

A-532961

ALBERTA MUNICIPAL AFFAIRS

ABSA – the pressure equipment safety authority

200, 4208 - 97 Street

Edmonton AB T6E 5Z9

MANUFACTURER'S DATA REPORT

FOR PRESSURE VESSEL

DÉCLARATION DE CONFORMITÉ DU CONSTRUCTEUR

D'APPAREILS SOUS PRESSION

Partial/ Partiel

Upon shipment of a pressure vessel, this form fully and correctly filled in must be mailed to the office of the Chief Inspector in the province of installation in accordance with the regulations under the Act, governing the construction and installation of pressure vessels.

Au moment de l'expédition d'un appareil sous pression, ce formulaire complété correctement, doit être envoyé au bureau de l'inspecteur en chef de la province d'installation tel que prévu dans les règlements de la loi sur les appareils sous pression.

Manufactured by Construit par	Name and address of Manufacturer/ Nom et adresse du constructeur Dynacorp Fabricators Inc.; 8600-92St, Grande Prairie, AB; T8V 7S3
Manufactured for Construit pour	Name and address of Purchaser or Consignee/ Nom et adresse du client ou de son représentant HalTech Testing Inc.; Box 92 Bay Tree, AB; T0H 0A0
Ultimate owner Utilisateur	Name and address/ Nom et adresse HalTech Testing Inc.; Box 92 Bay Tree, AB; T0H 0A0
Location of installation Lieu d'installation	Address/ Adresse Portable

Pressure vessel/ Appareil

Type/ Genre Horizontal Vessel 600 psi	Overall Length/Longueur totale 22'	Serial No./ N° de série 1J62931	Year built/Année de fabrication 2006
Provincial Registration No. – C.R.N./N° d'enregistrement provincial - N.E.C. T8209.2		National Board No./ N° National Board	Drawing No./ N° de dessin 5100-37 Rev0

The chemical and physical properties of all parts meet the requirements of material specifications of the A.S.M.E. Code.
Les propriétés chimiques et physiques de toutes les composantes respectent les exigences des spécifications de matériaux de code ASME.

The design, construction and workmanship conform to CSA B51. La conception, la construction et la façon sont conformes à ACNOR B51.	ASME Section VIII	Division 1	Addenda/Supplément 05	Code case No. N° de cas
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Manufacturer's partial data reports properly identified and signed by authorized inspectors have been furnished for the following items of the report, and attached to this report:

Rapports partiels du constructeur adéquatement identifiés et signés par les inspecteurs autorisés ont été produits pour les items suivants du rapport, et attachés à ce rapport:

Names of parts/ Nom de la composante	Item No./ NO d'item	Manufacturer's Name/ Nom du constructeur	Identifying Stamp/ Estampe d'identification

Shell/ Virole

Description	Material Matériau	Thickness Épaisseur	Corr. Allow. Surépais. de corr.	Diameter Diamètre	Longitudinal Joints Joints longitudinaux			P.W.H.T. Traitement therm		Girth Joints Joints de circonférence		Number of courses Nombre de sections
					Type	R.T. Radiog.	Efficiency Efficacité	Temp.	Time Durée	Type	R.T. Radiog.	
Shell A,B	SA516 70N	1.125"	0.0625"	66" ID	1	Full	100%	1150F	75 min	1	Full	2

Heads/ Tetes

Description	Material Matériau	Min. Thicken. Épals minim.	Corr. Allow Surép. Corr.	Crown. Radius Rayon couron.	Knuckle Radius Petit rayon	Ellipse Ratio Repp. ellipse	Conical Apex Angle Angle conique	Hemisph. Radius Ray. Hémisph	Flat Diameter Diam. plat	Side to pressure Côte sous pression
Head A,B	SA516 70N	1.0625"	0.0625"			2:1 S.E.				Concave
Removable bolts used (describe other fastenings) Boulons amovible utilisés (décrire tout autre attache)					Mat'l Spec./ Spéc. du mat.			Grade		Size/ Dimension

Pressure - Temperature/ Pression - température

Pressure Vessel Part Partie de l'appareil	Constructed for max. allowable working pressure Construit pour une pression maximale de marche permise	At max. temp. A une temp. max.	Min. Temp. (when less than -29°C) Temp. min. (Inférieure à -29°C)	Test pressure (hydro-pneumatic or combination) Pression d'épreuve (hydro-pneumatique ou combinaison)
Vessel	600 psi	100F	-50F	780 psi

Tube Section/ Faisceau tubulaire

Tube material/ Matière des tubes	Diameter/ Diamètre	Nominal Thickness (gauge) Epaisseur nominale (calibre)	Number/ Nbre	Type (Straight or U) Type (Droit ou U)	Heating Surface Surface de chauffe
Tubesheet/ Plaque tubulaire	Material/ Matériau	Diameter/ Diamètre	Nominal Thickness Epaisseur nominale	Corr. Allow. Surépais. corrosion	Attachment Mode d'attachement

Jacket/ Chemise

Type of jacket/ Genre de chemise	Jacket closure Fermeture de chemise	Proof Test Pression d'épreuve	Heating Surface Surface de chauffe	Sketch/ Schéma
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Safety Valve Outlets/ Soupapes de sûreté

Number/ Nombre	Dimension	Location/ Endroit
1	3"	Near top of Head B1

Nozzles and Openings/ Tubulures et ouvertures

Purpose/ But	Number Nombre	Dimension	Type	Material Matériau	Nominal Thickness Epaisseur nominale	Reinforcement material Matériau de renfort	How attached Genre d'attaches	Location/ Endroit
Manway	1	24"	RFLWN	SA105N	1.81"		UW16.1c	Head A
Manway	1	20"	RFHB	SA105N	2.50"		UW16.1c	Shell B
Inlet/Gas Out	2	6"	RFLWN	SA350 LF2	1.06"		UW16.1c	Shell A,B
Heat Coil	1	4"	RFLWN	SA105N	0.88"		UW16.1c	Head A
Drain	1	4"	RFHB	SA105N	1.40"		UW16.1c	Shell A
Drain/PSV/Spare	7	3"	RFLWN	SA105N	0.81"		UW16.1c	Shell A,B Head B
Spare	1	2"	RFWN	SA106B	.218"		Uw16.1c	Shell B
Level Gauge/PI	10	3/4"	6000# CPLG	SA105N			UW16.1c	Shell A,B Head B

Supports/ Supports

Skirt/ Jupe Yes/ Oui No/ Non <input type="checkbox"/> <input type="checkbox"/>	Lugs/ Orelles No./ Nbre	Legs/ Pieds No./ Nbre	Other/ Autres (Description)	Attached/ Attaches (Where and How/ Méthode et endroit)
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Remarks/ Observations (Cubical capacity/ Volume)

Impact Test as per UG-84 to -50F
 Constructon Drawing: 5100-37 Rev1
 SV to be supplied by Crossfire Energy
 Volume: 526.7 Cubic Feet (~14.91 Cubic meters)

Certificate of Compliance/ Certificat de conformité

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial Registered design below and the requirements of standard CSA B51.

Nous certifions que les données de la déclaration de conformité sont correctes et que l'appareil a été construit en accord avec l'enregistrement provincial ci-dessous et les exigences de la norme ACNOR B51.

Provincial Registered Design
 Enregistrement provincial T8209.2

Manufacturer
 Constructeur Dynacorp Fabricators Inc.

Signature [Signature] Date Nov 14/06

Certificate of Shop Inspection/ Certificat d'inspection en usine
 I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector
 Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
 employed by ABSA
 employé par ABSA

of/ de Alberta
 have inspected the above vessel and state that to the best of my knowledge and belief, the manufacturer has constructed the vessel in accordance with the Provincial registration CRN T8209.2 and the requirements of standard CSA B51.
 ai inspecté l'appareil précité et autant que je sache, crois que le constructeur a construit l'appareil en accord avec l'enregistrement provincial NEC _____ et les exigences de la norme ACNOR B51.

Inspector's Name
 Nom de l'inspecteur HAROLD A WADSWORTH AB-183A
 Signature [Signature] Date Nov 14/06

Certificate of Compliance - Field Work/ Certificat de conformité - Installation au chantier

We certify that the field installation of all parts of the vessel conforms with the requirements of Provincial Regulations.

Nous certifions que l'installation au chantier de toutes les composantes de l'appareil est conforme aux règlements provinciaux.

Installer's Name
 Nom de l'installateur _____

Signature _____

Certificate of Field Inspection/ Certificat d'inspection - Installation au chantier

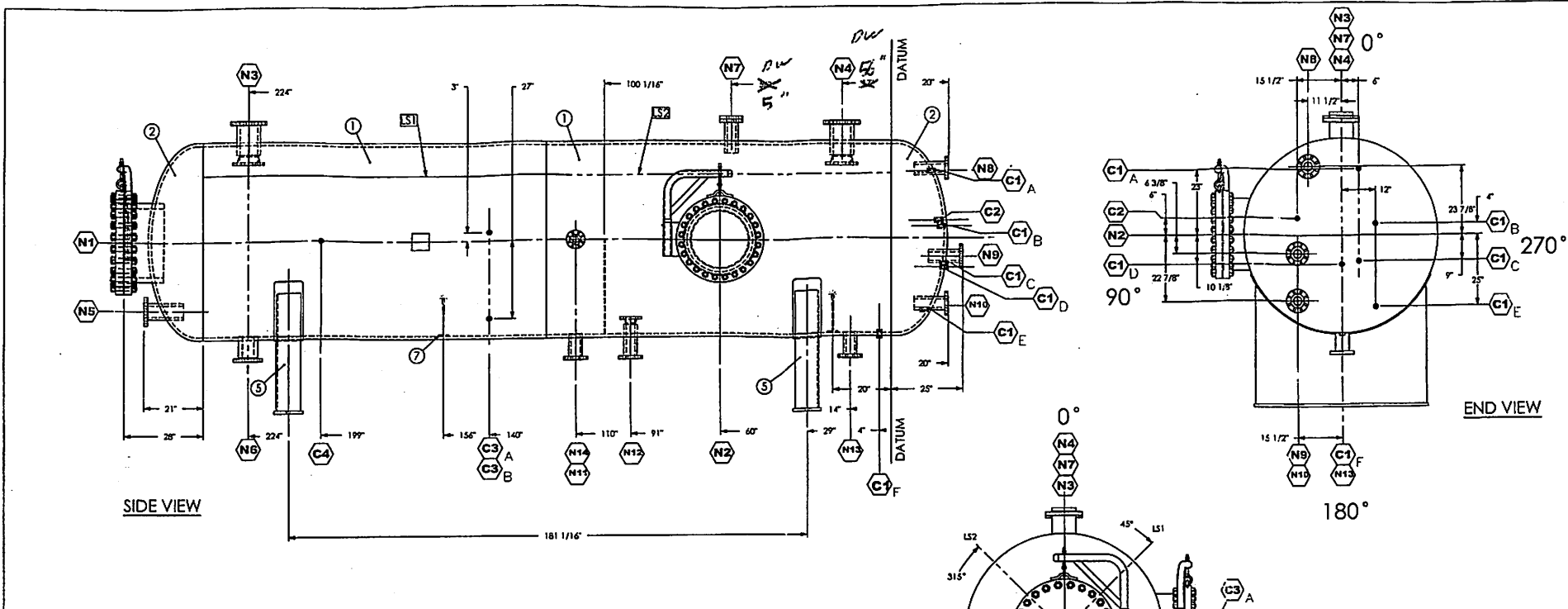
I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector
 Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
 employed by _____
 employé par _____

have inspected the items not covered by the Shop Inspection Certificate and the installation of the items and state that to the best of my knowledge and belief the construction and assembly of the items are in accordance with the Provincial Regulations.

ai inspecté les composantes non couvertes par le certificat d'inspection en usine et l'installation de l'appareil et, autant que je sache, la construction et l'assemblage de l'appareil sont en accord avec les règlements provinciaux.

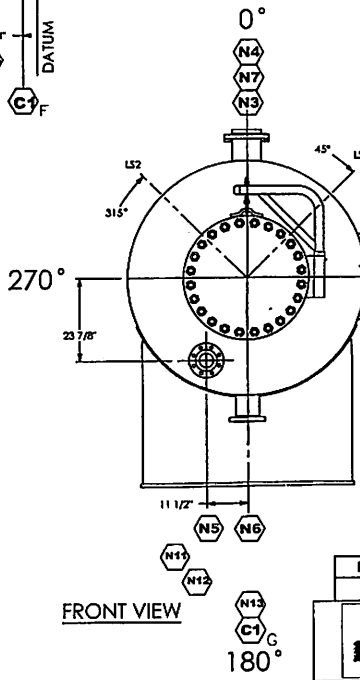
Inspector's Name
 Nom de l'inspecteur _____

Signature _____ Date _____



TAG	SIZE (IN)	TYPE	SERVICE	PROJECTION		WELD DETAIL	WELD SIZE (IN)		ITEMS
				INSIDE	OUTSIDE		A	B	
N1	24	#300 HB	MANWAY	1-1/2"	AS	4	3/8"	BW	14
N2	20	#300 HB	MANWAY	1-3/4"	8-13/16	4	3/8"	BW	13
N3	6	#300 LWN	INLET	3/4"	7-5/8	4	3/8"	-	17
N4	6	#300 LWN	GAS OUT	3/4"	6 7/8	4	3/8"	-	17
N5	4	#300 LWN	HEAT COIL	1-1/2"	AS	9	3/8"	-	21
N6	4	#300 HB	DRAIN	CF	7-5/8	9	3/8"	-	18
N7	3	#300 LWN	SPARE	1/4"	7-5/8	4	3/8"	-	15
N8	3	#300 LWN	PSV	3/4"	AS	9	3/8"	-	15
N9	3	#300 LWN	DRAIN	SF*	AS	9	3/8"	-	15
N10	3	#300 LWN	DRAIN	7/8"	AS	9	3/8"	-	15
N11	3	#300 LWN	DRAIN	CF	7-5/8	9	5/8"	-	16
N12	3	#300 LWN	DRAIN	SF*	7-5/8	9	5/8"	-	15
N13	3	#300 LWN	DRAIN	CF	7-5/8	9	5/8"	-	16
N14	2	#300 WN	SPARE	SF*	5-7/8	9	3/8"	-	10
C1 (A-E)	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	23
C1F	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	23
C2	0.75	#6000 CPLG	PI	N/A	N/A	9	3/8"	-	23
C3 A	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	23
C3 B	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	24
C4	0.75	#6000 CPLG	PI	N/A	N/A	9	3/8"	-	23

AS= AS SHOWN, CF=CONTOUR - CUT FLUSH, SF=SQUARE - CUT FLUSH, BW=BACKWELD, *="MINIMUM DIMENSION (2" EXCESS IS ACCEPTABLE)



FRONT VIEW

Revised For Fabrication
1062931 O.C.

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET 2		

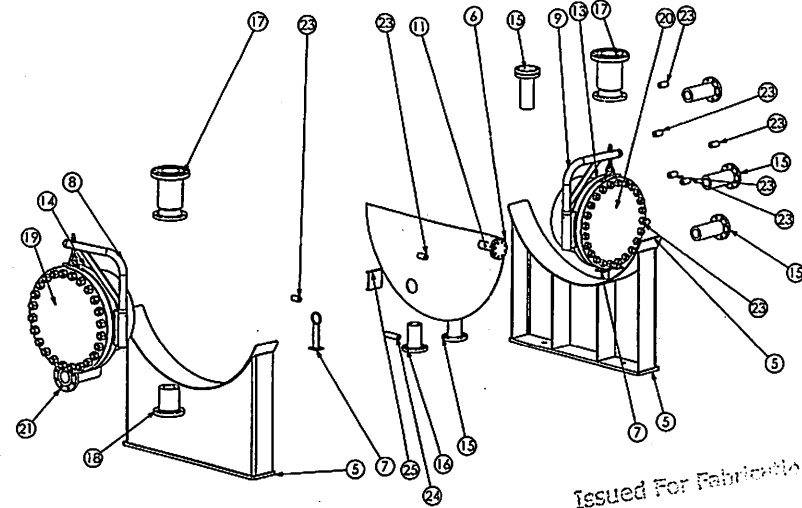
8600-92 St. Grande Prairie, AB T8V 7S3
Ph: (780) 538-1200 Fax: (780) 538-1090
9815-48 St. SE Calgary, T2C 2R1
Ph: (403) 720-9800 Fax: (403) 720-9881

66" ID 600 PSI Vessel

DWN	JPA	DATE	July 7, 2006	APPR	-
DWG. NO.	5100-37 REV1			SCALE	NTS
					SHEET
					1 OF 2

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ITEM	QTY.	TYPE	PART NUMBER	LENGTH	MATERIAL
1	2	SHELL	SHELL - 66" I.D. X 1.125" SHELL	120"	SA516-70N**
2	2	HEAD	HEAD - 66" I.D. X 1.125" THK (1.0625" MIN). 2-1 SE. 2" SF		SA-516-70N**
5	2	SADDLE	5100-37-09		
6	1	WIER PLATE	5100-37-12		SA-36
7	2	HEAT COIL SUPPORT	5100-37-13		
8	1	DAVIT ARM	8000-20-03		
9	1	DAVIT ARM	8000-20-09		
10	1	FLANGE	FLA 2 300 S80 RFWN		SA-105N
11	1	PIPE	PIP 2.0 S80	6	SA-106-B
12	2	FLANGE	FLA 6 150 S40 RFWN		SA-105N
13	1	FLANGE	FLA 20 300 RF HB X 14 LG.		SA-105N
14	1	FLANGE	FLA 24 300 RF LWN X 14 LG.		SA-105N
15	5	FLANGE	FLA 3 300 RF LWN X 12 LG.		SA-105N
16	2	FLANGE	FLA 3 300 RF LWN X 9 LG.		SA-105N
17	2	FLANGE	FLA 6 300 RF LWN X 12 LG.		SA-105N
18	1	FLANGE	FLA 4 300 RF HB X 9 LG.		SA-350-LF2-1
19	1	FLANGE	FLA 24 300 RFB		SA-105N
20	1	FLANGE	FLA 20 300 RFB		SA-105N
21	1	FLANGE	FLA 4 300 RF LWN X 14 LG.		SA-350-LF2-1
22	1	FLANGE	FLA 3 150 S40 RFWN		SA-105N
23	9	COUPLING	THD 0.75 6M CPLG TOE X 3LG	6	SA-105
24	1	COUPLING	THD 0.75 6M CPLG TOE X 6LG	6	SA-105
25	1	BRACKET	8000-25		SA-36
26	1	FLANGE	FLA 3 300 RFB		SA-105N
27	1	FLANGE	FLA 2 300 RFB		SA-105N



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1062931 Q.C.

BOLT-UPS					
ITEM	20" 300 BOLT-UP/QTY.	24" 300 BOLT-UP/QTY.	TYPE	PART NUMBER	MATERIAL
1	1	-	GASKET	GAS 20" #300 RF FLEX RW SPIRAL CG	316-VC
1	-	1	GASKET	GAS 24" #300 RF FLEX RW SPIRAL CG	316-VC
2	48	-	NUT	NUT 1.25	SA-194-2HM
2	-	48	NUT	NUT 1.5	SA-194-2HM
3	24	-	STUD	STU 1.25 x 8.25	SA-193-B7M
3	-	24	STUD	STU 1.5 x 9.25	SA-193-B7M

CONSTRUCTION NOTES

*OPTIONAL - AS AN ALTERNATIVE TO THE THREADED COUPLING, A TOL OF THE SAME SIZE AND RATING MAY BE SUBSTITUTED, ATTACHED WITH A FULL PENETRATION GROOVE WELD.

**IMPACT TESTED MATERIAL REQUIRED (AS PER UG-84)

SA333-6 MAY BE SUBSTITUTED FOR SA 106B
SA516-70N MAY BE SUBSTITUTED FOR SA-36
SA350/LF2-1 MAY BE SUBSTITUTED FOR SA 105N
SA420/WPL6 MAY BE SUBSTITUTED FOR SA 234/WPB

REV.	DESCRIPTION	DATE	DRAWN BY
1	C4 & C3A CHANGED TO 3" LG CPLG. ROW ADDED TO FITTINGS TABLE FOR C3B, BOM UPDATED	AUG. 25, 2006	JPA

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DESIGN DATA			
CODE: CONSTRUCTION IN ACCORDANCE WITH ASME B&PV CODE SEC. VIII DIV.1 2004ED 2005 ADD.			
MAWP: 600 PSI	RADIOGRAPHY: FULL(RT-1) UW-11a	DESIGN TEMP: 100°F	CORROSION ALLOWANCE: 0.0625"
MDMT: -50°F	HEADS, SHELLS & PROD. WELDS: IMPACT TEST PER UG-84 TO -50°F. COUPLINGS: EXEMPT AS PER UCS-66(b)(3). NOZZLES: EXEMPT PER UCS-66(b)(1)(b)		
HYDROTEST: 780 PSI	VOLUME: 14.91 m ³ (526.7 FT ³)	WEIGHT: 24,107 lb	INSPECTION BY: PROVINCIAL BOILER INSPECTOR
PWHT: 75 minutes @ 1150° ± 50°F AS PER UCS-56			

NOTES:
FOR WELD DETAIL INFORMATION SEE DYNACORP STANDARD WELD DETAILS DYN-W1-R5.
FOR UNSPECIFIED WELDS USE 3/8" FILLET WELD.
FOR TOLERANCE INFORMATION SEE: DYN-T1

	8600-92 St. Grande Prairie, AB T8V 7S3 Ph: (780) 538-1200 Fax: (780) 538-1090
	9815-48 St. SE Calgary, AB T2C 2R1 Ph: (403) 720-9880 Fax: (403) 720-9881

BOM

OWN	JPA	DATE	JULY 7, 2006	APPR	-
DWG. NO.	5100-37 REV1			SCALE	NTS
					SHEET 2 OF 2

V-104 A/R
NITROGEN BOTTLES
SUPPLIED BY CUSTOMER

V-103 A/R
PROPANE TANK
450 LBS

V-102
FUEL GAS SOLIDIZER
6425" ID X 30" LONG
NAVP 150 P330 R 507T
CA-410227

V-101
64" ID X 19'-0" S/S SEPARATOR
NAVP 600 P330 R 107T
CA-406257
VOLING FACE GUAGE METERS

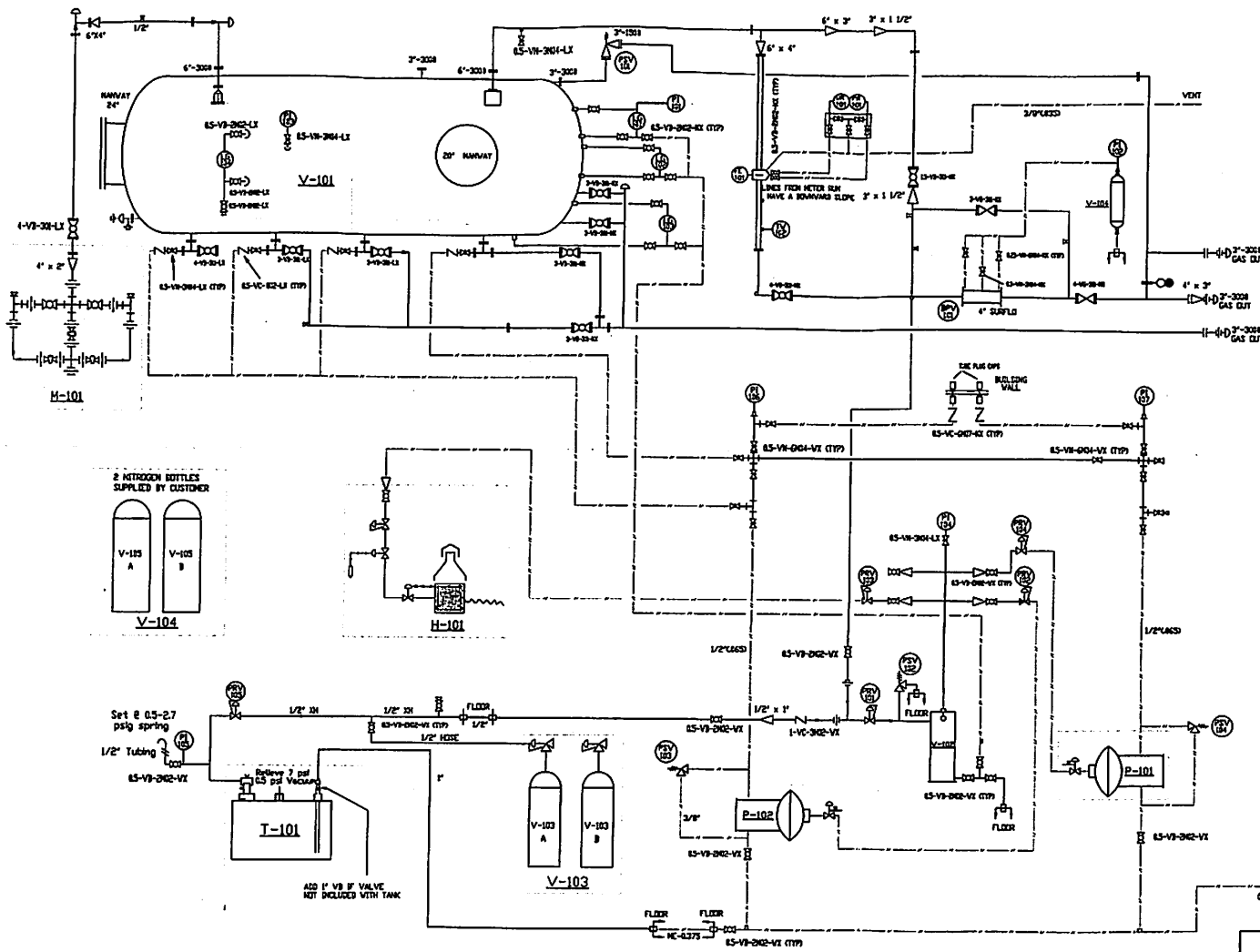
H-101
CATALYTIC HEATER
24" X 24" LPS
K400 3TU
12 VOLT START UP

H-101
3 VALVE
FULLY WELDED
FLOWMETER

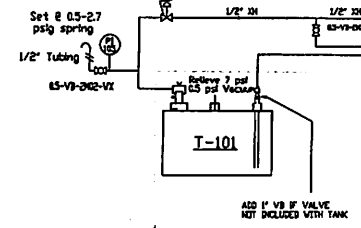
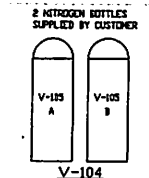
P-101
METHANOL INJECTION PUMP
TEXTAM MODEL 3000
3/8" FLANGER

P-102
METHANOL INJECTION PUMP
TEXTAM MODEL 3000
1/2" FLANGER

T-101
METHANOL TANK
SET L
MAX PRESSURE 50 LPS
CSA APPROVED



ITEM	QTY.	DESCRIPTION	MFG
BPV-101	1	BACKPRESSURE VALVE 4" 300 PSIG LOW BACKPRESSURE SOLID	SURELO
FX-101	1	METER RUN 4" 3/4" 3000 R.P. MODEL DISC. SHEET TRIM. WPL. 62"	DANIELS
DR-101	1	3 PSI BARTHON SMART RECORDING, 900 STATIC, 0-200 ING	SYSTEM
PR-101	1	DIFFERENTIAL C/W FACE BELLGOS	
H-101	1	CATALYTIC HEATER 24" X 24" 12V LPS C/W THERMOSTAT GRILLE HOOD LEADS W/8" OF VENT PIPE.	POEEMA
LG-101	1	LEVEL GAUGE TRANSPARENT Q27120	QUALITY
LG-102	2	LEVEL GAUGE TRANSPARENT Q27120	QUALITY
LG-103	1	LEVEL GAUGE TRANSPARENT Q27120 L15	QUALITY
LG-104	1	LEVEL GAUGE TRANSPARENT Q27120 L15	QUALITY
LG-105	1	LEVEL GAUGE METHANOL	
P-101	1	CHEMICAL INJECTOR MODEL 3000 NEW 3" FLANGER	TEXTAM
P-102	1	CHEMICAL INJECTOR MODEL 3100 NEW 1" FLANGER	TEXTAM
PI-101	3	PRESSURE GAUGE 1/2" NPT 4" FACE 0-600 PSI LIQUID FILLED HAZE	NSA
PI-102	3	PRESSURE GAUGE 1/2" NPT 2.5" FACE 0-200 PSI LIQUID FILLED	NSA
PI-104	1	PRESSURE GAUGE 1/4" NPT 2.5" FACE 0-15 GAL/HR ² SHEET	NSA
PI-105	1	PRESSURE GAUGE 1/4" NPT 2.5" FACE 0-15 GAL/HR ² SHEET	NSA
PI-106	2	PRESSURE GAUGE 1/2" NPT 4" FACE 0-3000 PSI LIQUID FILLED HAZE	NSA
PI-107	2	PRESSURE GAUGE 1/2" NPT 4" FACE 0-3000 PSI LIQUID FILLED HAZE	NSA
PRV-101	1	PRESSURE REGULATOR MODEL 637 1" NPT 3000PSI BODY 1/8" TRIM 0-125 PSI SHEET	FISHER
PRV-102	3	PRESSURE REGULATOR MODEL 670TR 1/4" NPT 0-60 PSI SHEET	FISHER
PRV-103	1	PRESSURE REGULATOR MODEL 912 1/4" NPT 0.5-3.7 PSI SHEET	FISHER
PRV-104	1	PRESSURE REGULATOR MODEL 912 1/4" NPT 0.5-3.7 PSI SHEET	FISHER
PSV-101	1	PRESSURE RELIEF VALVE 3" 3000 X 3" 1500 SET AT 600 PSI HAZE	TAYLOR
PSV-102	1	PRESSURE RELIEF VALVE 1" NPT X 1" NPT SET AT 150 PSI HAZE	TAYLOR
PSV-103	2	PRESSURE RELIEF VALVE 1/4" NPT X 1/4" NPT SET AT 5000 PSI SHEET - METHANOL	MJPRO
PSV-104	2	PRESSURE RELIEF VALVE 1/4" NPT X 1/4" NPT SET AT 5000 PSI SHEET - METHANOL	MJPRO
T-101	1	METHANOL STORAGE TANK 420L CSA STEEL	BRETON
TR-101	1	THERMOWELL 3/4" X 1/2" NPT X 6" STEM SS HAZE	NSA
V-101	1	SEPARATOR: OYKACORP DWGR. 3100-37	OTH
V-102	1	FUEL GAS SCRAMBLER 8" X 30" 150 PSI C/W HUSD	LOW-TECH
V-103	2	PROPANE TANKS 450 LBS	
V-104	1	4" NPS SURGE DOTTLE	
0.25-W-2424-KX	2	1/4" NEEDLE VALVE 6000# NPT SWEET	
0.5-VB-2422-LX	14	1/2" BALL VALVE 2000# NPT RP LOW TEMP HAZE	
0.5-VB-2422-KX	15	1/2" BALL VALVE 2000# NPT RP SWEET	
0.5-W-2424-LX	7	1/2" NEEDLE VALVE 3000# NPT RP LOW TEMP HAZE	
0.5-W-2424-KX	10	1/2" NEEDLE VALVE 6000# NPT SWEET	
0.5-VC-802-LX	4	1/2" CHECK VALVE CLASS 800 NPT SWING LOW TEMP HAZE	
0.5-VC-802-KX	2	1/2" CHECK BALL VALVE 6M NPT HAZE	
1-VC-2402-KX	1	1" CHECK BALL VALVE 3M NPT SWEET	
1.5-VB-311-KX	1	1.5" 300# RF BALL VALVE FP HAZE	NUTRON
3-VB-301-KX	4	3" 300# RF BALL VALVE RP HAZE	NUTRON
3-VB-301-LX	2	3" 300# RF BALL VALVE RP LOW TEMP HAZE	NUTRON
3-VB-301-KX	1	3" 300# RF GATE VALVE HAZE	
4-VB-301-KX	1	4" 300# RF GATE VALVE HAZE	
4-VB-311-KX	2	4" 300# RF BALL VALVE FP HAZE	NUTRON
4-VB-301-LX	2	4" 300# RF BALL VALVE RP HAZE	



Issued For Fabrication
1402931 Q.C.

INSTRUMENTATION 3/8 X 1/8 SSV 26SS SLS TUBING CV 3/16 HYDOK FITTINGS
PIPING 200# TRIM FITTINGS A-103
304 SS PIPE 1-1/2" & SMALLER A-106

NOTE: VENT TO OUTSIDE UNLESS OTHERWISE INDICATED

8500-82 St. Grande Prairie, AB T8V 7S3
Ph: (780) 538-1200 Fax: (780) 538-1090

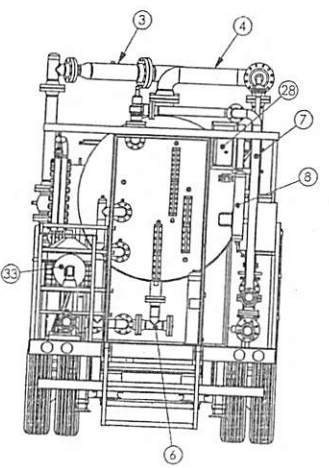
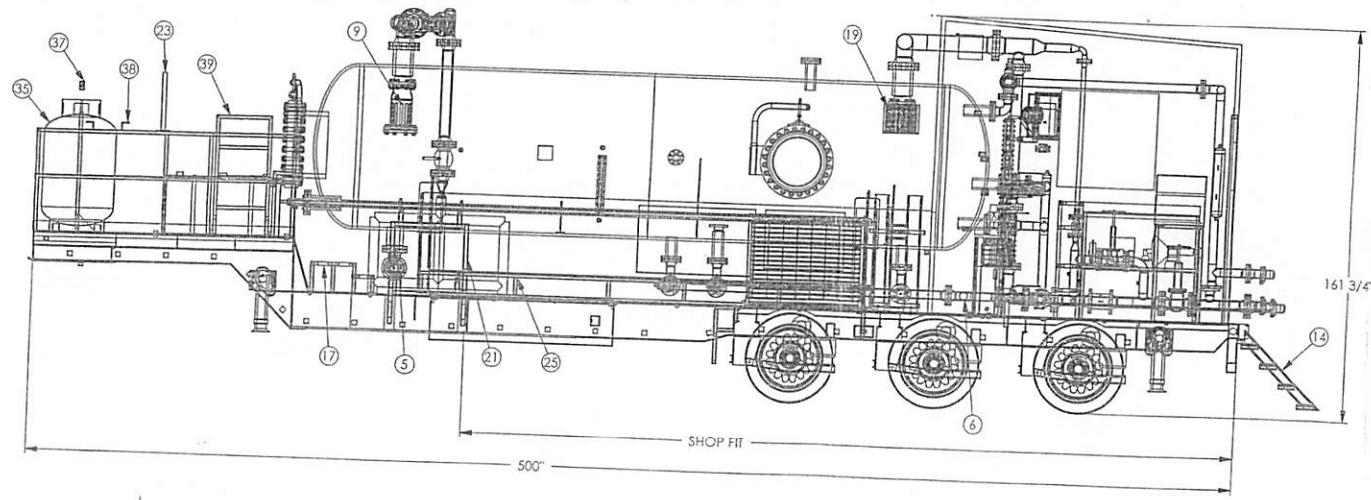
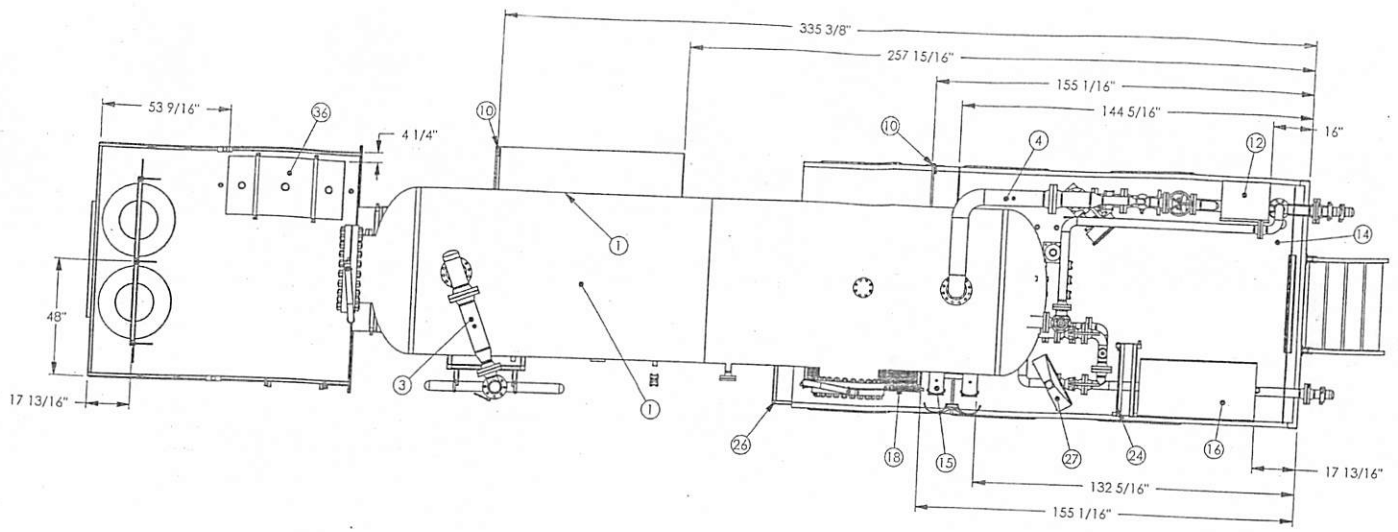
9815-48 St. SE Calgary, AB T2C 2R1
Ph: (403) 720-9800 Fax: (403) 720-9881

DYNACORP
P&ID (600 PSI P-TANK)

REV.	DESCRIPTION	DATE	BY
1			

OWN JPA DATE JULY 17/06 APPR [Signature]
DWG. NO. 4100-47-01 SCALE NTS SHEET 1/1

JULY 2006 3:12:39 PM, ISSUED FOR CONSTRUCTION 146304 AUG/06 GARRET HANNA



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 1J62931 Q.C.


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TOP ASSEM.			
DWN	JPA	DATE	AUG. 1, 2006
APP			
OWG.			
NO.			4100-47
		SCALE	NTS
		SHEET	1 OF 2

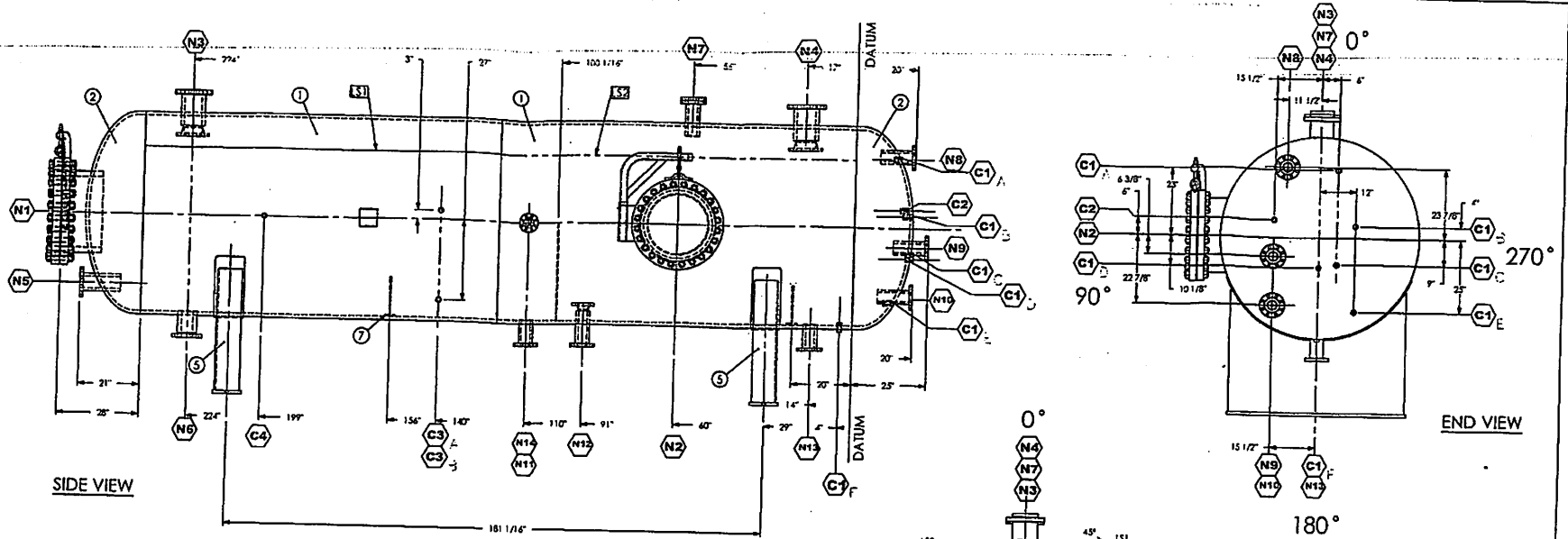
QTY	UNIT	TYPE	PART NUMBER	LENGTH	MATERIAL
1	1	66" I.D. X 20' 600PSI TANK	5100-37		
2	1	STEAM COIL	7010-01		
3	1	INLET SPOOL	7130-11		
4	1	GAS OUT	7230-15		
5	1	DRAIN	7330-13-01		
6	1	OUTLET GAS SYSTEM	7330-14		
7	1	PSV	7530-13		
8	1	4" NPS SURGE BOTTLE	7600-10		
9	1	INLET DIFFUSER	8000-65		
10	2	FLOW LINE FINGERS	8301-59		
11	1	STOPPER PLATE	8301-60		SA-36
12	1	CABINET	8302-23		
13	1	SIDE COMPARTMENT	8302-24		SA-36
14	1	DECKED TRAILER	8410-16		
15	1	NITROGEN RACK (DOUBLE)	8500-06		
16	1	WORKBENCH	8500-08		
17	1	SWING RACK	8500-09		
18	1	MANWAY PLATFORM	8500-26		
19	1	DEMISTER	8501-78		
20	1	CHART RECORDER MOUNT	8501-81		
21	1	INLET MANIFOLD SUPPORT	8502-03-02		
22	1	PANEL BUILDING	8502-48		
23	2	LIGHT STAND	8502-51		
24	1	SWING RACK	8502-54		
25	2	BASKET SIDES	8502-56		
26	1	LADDER	8502-57		SA-36
37	1	PROPANE RACK (DOUBLE)	8500-04		
38	2	CABLE HOLDER	8502-52		SA-36
39	1	HANDRAIL ASSEMBLY	8502-50		
40	2	HEATER LEGS	ANG 0.125" X 1.5" X 1.5"	32"	SA-36
41	1	MANIFOLD	7700-01		
42	1	TUBE	HSS 1.5" X 1.5" X 0.188"	960	SA-36

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BOM			
DWN	JPA	DATE	AUG.1.2006
OWG. NO.	4100-47	APPR	-
		SCALE	NTS
		SHEET	2 OF 2

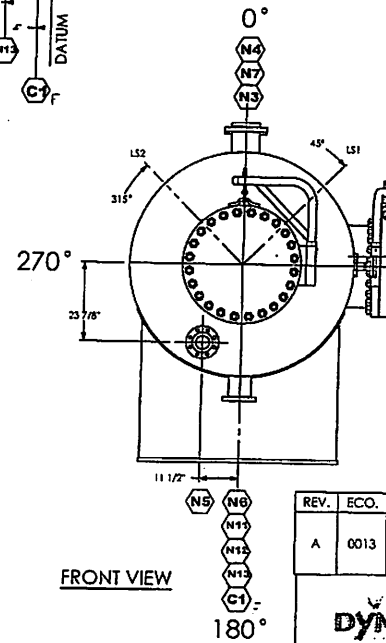
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TAG	SIZE (IN)	TYPE	SERVICE	PROJECTION		WELD DETAIL	WELD SIZE (IN)		ITEMS
				INSIDE	OUTSIDE		A	B	
N1	24	#300 LWN	MANWAY	2 5/8"	AS		1 3/8"	1 1/2"	27
N2	20	#300 HB	MANWAY	1-3/4"	8-13/16	4	3/8"	BW	13
N3	6	#300 LWN	INLET	3/4"	7-5/8	4	3/8"	-	16
N4	4	#300 LWN	GAS OUT	3/4"	6 7/8	4	3/8"	-	16
N5	4	#300 LWN	HEAT COIL	1-1/2"	AS	9	3/8"	-	20
N6	4	#300 HB	DRAIN	CF	7-5/8	9	3/8"	-	17
N7	3	#300 LWN	SPARE	1/4"	7-5/8	4	3/8"	-	14
N8	3	#300 LWN	PSV	3/4"	AS	9	3/8"	-	14
N9	3	#300 LWN	DRAIN	SF*	AS	9	3/8"	-	14
N10	3	#300 LWN	DRAIN	7/8"	AS	9	3/8"	-	14
N11	3	#300 LWN	DRAIN	CF	7-5/8	9	5/8"	-	15
N12	3	#300 LWN	DRAIN	SF*	7-5/8	9	5/8"	-	14
N13	3	#300 LWN	DRAIN	CF	7-5/8	9	5/8"	-	15
N14	2	#300 WN	SPARE	SF*	5-7/8	9	3/8"	-	10
C1 (A-E)	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	22
C1F	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	22
C2	0.75	#6000 CPLG	PI	N/A	N/A	9	3/8"	-	22
C3 A	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	22
C3 B	0.75	#6000 CPLG	LEVEL GAUGE	N/A	N/A	9	3/8"	-	23
C4	0.75	#6000 CPLG	PI	N/A	N/A	9	3/8"	-	22

AS= AS SHOWN, CF=CONTOUR - CUT FLUSH, SF=SQUARE - CUT FLUSH, BW=BACKWELD, *MINIMUM DIMENSION [2" EXCESS IS ACCEPTABLE]

It is the policy of Dynacorp Ltd. to ensure that all products are manufactured to the highest standards of quality and safety. We warrant our products to be free from defects in material and workmanship for a period of 12 months from the date of completion of the work. This warranty is void if the product is used for any purpose other than that for which it is specifically designed, or if it is altered or modified in any way without the written permission of Dynacorp Ltd.



ALBERTA BOILERS SAFETY ASSOCIATION
 PROVINCE OF ALBERTA
 SAFETY CODES ACT
 90T8209.2
 DWG. No. 5100-37 Rev. A
 DWG. No. 4137
 OCT - 3 2005
 ACCEPTED
 DRASCO FREDA, P. ENG.
 DESIGN SURVEY ENGINEER

REV.	ECO.	DESCRIPTION	DATE	APPROVED
A	0013	INCREASED INSIDE PROJECTION OF MANWAY (N1) FROM 3/4" -> 2 5/8". HB TO LWN. OUTER WELD SIZE 3/8" -> 1 3/8". INNER WELD SIZE BW -> 1 1/2"	10/02/06	

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DYNACORP

66" ID 600 PSI Vessel

DWN JPA DATE July 7, 2006 APPR -
 DWG. NO. 5100-37 REV A SCALE NTS SHEET 1 OF 2

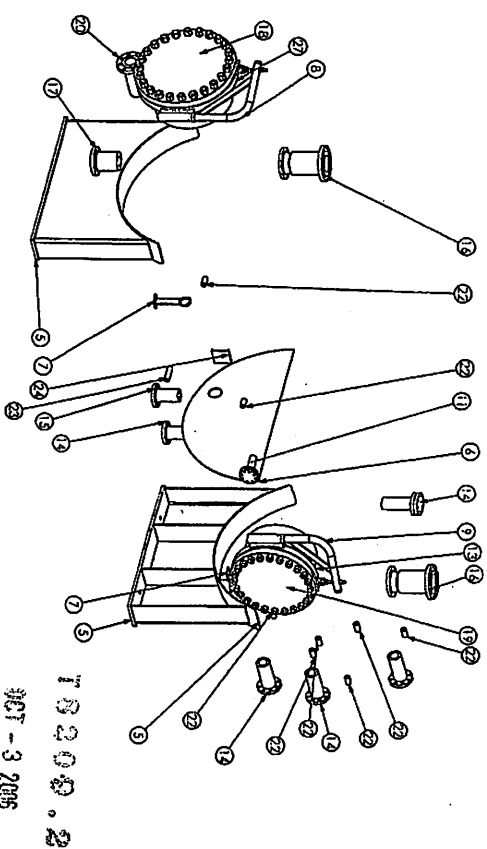
ITEM QTY.	TYPE	PART NUMBER	LENGTH	MATERIAL
1	SHELL	SHELL - 66" I.D. X 1.125" SHELL	120"	SA-516-70N**
2	HEAD	HEAD - 66" I.D. X 1.125" THK (1.0625" MIN) 21 SE, 2" SF		SA-516-70N**
5	2	SA-DILE		
6	1	WIHR PLATE	5100-37-12	SA-36
7	2	HEAT COIL	5100-37-13	
8	1	DAVIT ARM	8000-20-03	
9	1	DAVIT ARM	8000-20-09	
10	1	FLANGE	FLA 2 300 S80 RPWN	SA-105N
11	1	PIPE	PIP 2.0 S80	SA-106-B
12	2	FLANGE	FLA 6 150 S40 RPWN	SA-105N
13	1	FLANGE	FLA 20 300 RF HB X 14 LG.	SA-105N
14	5	FLANGE	FLA 3 300 RF LWN X 12 LG.	SA-105N
15	2	FLANGE	FLA 3 300 RF LWN X 9 LG.	SA-105N
16	2	FLANGE	FLA 6 300 RF LWN X 12 LG.	SA-105N
17	1	FLANGE	FLA 4 300 RF HB X 9 LG.	SA-350-LF2-1
18	1	FLANGE	FLA 24 300 RFB	SA-105N
19	1	FLANGE	FLA 20 300 RFB	SA-105N
20	1	FLANGE	FLA 4 300 RF LWN X 14 LG.	SA-350-LF2-1
21	1	FLANGE	FLA 3 150 S40 RPWN	SA-105N
22	9	COUPLING	THD 0.75 6M CPLG TOE X 3LG	SA-105
23	1	COUPLING	THD 0.75 6M CPLG TOE X 6LG	SA-105
24	1	BRACKET	8000-25	SA-36
25	1	FLANGE	FLA 3 300 RFB	SA-105N
26	1	FLANGE	FLA 2 300 RFB	SA-105N
27	1	FLANGE	FLA 24 300 RF LWN X 14 LG.	SA-105N

BOLTS/UPS

ITEM	20" 300 BOLT-UP/QTY.	24" 300 BOLT-UP/QTY.	TYPE	PART NUMBER	MATERIAL
1	1	-	GASKET	GAS 20" #300 RF FLEX RW SPIRAL CG	316-VG
1	-	1	GASKET	GAS 24" #300 RF FLEX RW SPIRAL CG	316-VG
2	48	-	NUT	NUT 1.25	SA-19-42HM
2	-	48	NUT	NUT 1.5	SA-19-42HM
3	24	-	STUD	STU 1.25 X 9.25	SA-19-3-87M
3	-	24	STUD	STU 1.5 X 9.25	SA-19-3-87M

CONSTRUCTION NOTES
 *OPTIONAL - AS AN ALTERNATIVE TO THE THREADED COUPLING, A TOL OF THE SAME SIZE AND RATING MAY BE SUBSTITUTED WITH A FULL PENETRATION GROOVE WELD.
 **IMPACT TESTED MATERIAL REQUIRED (AS PER UG-94)

SA-333-4 MAY BE SUBSTITUTED FOR SA-106B
 SA-330-1 MAY BE SUBSTITUTED FOR SA-336
 SA-350-LF2-1 MAY BE SUBSTITUTED FOR SA-105N
 SA-420-W16-L MAY BE SUBSTITUTED FOR SA-233-W16-PB



DESIGN DATA

CODE CONSTRUCTION IN ACCORDANCE WITH ASME B&PV CODE SEC. VIII DIV.1, 2004ED 2005 ADD.

MAWP: 600 PSI	RADIOGRAPHY: FULL(1) UW-11a	DESIGN TEMP: 100°F	CORROSION ALLOWANCE: 0.0625"
MDMT: -50°F	HEADS, SHEETS & PROD. WELDS: IMPACT TEST PER UG-94 TO -50°F. COUPLINGS EXEMPT AS PER UCS-66(d)(3). NOZZLES: EXEMPT PER UCS-66(b)(1)(e).		
HYDROTEST: 780 PSI	VOLUME: 14.91 m ³ (528.7 FMS ³)	WEIGHT: 24,107 LB	INSPECTION BY: PROVINCIAL BOILER INSPECTOR

NOTES:
 FOR WELD DETAIL INFORMATION SEE DYNACORP STANDARD WELD DETAILS DYN-W1-R5.
 FOR UNSPECIFIED WELDS USE 3/8" FILLET WELD.
 FOR TOLERANCE INFORMATION SEE: DYN-T1

DYNACORP BOM

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DYNACORP BOM
 DATE: JULY 7, 2006
 DRAWN BY: JPA
 REV: 5100-37 REV A
 SCALE: NTS
 SHEET: 2 OF 2

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