



Summary of Tests carried out on five “used” vehicles to ascertain effect of CealDoctor™ treatment

CealDoctor™ is an engine healing treatment and is added to the crankcase oil of “worn” engines.

In order to evaluate its performance, five randomly selected vehicles were in that were in regular daily use and had accumulated over 100,000 klms were chosen and subjected to the series of tests outlined in this report.

This report includes the details of the vehicles, the results of the various tests and the average of the changes that took place.

Actual testing commenced on March 2nd 2011 with compression tests, oil change, oil filter, air filter and fuel filter changed.

AirCare emissions tests and noise and vibration tests were carried out on each vehicle on completion of the compression tests.

Fuel consumption was recorded with some difficulty as three of the vehicles were driven by different drivers at different times and fuel purchases were not always recorded.

Crankcase oil analysis was conducted on each vehicle by Finning SOS laboratory with supplemental tests carried out by Titan Certified Laboratory.

This process was carried out on each of the vehicles listed.

1. 2005 Hyundai Accent with a four cylinder engine and 160,211 klms.

2. 2001 Toyota Camry with six cylinder engine and 147,327 klms.
3. 1998 Chevrolet Malibu with six cylinder engine and 175,323 klms.
4. 1994 Dodge Caravan with a six cylinder engine and 295.931 klms
5. 1989 Pontiac Firebird with a six cylinder engine and 137,411 klms.

Details of results below:

Hyundai Accent

- (a) Worst compression improved by 12.5%
- (b) All cylinder compressions came within 5.2% of each other
- (c) CO emissions reduced by 20%
- (d) Fuel economy improved by 2.18%
- (e) Test covered 7,268 klms.

1. Toyota Camry

- (a) Worst compression improved by 22.9%
- (b) All cylinder compressions came within 5.8% of each other (c) No improvement in emissions as engine has a broken piston ring (d) Fuel economy improved by 5.53%
- (e) Test covered 9,109 klms

2. Chevrolet Malibu

- (a) Worst compression improved by 6.25%
- (b) All cylinder compressions came within 5.8% of each other
- (c) Emissions HC lowered by 84% CO lowered by 27%
- (d) Fuel economy improved by 5.09%
- (e) Test covered 9,159 klms

3. Dodge Caravan

- (a) Worst compression improved by 4.65%
- (b) All cylinder compressions came within 4.24%
- (c) Emissions CO lowered by 20%
- (d) Fuel economy improved by 3.5%
- (e) Test covered 8,353 klms

4. Pontiac Firebird

- (a) Worst compression improved by 28%
- (b) All cylinder compressions came within 3.11%
- (c) Emissions NOx lowered by 8.19%
- (d) Fuel economy improved by 4.3%
- (e) Test covered 2,346 klms

The test results show that the application of one treatment of CealDoctor heals “worn” engines by recovering the compression in the cylinders.

The resulting improvement of compression improves combustion conditions reducing emissions, and providing better fuel mileage.

Crankcase oil analysis indications are that the oil need not be changed as frequently as previous and can be extended for 12,000 to 20,000klms.

Engine balance is restored as the compressions of the cylinders all come within 10% of each other lowering the noise and vibration felt in the “cab”.

Engine treatment with CealDoctor could save thousands of repair dollars, fuel dollars, reduce emissions and extend the life of a used vehicle considerably.

One treatment of CealDoctor costs about \$60 per year depending on the “worn” condition of the engine against one hour of professional shop time at \$98 to \$125/hour!

Prepared by:

Daniel T. Coghill, eng.

Alba Engineering

1680 56th Street

Delta BC V4L 2L6

778-434-2181

Overview of Alba Engineering and D.Coghill

Over the past 24 years we have built a reputation for reliability matched by a dedication to

service and a commitment to integrity.

We have provided technical, maintenance and lubrication services to the marine, mining, pulp and paper and transportation industries.

Danny Coghill is an experienced marine/maintenance engineer who specialized in lubrication and oil technology with the following certification credentials.

M.I.Nuc.E. C.I.M.M. S.N.A.M.E. M.T.S. W.H.I.M.S.

We consider it a point of pride that many of our clients keep us involved in multiple aspects of their business and call on us from time to time for advice and to talk through their latest plans.

We have worked hard to establish those relationships and know they appreciate the quality of our reports within the fields of lubrication, maintenance and failure analysis.

We provide a synopsis of Daniel Coghill's experience.

To contact Danny Coghill direct:

e-mail: alba@eastlink.ca

CAREER SUMMARY

TECHNICAL SERVICES AND SALES MANAGEMENT

PROVIDED TECHNICAL SERVICES AND SALES EXPERTISE to industrial and international marine customers on behalf of two major oil companies.

PROVIDED TECHNICAL CONSULTING SERVICES for a prominent consulting company to it's customers in the field of computerized maintenance and failure analysis.

Developed and implemented computer based maintenance management systems for customers such as, the "Seatac" International Airport, an organization with \$US 35,000,000 yearly maintenance budget. Installed and implemented a system designed to reduce this cost by \$US 7,000,000 per year.

Other major customers included; Lobbatt's Brewery, Armstrong Foods, West Coast Energy and B.C. Hydro.

MANAGEMENT/SENIOR SALES

DEVELOPED AND SERVICED customers with high quality products and services that provided them with long term benefits, such as, lubricants, and lubrication technology in the marine and industrial fields.

Recently (2004-5) developed a modern tire sealant for the transportation industry.

SUPERVISED the progressive work of several unionized companies in constructing a 650 megawatt nuclear power station including the welding of both reactors, fuel and control stand pipes, steam systems etc..

OPERATED AND MANAGED My own welding company repairing ships, ferries and tugs on B.C. coast. Fabricated and welded storage and process tanks and systems.

TRAINING

DEVELOPED AND PRESENTED TECHNICAL SEMINARS for company sales personnel, and for industrial and marine customers in oil and lubrication technology, also conducted training seminars in maintenance management and W.H.M.I.S.

WORK HISTORY

Technical Consultant

Self employed 2000- present

I am providing consulting services for the sale and technical development of products for marine, industrial and transportation applications.

Technical Service/Sales Manager

Lo-Rez Vibration Control Ltd 2000-2003

I provided marine and industrial clients with solutions to resolve machinery and engine's unwanted vibrations using high quality torsional couplings and vibration isolators.

Marine/Industrial Specialist

Kelsan Technologies Corp. 1997 to 2000

Developed products and designed mechanisms to provide reduction in noise, vibration and wear of machine parts for customers in the industrial and marine markets.

Technical consultant/Sales Engineer

Tero Consulting Ltd. Vancouver, BC 1991 to 1997

Specialized in sales and technical services for maintenance projects; fuel and lubricant technology and computer assisted maintenance programs. Conducted equipment and plant mechanical audits and recommended appropriate solutions on projects with multi million dollar budgets.

Project Manager

Murray Latta Ltd. Vancouver, BC 1990 to 1991

Responsible for sales and project development for heavy duty machine shop. Prepared costing and materials bids, including a \$12,000,000 project for B.C. Ferry terminal expansion; a project to rebuild a pallet plant and a project to reshore the R.C.M.P. "St. Roche" the first vessel to traverse the Northwest Passage.

Technical services/Sales Manager

Sunoco Ltd. Vancouver, BC 1988 to 1990

Provided sales and technical services to mining companies, pulp and paper, sawmills, manufacturing and food producing customers.

Owner/Operator

Canadian Lubeweld Ltd 1979 to 1988

Company conducted welding repairs and modifications to ships, tugs and ferries on BC coast. Fabricated pipe systems, tanks structures etc BC "A" certified welder

Technical Services Manager

G.O.T.C.O. Ltd. New York, NY 1977 to 1979

Conducted sales and technical services to Deep sea ship owners of lubricants, fuels and oil analyses.

Product Application Engineer

Gulf Oil Canada Ltd. 1972 to 1977

Responsible for the coordination of sales and supply of fuels and lubricants to several industries, such as food manufacturing, road transportation, rail and the International Marine industry. Conducted plant and machinery surveys, and provided expertise in equipment troubleshooting and failure analysis, also conducted field trials with new diesel engine crankcase oils, hydraulic oils and two cycle oils.

UNITED KINGDOM HISTORY***Site Mechanical Supervisor***

The Nuclear Power Group

As Site mechanical Supervisor I was responsible for the scheduling and supervising of the work of five Engineering companies on the construction of the 650 megawatt Nuclear Power Station at located in Oldbury, Glocs., England.

Welding Supervisor

Braithwaites Ltd.

Installation and welding of tanks for condensates, fuel, water, wine etc.

Fitter/Welder

British Aircraft Corporation

On Passing A.I.D and A.R.B. certification for airframe welding I was employed building experimental aircraft components.

Marine engineer

Royal Navy

Certified to operate and maintain all ship's machinery, including highly forced steam boilers, steam turbines, diesel generators, pumps, and all deck machinery.