

A0480049 - VESSEL INSPECTION / DATA - NOV 2001

1060-04

Canadian Natural Resources Limited
Production - Facilities Engineering
A0480049 Horizontal Vessel Certificate of Inspection
and Manufacturers Data Report

Content Date Range: 11/30/2001 to 11/30/2001

Vessel Integrity
Inspection Data

Open: 2/5/2007 Close:

CC+2 0P P



00763592

Vial: Yes
Original: Yes
Confidential: No

Certificate of Inspection

ANADARKO CANADA CORPORATION
PO BOX 2595 STN M
425-1 STREET SW
ATTN TERRY MCCONNELL
CALGARY, AB
T2P 4V4

PREFERRED RE-INSP. INTERVAL: 2.00 Yr.

YEAR BUILT: 2001
CRN: K2109.12
SERIAL #: 12492

LOCATION: STOCK - CALGARY
DESCRIPTION: HORIZONTAL VESSEL
COMPANY CODE:
MANUFACTURER: BILTON WELDING & MANUFACTURING LTD

VOLUME: 19 M3
HEATING SURFACE:
SURFACE AREA:
Safety Valves _____

PART	MAX. AUTHORIZED WORKING PRESSURE	MAX. TEMP	MIN. TEMP	VALVE ID	SETTING	CAPACITY	LOCATION
VESSEL	345 KPA	93 C	-29 C	SV1			TO BE INSTALLED

OWNER INSTRUCTIONS/REMARKS:

CONTACT THE ABSA SAFETY CODES OFFICER BEFORE PLACING THE VESSEL/BOILER IN SERVICE.

VESSEL/BOILER TO BE INSTALLED IN ACCORDANCE WITH THE SAFETY CODES ACT AND REGULATIONS.

VERIFY THAT VESSEL/BOILER IS PROTECTED BY AN ACCEPTABLE ASME CODE PRESSURE RELIEF VALVE, OF ADEQUATE CAPACITY, SET AT NO MORE THAN MAXIMUM PRESSURE AUTHORIZED AND INSTALLED IN ACCORDANCE WITH THE SAFETY CODES ACT & REGULATIONS.

Safety Codes Officer: LICHTENWALD, LARRY

Signature: 

NOTE: REQUIREMENTS OF THE SAFETY CODES ACT AND THE REGULATIONS ISSUED THEREUNDER:

The owner or person in charge shall report all accidents involving a boiler, pressure vessel or pressure piping system to the district Safety Codes Officer immediately and shall send a full report in writing to the Administrator as required by the Act. No repairs or alterations may be made unless authorized by a Safety Codes Officer.

ALBERTA MUNICIPAL AFFAIRS
 Alberta Boilers Safety Association
 200, 4208 - 97 Street
 Edmonton AB T6E 5Z9

(A) 480049

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 Bilton Welding & Manufacturing Ltd 3704-58 Ave, Innisfail, AB T4G 1S8
Manufactured for Construit pour	Name and address of Purchaser or Consignee/ Nom et adresse du client ou de son représentant Anadarko Canada Corporation 425-1 Street S.W., Calgary, AB T2P 4V4
Ultimate owner Utilisateur	Name and address/ Nom et adresse Anadarko Canada Corporation 425-1 Street S.W., Calgary, AB T2P 4V4
Location of installation Lieu d'installation	Address/ Adresse Stock- Manufacturers yard pending move

Pressure vessel/ Appareil

Type/ Genre Horizontal Vessel	Overall Length/Longueur totale 10'-0"	Serial No./ N° de série 12492	Year built/Année de fabrication 2001
Provincial Registration No. - C.R.N./N° d'enregistrement provincial - N.E.C. K2109.12		National Board No./ N° National Board	Drawing No./ N° de dessin BWM-019-00 REV 4

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 I	Addenda/Supplément 2000	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:
 Les 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./ N° 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 #1	SA-516-70N	3/8"	1/8"	8' ID	1	None	0.7	N/A	N/A	1	None	1

Heads/ Tetes

Description	Material Matériau	Min. Thicken. Épais minim.	Corr. Allow Surép. Corr.	Crown Radius Rayon couron.	Knuckle Radius Petit rayon	Ellipse Ratio Rapp. ellipse	Conical Apex Angle Angle conique	Hemisph. Radius Ray. Hémisph	Flat Diameter Diam.plat	Side to pressure Côte sous pression
Head #1 #1	SA-516-70N	0.313"	1/8"			2:1				Concave
Head #2 #2	SA-516-70N	0.313"	1/8"			2:1				Concave
Removable bolts used (describe other fastenings) Boulons amovible utilisés (décrire tout autre attache)					Mat'l Spec./ Spéc. du mat. SA-194 / SA-193			Grade 2HM / B7M		Size/ Dimension 1 1/8"

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)
Shells / Heads	50 psi (g) / 345 Kpa (g)	200 F / 93 C	-20 F / -29 C	75 psi (g) / 517 Kpa (g)

Tube Section/ Faisceau tubulaire

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

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 Supplied and installed by others as per UG-125
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Nozzles and Openings/ Tubulures et ouvertures

Purpose/ But	Number Nombre	Dimension	Type	Material Matériau	Nominal Thickness Épaisseur nominale	Reinforcement material Matériau de renfort	How attached Genre d'attaches	Location/ Endroit
Manway (M1)	1	20"	150# RFSO	SA-106-B/SA-105-N	0.375"	N/A	UW-16.1C	Shell
Inlet (N1)	1	6"	150# RFWN	SA-106-B/SA-105-N	0.432"	Inherent	UW-16.1 C	Head
Outlet (N2)	1	6"	150# RFWN	SA-106-B/SA-105-N	0.432"	Inherent	UW-16.1 C	Head
Gauge (N3)	1	4"	150# RFWN	SA-106-B/SA-105-N	0.337"	Inherent	UW-16.1 C	Shell
Pumpout (N4)	1	3"	150# RFWN	SA-106-B/SA-105-N	0.300	Inherent	UW-16.1 C	Shell

Supports/ Supports

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

Approximate Volume: 654 cu ft (19 cu m)
Impact tests exempt as per UG 20 (f) 1-5
Fabrication drawing: A365-1 rev 0

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 K2109.12

Manufacturer
Constructeur Bilton Welding & Manufacturing Ltd.

Signature [Signature] Date 11/30/01

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 Alberta Boilers Safety Association

of/ de Alberta
I 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 k2109.12 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 LARRY LICHTENWALD AB 330
Signature [Signature] Date 11/30/01

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 _____
Date _____

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 _____

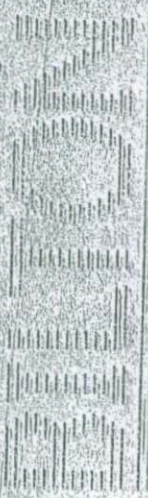
have inspected the items not covered by the Shop Inspection Certificate the installation of the items and state that to the best of my knowledge and belief the construction and assembly of the items are in accordance with Provincial Regulations.

ai inspecté les composantes non couvertes par le certificat d'inspection en usine 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 _____

AW

CERTIFIED BY



INNISFAIL AB

1-888-227-4923

Welding & Manufacturing Ltd.

MAWP. 50 PSI 345 KPA AT 200 °F 93 °C
 MD-MT. -20 °F -29 °C AT 50 PSI 345 KPA
 SERIAL 12492 YEAR BUILT 2001

A.R.N.

K2109.12 480079

DESC. 8' X 10' KNOCKOUT

SHELL THK 0.375" MIN. HD. THK 0.313" MIN.

CORR. ALLOW. 0.125" P.W.H.F. N/A

MADE IN CANADA