OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Machine Id
TRP DIESEL (S/N 97847-04)
Component
Diesel Engine
Fluid
PETRO CANADA 40W (35 GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

▲ Wear
All component wear rates are normal. A decrease in the copper level is noted.

Contamination
There is no indication of any contamination in the component.

Fluid Condition
The condition of the oil is acceptable for the time in service. The viscosity index is 112.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC293469**	PC293041	WC666776
Sample Date		Client Info		**27 Mar 2007**	09 May 2006	27 May 2005
Machine Age	hrs	Client Info		**0**	7378	7297
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**NORMAL**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method		**<1.0**	<1.0	<1.0
Water		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		**47**	33	26
Chromium	ppm	ASTM D5185(m)		**2**	1	<1
Nickel	ppm	ASTM D5185(m)		**0**	0	0
Titanium	ppm	ASTM D5185(m)		**<1**	<1	<1
Silver	ppm	ASTM D5185(m)		**<1**	<1	0
Aluminum	ppm	ASTM D5185(m)		**2**	2	1
Lead	ppm	ASTM D5185(m)		**11**	13	16
Copper	ppm	ASTM D5185(m)		▲ **269**	▲ 327	▲ 352
Tin	ppm	ASTM D5185(m)		**5**	4	2
Vanadium	ppm	ASTM D5185(m)		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**10**	3	6
Barium	ppm	ASTM D5185(m)		**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)		**4**	3	3
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**35**	32	44
Calcium	ppm	ASTM D5185(m)		**2543**	2348	2288
Phosphorus	ppm	ASTM D5185(m)		**958**	888	870
Zinc	ppm	ASTM D5185(m)		**1059**	987	894
Sulfur	ppm	ASTM D5185(m)		**4523**	4050	3787

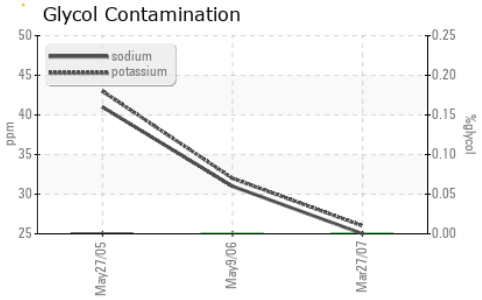
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**5**	4	4
Sodium	ppm	ASTM D5185(m)		**25**	31	▲ 41
Potassium	ppm	ASTM D5185(m)		**26**	▲ 32	▲ 43
Glycol	%	ASTM D7922*		**0.0**	0.0	▲ 0.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0.3**	0.1	0
Nitration	Abs/cm	ASTM D7624*		**5**	6	5
Sulfation	Abs/.1mm	ASTM D7415*		**22**	23	25

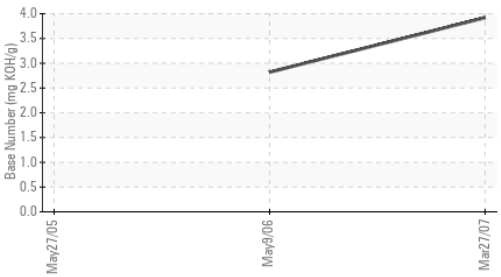
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		**12**	14	15
Acid Number (AN)	mg KOH/g	ASTM D974*		**1.95**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		**3.92**	2.82	---

OIL ANALYSIS REPORT

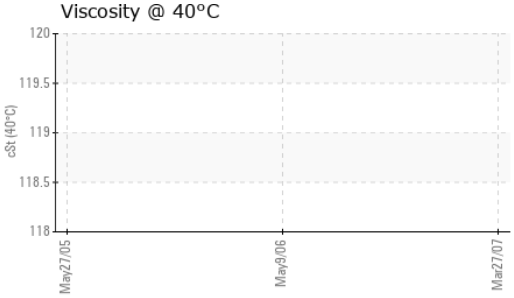
Glycol Contamination



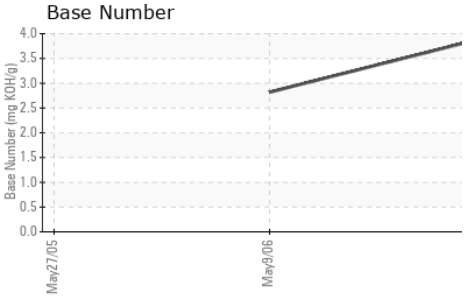
Base Number



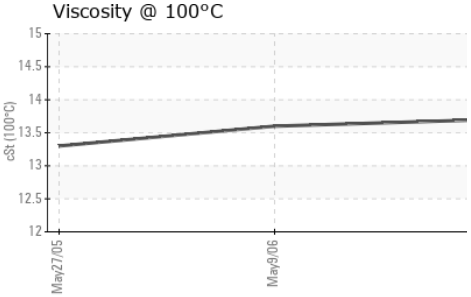
Viscosity @ 40°C



Base Number



Viscosity @ 100°C

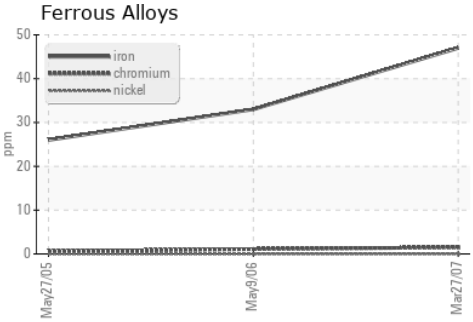


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*		**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

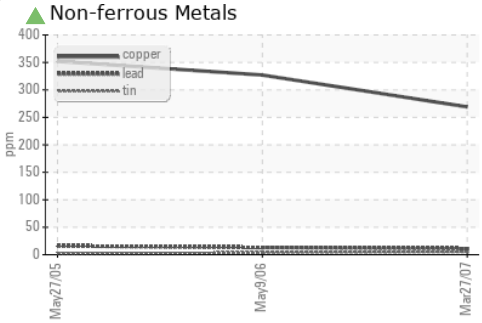
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		**119**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**13.7**	13.6	13.3
Viscosity Index (VI)	Scale	ASTM D2270*		**112**	---	---

GRAPHS

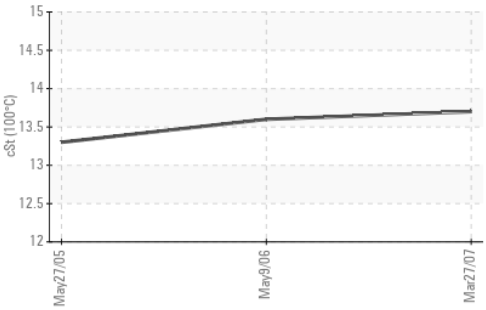
Ferrous Alloys



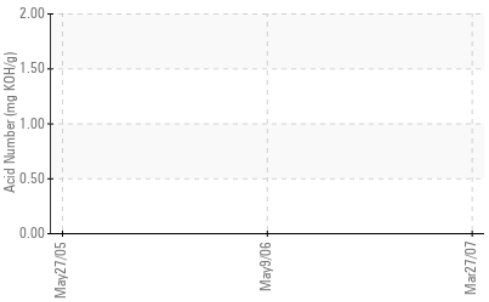
Non-ferrous Metals



Viscosity @ 100°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC293469 **Recieved** : 30 Mar 2007
Lab Number : 01371872 **Diagnosed** : 04 Apr 2007
Unique Number : 2422300 **Diagnostician** :
Test Package : IND 2 (Additional Tests: Glycol, KV40, TAN Auto, VI, Visual)

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.

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