

CERTIFICATE OF COMPLIANCE AND TEST REPORT
FOR
SEAMLESS ALUMINUM CYLINDERS MANUFACTURED UNDER
U. S. DEPARTMENT OF TRANSPORTATION REGULATIONS.

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

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

CONSIGNEE TO: CATALINA CYLINDERS
7300 ANACONDA AVENUE, GARDEN GROVE, CALIFORNIA 92841

CYLINDER DESCRIPTION AND DESIGN CRITERIA:

Specification: DOT-3AL3000 Service Pressure: 3000 psi (207 BAR)
Nominal Size 5.25 inches (133.4 mm) OD DOT Test Pressure: 5000 psi
25.2 inches (640.1 mm) Long Minimum Wall: .344 inches (8.738 mm)
Nominal Volumetric Capacity: 350.4 Cu. In. (5.76 L)
DOT Calculated Stress at test pressure: 32704 psi.

MANUFACTURING PROCESS:

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

MATERIAL AND HEAT TREATMENT: 6061 Aluminum. Solution Treatment and Artificial Aging to the 6061 T6 Condition.

REPORT DETAILS:

Quantity: 192
Cast Code: OL4 Lot Numbers: AA937

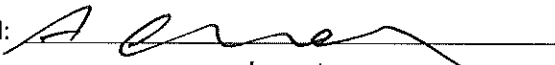
MARKS STAMPED INTO THE SHOULDER OF THE CYLINDER ARE:

Specification and Service Pressure: DOT 3AL3000
Serial Numbers: FW0001091 to FW0001282 inclusive Test Date: 03-12
Inspector's Mark: 
Manufacturer's Symbol: M4002 Other Marks: CATALINA S40 M25X2 DIVING BREATHING GAS
CE0426 PS200BAR TS-20/+60C PT344BAR 7.3 KG

I hereby certify that I have determined the cylinders described on this report comply with the requirements of the U. S. Department of Transportation Specification 3AL.

Remarks:

T. H. COCHRANE LABORATORIES, LTD.
Milwaukee, WI 53225

Signed: 
Inspector

Date: MAR 19 2012

NOTE: The cylinders that are the subject of this Test Report have been inspected in accordance with the requirements of the law and the regulations of the Department of Transportation. This Test Report is not to be taken as an indication that said cylinders are or are not safe for use. THIS TEST REPORT DOES NOT CONSTITUTE AN EXPRESS OR IMPLIED WARRANTY.

SERIAL NUMBER RANGE: FW0001091 to FW0001282 inclusive

SIZE: 5.25 O.D. x 25.2 long.

CYLINDER MANUFACTURER: CATALINA CYLINDERS

RECORD OF CHEMICAL ANALYSIS OF MATERIAL FOR CYLINDERS

Alloy	Cast Code	Type of Analysis (Ladle or Cast)	CHEMICAL ANALYSIS									
			Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi
6061	OL4	Ladle	.62	.17	.31	.03	.91	.078	.00	.01	.000	.000

Balance AL Other Elements each <.05, Total <.15

Chemical Analysis and Check Analysis are on file at the Manufacturer. Material Manufacturer: ALCAN

The above analysis has been verified to comply with material authorized by the specification.

RECORD OF PHYSICAL TESTS OF MATERIAL FOR CYLINDERS

LOT NO.	TEST BAR	YIELD STRENGTH IN PSI (MPa)	TENSILE STRENGTH IN PSI (MPa)	% ELONGATION	FLATTENING TEST
AA937	0	41,271 psi (284.6 Mpa)	52,373 psi (361.1 Mpa)	19.6	Pass
	180	43,725 psi (301.5 Mpa)	51,848 psi (357.5 Mpa)	17.9	

Signed: 

INSPECTOR

Date:

MAR 19 2012

Location: Garden Grove, California

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

Lot No.	Serial Number	Total Hydrocarbons (mg)	Regulatory Level Allowed (mg)
AA937	FW0001091	3.5	5.12

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.

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 15-Mar-12
Day: Thursday
Time: 2:21 PM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001091	AA937	1	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001092	AA937	2	5020	37.1	0.0	0.0	16.35	29.15	355.07	P
FW0001093	AA937	3	5020	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001094	AA937	4	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001095	AA937	5	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001096	AA937	1	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001097	AA937	2	5020	37.2	0.1	0.3	16.40	29.20	355.07	P
FW0001098	AA937	3	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001099	AA937	4	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001100	AA937	1	5000	35.6	0.1	0.3	16.40	29.20	355.07	P
FW0001101	AA937	2	5000	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001102	AA937	3	5000	36.7	0.0	0.0	16.40	29.15	353.69	P
FW0001103	AA937	4	5000	36.8	0.0	0.0	16.35	29.20	356.46	P
FW0001104	AA937	1	5000	36.9	0.0	0.0	16.35	29.15	355.07	P
FW0001105	AA937	2	5000	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001106	AA937	3	5000	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001107	AA937	4	5000	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001108	AA937	3	5020	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001109	AA937	4	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001110	AA937	5	5020	36.9	0.0	0.0	16.35	29.20	356.46	P
FW0001111	AA937	6	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001112	AA937	3	5000	36.8	0.0	0.0	16.40	29.15	353.69	P
FW0001113	AA937	4	5000	36.7	0.0	0.0	16.35	29.20	356.46	P
FW0001114	AA937	5	5000	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001115	AA937	6	5000	37.1	0.0	0.0	16.35	29.20	356.46	P
FW0001116	AA937	3	5000	36.8	0.0	0.0	16.35	29.20	356.46	P
FW0001117	AA937	4	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001118	AA937	5	5000	37.1	0.1	0.3	16.35	29.20	356.46	P
FW0001119	AA937	6	5000	37.0	0.0	0.0	16.35	29.20	356.46	P
FW0001120	AA937	3	5000	36.9	0.0	0.0	16.35	29.20	356.46	P
FW0001121	AA937	4	5000	36.9	0.0	0.0	16.35	29.15	355.07	P
FW0001122	AA937	5	5000	37.1	0.1	0.3	16.30	29.15	356.46	P
FW0001123	AA937	6	5000	37.0	0.0	0.0	16.35	29.20	356.46	P
FW0001124	AA937	3	5000	36.9	0.0	0.0	16.35	29.15	355.07	P
FW0001125	AA937	4	5000	36.9	0.0	0.0	16.35	29.20	356.46	P
FW0001126	AA937	5	5000	37.1	0.4	1.1	16.40	29.15	353.69	P
FW0001127	AA937	6	5000	36.8	0.0	0.0	16.35	29.20	356.46	P
FW0001128	AA937	3	5000	37.1	0.3	0.8	16.40	29.15	353.69	P
FW0001129	AA937	4	5000	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001130	AA937	5	5000	36.7	0.0	0.0	16.40	29.15	353.69	P

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 15-Mar-12
Day: Thursday
Time: 2:21 PM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001131	AA937	6	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001132	AA937	3	5000	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001133	AA937	4	5000	36.8	0.0	0.0	16.40	29.30	357.85	P
FW0001134	AA937	5	5000	36.8	0.0	0.0	16.40	29.25	356.46	P
FW0001135	AA937	6	5000	36.9	0.0	0.0	16.35	29.25	357.85	P
FW0001136	AA937	3	5000	36.6	0.0	0.0	16.40	29.25	356.46	P
FW0001137	AA937	4	5000	36.8	0.0	0.0	16.35	29.25	357.85	P
FW0001138	AA937	5	5000	36.9	0.0	0.0	16.30	29.25	359.23	P
FW0001139	AA937	6	5000	37.0	0.0	0.0	16.30	29.25	359.23	P
FW0001140	AA937	3	5000	37.0	0.0	0.0	16.40	29.25	356.46	P
FW0001141	AA937	4	5000	37.1	0.0	0.0	16.35	29.20	356.46	P
FW0001142	AA937	5	5000	37.2	0.1	0.3	16.40	29.20	355.07	P
FW0001143	AA937	6	5000	37.2	0.2	0.5	16.40	29.25	356.46	P

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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: 16-Mar-12
Day: Friday
Time: 7:58 AM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001144	AA937	3	5000	36.8	0.0	0.0	16.35	29.20	356.46	P
FW0001145	AA937	4	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001146	AA937	5	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001147	AA937	6	5000	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001148	AA937	3	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001149	AA937	4	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001150	AA937	5	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001151	AA937	6	5020	36.9	0.0	0.0	16.35	29.15	355.07	P
FW0001152	AA937	3	5000	36.7	0.0	0.0	16.40	29.15	353.69	P
FW0001153	AA937	4	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001154	AA937	5	5000	36.7	0.0	0.0	16.40	29.20	355.07	P
FW0001155	AA937	6	5000	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001156	AA937	3	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001157	AA937	4	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001158	AA937	5	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001159	AA937	6	5020	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001160	AA937	3	5000	36.6	0.0	0.0	16.40	29.20	355.07	P
FW0001161	AA937	4	5000	36.7	0.0	0.0	16.40	29.15	353.69	P
FW0001162	AA937	5	5000	37.0	0.0	0.0	16.40	29.25	356.46	P
FW0001163	AA937	6	5000	36.6	0.0	0.0	16.40	29.15	353.69	P
FW0001164	AA937	3	5000	36.8	0.0	0.0	16.45	29.20	353.69	P
FW0001165	AA937	4	5000	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001166	AA937	5	5000	36.6	0.0	0.0	16.40	29.20	355.07	P
FW0001167	AA937	6	5000	36.7	0.0	0.0	16.40	29.20	355.07	P
FW0001168	AA937	3	5000	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001169	AA937	4	5000	36.8	0.0	0.0	16.40	29.25	356.46	P
FW0001170	AA937	5	5000	36.7	0.0	0.0	16.40	29.25	356.46	P
FW0001171	AA937	6	5000	37.1	0.0	0.0	16.40	29.25	356.46	P
FW0001172	AA937	1	5000	37.0	0.0	0.0	16.45	29.25	355.07	P
FW0001173	AA937	2	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001174	AA937	3	5000	36.9	0.0	0.0	16.45	29.25	355.07	P
FW0001175	AA937	4	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001176	AA937	5	5000	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001177	AA937	6	5000	37.1	0.0	0.0	16.40	29.25	356.46	P
FW0001178	AA937	1	5020	36.9	0.0	0.0	16.40	29.25	356.46	P
FW0001179	AA937	2	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001180	AA937	3	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001181	AA937	4	5020	36.9	0.0	0.0	16.40	29.25	356.46	P
FW0001182	AA937	5	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001183	AA937	6	5020	36.8	0.0	0.0	16.40	29.20	355.07	P

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 16-Mar-12
Day: Friday
Time: 7:58 AM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001184	AA937	1	5020	37.2	0.0	0.0	16.40	29.15	353.69	P
FW0001185	AA937	2	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001186	AA937	3	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001187	AA937	4	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001188	AA937	5	5020	36.7	0.2	0.5	16.40	29.20	355.07	P
FW0001189	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001190	AA937	1	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001191	AA937	2	5020	36.8	0.0	0.0	16.40	29.15	353.69	P
FW0001192	AA937	3	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001193	AA937	4	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001194	AA937	5	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001195	AA937	6	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001196	AA937	1	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001197	AA937	2	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001198	AA937	3	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001199	AA937	4	5000	36.8	0.0	0.0	16.40	29.25	356.46	P
FW0001200	AA937	5	5000	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001201	AA937	6	5000	37.1	0.1	0.3	16.40	29.15	353.69	P
FW0001202	AA937	1	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001203	AA937	2	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001204	AA937	3	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001205	AA937	4	5020	36.8	0.0	0.0	16.45	29.20	353.69	P
FW0001206	AA937	5	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001207	AA937	6	5020	36.7	0.0	0.0	16.35	29.15	355.07	P
FW0001208	AA937	1	5020	36.9	0.0	0.0	16.35	29.20	356.46	P
FW0001209	AA937	2	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001210	AA937	3	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001211	AA937	4	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001212	AA937	5	5020	36.8	0.2	0.5	16.40	29.20	355.07	P
FW0001213	AA937	6	5020	36.8	0.0	0.0	16.40	29.20	355.07	P
FW0001214	AA937	1	5000	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001215	AA937	2	5000	37.4	0.2	0.5	16.40	29.20	355.07	P
FW0001216	AA937	3	5000	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001217	AA937	4	5000	37.0	0.0	0.0	16.35	29.20	356.46	P
FW0001218	AA937	5	5000	36.9	0.3	0.8	16.40	29.20	355.07	P
FW0001219	AA937	6	5000	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001220	AA937	1	5000	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001221	AA937	2	5000	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001222	AA937	3	5000	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001223	AA937	4	5000	37.0	0.0	0.0	16.35	29.20	356.46	P
FW0001224	AA937	5	5000	37.0	0.0	0.0	16.35	29.20	356.46	P

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 16-Mar-12
Day: Friday
Time: 7:58 AM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001225	AA937	6	5000	37.0	0.0	0.0	16.35	29.20	356.46	P
FW0001226	AA937	1	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001227	AA937	2	5020	37.3	0.0	0.0	16.40	29.20	355.07	P
FW0001228	AA937	3	5020	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001229	AA937	4	5020	36.8	0.0	0.0	16.40	29.15	353.69	P
FW0001230	AA937	5	5020	37.3	0.1	0.3	16.40	29.20	355.07	P
FW0001231	AA937	6	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001232	AA937	1	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001233	AA937	2	5020	37.0	0.0	0.0	16.35	29.15	355.07	P
FW0001234	AA937	3	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001235	AA937	4	5020	38.4	1.6	4.2	16.40	29.20	355.07	P
FW0001236	AA937	5	5020	37.1	0.1	0.3	16.35	29.20	356.46	P
FW0001237	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001238	AA937	1	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001239	AA937	2	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001240	AA937	3	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001241	AA937	4	5020	37.6	0.2	0.5	16.40	29.20	355.07	P
FW0001242	AA937	5	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001243	AA937	6	5020	36.9	0.0	0.0	16.40	29.15	353.69	P
FW0001244	AA937	1	5020	37.6	0.1	0.3	16.40	29.20	355.07	P
FW0001245	AA937	2	5020	38.2	0.8	2.1	16.40	29.20	355.07	P
FW0001246	AA937	3	5020	37.1	0.0	0.0	16.40	29.15	353.69	P
FW0001247	AA937	4	5020	37.0	0.0	0.0	16.40	29.15	353.69	P
FW0001248	AA937	5	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001249	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001250	AA937	1	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001251	AA937	2	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001252	AA937	3	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001253	AA937	4	5020	37.1	2.1	5.7	16.40	29.20	355.07	P
FW0001254	AA937	5	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001255	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001256	AA937	1	5020	37.4	0.1	0.3	16.40	29.20	355.07	P
FW0001257	AA937	2	5020	37.3	0.2	0.5	16.40	29.20	355.07	P
FW0001258	AA937	3	5020	37.2	0.1	0.3	16.40	29.20	355.07	P
FW0001259	AA937	4	5020	37.2	0.0	0.0	16.40	29.20	355.07	P
FW0001260	AA937	5	5020	37.1	0.3	0.8	16.35	29.20	356.46	P
FW0001261	AA937	6	5020	37.4	0.3	0.8	16.35	29.20	356.46	P
FW0001262	AA937	1	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001263	AA937	2	5020	37.6	0.1	0.3	16.40	29.20	355.07	P
FW0001264	AA937	3	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001265	AA937	4	5020	39.6	2.2	5.6	16.40	29.20	355.07	P

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 16-Mar-12
Day: Friday
Time: 7:58 AM

Cylinder Type: **S40.2-FW**

Test Station: **# 4 Hydro**

Test Pressure (T/P): **5000**

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
FW0001266	AA937	5	5020	37.2	0.1	0.3	16.40	29.20	355.07	P
FW0001267	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001268	AA937	1	5000	37.0	0.0	0.0	16.45	29.25	355.07	P
FW0001269	AA937	2	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001270	AA937	3	5000	37.0	0.0	0.0	16.40	29.25	356.46	P
FW0001271	AA937	4	5000	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001272	AA937	5	5000	37.1	1.2	3.2	16.40	29.20	355.07	P
FW0001273	AA937	6	5000	37.2	0.3	0.8	16.40	29.20	355.07	P
FW0001274	AA937	1	5020	37.1	1.4	3.8	16.40	29.20	355.07	P
FW0001275	AA937	2	5020	37.0	0.0	0.0	16.40	29.20	355.07	P
FW0001276	AA937	3	5020	36.9	0.0	0.0	16.40	29.20	355.07	P
FW0001277	AA937	4	5020	37.0	0.0	0.0	16.40	29.25	356.46	P
FW0001278	AA937	5	5020	36.9	0.0	0.0	16.35	29.20	356.46	P
FW0001279	AA937	6	5020	37.1	0.0	0.0	16.40	29.20	355.07	P
FW0001280	AA937	1	5020	36.4	0.0	0.0	16.40	29.20	355.07	P
FW0001281	AA937	2	5020	37.1	0.0	0.0	16.40	29.25	356.46	P
FW0001282	AA937	3	5020	37.1	0.0	0.0	16.35	29.20	356.46	P

T. H. COCHRANE LABORATORIES, LTD.

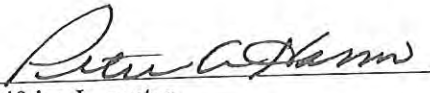
Signature Page of Certifying Inspector for DOT/TC Certificate of Compliance and Test Report No.

0012-45982

I hereby certify that I have determined the cylinders described on this report comply with the requirements of the U. S. Department of Transportation Specification 3AL, and Transport Canada Specification 3ALM.

T. H. COCHRANE LABORATORIES, LTD.
Milwaukee, Wisconsin

Signed:


Certifying Inspector

Record Of Mechanical Property Testing

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

HT Lot # AA937

Saturday, February 18, 2012 5:09 AM

Cylinder Type S40

Cast # OL4

Crosshead Speed 0.11 in/min

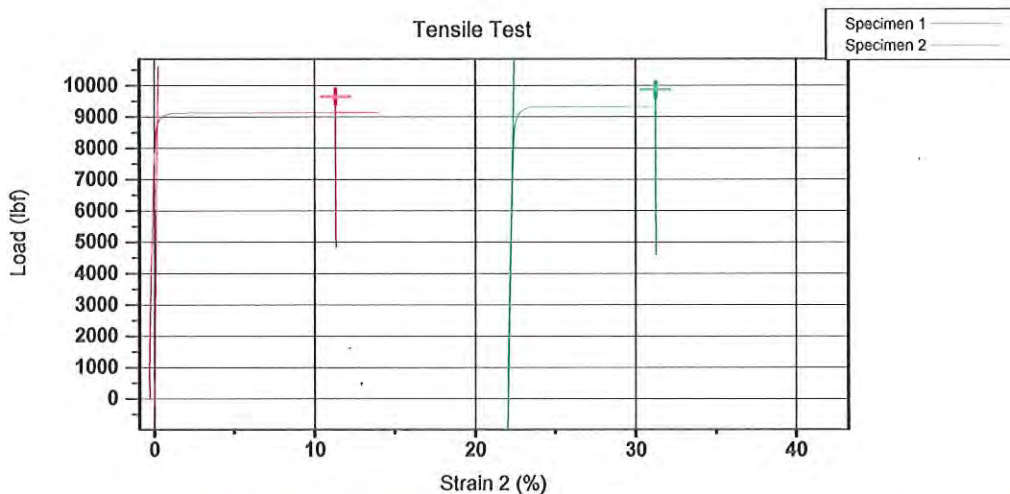
Material: 6061-T6

0 degree Pass Fail
 180 degree Pass Fail
 Crush Test Pass Fail

Specimens tested: 2

Hardness 70

	Thickness (in)	Width (in)	Area (in ²)	YTS-Load (lbf)	YTS (psi)	UTS-load (lbf)	UTS (psi)	%e (%)
1	0.379	0.497	0.1884	7774.0	41271.2	9865.2	52373.2	19.6
2	0.373	0.499	0.1861	8138.4	43725.2	9650.5	51848.9	17.9



INSPECTOR: [Signature]

DATE: 2/18/12

Certificat d'analyse / Certificate of Analysis

SHA

Page: 1 / 3

Ref. client / Cus. Order Ref. :

044508

Commande Rio Tinto Alcan / Rio Tinto Alcan Order

415-0307464-1

Expédié à / Ship to :

CATALINA CYLINDERS

DIVISION OF ALUMINUM PRECISION PRODUCTS

7300 ANACONDA AVE

Vendu à / Sold to :

ALCAN PRIMARY PRODUCTS CORP.

APMG - INGOT SALES

6150 PARKLAND BLVD., SUITE 200

GARDEN GROVE

CA, United States

92841

CLEVELAND, OH

44124-4185

Pour l'origine / Point of Origin
Rio Tinto Alcan Inc.

USINE SHAWINIGAN

1100 Boul. St-Sacrement

Shawinigan

Québec, Canada

G9N 6W4

Date d'exp. / Shipping Date:

Connaissance / Bill of Lading:

Liste d'exp. / Shipplst:

Équipement / Equipment:

2011-12-08

326-093663-064175

64175

ICG978996

Alliage (AA) / Alloy (AA) :

69276

(6061)

Produit / Product:

Aluminum Extrusion Ingot

Dimension :

133 MM DIA. X 5486 MM LONG

5.25 IN DIA. X 216 IN LONG

Analyse en % du poids / Analysis in % of weight

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	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Ga
11167401C	8205622	1,639	3,613	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401C	8205623	1,640	3,616	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401C	8205624	1,639	3,613	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401C	8205625	1,640	3,616	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401C	8205626	1,639	3,613	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401C	8205627	1,637	3,609	8	0.62	0.17	0.31	0.03	0.91	0.078	0.00	0.01	0.000	0.01
11167401B	8205628	1,641	3,618	7	0.62	0.17	0.31	0.03	0.91	0.080	0.00	0.01	0.000	0.01
11167401C	8205629	1,639	3,613	8	0.62	0.17	0.31	0.03	0.91	0.080	0.00	0.01	0.000	0.01

Paquets : 12

Poids net : KG

LB

19,262

Pièces : 94

Pièces :

Tare : KG

LB

241

Poids brut : KG

LB

42,997

Bundles : 12

Net Weight :

KG

42,465

Pièces :

Pièces :

Tare : KG

LB

531

Gross Weight :

KG

42,997

LES LINGOTS TRIL-OK 23KG, LES LINGOTS EN FORME DE T, LES GUEUSES, LES LINGOTS DE LAMINAGE MIS AU REBUT ET AUTRES LINGOTS DE REFUSION, ONT TENDANCE À FORMER DES CAVITÉS SUSCEPTIBLES D'EMPRISONNER DE L'EAU, POUR ÉLIMINER L'HUMIDITÉ, AVANT LEUR EMPLOI DANS TOUT PROCÉDÉ DE FUSION ET POUR PRÉVENIR LES RISQUES D'EXPLOSION, LES LINGOTS DEVRAIENT ÊTRE SOUMIS À UN SÉCHAGE INTENSIF PAR CHAUFFAGE PRÉLIMINAIRE AVANT DE LES INCORPORER À DU MÉTAL EN FUSION. TRIL-OK 23 KG INGOT, TEE INGOT, SOWS, SCRAPPED SHEET INGOT AN OTHER INGOT FOR REMELTING ARE PRONE TO THE FORMATION OF SHRINKAGE CAVITIES WHICH WILL PERMIT ENTRAPMENT OF WATER, TO ELIMINATE MOISTURE PRIOR TO USE IN ANY MELTING OPERATION AND TO SAFEGUARD AGAINST POSSIBLE EXPLOSION HAZARDS, INGOTS SHOULD BE THOROUGHLY DRIED BY PREHEATING BEFORE LOADING THEM INTO MOLTEN METAL.

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

/ Michel Caron

UNIVERSITY MICROFILMS
SERIALS ACQUISITION
300 N ZEEB RD
ANN ARBOR MI 48106

LOT # AA937
CYL. TYPE: SHO-2
M25X2
DATE: 03-14-12
ZENOW
ORDER # ITALY

M.A. OK.
N.M (TOP LINE)
ONLY

VOLUME

LOT # A4937
ORDER # 34790

76-207606/PT. 1A
F40001091
M1012 03 C12

SET-UP RELEASED
CHECK SERIAL # PLS.

TOP LINE
BOTTOM LINE
RELEASED

60426 P3200818
107-846000