

Pneumatic Pressure Test

Key Largo Cylinder

October 4, 2000

Prepared for:

U.S. DOT/RSPA
Office of Hazardous Materials Enforcement
U.S. Department of Transportation
400 Seventh Street S.W.
Washington D.C. 20590

October 2000

Project Name: Key Largo Cylinder
Report No: DC18344.000/B0F0/1000/R521

TEST DESCRIPTION

PROJECT NAME: Key Largo Cylinder

PROJECT NUMBER: DC18344

TEST DATE: October 4, 2000

TEST TYPE: Pneumatic Pressure Test

TEST ARTICLE: Scuba tank regulator valve assembly

INSTRUMENTATION: Regulator valve pressure – primary transducer
Regulator valve pressure – secondary transducer

PHOTOGRAPHY: 1 real-time video view of regulator valve
Still photographs

PROCEDURES: A scuba tank regulator valve assembly was pneumatically pressure tested. The valve was installed in the Exponent gaseous testing bunker and slowly pressurized with nitrogen. The pressure was increased by a 50 psi (nominal) step each minute until activation of the pressure relief device.

RESULTS: The pressure relief device activated at 4651 psig (primary pressure transducer reading).

Exponent
Failure Analysis Associates

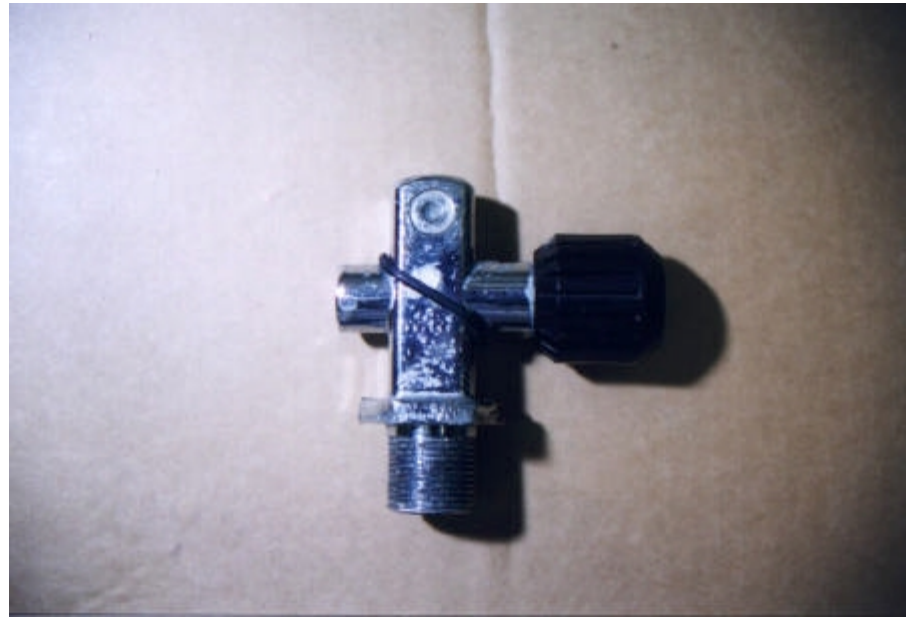
PHOTO-DOCUMENTATION DATA

PROJECT NUMBER:	DC18344
PROJECT NAME:	Key Largo Cylinders
DATE:	October 4, 2000
LOCATION:	Phoenix Test & Engineering Center
PHOTOGRAPHER:	Jim Smith
ROLL:	(X) () () () () () () () () () () () A B C D E F G H I J K L
SUBJECT:	Pneumatic Pressure Test

KODAK Color Control Patches

Blue	Light	Green	Yellow	Red	Black
Blue	Light	Green	Yellow	Red	Black

Exponent

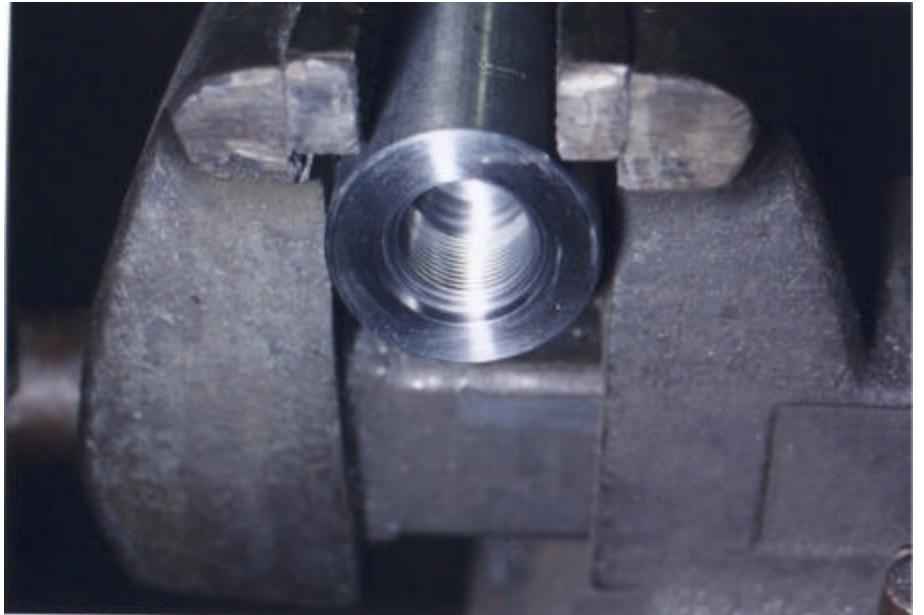


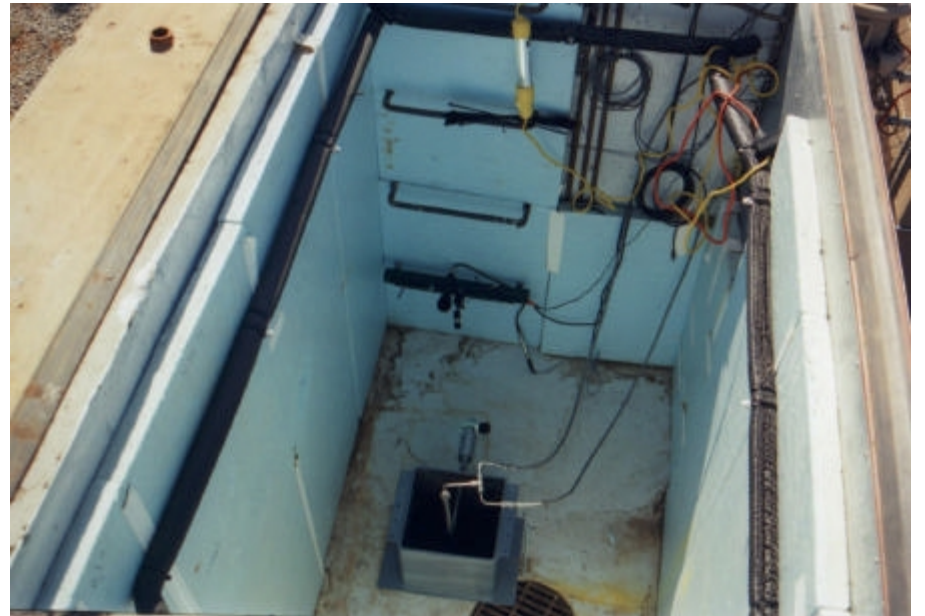
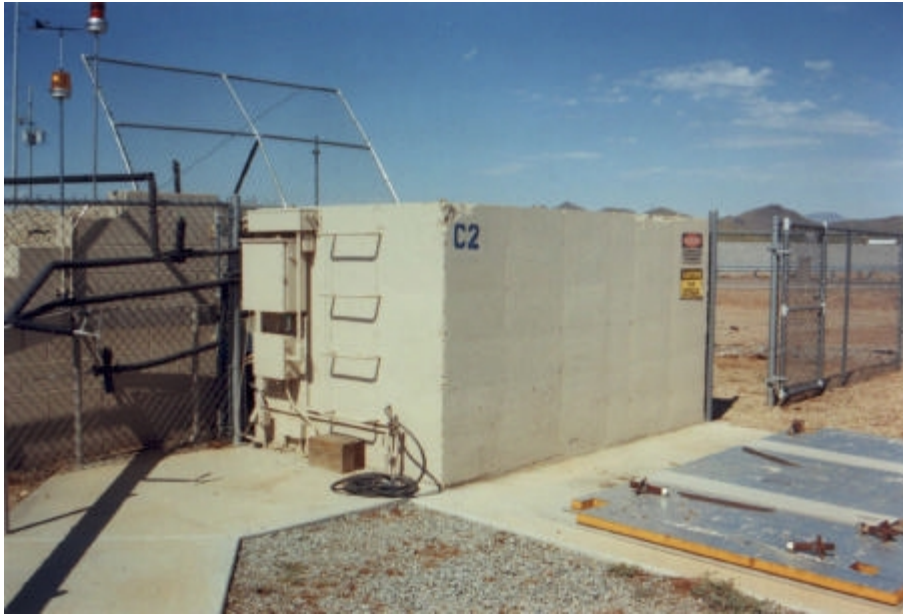


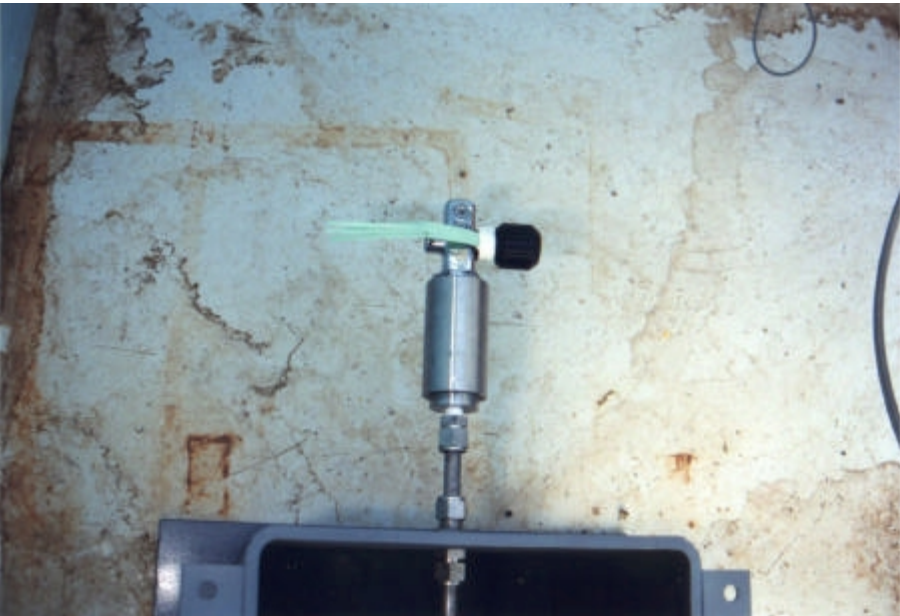
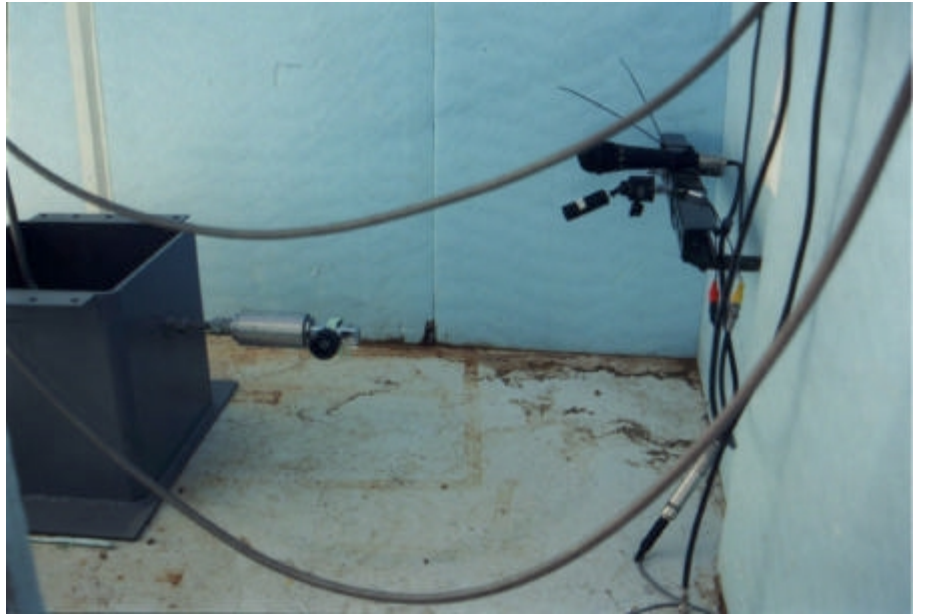















Exponent
Failure Analysis Associates

PHOTO-DOCUMENTATION DATA

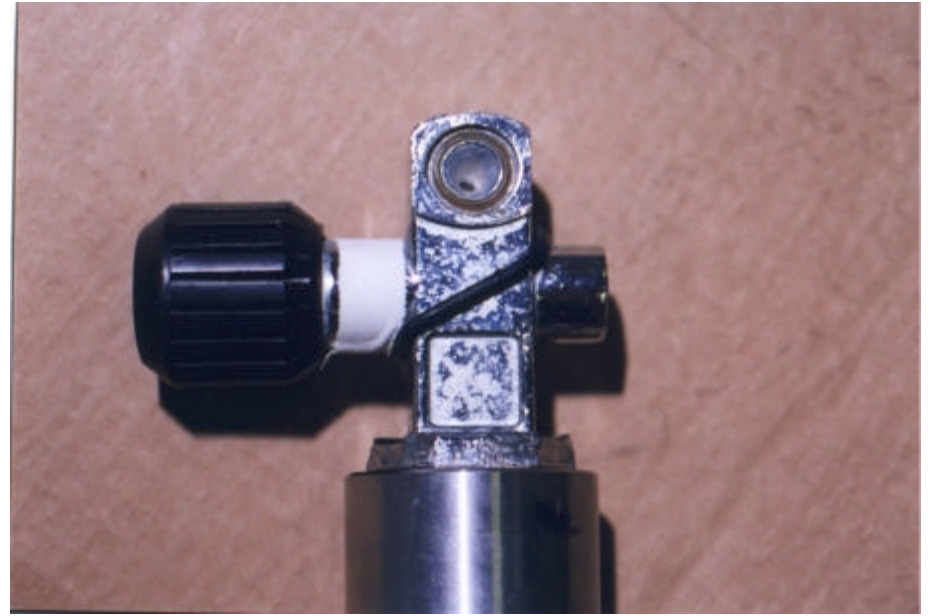
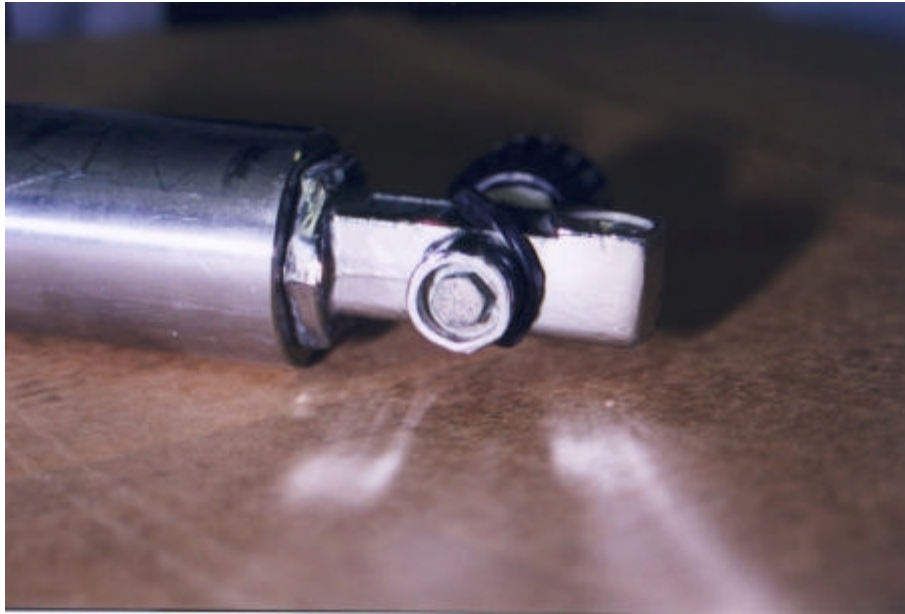
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ROLL:	(X) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 A B C D E F G H I J K L
SUBJECT:	Pneumatic Pressure Test - Post Test

KODAK Color Control Patches





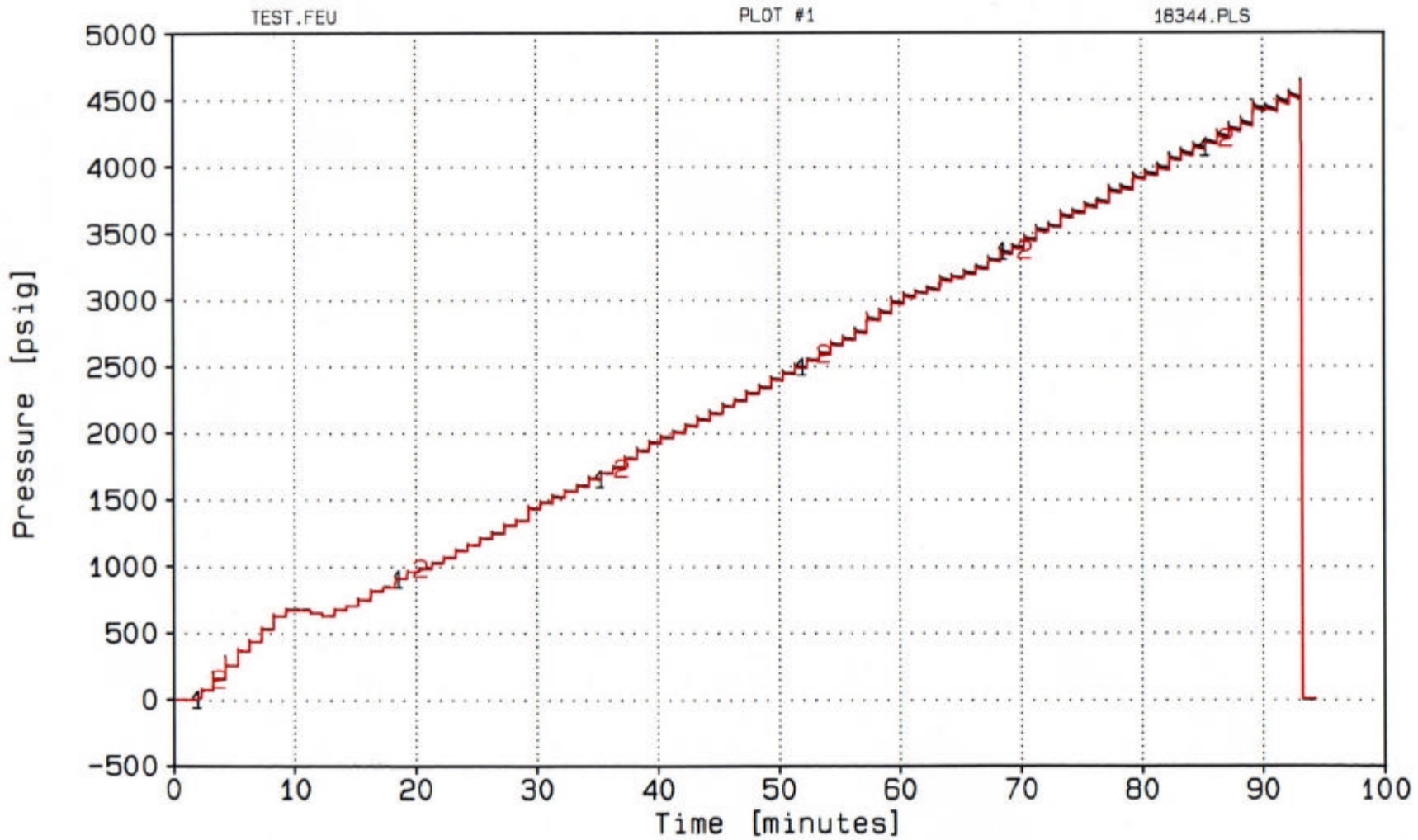




Pressure v Time

Scuba Tank Regulator Valve

Pneumatic Pressure Test - 10/4/00



Key Largo Cylinder
DC18344

Primary

Secondary

Exponent
Failure
Analysis
Associates

