Size (NPS) of the primary section of the line.

LINE NUMBER

Shall be assigned as a four character number issued sequentially starting with 0001 for each commodity.

INSULATION:

Thickness in inches, e.g., 1, 1.5, 2, 2.5, 3, 3.5 & 3.5

TYPE AND MATERIAL CODE:

H	Hot
P	Personnel Protection
C	Cold Insulation
CP	Condensation Protection

TRACING TYPE:

GT1	Glycol Traced Freeze Protection (Hold 10 °C)
GT2	Glycol Traced Viscosity Control (Hold 60 °C)
GT3	Glycol Traced Viscosity Control (Hold Temp to be Specified)
ET1	Electric Traced Freeze Protection (Hold 10 °C)
ET2	Electric Traced Viscosity Control (Hold 60 °C)
ET3	Electric Traced Viscosity Control (Hold Temp to be Specified)
JHO	Jacketed Hot Oil

GENERAL NOTES:

All notes fully detailed in the Notes field. CL spec does not have a general notes list.

