

Catalina Cylinders

12452 Monarch Street
Garden Grove, CA 92841

Declaration of Conformity according to the European Pressure Equipment Directive 2010/35/EU and conforms with the requirements of the ADR/RID 2011 (PED)

For pressure equipment

The manufacturer herewith declares that the pressure equipment described below complies with the requirements of the Pressure Equipment Directive.

Description:

Aluminum Cylinder for Compressed Breathing Gas

For Application in Breathing Apparatus

Model: S80.3

Volume [L]: 11.1

Test pressure P_H [bar]: 311

Service pressure P_s [bar]: 207

Serial numbers: GV0002340 - GV0002530

Year/month of Manufacture: 2014/02

Applied conformity assessment procedures: Modules B + C1

Applied Standards: ISO 7866; 1999

EC Type Examination Certificate: USA 11-02-189-005

Notified body in charge for monitoring of the final assessment: TUV SUD Industrie
Service GmbH, Westendstr. 199 D-80686 Munchen, NB No: 0036

Date: 2/18/2014

Manufacturer's Stamp: **Catalina**

Name: Bob Lance

Position: Quality Manager

Signature Bob Lance

DATE: 02-18-14

MODEL: S80.3

CERTIFICATE OF CONFORMANCE
Application of ISO 7866:1999

Seamless Aluminum Cylinders Model No. S80.3

MANUFACTURED FOR: STOCK

MANUFACTURED BY: CATALINA CYLINDERS,
7300 ANACONDA AVENUE, GARDEN GROVE, CALIFORNIA 92841

QUANTITY: 191

SERIAL NUMBERS: GV0002340 TO GV0002530

BATCH NUMBER(S): AF758 **HEAT NUMBER(S):** RH0

TECHNICAL DATA:

Service Pressure: 207Bar

Test Pressure: 311 Bar

Nominal Size 184.2 mm OD

Minimum Wall: 12.1 mm

657.9 mm Long (without cap and without valve)

Nominal Volumetric Capacity: 11.1 Liters

CONSTRUCTION: Backward Extrusion to Form a Seamless Shell, the open end is closed by swaging.

MATERIAL AND HEAT TREATMENT: AA Alloy Designation 6061A. Solution Treatment and Artificial Aging to the 6061 T6 Condition

STAMP MARKING: Markings as noted on layout attached to this certificate.

I hereby certify that I have determined the cylinders covered by this Certificate of Conformance have been manufactured in accordance with the requirements of ISO Standard 7866:1999, and have passed all the inspections and tests required by this ISO Standard.

Remarks:

CATALINA CYLINDERS
Garden Grove, CA

Signed: 

Inspector

Date: 02-18-14

PRODUCTION TEST DATA

Measurement of Cylinders

Batch No.	Serial Numbers	Water Capacity	Minimum measured thickness	
AF758	GV0002340- GV0002530	100% Inspected all capacities 11.1L or greater	100% Wall Thickness Inspected all above 12.1 mm minimum	100% Base Thickness Inspected all above 18.7 mm minimum

Mechanical Testing

Batch No.	Serial Numbers	Cast No.				Flattening Test	Burst Test Serial No.	Burst Test (Bar)	Hardness
			Yield Stress (Mpa)	Tensile Stress (Mpa)	Elongation %				
AF758	GV0002340 to GV0002530	RH0	294.1 332.7	347.7 346.8	20.5 18.4	OK	GV0002340	568.8	OK

Record of Chemical Analysis of Material for Cylinders

HEAT NO (HEAT CODE)	TYPE OF ANALYSIS (LADLE OR CHECK)	CHEMICAL ANALYSIS									
		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi
RH0	LADLE	.61	.17	.31	.02	.92	.076	.00	.01	.000	.000

Date: 02-18-14

Place: GARDEN GROVE, CALIFORNIA USA

Signature: 
On behalf of Catalina Cylinders

RECORD OF RESIDUAL HYDROCARBON TESTING
(In Accordance with Fed Spec. RR-C-901C)

Lot No.	Serial Number	Total Hydrocarbons (mg)	Regulatory Level Allowed (mg)
AF758	GV0002340	8.9	9.00

Certificate of Residual Hydrocarbon Testing are on file at Manufacturer.

Certifying Entity: **South Coast Pollution Control**

This record of Residual Hydrocarbon Testing is provided for informational purposes only, it is not to be considered a part of the Certificate of Compliance and Test Report to which it is attached, and has not been certified or verified by T.H. Cochrane Laboratories, Ltd.

CYLINDER 100% HARDNESS TEST

Cylinder type: S80.3

Lot number: AF758

Highest reading: 69.6

Lowest reading: 64

Sample readings:

64	68.3	67.5	66.7	67.3	66.2	66.7	68.6	69.6
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Hardness range		
52	to	75

Catalina Cylinders certifies that all cylinders in the above lot number manufactured by Catalina cylinder was 100% hardness tested per the ISO 8766 (11.3) standard

Comments:

Date: 02.13.14

Inspected by: M.A.

Burst Test Form

Specification Information

Specification(s):

ISO 7866

Minimum Burst Pressure (B/P): **497bar / 7,200psi**

Specification Section(s): 10.4

1. Rate of pressurization may not exceed 200psi per second throughout entire pressurization.
2. Burst fracture must initiate in the longitudinal direction in the cylindrical portion of the cylinder. The cylinder must not fragment.

Cylinder Information

Cylinder Name:

S80.3

Size; capacity: 678 cu.in

diameter: 184.15mm

length: 658.81mm

Pressure; Service: 207bar / 3000psi

Test: 311bar / 4500psi

Serial Number (1): GV0002340

Cast #: RH0

Lot #: AF758

Serial Number (2):

Cast #:

Lot #:

Serial Number (3):

Cast #:

Lot #:

Test Information

Test Date:

Cylinder		Pressure (psi)	Burst Test Results	
Serial Number	State of Manf.		Location	Fragmentation/ Pieces
GV0002340	Hydroed	8,250	LOWER SIDEWALL	NONE

Notes:

Inspector:

  M. A.

Date:

02-18-14

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 14-Feb-14
Day: Friday
Time: 2:08 PM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002340	AF758	1	4520	62.9	0.3	0.5	31.05	55.75	685.18	PASS
GV0002341	AF758	2	4520	63.0	0.1	0.2	31.05	55.80	686.57	PASS
GV0002342	AF758	3	4520	62.6	0.2	0.3	31.05	55.75	685.18	PASS
GV0002343	AF758	4	4520	63.1	0.0	0.0	31.05	55.80	686.57	PASS
GV0002344	AF758	5	4520	62.5	0.4	0.6	31.15	55.85	685.18	PASS
GV0002345	AF758	1	4520	62.4	0.0	0.0	31.05	55.80	686.57	PASS
GV0002346	AF758	2	4520	62.7	0.0	0.0	31.05	55.80	686.57	PASS
GV0002347	AF758	3	4520	62.1	0.0	0.0	31.10	55.75	683.79	PASS
GV0002348	AF758	4	4520	62.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002349	AF758	5	4520	62.0	0.0	0.0	31.10	55.70	682.40	PASS
GV0002350	AF758	6	4520	63.3	0.4	0.6	31.05	55.70	683.79	PASS
GV0002351	AF758	1	4520	62.5	0.1	0.2	31.05	55.75	685.18	PASS
GV0002352	AF758	2	4520	62.9	0.0	0.0	31.05	55.70	683.79	PASS
GV0002353	AF758	3	4520	62.0	0.0	0.0	31.05	55.70	683.79	PASS
GV0002354	AF758	4	4520	62.8	0.0	0.0	31.10	55.75	683.79	PASS
GV0002355	AF758	5	4520	62.5	0.0	0.0	31.05	55.70	683.79	PASS
GV0002356	AF758	1	4500	62.2	0.0	0.0	31.05	55.75	685.18	PASS
GV0002357	AF758	2	4500	62.4	0.0	0.0	31.05	55.75	685.18	PASS
GV0002358	AF758	3	4500	61.7	0.0	0.0	31.05	55.75	685.18	PASS
GV0002359	AF758	4	4500	62.4	0.0	0.0	31.05	55.80	686.57	PASS
GV0002360	AF758	5	4500	62.0	0.0	0.0	31.05	55.80	686.57	PASS
GV0002361	AF758	1	4500	62.2	0.0	0.0	31.05	55.75	685.18	PASS
GV0002362	AF758	2	4500	62.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002363	AF758	3	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002364	AF758	4	4500	62.6	0.3	0.5	31.15	55.90	686.57	PASS
GV0002365	AF758	5	4500	62.0	0.0	0.0	31.05	55.70	683.79	PASS
GV0002366	AF758	1	4500	62.3	0.1	0.2	31.05	55.75	685.18	PASS
GV0002367	AF758	2	4500	62.1	0.0	0.0	31.05	55.80	686.57	PASS
GV0002368	AF758	3	4500	62.0	0.0	0.0	31.05	55.75	685.18	PASS
GV0002369	AF758	4	4500	62.8	0.0	0.0	31.05	55.70	683.79	PASS
GV0002370	AF758	5	4500	62.3	0.0	0.0	31.05	55.70	683.79	PASS
GV0002371	AF758	1	4520	62.5	0.0	0.0	31.05	55.80	686.57	PASS
GV0002372	AF758	2	4520	62.9	0.1	0.2	31.05	55.75	685.18	PASS
GV0002373	AF758	3	4520	62.4	0.0	0.0	31.05	55.75	685.18	PASS
GV0002374	AF758	4	4520	62.9	0.0	0.0	31.05	55.70	683.79	PASS
GV0002375	AF758	5	4520	62.0	0.0	0.0	31.05	55.70	683.79	PASS
GV0002376	AF758	1	4500	62.1	0.2	0.3	31.05	55.65	682.40	PASS
GV0002377	AF758	2	4500	62.3	0.0	0.0	31.15	55.70	681.02	PASS
GV0002378	AF758	3	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002379	AF758	4	4500	62.5	0.0	0.0	31.00	55.80	687.95	PASS
GV0002380	AF758	5	4500	62.3	0.4	0.6	31.05	55.80	686.57	PASS
GV0002381	AF758	1	4500	62.3	0.0	0.0	31.15	55.80	683.79	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 14-Feb-14
Day: Friday
Time: 2:08 PM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002382	AF758	2	4500	62.2	0.0	0.0	31.10	55.75	683.79	PASS
GV0002383	AF758	3	4500	61.9	0.0	0.0	31.05	55.70	683.79	PASS
GV0002384	AF758	4	4500	62.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002385	AF758	5	4500	61.9	0.0	0.0	31.05	55.75	685.18	PASS
GV0002386	AF758	1	4500	61.9	0.0	0.0	31.05	55.75	685.18	PASS
GV0002387	AF758	2	4500	62.3	0.0	0.0	31.05	55.80	686.57	PASS
GV0002388	AF758	3	4500	61.6	0.0	0.0	31.15	55.80	683.79	PASS
GV0002389	AF758	4	4500	62.6	0.0	0.0	31.10	55.80	685.18	PASS
GV0002390	AF758	5	4500	61.7	0.0	0.0	31.05	55.85	687.95	PASS
GV0002391	AF758	1	4500	62.2	0.0	0.0	31.15	55.80	683.79	PASS
GV0002392	AF758	2	4500	62.2	0.0	0.0	31.15	55.75	682.40	PASS
GV0002393	AF758	3	4500	61.5	0.1	0.2	31.15	55.75	682.40	PASS
GV0002394	AF758	4	4500	62.3	0.0	0.0	31.05	55.75	685.18	PASS
GV0002395	AF758	5	4500	61.4	0.0	0.0	31.10	55.85	686.57	PASS
GV0002396	AF758	1	4500	62.4	0.3	0.5	31.05	55.80	686.57	PASS
GV0002397	AF758	2	4500	62.8	0.3	0.5	31.20	55.70	679.63	PASS
GV0002398	AF758	3	4500	62.3	0.0	0.0	31.10	55.75	683.79	PASS
GV0002399	AF758	4	4500	62.5	0.1	0.2	31.05	55.90	689.34	PASS
GV0002400	AF758	5	4500	62.5	0.3	0.5	31.05	55.75	685.18	PASS
GV0002401	AF758	1	4500	62.1	0.0	0.0	31.20	55.75	681.02	PASS
GV0002402	AF758	2	4500	62.2	0.0	0.0	31.05	55.85	687.95	PASS
GV0002403	AF758	3	4500	61.7	0.0	0.0	31.20	55.75	681.02	PASS
GV0002404	AF758	4	4500	62.7	0.0	0.0	31.10	55.80	685.18	PASS
GV0002405	AF758	5	4500	61.8	0.0	0.0	31.10	55.75	683.79	PASS
GV0002406	AF758	1	4500	62.3	0.3	0.5	31.10	55.70	682.40	PASS
GV0002407	AF758	2	4500	62.5	0.1	0.2	31.05	55.75	685.18	PASS
GV0002408	AF758	3	4500	62.1	0.0	0.0	31.05	55.85	687.95	PASS
GV0002409	AF758	4	4500	62.6	0.0	0.0	31.10	55.75	683.79	PASS
GV0002410	AF758	5	4500	62.3	0.3	0.5	31.05	55.85	687.95	PASS
GV0002411	AF758	1	4500	62.3	0.2	0.3	31.10	55.75	683.79	PASS
GV0002412	AF758	2	4500	62.7	0.0	0.0	31.05	55.70	683.79	PASS
GV0002413	AF758	3	4500	61.8	0.0	0.0	31.05	55.70	683.79	PASS
GV0002414	AF758	4	4500	62.6	0.1	0.2	31.05	55.75	685.18	PASS
GV0002415	AF758	5	4500	62.1	0.1	0.2	31.05	55.75	685.18	PASS
GV0002416	AF758	1	4500	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002417	AF758	2	4500	62.6	0.0	0.0	31.05	55.75	685.18	PASS
GV0002418	AF758	3	4500	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002419	AF758	4	4500	62.5	0.1	0.2	31.05	55.75	685.18	PASS
GV0002420	AF758	5	4500	61.4	0.0	0.0	31.05	55.75	685.18	PASS
GV0002421	AF758	1	4500	62.3	0.3	0.5	31.00	55.80	687.95	PASS
GV0002422	AF758	2	4500	62.6	0.3	0.5	31.05	55.75	685.18	PASS
GV0002423	AF758	3	4500	62.0	0.0	0.0	31.05	55.80	686.57	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 14-Feb-14

Day: Friday

Time: 2:08 PM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002424	AF758	4	4500	62.7	0.0	0.0	31.05	55.80	686.57	PASS
GV0002425	AF758	5	4500	61.5	0.0	0.0	31.10	55.80	685.18	PASS
GV0002426	AF758	1	4500	62.3	0.0	0.0	31.05	55.75	685.18	PASS
GV0002427	AF758	2	4500	62.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002428	AF758	3	4500	61.9	0.0	0.0	31.05	55.75	685.18	PASS
GV0002429	AF758	4	4500	62.5	0.0	0.0	31.15	55.80	683.79	PASS
GV0002430	AF758	5	4500	61.9	0.0	0.0	31.05	55.85	687.95	PASS
GV0002431	AF758	1	4500	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002432	AF758	2	4500	62.3	0.0	0.0	31.05	55.70	683.79	PASS
GV0002433	AF758	3	4500	61.8	0.0	0.0	31.00	55.80	687.95	PASS
GV0002434	AF758	4	4500	62.4	0.0	0.0	31.10	55.70	682.40	PASS
GV0002435	AF758	5	4500	61.8	0.0	0.0	31.05	55.80	686.57	PASS
GV0002436	AF758	6	4500	62.3	0.0	0.0	31.00	55.80	687.95	PASS
GV0002437	AF758	1	4500	62.2	0.1	0.2	31.05	55.75	685.18	PASS
GV0002438	AF758	2	4500	62.3	0.0	0.0	31.05	55.75	685.18	PASS
GV0002439	AF758	3	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002440	AF758	4	4500	62.4	0.0	0.0	31.05	55.75	685.18	PASS
GV0002441	AF758	5	4500	61.4	0.0	0.0	31.05	55.75	685.18	PASS
GV0002442	AF758	1	4500	62.3	0.3	0.5	31.10	55.80	685.18	PASS
GV0002443	AF758	2	4500	62.7	0.0	0.0	31.10	55.80	685.18	PASS
GV0002444	AF758	3	4500	61.9	0.0	0.0	31.10	55.75	683.79	PASS
GV0002445	AF758	4	4500	62.7	0.0	0.0	31.05	55.75	685.18	PASS
GV0002446	AF758	5	4500	61.8	0.0	0.0	31.05	55.80	686.57	PASS
GV0002447	AF758	1	4500	62.2	0.2	0.3	31.10	55.80	685.18	PASS
GV0002448	AF758	2	4500	63.0	0.1	0.2	31.05	55.85	687.95	PASS
GV0002449	AF758	3	4500	61.8	0.0	0.0	31.15	55.75	682.40	PASS
GV0002450	AF758	4	4500	62.7	0.0	0.0	31.05	55.75	685.18	PASS
GV0002451	AF758	5	4500	62.3	0.0	0.0	31.10	55.80	685.18	PASS
GV0002452	AF758	1	4500	61.9	0.0	0.0	31.10	55.80	685.18	PASS
GV0002453	AF758	2	4500	62.2	0.0	0.0	31.05	55.80	686.57	PASS
GV0002454	AF758	3	4500	61.8	0.0	0.0	31.10	55.75	683.79	PASS
GV0002455	AF758	4	4500	62.5	0.0	0.0	31.10	55.80	685.18	PASS
GV0002456	AF758	5	4500	61.4	0.0	0.0	31.15	55.80	683.79	PASS
GV0002457	AF758	1	4520	62.3	0.2	0.3	31.10	55.80	685.18	PASS
GV0002458	AF758	2	4520	62.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002459	AF758	3	4520	61.6	0.0	0.0	31.05	55.75	685.18	PASS
GV0002460	AF758	4	4520	62.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002461	AF758	5	4520	61.5	0.0	0.0	31.00	55.80	687.95	PASS
GV0002462	AF758	1	4520	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002463	AF758	2	4520	62.7	0.0	0.0	31.05	55.75	685.18	PASS
GV0002464	AF758	3	4520	62.3	0.0	0.0	31.20	55.85	683.79	PASS
GV0002465	AF758	4	4520	62.7	0.0	0.0	31.05	55.75	685.18	PASS

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Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 14-Feb-14
Day: Friday
Time: 2:08 PM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002466	AF758	5	4520	61.4	0.0	0.0	31.05	55.80	686.57	PASS
GV0002467	AF758	1	4500	62.3	0.0	0.0	31.05	55.95	690.73	PASS
GV0002468	AF758	2	4500	62.6	0.0	0.0	31.25	55.95	685.18	PASS
GV0002469	AF758	3	4500	61.9	0.0	0.0	31.15	55.95	687.95	PASS
GV0002470	AF758	4	4500	62.1	0.0	0.0	31.10	55.95	689.34	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 17-Feb-14
Day: Monday
Time: 5:57 AM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002471	AF758	1	4500	61.6	0.0	0.0	31.10	55.80	685.18	PASS
GV0002472	AF758	2	4500	62.2	0.0	0.0	31.05	55.80	686.57	PASS
GV0002473	AF758	3	4500	61.6	0.0	0.0	31.10	55.80	685.18	PASS
GV0002474	AF758	4	4500	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002475	AF758	5	4500	61.7	0.0	0.0	31.05	55.80	686.57	PASS
GV0002476	AF758	6	4500	61.8	0.0	0.0	31.05	55.70	683.79	PASS
GV0002477	AF758	1	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002478	AF758	2	4500	62.8	0.0	0.0	31.05	55.80	686.57	PASS
GV0002479	AF758	3	4500	61.8	0.0	0.0	31.05	55.80	686.57	PASS
GV0002480	AF758	4	4500	62.2	0.0	0.0	31.05	55.80	686.57	PASS
GV0002481	AF758	5	4500	61.9	0.0	0.0	31.05	55.80	686.57	PASS
GV0002482	AF758	6	4500	61.9	0.0	0.0	31.10	56.00	690.73	PASS
GV0002483	AF758	1	4500	61.8	0.0	0.0	31.05	55.85	687.95	PASS
GV0002484	AF758	2	4500	62.0	0.0	0.0	31.25	55.80	681.02	PASS
GV0002485	AF758	3	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002486	AF758	4	4500	62.2	0.0	0.0	31.05	55.75	685.18	PASS
GV0002487	AF758	5	4500	61.6	0.0	0.0	31.05	55.75	685.18	PASS
GV0002488	AF758	6	4500	61.9	0.0	0.0	31.10	55.75	683.79	PASS
GV0002489	AF758	1	4500	62.0	0.0	0.0	31.05	55.75	685.18	PASS
GV0002490	AF758	2	4500	62.4	0.0	0.0	31.05	55.80	686.57	PASS
GV0002491	AF758	3	4500	61.6	0.0	0.0	31.05	55.75	685.18	PASS
GV0002492	AF758	4	4500	62.0	0.0	0.0	31.10	55.80	685.18	PASS
GV0002493	AF758	5	4500	61.6	0.0	0.0	31.10	55.75	683.79	PASS
GV0002494	AF758	6	4500	61.8	0.0	0.0	31.10	55.75	683.79	PASS
GV0002495	AF758	1	4500	61.8	0.0	0.0	31.05	55.75	685.18	PASS
GV0002496	AF758	2	4500	62.3	0.0	0.0	31.15	55.70	681.02	PASS
GV0002497	AF758	3	4500	61.8	0.0	0.0	31.05	55.80	686.57	PASS
GV0002498	AF758	4	4500	62.3	0.0	0.0	31.05	55.70	683.79	PASS
GV0002499	AF758	5	4500	61.5	0.0	0.0	31.05	55.80	686.57	PASS
GV0002500	AF758	6	4500	61.5	0.0	0.0	31.10	55.75	683.79	PASS
GV0002501	AF758	1	4500	61.8	0.0	0.0	31.00	55.75	686.57	PASS
GV0002502	AF758	2	4500	62.1	0.0	0.0	31.05	55.75	685.18	PASS
GV0002503	AF758	3	4500	61.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002504	AF758	4	4500	62.0	0.0	0.0	31.05	55.75	685.18	PASS
GV0002505	AF758	5	4500	61.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002506	AF758	6	4500	62.0	0.0	0.0	31.05	55.75	685.18	PASS
GV0002507	AF758	1	4500	61.9	0.0	0.0	31.05	55.80	686.57	PASS
GV0002508	AF758	2	4500	62.1	0.0	0.0	31.05	55.80	686.57	PASS
GV0002509	AF758	3	4500	61.4	0.0	0.0	31.10	55.75	683.79	PASS
GV0002510	AF758	4	4500	62.2	0.0	0.0	31.10	55.75	683.79	PASS
GV0002511	AF758	5	4500	61.6	0.0	0.0	31.15	55.75	682.40	PASS
GV0002512	AF758	6	4500	61.9	0.0	0.0	31.10	55.70	682.40	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

Manufacturer: Catalina Cylinders / Garden Grove
Independent Inspector: T. H. Cochrane Labs

Test Date: 17-Feb-14
Day: Monday
Time: 5:57 AM

Cylinder Type: **S80.3**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **4500**

Cylinder Serial Number	Cylinder Lot Number	Hydro Jkt Num	Actual T/P (psi)	Total Expan (cc)	Perm Expan (cc)	Ratio Perm/Tot (%)	Empty Weight (lbs)	Full Weight (lbs)	Volume Capacity (cu in)	Pass or Fail
GV0002513	AF758	1	4500	62.6	0.2	0.3	31.05	55.75	685.18	PASS
GV0002514	AF758	2	4500	62.7	0.1	0.2	31.05	55.75	685.18	PASS
GV0002515	AF758	3	4500	62.3	0.1	0.2	31.05	55.80	686.57	PASS
GV0002516	AF758	4	4500	62.7	0.0	0.0	31.05	55.75	685.18	PASS
GV0002517	AF758	5	4500	62.2	0.1	0.2	31.10	55.80	685.18	PASS
GV0002518	AF758	6	4500	62.3	0.0	0.0	31.05	55.80	686.57	PASS
GV0002519	AF758	1	4500	61.9	0.0	0.0	31.10	55.85	686.57	PASS
GV0002520	AF758	2	4500	62.5	0.0	0.0	31.10	55.75	683.79	PASS
GV0002521	AF758	3	4500	61.9	0.0	0.0	31.10	55.75	683.79	PASS
GV0002522	AF758	4	4500	62.6	0.0	0.0	31.10	55.75	683.79	PASS
GV0002523	AF758	5	4500	61.5	0.0	0.0	31.05	55.75	685.18	PASS
GV0002524	AF758	6	4500	62.3	0.0	0.0	31.00	55.90	690.73	PASS
GV0002525	AF758	1	4500	62.0	0.0	0.0	31.05	55.80	686.57	PASS
GV0002526	AF758	2	4500	62.5	0.0	0.0	31.05	55.80	686.57	PASS
GV0002527	AF758	3	4500	62.0	0.0	0.0	31.05	55.90	689.34	PASS
GV0002528	AF758	4	4500	62.3	0.0	0.0	31.15	55.85	685.18	PASS
GV0002529	AF758	5	4500	61.3	0.0	0.0	31.10	55.75	683.79	PASS
GV0002530	AF758	6	4500	62.1	0.0	0.0	31.05	55.70	683.79	PASS

CO

J.P.

ISO

Record Of Mechanical Property Testing

Independent Inspection Agency: T.H. Cochrane Laboratory, Ltd(IA03)
Manufacturer: Catalina Cylinders / Garden Grove, CA Facility (M4002)

HT Lot # AF758

Friday, February 14, 2014 11:39 AM

Cylinder Type AS80

Cast # RH0

Crosshead Speed 0.11 in/min

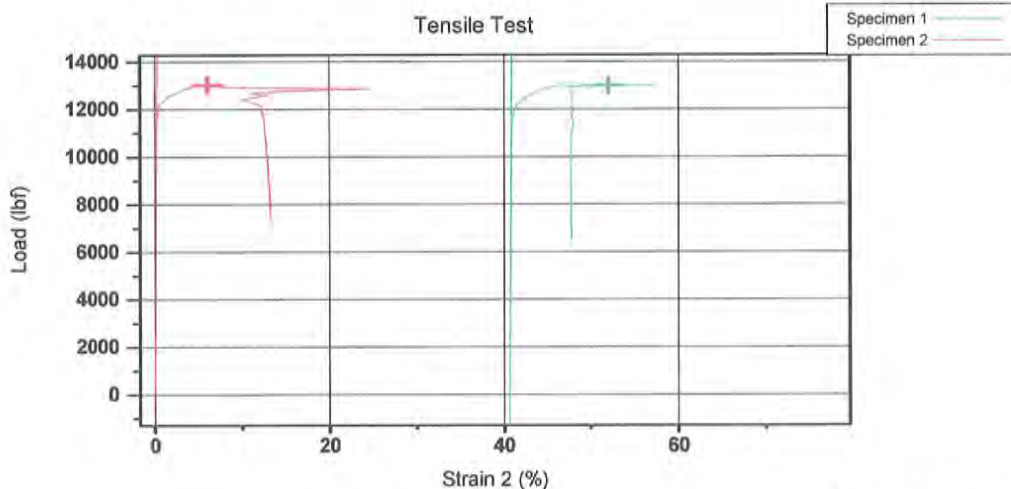
Material: 6061

0 degree Pass ☒ Fail ☐
180 degree Pass ☒ Fail ☐
Crush Test Pass ☒ Fail ☐

Specimens tested: 2

Hardness

	Thickness (in)	Width (in)	Area (in ²)	YTS-Load (lbf)	YTS (psi)	UTS-load (lbf)	UTS (psi)	%e (%)
1	0.514	0.501	0.2575	10983.3	42651.1	12984.4	50422.0	20.5
2	0.518	0.500	0.2590	12498.0	48254.9	13026.7	50296.0	18.4



INSPECTOR:

[Handwritten signature]

DATE:

2-14-14

00

Page: 1 / 6

Rio Tinto Alcan Inc.

Qu bec, Canada

Vendu à / Sold to :

ALCAN PRIMARY PRODUCTS COMPANY LLC

6150 PARKLAND BLVD., SUITE 200

CLEVELAND, OH

44124-4185

(6061)

Aluminum Extrusion Ingot

184 MM DIA. X 5486 MM LONG

Analyse % du poids / Analysis in % of weight									Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Ga
No d'échantillon de coulée Sample No of Drop	No Lot Lot No	Poids net (KG) Net Weight (KG)	Poids net (LB) Net Weight (LB)	Pièces Pieces	Pb	Sn												
13490401A	8280580	2,351	5,183	6	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401A	8280581	2,352	5,185	6	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401A	8280582	2,352	5,185	6	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401A	8280583	2,352	5,185	6	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401A	8280584	2,352	5,185	6	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401A	8280585	2,351	5,183	4	0.61 0.000	0.17 0.000	0.31	0.02	0.92	0.076	0.00	0.01	0.000	0.01				
13490401B				2	0.60 0.000	0.17 0.000	0.31	0.02	0.91	0.074	0.00	0.01	0.000	0.01				
13490401B	8280586	2,352	5,185	6	0.60 0.000	0.17 0.000	0.31	0.02	0.91	0.074	0.00	0.01	0.000	0.01				
Paquets :	Poids net :	KG	76,792	Pièces :	196	Tare :	KG	678	Poids brut :	KG	77,470							
Bundles :	Net Weight :	LB	169,297	Pieces :			LB	1,495	Gross Weight :	LB	170,792							

[illegible]

LB

GPC04075C.V6.1

L'EXACTITUDE DE CES ANALYSES EST DANS LES NORMES DES LIMITES COMMERCIALES
THE ANALYSES HERE ARE ACCURATE WITHIN COMMERCIAL LIMITS

ES COMMERCIAL

M.A. ok.

⑩

TOP LINE RELEASED

CHECK SERIAL # 915.

#

85258

RECEIVED
M.A.

CHECK SERIAL # 415.
#758
4/25/02 USA CAPITAL INC - MON
14.2% 11.1% PW207BAB PITBING
CE000000 2014/02 PITBING BREATHING