



Declaration of Conformity

According to Directive 2014/68/EC (PED)

For Pressure Equipment

Catalina Cylinders Inc.

Herewith declares, that the Pressure Equipment

Seamless Extruded Aluminum Cylinders

(Model S80.3, 77.4 cuft, PT 311bar)

Serial Numbers: GV0005820 – GV0006336

Year of Manufacturing: 2016

Volume: 77.4 cuft

Test Pressure: 311 bar

Test Medium: Water

Conform to the Pressure Equipment Directive 2014/68/EC

Type Approval No: USA-11-01-189-002

EC Certificate of Conformity Number: CCA-1266-007-16010

Applied standard: ISO 7866:2012

Notified body engaged for monitoring of the quality system:

Arrowhead Industrial Services Bourne, Lincolnshire UK

Notified Body Number 1266

Certificate Number ACS-20140522-0-PED-02

Catalina Cylinders Inc. Garden Grove, California, USA

A handwritten signature in black ink that reads "Miguel Garay".

Miguel Garay

Quality Assurance Manager

August, 2016

WORLD CLASS PRODUCTS. FIRST CLASS SERVICE.™

TEL (714) 890-0999 ♦ FAX (714) 890-1744 ♦

www.catalinacylinders.com

7300 Anaconda Avenue, Garden Grove, California 92841

EC Certificate of Conformity

Certificate Nº

CCA-1266-007-16010

Manufacturer	Catalina Cylinders	Manufacturer's Mark
Address	12452 Monarch/7300 Anaconda Avenue Garden Grove, CA	CATALINA
Country	USA	

Regulation[s]:	PED 2014/68/EC
Design Specification:	EN ISO 7866:2012

Inspection Body [Xa]:	Arrowhead Industrial Services Limited	Inspector's Mark	
Address:	Meadow Drove Business Centre, Bourne, Lincolnshire, PE10 0BP, UK		
Identification Number:	1266		
Type Approval Nº:	USA-11-02-189-002		
Cylinder Type:	Seamless aluminium alloy		
Drawing Nº:	S80.3-GV		
Manufacturing Batch Nº:	AN448, AN449, AN450		
Serial Nº Range:	From: GV0005820	To: GV0006336	
Total Tested:	517	Total Accepted:	517

Customer	AEROTECNICA COLTRI S.P.A. VIA COLLI STORICI 177
Address	SAN MARTINO DELLA BATTAGLIA 25010
Country	ITALY

The undersigned hereby declare that the Conformity Assessment Requirements of the above referenced Regulations have been carried out satisfactorily and that the cylinders accepted conform to the Design Specification. Test reports are supplied separately.

General Remarks:

Date of Inspection:	August, 2016	Signature	
IS Body Inspector:	Miguel Garay		

Approved by:	Signature	Digitally signed by Simon Davies
Simon Davies		DN: cn=Simon Davies, o,
Certifying Inspector		ou=Arrowhead Industrial
Arrowhead Industrial Services Limited		Services Limited,
		email=simon.davies@arrowh
		eadis.com, c=G8
		Date: 2016.08.02 16:22:27
		+01'00'

DATE: 08-01-16

MODEL: S80.3

CERTIFICATE OF CONFORMANCE
Application of ISO 7866:2012

Seamless Aluminum Cylinders Model No. S80.3

MANUFACTURED FOR: STOCK

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

QUANTITY: 517

SERIAL NUMBERS: GV0005820 TO GV0006336

BATCH NUMBER(S): AN448, AN449, AN450 **HEAT NUMBER(S):** TD3

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 EN ISO 7866:2012, and have passed all the inspections and tests required by this ISO Standard.

Remarks: COLTRI SUB

CATALINA CYLINDERS
Garden Grove, CA

Signed: _____

Inspector

Date: 08-01-16

PRODUCTION TEST DATA

Measurement of Cylinders

Batch No.	Serial Numbers	Water Capacity	Minimum measured thickness	
AN448,AN449,AN450	GV0005820- GV0006336	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 %				
AN448	GV0005820 to GV0006018	TD3	297.1	346.9	22.9	OK	GV0005821	551.6	OK
			292.3	345.4	23.6				
AN449	GV0006019- GV0006217	TD3	322.6	353.4	20.9	OK	GV0006049	534.6	OK
			332.4	351.6	21.3				
AN450	GV0006218- GV0006336	TD3	315.5	348.7	23.5	OK	GV0006304	539.7	OK
			317.1	345.4	21.9				

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
TD3	LADLE	.61	.17	.31	.02	.91	.080	.00	.01	.001	.000

Date: 08-01-16

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)
AN448	GV0005820	8.4	9.00
AN449	GV0006019	7.6	9.00
AN450	GV0006218	<0.2	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.

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 28-Jul-16
Day: Thursday
Time: 2:11 PM

Cylinder Type: **S80-GV**

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
GV0005820	AN448	1	4500	64.4	0.3	0.5	31.34	55.90	681.29	PASS
GV0005821	AN448	2	4500	64.4	0.0	0.0	31.36	56.00	683.51	PASS
GV0005822	AN448	3	4500	64.3	0.0	0.0	31.18	55.85	684.35	PASS
GV0005823	AN448	4	4500	64.6	0.2	0.3	31.28	55.95	684.35	PASS
GV0005824	AN448	5	4500	64.8	0.1	0.2	31.34	55.95	682.68	PASS
GV0005825	AN448	6	4500	64.3	0.0	0.0	31.22	55.85	683.24	PASS
GV0005826	AN448	1	4500	64.4	0.1	0.2	31.22	55.95	686.01	PASS
GV0005827	AN448	2	4500	64.5	0.0	0.0	31.30	56.00	685.18	PASS
GV0005828	AN448	3	4500	64.9	0.8	1.2	31.28	55.95	684.35	PASS
GV0005829	AN448	4	4500	64.0	0.0	0.0	31.30	55.95	683.79	PASS
GV0005830	AN448	5	4500	64.6	0.1	0.2	31.30	55.95	683.79	PASS
GV0005831	AN448	6	4500	63.9	0.0	0.0	31.24	55.90	684.07	PASS
GV0005832	AN448	1	4500	64.7	0.4	0.6	31.32	55.95	683.24	PASS
GV0005833	AN448	2	4500	64.6	0.2	0.3	31.32	55.95	683.24	PASS
GV0005834	AN448	3	4500	63.9	0.0	0.0	31.30	56.00	685.18	PASS
GV0005835	AN448	4	4500	64.3	0.0	0.0	31.24	55.90	684.07	PASS
GV0005836	AN448	5	4500	65.3	0.7	1.1	31.32	55.85	680.46	PASS
GV0005837	AN448	6	4500	64.5	0.0	0.0	31.32	55.95	683.24	PASS
GV0005838	AN448	1	4500	64.4	0.4	0.6	31.32	56.00	684.62	PASS
GV0005839	AN448	2	4500	64.5	0.0	0.0	31.26	56.00	686.29	PASS
GV0005840	AN448	3	4500	63.7	0.0	0.0	31.30	55.95	683.79	PASS
GV0005841	AN448	4	4500	64.3	0.0	0.0	31.30	55.95	683.79	PASS
GV0005842	AN448	5	4500	64.9	0.1	0.2	31.26	55.85	682.13	PASS
GV0005843	AN448	6	4500	64.8	0.3	0.5	31.28	55.95	684.35	PASS
GV0005844	AN448	1	4500	64.5	0.4	0.6	31.32	55.95	683.24	PASS
GV0005845	AN448	2	4500	64.5	0.1	0.2	31.32	55.95	683.24	PASS
GV0005846	AN448	3	4500	64.2	0.0	0.0	31.30	55.95	683.79	PASS
GV0005847	AN448	4	4500	64.5	0.2	0.3	31.26	55.90	683.51	PASS
GV0005848	AN448	5	4500	65.3	0.3	0.5	31.20	55.85	683.79	PASS
GV0005849	AN448	6	4500	64.8	0.4	0.6	31.30	55.95	683.79	PASS
GV0005850	AN448	1	4500	64.7	0.5	0.8	31.32	56.00	684.62	PASS
GV0005851	AN448	2	4500	64.4	0.6	0.9	31.32	56.00	684.62	PASS
GV0005852	AN448	3	4500	64.2	0.0	0.0	31.32	55.95	683.24	PASS
GV0005853	AN448	4	4500	64.5	0.2	0.3	31.20	55.95	686.57	PASS
GV0005854	AN448	5	4500	65.1	0.6	0.9	31.30	55.95	683.79	PASS
GV0005855	AN448	6	4500	64.9	0.7	1.1	31.30	55.90	682.40	PASS
GV0005856	AN448	1	4500	64.4	0.1	0.2	31.32	55.90	681.85	PASS
GV0005857	AN448	2	4500	64.2	0.0	0.0	31.34	55.90	681.29	PASS
GV0005858	AN448	3	4500	64.3	0.0	0.0	31.32	55.90	681.85	PASS
GV0005859	AN448	4	4500	64.4	0.0	0.0	31.30	55.85	681.02	PASS
GV0005860	AN448	5	4500	64.9	0.1	0.2	31.24	55.80	681.29	PASS
GV0005861	AN448	6	4500	64.1	0.0	0.0	31.28	55.85	681.57	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 28-Jul-16
Day: Thursday
Time: 2:11 PM

Cylinder Type: **S80-GV**

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
GV0005862	AN448	1	4500	64.6	0.2	0.3	31.24	55.85	682.68	PASS
GV0005863	AN448	2	4500	64.3	0.0	0.0	31.28	55.90	682.96	PASS
GV0005864	AN448	3	4500	64.1	0.0	0.0	31.24	55.85	682.68	PASS
GV0005865	AN448	4	4500	64.0	0.0	0.0	31.24	55.85	682.68	PASS
GV0005866	AN448	5	4500	64.8	0.2	0.3	31.24	55.85	682.68	PASS
GV0005867	AN448	6	4500	64.3	0.0	0.0	31.28	55.90	682.96	PASS
GV0005868	AN448	1	4500	64.6	0.2	0.3	31.22	55.85	683.24	PASS
GV0005869	AN448	2	4500	64.0	0.0	0.0	31.24	55.95	685.46	PASS
GV0005870	AN448	3	4500	64.0	0.0	0.0	31.30	55.90	682.40	PASS
GV0005871	AN448	4	4500	64.5	0.1	0.2	31.32	55.90	681.85	PASS
GV0005872	AN448	5	4500	65.2	0.3	0.5	31.28	55.90	682.96	PASS
GV0005873	AN448	6	4500	64.5	0.0	0.0	31.26	55.90	683.51	PASS
GV0005874	AN448	1	4500	64.4	0.3	0.5	31.26	55.90	683.51	PASS
GV0005875	AN448	2	4500	63.9	0.0	0.0	31.26	55.95	684.90	PASS
GV0005876	AN448	3	4500	63.8	0.0	0.0	31.26	55.95	684.90	PASS
GV0005877	AN448	4	4500	64.2	0.0	0.0	31.22	55.90	684.62	PASS
GV0005878	AN448	5	4500	64.9	0.1	0.2	31.24	55.95	685.46	PASS
GV0005879	AN448	6	4500	64.5	0.1	0.2	31.26	56.15	690.45	PASS
GV0005880	AN448	1	4500	64.2	0.2	0.3	31.26	56.00	686.29	PASS
GV0005881	AN448	2	4500	64.3	0.0	0.0	31.26	56.00	686.29	PASS
GV0005882	AN448	3	4500	63.6	0.0	0.0	31.26	55.95	684.90	PASS
GV0005883	AN448	4	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0005884	AN448	5	4500	65.1	0.2	0.3	31.26	56.00	686.29	PASS
GV0005885	AN448	6	4500	64.0	0.0	0.0	31.28	55.90	682.96	PASS
GV0005886	AN448	1	4500	64.3	0.1	0.2	31.28	55.95	684.35	PASS
GV0005887	AN448	2	4500	64.1	0.0	0.0	31.34	55.95	682.68	PASS
GV0005888	AN448	3	4500	64.0	0.0	0.0	31.34	55.85	679.91	PASS
GV0005889	AN448	4	4500	64.2	0.0	0.0	31.36	55.90	680.74	PASS
GV0005890	AN448	5	4500	64.9	0.3	0.5	31.28	55.95	684.35	PASS
GV0005891	AN448	6	4500	64.2	0.0	0.0	31.34	55.90	681.29	PASS
GV0005892	AN448	1	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0005893	AN448	2	4500	63.9	0.0	0.0	31.28	55.95	684.35	PASS
GV0005894	AN448	3	4500	63.5	0.0	0.0	31.34	55.95	682.68	PASS
GV0005895	AN448	4	4500	64.2	0.0	0.0	31.34	55.95	682.68	PASS
GV0005896	AN448	5	4500	65.2	0.4	0.6	31.24	55.90	684.07	PASS
GV0005897	AN448	6	4500	64.2	0.0	0.0	31.30	55.90	682.40	PASS
GV0005898	AN448	1	4500	64.5	0.3	0.5	31.34	55.90	681.29	PASS
GV0005899	AN448	2	4500	64.0	0.0	0.0	31.28	55.95	684.35	PASS
GV0005900	AN448	3	4500	64.2	0.0	0.0	31.34	55.90	681.29	PASS
GV0005901	AN448	4	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0005902	AN448	5	4500	65.0	0.2	0.3	31.32	55.90	681.85	PASS
GV0005903	AN448	6	4500	64.1	0.0	0.0	31.32	55.90	681.85	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 28-Jul-16
Day: Thursday
Time: 2:11 PM

Cylinder Type: **S80-GV**

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
GV0005904	AN448	1	4500	64.3	0.2	0.3	31.28	55.90	682.96	PASS
GV0005905	AN448	2	4500	63.8	0.0	0.0	31.24	56.00	686.84	PASS
GV0005906	AN448	3	4500	63.6	0.0	0.0	31.24	55.95	685.46	PASS
GV0005907	AN448	4	4500	64.4	0.0	0.0	31.24	55.95	685.46	PASS
GV0005908	AN448	5	4500	64.9	0.2	0.3	31.30	55.90	682.40	PASS
GV0005909	AN448	6	4500	64.4	0.1	0.2	31.28	55.90	682.96	PASS
GV0005910	AN448	1	4500	64.2	0.1	0.2	31.26	55.90	683.51	PASS
GV0005911	AN448	2	4500	64.1	0.0	0.0	31.34	55.95	682.68	PASS
GV0005912	AN448	3	4500	64.1	0.0	0.0	31.32	55.90	681.85	PASS
GV0005913	AN448	4	4500	64.4	0.1	0.2	31.24	55.95	685.46	PASS
GV0005914	AN448	5	4500	64.7	0.0	0.0	31.32	55.95	683.24	PASS
GV0005915	AN448	6	4500	64.5	0.3	0.5	31.36	55.90	680.74	PASS
GV0005916	AN448	1	4500	64.3	0.1	0.2	31.36	55.90	680.74	PASS
GV0005917	AN448	2	4500	63.7	0.0	0.0	31.30	55.95	683.79	PASS
GV0005918	AN448	3	4500	64.2	0.1	0.2	31.28	55.95	684.35	PASS
GV0005919	AN448	4	4500	64.2	0.0	0.0	31.32	55.95	683.24	PASS
GV0005920	AN448	5	4500	64.7	0.2	0.3	31.30	55.90	682.40	PASS
GV0005921	AN448	6	4500	64.7	0.3	0.5	31.32	55.90	681.85	PASS
GV0005922	AN448	1	4500	64.0	0.0	0.0	31.30	55.90	682.40	PASS
GV0005923	AN448	2	4500	63.6	0.0	0.0	31.32	55.95	683.24	PASS
GV0005924	AN448	3	4500	64.1	0.0	0.0	31.30	56.05	686.57	PASS
GV0005925	AN448	4	4500	63.9	0.0	0.0	31.32	55.95	683.24	PASS
GV0005926	AN448	5	4500	64.6	0.1	0.2	31.32	55.95	683.24	PASS
GV0005927	AN448	6	4500	64.2	0.1	0.2	31.32	55.90	681.85	PASS
GV0005928	AN448	1	4500	64.4	0.3	0.5	31.32	55.90	681.85	PASS
GV0005929	AN448	2	4500	64.1	0.0	0.0	31.32	55.90	681.85	PASS
GV0005930	AN448	3	4500	64.4	0.2	0.3	31.32	55.90	681.85	PASS
GV0005931	AN448	4	4500	64.5	0.5	0.8	31.32	55.90	681.85	PASS
GV0005932	AN448	5	4500	64.6	0.0	0.0	31.32	55.90	681.85	PASS
GV0005933	AN448	6	4500	64.2	0.0	0.0	31.28	55.90	682.96	PASS
GV0005934	AN448	1	4500	64.3	0.0	0.0	31.32	55.90	681.85	PASS
GV0005935	AN448	2	4500	63.9	0.0	0.0	31.28	55.95	684.35	PASS
GV0005936	AN448	3	4500	64.2	0.1	0.2	31.28	55.95	684.35	PASS
GV0005937	AN448	4	4500	64.5	0.0	0.0	31.32	55.90	681.85	PASS
GV0005938	AN448	5	4500	64.8	0.2	0.3	31.30	55.85	681.02	PASS
GV0005939	AN448	6	4500	64.2	0.0	0.0	31.32	55.90	681.85	PASS
GV0005940	AN448	1	4500	64.2	0.1	0.2	31.32	55.95	683.24	PASS
GV0005941	AN448	2	4500	63.8	0.0	0.0	31.32	55.95	683.24	PASS
GV0005942	AN448	3	4500	64.4	0.1	0.2	31.32	55.95	683.24	PASS
GV0005943	AN448	4	4500	64.4	0.0	0.0	31.26	55.90	683.51	PASS
GV0005944	AN448	5	4500	64.7	0.0	0.0	31.24	55.85	682.68	PASS
GV0005945	AN448	6	4500	64.6	0.2	0.3	31.32	55.95	683.24	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: 28-Jul-16
Day: Thursday
Time: 2:11 PM

Cylinder Type: **S80-GV**

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
GV0005946	AN448	1	4500	64.2	0.0	0.0	31.34	55.95	682.68	PASS
GV0005947	AN448	2	4500	64.4	0.0	0.0	31.28	55.90	682.96	PASS
GV0005948	AN448	3	4500	64.6	0.4	0.6	31.28	55.95	684.35	PASS
GV0005949	AN448	4	4500	64.1	0.0	0.0	31.30	56.00	685.18	PASS
GV0005950	AN448	5	4500	64.7	0.1	0.2	31.30	55.95	683.79	PASS
GV0005951	AN448	6	4500	64.4	0.1	0.2	31.26	55.85	682.13	PASS
GV0005952	AN448	1	4500	64.4	0.3	0.5	31.36	55.95	682.13	PASS
GV0005953	AN448	2	4500	64.5	0.1	0.2	31.32	55.90	681.85	PASS
GV0005954	AN448	3	4500	64.0	0.0	0.0	31.30	55.85	681.02	PASS
GV0005955	AN448	4	4500	63.9	0.0	0.0	31.28	55.90	682.96	PASS
GV0005956	AN448	5	4500	64.9	0.2	0.3	31.32	55.95	683.24	PASS
GV0005957	AN448	6	4500	64.2	0.0	0.0	31.32	55.90	681.85	PASS
GV0005958	AN448	1	4500	64.4	0.2	0.3	31.30	55.85	681.02	PASS
GV0005959	AN448	2	4500	64.4	0.2	0.3	31.30	55.90	682.40	PASS
GV0005960	AN448	3	4500	64.4	0.2	0.3	31.32	55.95	683.24	PASS
GV0005961	AN448	4	4500	64.2	0.0	0.0	31.30	55.90	682.40	PASS
GV0005962	AN448	5	4500	64.8	0.4	0.6	31.36	55.90	680.74	PASS
GV0005963	AN448	6	4500	64.3	0.1	0.2	31.28	55.95	684.35	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 5:08 AM

Cylinder Type: **S80-GV**

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
GV0005964	AN448	1	4500	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0005965	AN448	2	4500	64.5	1.1	1.7	31.34	55.90	681.29	PASS
GV0005966	AN448	3	4500	64.3	0.0	0.0	31.30	55.90	682.40	PASS
GV0005967	AN448	4	4500	64.3	0.0	0.0	31.26	55.95	684.90	PASS
GV0005968	AN448	5	4500	65.0	0.0	0.0	31.26	55.95	684.90	PASS
GV0005969	AN448	6	4500	64.6	0.1	0.2	31.26	55.90	683.51	PASS
GV0005970	AN448	1	4500	64.5	0.1	0.2	31.34	55.90	681.29	PASS
GV0005971	AN448	2	4500	64.8	0.7	1.1	31.30	55.90	682.40	PASS
GV0005972	AN448	3	4500	64.5	0.0	0.0	31.28	55.95	684.35	PASS
GV0005973	AN448	4	4500	63.7	0.0	0.0	31.36	55.90	680.74	PASS
GV0005974	AN448	5	4500	65.1	0.1	0.2	31.28	56.05	687.12	PASS
GV0005975	AN448	6	4500	65.3	0.4	0.6	31.28	55.95	684.35	PASS
GV0005976	AN448	1	4520	64.5	0.1	0.2	31.26	55.95	684.90	PASS
GV0005977	AN448	2	4520	64.7	0.8	1.2	31.26	55.95	684.90	PASS
GV0005978	AN448	3	4520	64.5	0.1	0.2	31.28	55.90	682.96	PASS
GV0005979	AN448	4	4520	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0005980	AN448	5	4520	64.9	0.2	0.3	31.28	56.00	685.73	PASS
GV0005981	AN448	6	4520	64.7	0.1	0.2	31.24	55.90	684.07	PASS
GV0005982	AN448	1	4500	64.4	0.0	0.0	31.32	55.90	681.85	PASS
GV0005983	AN448	2	4500	64.9	0.9	1.4	31.32	55.85	680.46	PASS
GV0005984	AN448	3	4500	64.6	0.0	0.0	31.32	55.85	680.46	PASS
GV0005985	AN448	4	4500	64.5	0.0	0.0	31.30	55.85	681.02	PASS
GV0005986	AN448	5	4500	65.0	0.2	0.3	31.32	55.85	680.46	PASS
GV0005987	AN448	6	4500	64.9	0.2	0.3	31.30	55.80	679.63	PASS
GV0005988	AN448	1	4500	64.6	0.0	0.0	31.32	55.90	681.85	PASS
GV0005989	AN448	2	4500	64.7	0.7	1.1	31.32	55.95	683.24	PASS
GV0005990	AN448	3	4500	64.3	0.0	0.0	31.30	55.85	681.02	PASS
GV0005991	AN448	4	4500	64.5	0.0	0.0	31.32	55.90	681.85	PASS
GV0005992	AN448	5	4500	65.1	0.1	0.2	31.26	55.85	682.13	PASS
GV0005993	AN448	6	4500	64.3	0.0	0.0	31.26	55.85	682.13	PASS
GV0005994	AN448	1	4500	64.4	0.0	0.0	31.30	55.90	682.40	PASS
GV0005995	AN448	2	4500	64.6	0.8	1.2	31.26	55.90	683.51	PASS
GV0005996	AN448	3	4500	64.2	0.0	0.0	31.30	55.85	681.02	PASS
GV0005997	AN448	4	4500	64.0	0.0	0.0	31.34	55.90	681.29	PASS
GV0005998	AN448	5	4500	64.8	0.0	0.0	31.26	55.95	684.90	PASS
GV0005999	AN448	6	4500	64.7	0.0	0.0	31.26	55.90	683.51	PASS
GV0006000	AN448	1	4520	64.4	0.0	0.0	31.26	56.00	686.29	PASS
GV0006001	AN448	2	4520	64.9	0.7	1.1	31.26	55.95	684.90	PASS
GV0006002	AN448	3	4520	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006003	AN448	4	4520	64.1	0.0	0.0	31.26	56.00	686.29	PASS
GV0006004	AN448	5	4520	64.8	0.0	0.0	31.26	55.95	684.90	PASS
GV0006005	AN448	6	4520	64.4	0.0	0.0	31.26	55.85	682.13	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: 29-Jul-16

Day: Friday

Time: 5:08 AM

Cylinder Type: **S80-GV**

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
GV0006006	AN448	1	4520	64.3	0.0	0.0	31.26	55.90	683.51	PASS
GV0006007	AN448	2	4520	64.7	0.9	1.4	31.26	55.90	683.51	PASS
GV0006008	AN448	3	4520	64.2	0.0	0.0	31.26	55.95	684.90	PASS
GV0006009	AN448	4	4520	64.4	0.0	0.0	31.26	55.90	683.51	PASS
GV0006010	AN448	5	4520	64.7	0.0	0.0	31.26	55.90	683.51	PASS
GV0006011	AN448	6	4520	64.3	0.0	0.0	31.26	55.90	683.51	PASS
GV0006012	AN448	1	4500	64.4	0.0	0.0	31.26	55.90	683.51	PASS
GV0006013	AN448	2	4500	64.5	1.1	1.7	31.26	55.95	684.90	PASS
GV0006014	AN448	3	4500	64.3	0.0	0.0	31.26	55.90	683.51	PASS
GV0006015	AN448	4	4500	64.1	0.0	0.0	31.26	56.05	687.67	PASS
GV0006016	AN448	5	4500	64.8	0.0	0.0	31.26	55.90	683.51	PASS
GV0006017	AN448	6	4500	64.2	0.0	0.0	31.26	55.95	684.90	PASS
GV0006018	AN448	1	4500	64.2	0.0	0.0	31.26	55.95	684.90	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 8:19 AM

Cylinder Type: **S80-GV**

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
GV0006019	AN449	2	4500	64.2	1.0	1.6	31.36	55.95	682.13	PASS
GV0006020	AN449	3	4500	64.3	0.0	0.0	31.26	55.90	683.51	PASS
GV0006021	AN449	4	4500	64.1	0.0	0.0	31.24	55.90	684.07	PASS
GV0006022	AN449	5	4500	64.8	0.0	0.0	31.26	55.85	682.13	PASS
GV0006023	AN449	6	4500	64.7	0.0	0.0	31.30	55.90	682.40	PASS
GV0006024	AN449	1	4500	64.2	0.0	0.0	31.40	56.05	683.79	PASS
GV0006025	AN449	2	4500	64.7	0.9	1.4	31.34	56.00	684.07	PASS
GV0006026	AN449	3	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006027	AN449	4	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006028	AN449	5	4500	64.9	0.0	0.0	31.22	55.90	684.62	PASS
GV0006029	AN449	6	4500	64.6	0.0	0.0	31.30	55.90	682.40	PASS
GV0006030	AN449	1	4500	64.3	0.0	0.0	31.26	55.95	684.90	PASS
GV0006031	AN449	2	4500	64.5	1.0	1.6	31.24	55.90	684.07	PASS
GV0006032	AN449	3	4500	64.4	0.0	0.0	31.24	55.90	684.07	PASS
GV0006033	AN449	4	4500	64.4	0.0	0.0	31.34	55.95	682.68	PASS
GV0006034	AN449	5	4500	65.0	0.0	0.0	31.26	55.90	683.51	PASS
GV0006035	AN449	6	4500	64.8	0.1	0.2	31.24	55.90	684.07	PASS
GV0006036	AN449	1	4500	64.1	0.0	0.0	31.28	56.00	685.73	PASS
GV0006037	AN449	2	4500	64.4	1.2	1.9	31.32	55.95	683.24	PASS
GV0006038	AN449	3	4500	64.1	0.0	0.0	31.30	55.95	683.79	PASS
GV0006039	AN449	4	4500	64.4	0.0	0.0	31.28	56.00	685.73	PASS
GV0006040	AN449	5	4500	64.5	0.0	0.0	31.34	55.90	681.29	PASS
GV0006041	AN449	6	4500	64.1	0.0	0.0	31.24	55.95	685.46	PASS
GV0006042	AN449	1	4500	64.6	0.0	0.0	31.34	55.90	681.29	PASS
GV0006043	AN449	2	4500	64.4	1.5	2.3	31.34	56.00	684.07	PASS
GV0006044	AN449	3	4500	63.8	0.0	0.0	31.22	55.95	686.01	PASS
GV0006045	AN449	4	4500	64.5	0.0	0.0	31.28	55.90	682.96	PASS
GV0006046	AN449	5	4500	64.6	0.0	0.0	31.28	55.90	682.96	PASS
GV0006047	AN449	6	4500	64.5	0.0	0.0	31.16	55.90	686.29	PASS
GV0006048	AN449	1	4500	64.4	0.0	0.0	31.32	55.85	680.46	PASS
GV0006049	AN449	2	4500	64.4	1.3	2.0	31.32	56.00	684.62	PASS
GV0006050	AN449	3	4500	63.9	0.0	0.0	31.30	56.05	686.57	PASS
GV0006051	AN449	4	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006052	AN449	5	4500	64.7	0.0	0.0	31.28	55.90	682.96	PASS
GV0006053	AN449	6	4500	64.0	0.0	0.0	31.32	55.90	681.85	PASS
GV0006054	AN449	1	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006055	AN449	2	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006056	AN449	3	4500	63.9	0.0	0.0	31.26	55.90	683.51	PASS
GV0006057	AN449	4	4500	64.2	0.0	0.0	31.32	55.90	681.85	PASS
GV0006058	AN449	5	4500	64.6	0.0	0.0	31.32	55.90	681.85	PASS
GV0006059	AN449	6	4500	64.3	0.0	0.0	31.26	55.95	684.90	PASS
GV0006060	AN449	1	4500	64.4	0.0	0.0	31.32	55.90	681.85	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 8:19 AM

Cylinder Type: **S80-GV**

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
GV0006061	AN449	2	4500	64.1	0.0	0.0	31.34	55.90	681.29	PASS
GV0006062	AN449	3	4500	63.9	0.0	0.0	31.32	55.95	683.24	PASS
GV0006063	AN449	4	4500	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006064	AN449	5	4500	64.8	0.0	0.0	31.34	55.90	681.29	PASS
GV0006065	AN449	6	4500	64.7	0.3	0.5	31.34	55.95	682.68	PASS
GV0006066	AN449	1	4500	64.4	0.0	0.0	31.24	56.00	686.84	PASS
GV0006067	AN449	2	4500	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006068	AN449	3	4500	64.0	0.0	0.0	31.20	55.95	686.57	PASS
GV0006069	AN449	4	4500	64.4	0.0	0.0	31.20	55.85	683.79	PASS
GV0006070	AN449	5	4500	64.6	0.0	0.0	31.32	55.95	683.24	PASS
GV0006071	AN449	6	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0006072	AN449	1	4520	64.4	0.0	0.0	31.18	56.00	688.51	PASS
GV0006073	AN449	2	4520	64.4	0.0	0.0	31.36	55.90	680.74	PASS
GV0006074	AN449	3	4520	64.0	0.0	0.0	31.22	55.90	684.62	PASS
GV0006075	AN449	4	4520	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006076	AN449	5	4520	64.6	0.0	0.0	31.34	55.95	682.68	PASS
GV0006077	AN449	6	4520	64.3	0.0	0.0	31.36	55.90	680.74	PASS
GV0006078	AN449	1	4500	64.1	0.0	0.0	31.28	55.90	682.96	PASS
GV0006079	AN449	2	4500	64.4	0.0	0.0	31.20	55.90	685.18	PASS
GV0006080	AN449	3	4500	64.1	0.0	0.0	31.20	55.90	685.18	PASS
GV0006081	AN449	4	4500	64.1	0.0	0.0	31.26	55.95	684.90	PASS
GV0006082	AN449	5	4500	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0006083	AN449	6	4500	64.0	0.0	0.0	31.36	55.90	680.74	PASS
GV0006084	AN449	1	4500	64.1	0.0	0.0	31.34	55.90	681.29	PASS
GV0006085	AN449	2	4500	64.4	0.0	0.0	31.32	55.90	681.85	PASS
GV0006086	AN449	3	4500	64.2	0.0	0.0	31.28	55.90	682.96	PASS
GV0006087	AN449	4	4500	64.0	0.0	0.0	31.24	55.95	685.46	PASS
GV0006088	AN449	5	4500	64.6	0.0	0.0	31.34	55.90	681.29	PASS
GV0006089	AN449	6	4500	64.5	0.1	0.2	31.34	55.90	681.29	PASS
GV0006090	AN449	1	4500	64.2	0.0	0.0	31.32	55.95	683.24	PASS
GV0006091	AN449	2	4500	64.6	0.0	0.0	31.30	55.95	683.79	PASS
GV0006092	AN449	3	4500	64.4	0.0	0.0	31.24	55.90	684.07	PASS
GV0006093	AN449	4	4500	64.4	0.0	0.0	31.28	55.90	682.96	PASS
GV0006094	AN449	5	4500	64.6	0.0	0.0	31.26	55.95	684.90	PASS
GV0006095	AN449	6	4500	64.1	0.0	0.0	31.30	56.00	685.18	PASS
GV0006096	AN449	1	4500	64.3	0.0	0.0	31.34	56.05	685.46	PASS
GV0006097	AN449	2	4500	64.6	0.0	0.0	31.30	55.95	683.79	PASS
GV0006098	AN449	3	4500	64.5	0.0	0.0	31.30	56.05	686.57	PASS
GV0006099	AN449	4	4500	64.5	0.0	0.0	31.22	56.00	687.40	PASS
GV0006100	AN449	5	4500	65.1	0.0	0.0	31.32	56.00	684.62	PASS
GV0006101	AN449	6	4500	64.8	0.0	0.0	31.30	55.85	681.02	PASS
GV0006102	AN449	1	4520	64.6	0.0	0.0	31.30	55.95	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: 29-Jul-16
Day: Friday
Time: 8:19 AM

Cylinder Type: **S80-GV**

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
GV0006103	AN449	2	4520	64.6	0.0	0.0	31.20	55.95	686.57	PASS
GV0006104	AN449	3	4520	64.5	0.0	0.0	31.30	55.95	683.79	PASS
GV0006105	AN449	4	4520	64.5	0.0	0.0	31.26	55.95	684.90	PASS
GV0006106	AN449	5	4520	64.9	0.0	0.0	31.30	55.95	683.79	PASS
GV0006107	AN449	6	4520	64.4	0.0	0.0	31.30	55.95	683.79	PASS
GV0006108	AN449	1	4500	64.3	0.0	0.0	31.28	55.90	682.96	PASS
GV0006109	AN449	2	4500	64.3	0.0	0.0	31.34	55.90	681.29	PASS
GV0006110	AN449	3	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006111	AN449	4	4500	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006112	AN449	5	4500	65.0	0.1	0.2	31.30	56.00	685.18	PASS
GV0006113	AN449	6	4500	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0006114	AN449	1	4500	64.3	0.0	0.0	31.32	55.95	683.24	PASS
GV0006115	AN449	2	4500	64.3	0.0	0.0	31.28	55.90	682.96	PASS
GV0006116	AN449	3	4500	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0006117	AN449	4	4500	64.5	0.0	0.0	31.20	56.00	687.95	PASS
GV0006118	AN449	5	4500	65.0	0.0	0.0	31.28	55.90	682.96	PASS
GV0006119	AN449	6	4500	64.8	0.0	0.0	31.32	56.05	686.01	PASS
GV0006120	AN449	1	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006121	AN449	2	4500	64.6	0.0	0.0	31.24	55.95	685.46	PASS
GV0006122	AN449	3	4500	64.6	0.0	0.0	31.32	55.95	683.24	PASS
GV0006123	AN449	4	4500	64.6	0.0	0.0	31.26	55.90	683.51	PASS
GV0006124	AN449	5	4500	65.0	0.0	0.0	31.24	56.00	686.84	PASS
GV0006125	AN449	6	4500	64.7	0.0	0.0	31.28	56.05	687.12	PASS
GV0006126	AN449	1	4500	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006127	AN449	2	4500	64.6	0.0	0.0	31.32	55.95	683.24	PASS
GV0006128	AN449	3	4500	64.7	0.0	0.0	31.30	55.95	683.79	PASS
GV0006129	AN449	4	4500	64.4	0.0	0.0	31.26	55.95	684.90	PASS
GV0006130	AN449	5	4500	64.7	0.0	0.0	31.30	55.95	683.79	PASS
GV0006131	AN449	6	4500	64.5	0.0	0.0	31.32	55.95	683.24	PASS
GV0006132	AN449	1	4500	64.6	0.2	0.3	31.32	55.95	683.24	PASS
GV0006133	AN449	2	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006134	AN449	3	4500	64.4	0.0	0.0	31.28	55.95	684.35	PASS
GV0006135	AN449	4	4500	64.3	0.0	0.0	31.28	55.95	684.35	PASS
GV0006136	AN449	5	4500	64.8	0.1	0.2	31.28	55.95	684.35	PASS
GV0006137	AN449	6	4500	64.9	0.2	0.3	31.34	55.95	682.68	PASS
GV0006138	AN449	1	4500	64.6	0.1	0.2	31.30	55.90	682.40	PASS
GV0006139	AN449	2	4500	64.5	0.0	0.0	31.30	55.95	683.79	PASS
GV0006140	AN449	3	4500	64.4	0.0	0.0	31.24	55.90	684.07	PASS
GV0006141	AN449	4	4500	64.4	0.0	0.0	31.24	55.95	685.46	PASS
GV0006142	AN449	5	4500	64.9	0.0	0.0	31.28	55.90	682.96	PASS
GV0006143	AN449	6	4500	64.5	0.0	0.0	31.30	55.95	683.79	PASS
GV0006144	AN449	1	4500	64.4	0.0	0.0	31.30	55.90	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: 29-Jul-16
Day: Friday
Time: 8:19 AM

Cylinder Type: **S80-GV**

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
GV0006145	AN449	2	4500	64.5	1.0	1.6	31.28	56.00	685.73	PASS
GV0006146	AN449	3	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006147	AN449	4	4500	64.4	0.0	0.0	31.22	55.95	686.01	PASS
GV0006148	AN449	5	4500	64.6	0.0	0.0	31.30	55.90	682.40	PASS
GV0006149	AN449	6	4500	64.6	0.0	0.0	31.28	55.95	684.35	PASS
GV0006150	AN449	1	4500	64.4	0.0	0.0	31.32	56.00	684.62	PASS
GV0006151	AN449	2	4500	64.3	0.0	0.0	31.32	55.90	681.85	PASS
GV0006152	AN449	3	4500	64.4	0.0	0.0	31.30	55.95	683.79	PASS
GV0006153	AN449	4	4500	64.5	0.0	0.0	31.40	55.95	681.02	PASS
GV0006154	AN449	5	4500	64.8	0.0	0.0	31.32	55.90	681.85	PASS
GV0006155	AN449	6	4500	64.7	0.2	0.3	31.34	55.95	682.68	PASS
GV0006156	AN449	1	4500	64.4	0.0	0.0	31.36	56.00	683.51	PASS
GV0006157	AN449	2	4500	64.2	0.0	0.0	31.32	56.00	684.62	PASS
GV0006158	AN449	3	4500	64.4	0.0	0.0	31.40	55.90	679.63	PASS
GV0006159	AN449	4	4500	64.6	0.0	0.0	31.36	55.85	679.35	PASS
GV0006160	AN449	5	4500	65.1	0.1	0.2	31.22	55.85	683.24	PASS
GV0006161	AN449	6	4500	64.8	0.0	0.0	31.20	55.85	683.79	PASS
GV0006162	AN449	1	4500	64.4	0.0	0.0	31.22	56.00	687.40	PASS
GV0006163	AN449	2	4500	64.4	0.0	0.0	31.26	55.90	683.51	PASS
GV0006164	AN449	3	4500	64.3	0.0	0.0	31.38	55.90	680.18	PASS
GV0006165	AN449	4	4500	64.3	0.0	0.0	31.32	55.90	681.85	PASS
GV0006166	AN449	5	4500	64.8	0.0	0.0	31.30	55.90	682.40	PASS
GV0006167	AN449	6	4500	64.2	0.0	0.0	31.26	55.90	683.51	PASS
GV0006168	AN449	1	4500	64.1	0.0	0.0	31.28	55.95	684.35	PASS
GV0006169	AN449	2	4500	64.4	1.4	2.2	31.36	55.90	680.74	PASS
GV0006170	AN449	3	4500	64.2	0.0	0.0	31.34	55.90	681.29	PASS
GV0006171	AN449	4	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0006172	AN449	5	4500	64.6	0.0	0.0	31.32	55.85	680.46	PASS
GV0006173	AN449	6	4500	64.5	0.0	0.0	31.36	55.90	680.74	PASS
GV0006174	AN449	1	4500	64.3	0.0	0.0	31.22	56.05	688.78	PASS
GV0006175	AN449	2	4500	64.6	0.0	0.0	31.28	56.05	687.12	PASS
GV0006176	AN449	3	4500	64.4	0.0	0.0	31.36	56.00	683.51	PASS
GV0006177	AN449	4	4500	64.2	0.0	0.0	31.34	56.00	684.07	PASS
GV0006178	AN449	5	4500	64.7	0.0	0.0	31.34	55.90	681.29	PASS
GV0006179	AN449	6	4500	64.5	0.0	0.0	31.34	55.90	681.29	PASS
GV0006180	AN449	1	4500	64.2	0.1	0.2	31.28	55.95	684.35	PASS
GV0006181	AN449	2	4500	64.4	1.3	2.0	31.30	55.90	682.40	PASS
GV0006182	AN449	3	4500	64.1	0.0	0.0	31.30	55.90	682.40	PASS
GV0006183	AN449	4	4500	64.3	0.0	0.0	31.28	55.90	682.96	PASS
GV0006184	AN449	5	4500	64.5	0.0	0.0	31.28	55.85	681.57	PASS
GV0006185	AN449	6	4500	64.6	0.1	0.2	31.30	56.00	685.18	PASS
GV0006186	AN449	1	4500	64.1	0.0	0.0	31.20	55.95	686.57	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: 29-Jul-16
Day: Friday
Time: 8:19 AM

Cylinder Type: **S80-GV**

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
GV0006187	AN449	2	4500	64.1	0.7	1.1	31.36	55.90	680.74	PASS
GV0006188	AN449	3	4500	64.0	0.0	0.0	31.36	55.90	680.74	PASS
GV0006189	AN449	4	4500	64.5	0.0	0.0	31.28	55.90	682.96	PASS
GV0006190	AN449	5	4500	64.8	0.0	0.0	31.26	56.00	686.29	PASS
GV0006191	AN449	6	4500	64.0	0.0	0.0	31.24	56.10	689.62	PASS
GV0006192	AN449	1	4500	64.4	0.1	0.2	31.40	56.05	683.79	PASS
GV0006193	AN449	2	4500	64.4	0.8	1.2	31.44	55.95	679.91	PASS
GV0006194	AN449	3	4500	64.4	0.0	0.0	31.38	55.95	681.57	PASS
GV0006195	AN449	4	4500	64.4	0.0	0.0	31.36	55.85	679.35	PASS
GV0006196	AN449	5	4500	64.9	0.0	0.0	31.30	55.90	682.40	PASS
GV0006197	AN449	6	4500	64.3	0.0	0.0	31.30	55.90	682.40	PASS
GV0006198	AN449	1	4520	64.2	0.0	0.0	31.24	55.95	685.46	PASS
GV0006199	AN449	2	4520	64.4	0.0	0.0	31.24	56.05	688.23	PASS
GV0006200	AN449	3	4520	64.3	0.0	0.0	31.30	55.90	682.40	PASS
GV0006201	AN449	4	4520	64.0	0.0	0.0	31.38	55.95	681.57	PASS
GV0006202	AN449	5	4520	64.5	0.0	0.0	31.22	55.85	683.24	PASS
GV0006203	AN449	6	4520	64.7	0.0	0.0	31.38	56.00	682.96	PASS
GV0006204	AN449	1	4500	64.1	0.0	0.0	31.36	55.95	682.13	PASS
GV0006205	AN449	2	4500	64.5	0.0	0.0	31.32	55.95	683.24	PASS
GV0006206	AN449	3	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006207	AN449	4	4500	64.2	0.0	0.0	31.28	55.90	682.96	PASS
GV0006208	AN449	5	4500	64.4	0.0	0.0	31.26	55.80	680.74	PASS
GV0006209	AN449	6	4500	64.4	0.0	0.0	31.28	55.80	680.18	PASS
GV0006210	AN449	1	4520	64.4	0.0	0.0	31.28	55.80	680.18	PASS
GV0006211	AN449	2	4520	64.7	0.0	0.0	31.32	55.95	683.24	PASS
GV0006212	AN449	3	4520	64.2	0.0	0.0	31.34	55.95	682.68	PASS
GV0006213	AN449	4	4520	64.6	0.0	0.0	31.28	55.95	684.35	PASS
GV0006214	AN449	1	4520	64.4	0.0	0.0	31.28	55.90	682.96	PASS
GV0006215	AN449	2	4520	64.7	0.0	0.0	31.28	55.90	682.96	PASS
GV0006216	AN449	3	4520	64.4	0.0	0.0	31.30	55.90	682.40	PASS
GV0006217	AN449	4	4520	64.4	0.0	0.0	31.28	55.90	682.96	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 10:51 AM

Cylinder Type: **S80-GV**

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
GV0006218	AN450	1	4500	64.6	0.3	0.5	31.32	56.00	684.62	PASS
GV0006219	AN450	2	4500	64.5	0.0	0.0	31.32	56.05	686.01	PASS
GV0006220	AN450	3	4500	64.4	0.0	0.0	31.32	56.00	684.62	PASS
GV0006221	AN450	4	4500	64.5	0.3	0.5	31.24	55.85	682.68	PASS
GV0006222	AN450	5	4500	65.1	0.3	0.5	31.36	56.00	683.51	PASS
GV0006223	AN450	6	4500	64.9	0.5	0.8	31.38	56.00	682.96	PASS
GV0006224	AN450	1	4500	64.7	0.2	0.3	31.24	55.90	684.07	PASS
GV0006225	AN450	2	4500	64.7	0.1	0.2	31.24	56.05	688.23	PASS
GV0006226	AN450	3	4500	64.4	0.0	0.0	31.34	56.05	685.46	PASS
GV0006227	AN450	4	4500	64.5	0.0	0.0	31.30	56.00	685.18	PASS
GV0006228	AN450	5	4500	64.9	0.0	0.0	31.32	56.00	684.62	PASS
GV0006229	AN450	6	4500	65.0	0.3	0.5	31.32	56.00	684.62	PASS
GV0006230	AN450	1	4500	64.6	0.3	0.5	31.34	56.05	685.46	PASS
GV0006231	AN450	2	4500	64.6	0.1	0.2	31.32	56.00	684.62	PASS
GV0006232	AN450	3	4500	64.2	0.0	0.0	31.32	56.05	686.01	PASS
GV0006233	AN450	4	4500	64.4	0.0	0.0	31.34	56.05	685.46	PASS
GV0006234	AN450	5	4500	64.8	0.0	0.0	31.34	56.00	684.07	PASS
GV0006235	AN450	6	4500	64.9	0.2	0.3	31.32	56.00	684.62	PASS
GV0006236	AN450	1	4520	64.4	0.0	0.0	31.30	56.05	686.57	PASS
GV0006237	AN450	2	4520	64.5	0.0	0.0	31.26	56.05	687.67	PASS
GV0006238	AN450	3	4520	64.2	0.0	0.0	31.36	56.00	683.51	PASS
GV0006239	AN450	4	4520	64.6	0.0	0.0	31.32	56.00	684.62	PASS
GV0006240	AN450	5	4520	65.1	0.0	0.0	31.36	55.95	682.13	PASS
GV0006241	AN450	6	4520	64.7	0.0	0.0	31.24	56.00	686.84	PASS
GV0006242	AN450	1	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006243	AN450	2	4500	64.4	0.0	0.0	31.32	56.05	686.01	PASS
GV0006244	AN450	3	4500	64.3	0.0	0.0	31.32	56.00	684.62	PASS
GV0006245	AN450	4	4500	64.4	0.0	0.0	31.34	56.00	684.07	PASS
GV0006246	AN450	5	4500	64.8	0.1	0.2	31.32	56.00	684.62	PASS
GV0006247	AN450	6	4500	64.2	0.0	0.0	31.34	56.05	685.46	PASS
GV0006248	AN450	1	4500	64.3	0.0	0.0	31.34	56.00	684.07	PASS
GV0006249	AN450	2	4500	64.4	0.0	0.0	31.34	56.00	684.07	PASS
GV0006250	AN450	3	4500	64.0	0.0	0.0	31.30	55.95	683.79	PASS
GV0006251	AN450	4	4500	64.2	0.0	0.0	31.30	55.95	683.79	PASS
GV0006252	AN450	5	4500	65.1	0.4	0.6	31.30	56.00	685.18	PASS
GV0006253	AN450	6	4500	64.7	0.1	0.2	31.34	56.00	684.07	PASS
GV0006254	AN450	1	4500	64.4	0.1	0.2	31.32	56.00	684.62	PASS
GV0006255	AN450	2	4500	64.5	0.0	0.0	31.30	56.00	685.18	PASS
GV0006256	AN450	3	4500	64.5	0.0	0.0	31.30	56.00	685.18	PASS
GV0006257	AN450	4	4500	64.4	0.0	0.0	31.30	55.95	683.79	PASS
GV0006258	AN450	5	4500	64.9	0.0	0.0	31.30	55.95	683.79	PASS
GV0006259	AN450	6	4500	64.2	0.0	0.0	31.28	56.00	685.73	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 10:51 AM

Cylinder Type: **S80-GV**

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
GV0006260	AN450	1	4500	64.4	0.0	0.0	31.30	56.05	686.57	PASS
GV0006261	AN450	2	4500	64.7	0.0	0.0	31.34	55.95	682.68	PASS
GV0006262	AN450	3	4500	64.1	0.0	0.0	31.28	56.00	685.73	PASS
GV0006263	AN450	4	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006264	AN450	5	4500	64.9	0.0	0.0	31.30	55.95	683.79	PASS
GV0006265	AN450	6	4500	64.7	0.0	0.0	31.32	56.00	684.62	PASS
GV0006266	AN450	1	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006267	AN450	2	4500	64.4	0.0	0.0	31.30	55.95	683.79	PASS
GV0006268	AN450	3	4500	63.9	0.0	0.0	31.30	55.95	683.79	PASS
GV0006269	AN450	4	4500	64.3	0.0	0.0	31.30	55.90	682.40	PASS
GV0006270	AN450	5	4500	64.8	0.0	0.0	31.36	55.95	682.13	PASS
GV0006271	AN450	6	4500	64.9	0.2	0.3	31.32	56.05	686.01	PASS
GV0006272	AN450	1	4500	64.4	0.0	0.0	31.38	55.90	680.18	PASS
GV0006273	AN450	2	4500	64.2	0.0	0.0	31.30	55.90	682.40	PASS
GV0006274	AN450	3	4500	64.1	0.0	0.0	31.32	55.90	681.85	PASS
GV0006275	AN450	4	4500	64.4	0.0	0.0	31.34	56.00	684.07	PASS
GV0006276	AN450	5	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0006277	AN450	6	4500	64.3	0.0	0.0	31.32	55.90	681.85	PASS
GV0006278	AN450	1	4500	64.4	0.0	0.0	31.28	56.00	685.73	PASS
GV0006279	AN450	2	4500	64.3	0.1	0.2	31.38	55.95	681.57	PASS
GV0006280	AN450	3	4500	63.6	0.0	0.0	31.32	56.05	686.01	PASS
GV0006281	AN450	4	4500	64.4	0.0	0.0	31.26	56.00	686.29	PASS
GV0006282	AN450	5	4500	65.0	0.4	0.6	31.38	55.95	681.57	PASS
GV0006283	AN450	6	4500	64.2	0.0	0.0	31.34	55.95	682.68	PASS
GV0006284	AN450	1	4500	64.2	0.0	0.0	31.34	56.05	685.46	PASS
GV0006285	AN450	2	4500	64.4	0.0	0.0	31.38	56.00	682.96	PASS
GV0006286	AN450	3	4500	64.3	0.0	0.0	31.34	55.95	682.68	PASS
GV0006287	AN450	4	4500	64.4	0.0	0.0	31.34	55.90	681.29	PASS
GV0006288	AN450	5	4500	64.9	0.1	0.2	31.32	56.00	684.62	PASS
GV0006289	AN450	6	4500	64.5	0.1	0.2	31.34	55.85	679.91	PASS
GV0006290	AN450	1	4500	64.3	0.0	0.0	31.34	55.90	681.29	PASS
GV0006291	AN450	2	4500	64.6	0.0	0.0	31.24	55.90	684.07	PASS
GV0006292	AN450	3	4500	64.3	0.0	0.0	31.40	55.85	678.24	PASS
GV0006293	AN450	4	4500	64.4	0.0	0.0	31.26	55.90	683.51	PASS
GV0006294	AN450	5	4500	65.1	0.2	0.3	31.22	55.85	683.24	PASS
GV0006295	AN450	6	4500	64.3	0.0	0.0	31.24	55.90	684.07	PASS
GV0006296	AN450	1	4500	64.4	0.0	0.0	31.20	55.95	686.57	PASS
GV0006297	AN450	2	4500	64.4	0.1	0.2	31.24	55.95	685.46	PASS
GV0006298	AN450	3	4500	64.1	0.0	0.0	31.18	55.90	685.73	PASS
GV0006299	AN450	4	4500	64.2	0.0	0.0	31.22	55.90	684.62	PASS
GV0006300	AN450	5	4500	64.9	0.0	0.0	31.36	55.95	682.13	PASS
GV0006301	AN450	6	4500	64.3	0.0	0.0	31.32	55.95	683.24	PASS

Record Of Hydrostatic Testing

In accordance CGA Pamphlet C-1

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

Test Date: 29-Jul-16
Day: Friday
Time: 10:51 AM

Cylinder Type: **S80-GV**

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
GV0006302	AN450	1	4500	64.0	0.0	0.0	31.24	55.90	684.07	PASS
GV0006303	AN450	2	4500	64.4	0.0	0.0	31.20	55.95	686.57	PASS
GV0006304	AN450	3	4500	63.9	0.0	0.0	31.32	55.95	683.24	PASS
GV0006305	AN450	4	4500	63.8	0.0	0.0	31.36	55.95	682.13	PASS
GV0006306	AN450	5	4500	64.7	0.1	0.2	31.26	55.95	684.90	PASS
GV0006307	AN450	6	4500	64.6	0.2	0.3	31.30	55.95	683.79	PASS
GV0006308	AN450	1	4500	64.4	0.0	0.0	31.32	56.00	684.62	PASS
GV0006309	AN450	2	4500	64.4	0.0	0.0	31.36	55.95	682.13	PASS
GV0006310	AN450	3	4500	64.1	0.0	0.0	31.36	55.95	682.13	PASS
GV0006311	AN450	4	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006312	AN450	5	4500	65.0	0.1	0.2	31.30	55.85	681.02	PASS
GV0006313	AN450	6	4500	64.4	0.0	0.0	31.30	56.00	685.18	PASS
GV0006314	AN450	1	4500	64.2	0.0	0.0	31.32	56.00	684.62	PASS
GV0006315	AN450	2	4500	64.4	0.0	0.0	31.32	56.00	684.62	PASS
GV0006316	AN450	3	4500	64.0	0.0	0.0	31.22	55.85	683.24	PASS
GV0006317	AN450	4	4500	64.2	0.0	0.0	31.28	55.95	684.35	PASS
GV0006318	AN450	5	4500	65.0	0.4	0.6	31.30	56.00	685.18	PASS
GV0006319	AN450	6	4500	64.0	0.0	0.0	31.38	55.95	681.57	PASS
GV0006320	AN450	1	4520	64.3	0.0	0.0	31.22	55.95	686.01	PASS
GV0006321	AN450	2	4520	64.7	0.0	0.0	31.32	55.90	681.85	PASS
GV0006322	AN450	3	4520	64.3	0.0	0.0	31.36	55.90	680.74	PASS
GV0006323	AN450	4	4520	64.4	0.0	0.0	31.30	55.90	682.40	PASS
GV0006324	AN450	5	4520	65.1	0.2	0.3	31.30	55.95	683.79	PASS
GV0006325	AN450	6	4520	64.5	0.0	0.0	31.22	55.95	686.01	PASS
GV0006326	AN450	1	4500	64.5	0.3	0.5	31.26	55.85	682.13	PASS
GV0006327	AN450	2	4500	64.6	0.0	0.0	31.26	55.90	683.51	PASS
GV0006328	AN450	3	4500	64.3	0.0	0.0	31.32	55.95	683.24	PASS
GV0006329	AN450	4	4500	64.3	0.0	0.0	31.34	55.90	681.29	PASS
GV0006330	AN450	5	4500	65.0	0.1	0.2	31.22	55.95	686.01	PASS
GV0006331	AN450	6	4500	64.5	0.0	0.0	31.28	55.95	684.35	PASS
GV0006332	AN450	1	4500	64.4	0.0	0.0	31.32	55.95	683.24	PASS
GV0006333	AN450	2	4500	64.4	0.0	0.0	31.26	55.85	682.13	PASS
GV0006334	AN450	3	4500	64.4	0.0	0.0	31.32	55.85	680.46	PASS
GV0006335	AN450	4	4500	64.4	0.0	0.0	31.28	55.85	681.57	PASS
GV0006336	AN450	5	4500	65.0	0.0	0.0	31.36	55.85	679.35	PASS

DL