



PROBLEM SUMMARY

Sample Rating Trend

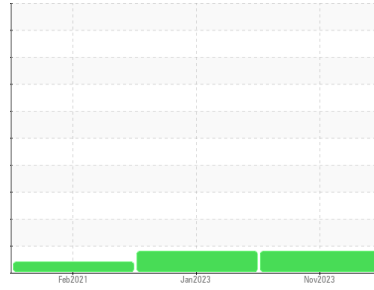
WEAR



Machine Id
DODGE 5500 8009 (S/N 522808)

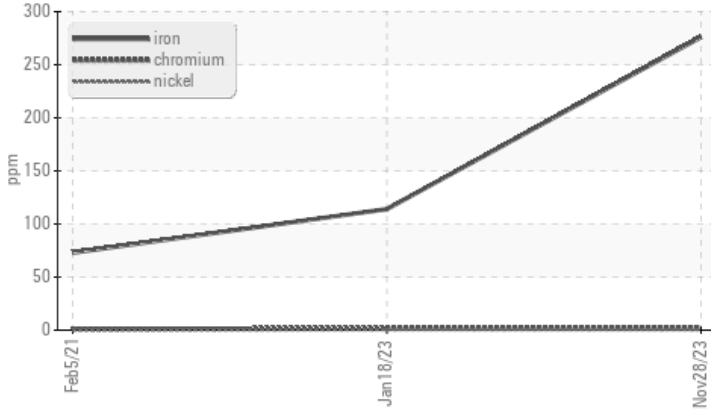
Component
Diesel Engine

Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>90	▲ 276	▲ 114	73

Customer Id: TRANEW
Sample No.: WC0879389
Lab Number: 06026187
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

18 Jan 2023 Diag: Don Baldrige

WEAR



Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



05 Feb 2021 Diag: Jonathan Hester

VISCOSITY



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type.

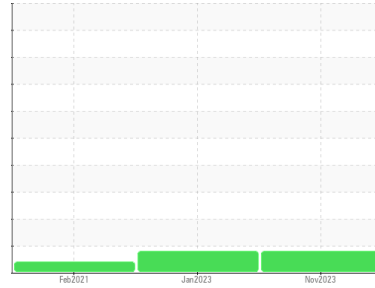
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
DODGE 5500 8009 (S/N 522808)

Component
Diesel Engine

Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

▲ Wear

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0879389	WC0775920	WC0532306
Sample Date	Client Info		28 Nov 2023	18 Jan 2023	05 Feb 2021
Machine Age	hrs	Client Info	2350	1643	547
Oil Age	hrs	Client Info	707	507	547
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	▲ 276	▲ 114	73
Chromium	ppm	ASTM D5185m >20	2	2	1
Nickel	ppm	ASTM D5185m >2	<1	<1	0
Titanium	ppm	ASTM D5185m >2	<1	4	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >20	7	6	5
Lead	ppm	ASTM D5185m >40	0	<1	<1
Copper	ppm	ASTM D5185m >330	7	13	207
Tin	ppm	ASTM D5185m >15	0	1	1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	2	8	20
Barium	ppm	ASTM D5185m 1	2	2	6
Molybdenum	ppm	ASTM D5185m 60	71	64	44
Manganese	ppm	ASTM D5185m 1	2	2	5
Magnesium	ppm	ASTM D5185m 1010	1062	924	624
Calcium	ppm	ASTM D5185m 1070	1195	1130	1435
Phosphorus	ppm	ASTM D5185m 1150	1027	923	873
Zinc	ppm	ASTM D5185m 1270	1357	1243	1125
Sulfur	ppm	ASTM D5185m 2060	2938	2955	2016

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	11	10	29
Sodium	ppm	ASTM D5185m	2	4	10
Potassium	ppm	ASTM D5185m >20	13	9	17

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	0.9	0.6	0.2
Nitration	Abs/cm	*ASTM D7624 >20	16.2	13.8	13
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.2	26.1	26.2

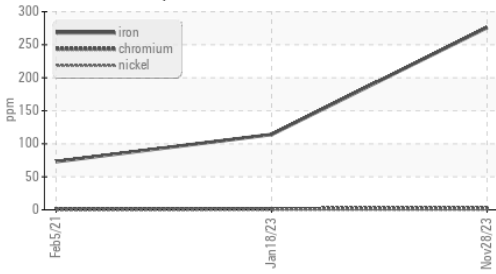
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	31.4	25.5	27.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	5.4	5.1	---



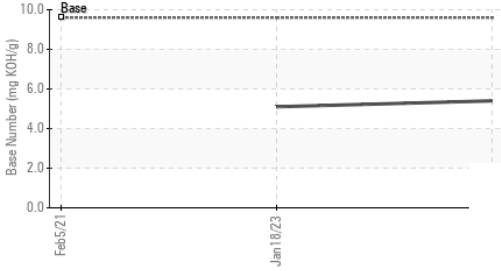
OIL ANALYSIS REPORT

▲ Ferrous Alloys



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

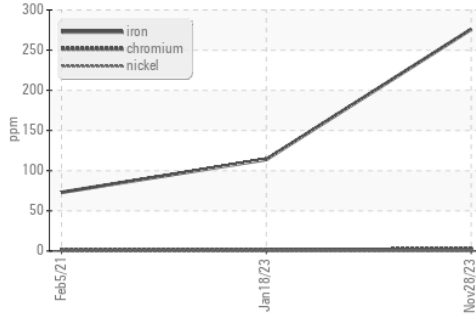
Base Number



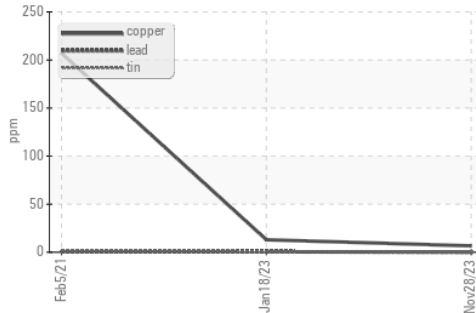
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	16.4	14.5 ▲ 11.9

GRAPHS

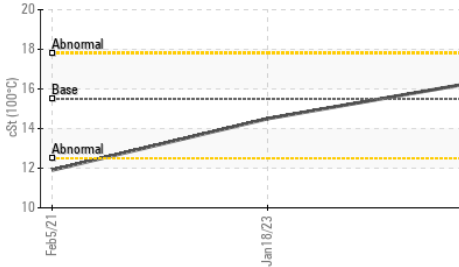
▲ Ferrous Alloys



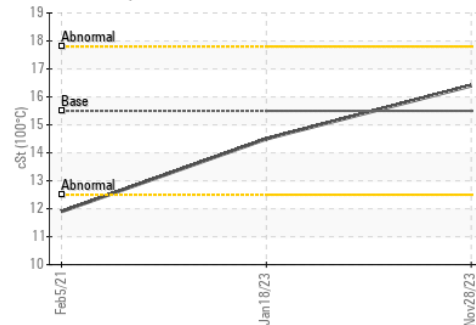
Non-ferrous Metals



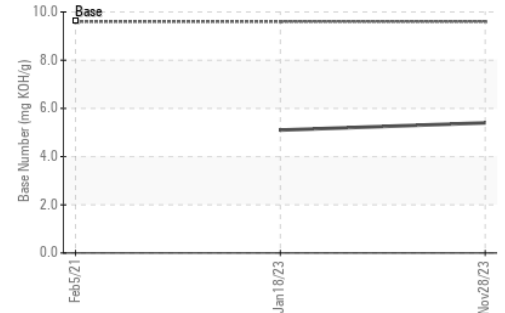
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0879389 **Received** : 06 Dec 2023
Lab Number : 06026187 **Diagnosed** : 07 Dec 2023
Unique Number : 10775978 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

TRADER CONSTRUCTION CO.
 PO DRAWER 1578
 NEW BERN, NC
 US 28563
 Contact: MIKE WYATT
 mw Wyatt@traderconstruction.com
 T: (252)633-1399
 F: (252)638-4871

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)