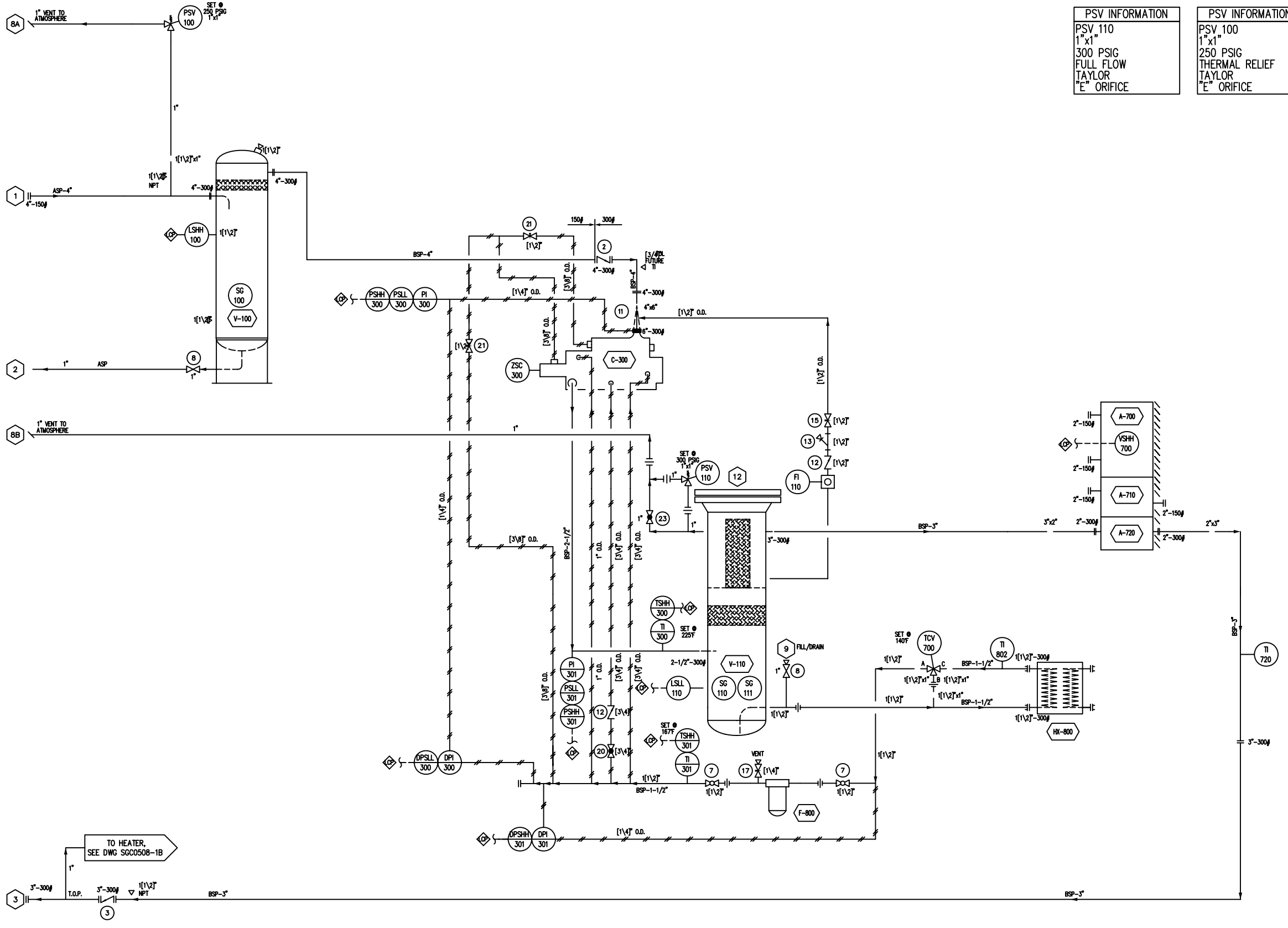

UNIT EQUIPMENT

A-700	ENGINE JACKET WATER COOLER; CSC MODEL L48, DWP 14 PSIG @ 300'F
A-710	AUXILIARY GLYCOL COOLER; CSC MODEL L48, DWP 14 PSIG @ 300'F
A-720	AFTER COOLER; CSC MODEL L48, DWP 645 PSIG @ -20/350'F
C-300	COMPRESSOR; HOWDEN XRV 204/145
CP	CONTROL PANEL; MURPHY MATIC CLASS 1, DIVISION 2, LCDT
HX-800	OIL COOLER; FLATPLATE 10x20-24 PLATE EXCHANGER, DWP 400 PSI @ 300'F
F-800	OIL FILTER; PARKER MODEL 80CN-210GN25E1E111, 10 MICRON, DWP 1000 PSIG @ -40/225'F
H-900	UNIT HEATER; CATA/DYNE 12,000 BTU/HR 12V
M-400	ENGINE; CAT 3304 NA 95 HP @ 1800 RPM
T-600	EJW GLYCOL EXPANSION TANK; CAPACITY 5 US GAL.
T-610	ENGINE OIL DAY TANK; CAPACITY 5 US GAL.
T-620	AUXILIARY GLYCOL EXPANSION TANK; CAPACITY 5 US GAL.
V-100	SUCTION SCRUBBER; 16" O.D. x 6'-0" S/S DWP 350 PSIG @ DWT -20/300'F, 1/8" CA
V-110	OIL SEPARATOR; 16" O.D. x 7'-0" S/S DWP 400 PSIG @ DWT -20/300'F, 1/8" CA

NOTES

1) TUBING TO BE [3\8]" O.D. 304 SST & FITTINGS TO BE MINIMUM CAD PLATED SWAGELOK FTGS. [C\W] S.S. FERRULES.
2) GLYCOL PIPING AND OTHER PIPING TO BE WELDED WHERE POSSIBLE.
   OIL PIPING TO BE PICKLED AFTER COALESCING FILTERS.
3) ALBERTA QUALITY CONTROL PROGRAM REGISTERED – AQP-1332.
4) PIPING AND FITTINGS: STARTEC SPECIFICATION
   LINE CLASSES:
   OIL SYSTEM & DISCH PROCESS 300# ANSI RATING – BSP.
   RELIEF HEADER 150# ANSI RATING – ASP.
   SUCTION PROCESS 150# ANSI RATING – ASP
   GLYCOL UTILITY – UG.
   INSTRUMENT AIR GAS UTILITY – IAG.
   ALL TUBING AS PER LINE CLASS.
5) ALL TEMPERATURE INDICATORS [3\4]" NPT.
6)

LEGEND

BALL VALVE, GATE VALVE, GLOBE VALVE, NEEDLE VALVE, CHECK VALVE, BUTTERFLY VALVE, ANGLE VALVE, 3-WAY VALVE
SOLENOID ACTUATED 3-WAY VALVE, PRESSURE SAFETY VALVE, REDUCER, PLUG, UNION, PRESSURE REGULATOR
PROCESS PIPING, UTILITY PIPING, CAPILLARY TUBING, PNEUMATIC TUBING, ELECTRIC SIGNAL, OIL LINE, FLEXIBLE HOSE, STRAINER
CONTROL VALVE WITH DIAPHRAM ACTUATOR, CONTROL VALVE WITH PISTON ACTUATOR, INSTRUMENT GAS

LOCALLY MOUNTED INSTRUMENT	LALL	LEVEL ALARM LOW LOW	PI	PRESSURE INDICATOR	PT	PRESSURE TRANSMITTER	ST	SPEED TRANSMITTER
LOCAL PANEL MOUNTED INSTRUMENT	LC	LEVEL CONTROLLER	DPI	DIFFERENTIAL PRESSURE INDICATOR	PV	PRESSURE VALVE	TC	TEMPERATURE CONTROLLER
BDV BLOWDOWN VALVE	LG	LEVEL GAUGE	PDSH	PRESSURE DIFFERENTIAL SWITCH HIGH	PY	PRESSURE RELAY	TCV	TEMPERATURE CONTROL VALVE
BDY BLOWDOWN RELAY	LSH	LEVEL SWITCH HIGH	DPCV	DIFFERENTIAL PRESS. CONTROL VALVE	S	STARTER	TSH	TEMPERATURE SWITCH HIGH
CV CONTROL VALVE	LSL	LEVEL SWITCH LOW	PRV	PRESSURE REGULATOR VALVE	SC	SPEED CONTROLLER	TI	TEMPERATURE INDICATOR
F LUBRICATOR	OVS	OVERSPEED SENSOR	PSL	PRESSURE SWITCH LOW	SG	SIGHT GLASS	VT	VIBRATION TRANSMITTER
FI FLOW INDICATOR	PB	PUSH BUTTON	PSH	PRESSURE SWITCH HIGH	SI	SPEED INDICATOR	ZI	TRANSDUCER INDICATOR
LAHH LEVEL ALARM HIGH HIGH	PCV	PRESSURE CONTROL VALVE	PSV	PRESSURE SAFETY VALVE	SOV	SHUT OFF VALVE	ZT	TRANSDUCER TRANSMITTER

PANEL INSTRUMENT, DISTRIBUTED CONTROL SYSTEM INSTRUMENT, CUSTOMER CONNECTION, LCP LOCAL CONTROL PANEL, I INTERLOCK

CUSTOMER CONNECTIONS

P&ID CONN.	REF. MK. #	SIZE	TYPE	RATING	DESCRIPTION
1	N1	4"	RFWN	300#	INLET
2	N2	1"	NPT	3000#	HYDROCARBON LIQUID DRAIN
3	N3	3"	RFWN	300#	OUTLET
4	N4	4"	RAIN CAP	–	ENGINE EXHAUST
5	N5	2"	PIPE	–	STARTER EXHAUST C/W BIRDSCREEN
N6A	N6A	12V DC	[C\W] CABLE	–	HEATER, 12 VDC STARTER
7	N7	1"	NPT	3000#	ENGINE OIL DRAIN
8A/B/C	N8A/B/C	1"	PIPE	150#	FLARE C/W BIRDSCREEN
9	N9	1"	NPT	3000#	COMPRESSOR OIL FILL/DRAIN
12	N12	16"	RFWN	300#	OIL COALESCING FILTER ACCESS

REFERENCE DRAWINGS

DWG. NO	DESCRIPTION	DWG. NO.	DESCRIPTION
SGC0508-1B	P&ID – UTILITY		
SGC0508-2A	GENERAL ARRANGEMENT		
SGC0508-2B	ELEVATIONS		

REVISIONS

NO.	DATE	BY	AP'D.	DESCRIPTION	ISSUE
A	05/03/02	BJB		FOR APPROVAL	
0	05/06/28	BJB		FOR CONSTRUCTION	
1	05/07/08	BJB		ADDED FLEX CONN.,CORRECTED CONN. ON AIR & OIL COOLERS	
2	05/08/31	NBF		AS BUILT	

SHIPPING WEIGHT
SANDBLAST
PRIMER
PAINT

Startec REFRIGERATION SERVICES LTD.

DRAWN ACAD/ STARTEC	DATE 05/06/28
CHECKED	DATE
ENG. APP'L.	DATE
PROD. APP'L.	DATE
JOB NO.	SGC-0508

CUSTOMER/PROJECT/LOCATION
STANDARD 95HP PACKAGE
XRV 204/145 & CAT G3304

TITLE
NATURAL GAS COMPRESSOR PACKAGE
HOWDEN XRV 204/145 & CAT G3304
P. & I.D. PROCESS

SCALE	DRAWING NO.	REV.
N.T.S.	SGC0508-1A	2