



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
FRED BARNETT

Machine Id
k/w 35

Component
Diesel Engine

Fluid
SHELL ROTELLA T 15W40 (40 LTR)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0001733	KL0001723	KL0001556
Sample Date		Client Info		02 Oct 2007	19 Sep 2007	09 Aug 2007
Machine Age	kms	Client Info		273900	266419	242303
Oil Age	kms	Client Info		7480	44000	22000
Filter Age	kms	Client Info		7480	44000	22000
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The iron level is abnormal. Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185(m)		▲ 194	● 174	99
Chromium	ppm	ASTM D5185(m)		2	2	1
Nickel	ppm	ASTM D5185(m)		1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)		12	11	8
Lead	ppm	ASTM D5185(m)		5	4	3
Copper	ppm	ASTM D5185(m)		4	3	<1
Tin	ppm	ASTM D5185(m)		2	<1	1
Vanadium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINATION

There is no indication of any contamination in the component.

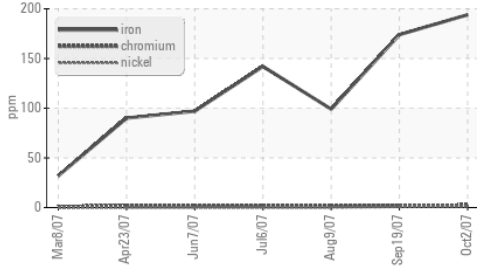
Silicon	ppm	ASTM D5185(m)		7	7	5
Potassium	ppm	ASTM D5185(m)		16	14	11
Fuel		WC Method		<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*		1.4	1.3	0.7
Nitration	Abs/cm	ASTM D7624*		8	8	7
Sulfation	Abs/.1mm	ASTM D7415*		21	21	20
Emulsified Water	scalar	Visual*		NEG	NEG	NEG

FLUID CONDITION

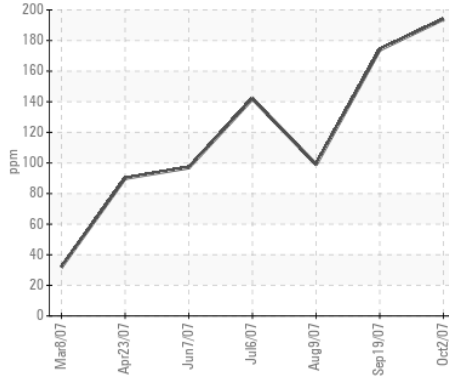
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		0	0	0
Boron	ppm	ASTM D5185(m)		11	10	15
Barium	ppm	ASTM D5185(m)		<1	<1	0
Molybdenum	ppm	ASTM D5185(m)		2	2	<1
Manganese	ppm	ASTM D5185(m)		1	<1	<1
Magnesium	ppm	ASTM D5185(m)		9	7	8
Calcium	ppm	ASTM D5185(m)		2379	2205	2337
Phosphorus	ppm	ASTM D5185(m)		1009	955	978
Zinc	ppm	ASTM D5185(m)		1236	1160	1209
Sulfur	ppm	ASTM D5185(m)		2977	2773	2949
Oxidation	Abs/.1mm	ASTM D7414*		17	17	16
Base Number (BN)	mg KOH/g	ASTM D2896*		6.7	6.9	8.2
Visc @ 100°C	cSt	ASTM D7279(m)		16.2	16.0	15.7

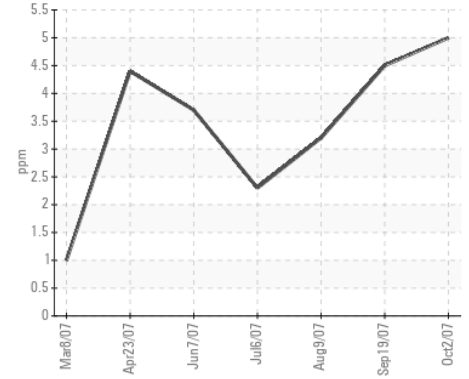
▲ Ferrous Alloys



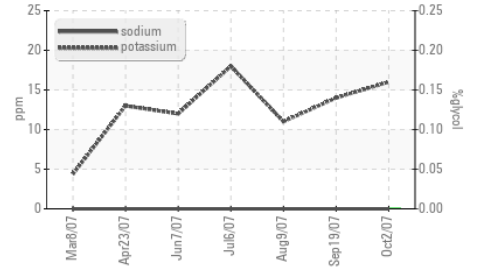
▲ Iron (ppm)



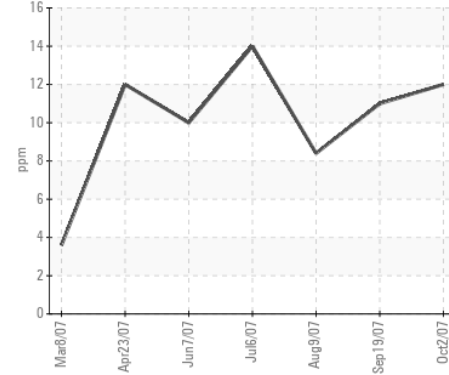
Lead (ppm)



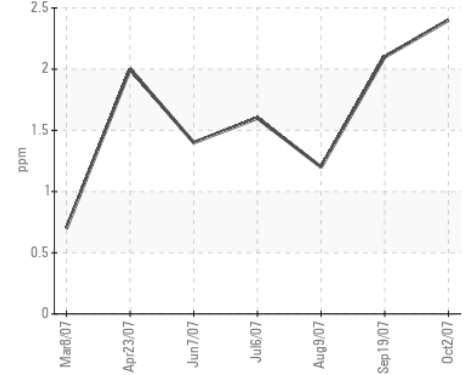
Glycol Contamination



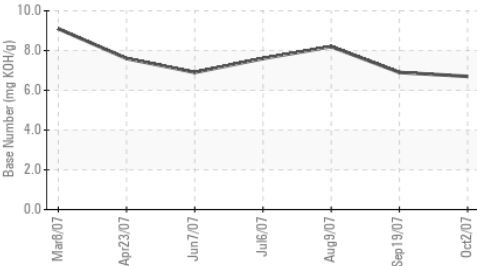
Aluminum (ppm)



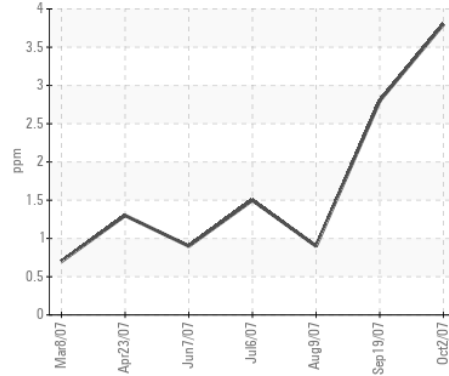
Chromium (ppm)



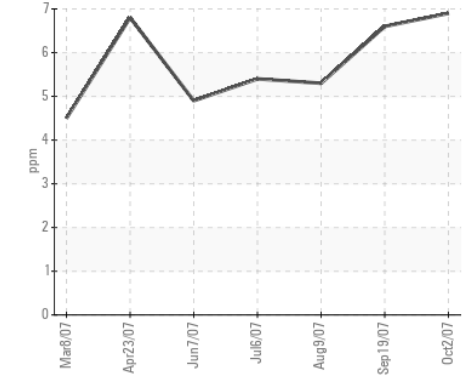
Base Number



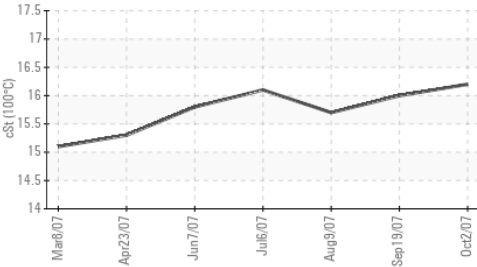
Copper (ppm)



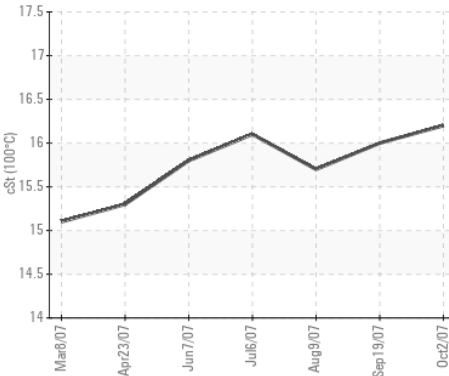
Silicon (ppm)



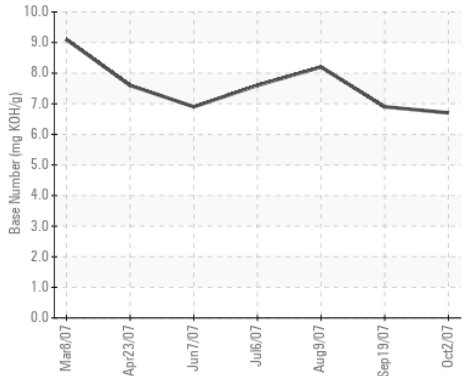
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : KL0001733 **Received** : 15 Oct 2007
Lab Number : 01416296 **Tested** : 15 Oct 2007
Unique Number : 2539011 **Diagnosed** : 15 Oct 2007 - Kevin Marson
Test Package : MOB1+ (Additional Tests: Glycol)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

DAB'S REPAIR LTD.
 2126 LOGAN AVE
 WINNIPEG, MB
 CA R2R 0J2
 Contact: Dan Belinski
 dan@dabsrepair.com
 T: (204)694-2390
 F: (204)694-2406