



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id HONDA RUST CHECK

Component
Gasoline Engine

Fluid
TRC 0W40 (5 LTR)

RECOMMENDATION

We advise that you monitor for an abnormal oil pressure drop and noise. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. The fluid was specified as TRC 0W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

WEAR

Lead ppm levels are severe. Bearing wear is indicated.

CONTAMINATION

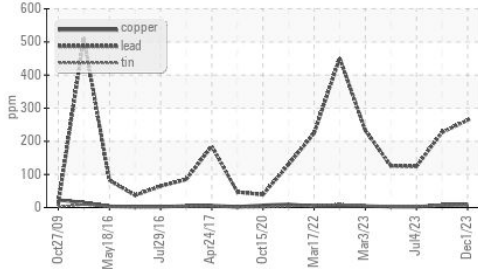
Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

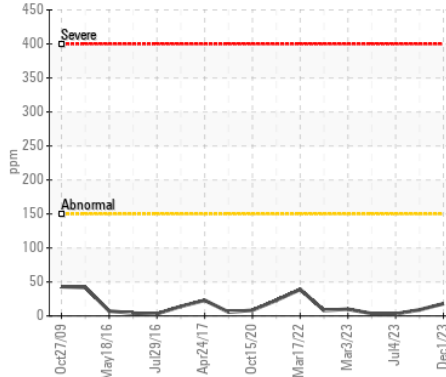
The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02618321	TR02583544	TR02568755
Sample Date		Client Info		01 Dec 2023	11 Sep 2023	04 Jul 2023
Machine Age	kms	Client Info		200170	198125	195405
Oil Age	kms	Client Info		5990	3945	1225
Filter Age	kms	Client Info		5990	3945	1225
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	ATTENTION
Iron	ppm	ASTM D5185(m)	>150	18	9	3
Chromium	ppm	ASTM D5185(m)	>20	3	2	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>40	4	3	2
Lead	ppm	ASTM D5185(m)	>50	▲ 264	▲ 227	● 124
Copper	ppm	ASTM D5185(m)	>155	9	7	2
Tin	ppm	ASTM D5185(m)	>10	7	6	3
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>30	19	14	12
Potassium	ppm	ASTM D5185(m)	>20	2	1	<1
Fuel	%	ASTM D7593*	>4.0	▲ 2.5	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.6	10.5	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	37.6	34.8	31.5
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>400	5	4	2
Boron	ppm	ASTM D5185(m)		34	52	102
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		81	90	95
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)		20	18	14
Calcium	ppm	ASTM D5185(m)		1864	1930	1999
Phosphorus	ppm	ASTM D5185(m)		794	942	965
Zinc	ppm	ASTM D5185(m)		953	1032	1031
Sulfur	ppm	ASTM D5185(m)		2836	2900	3000
Oxidation	Abs/.1mm	ASTM D7414*	>25	42.5	39.7	36.5
Base Number (BN)	mg KOH/g	ASTM D2896*		6.01	6.30	7.98
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 12.2	12.6	12.8

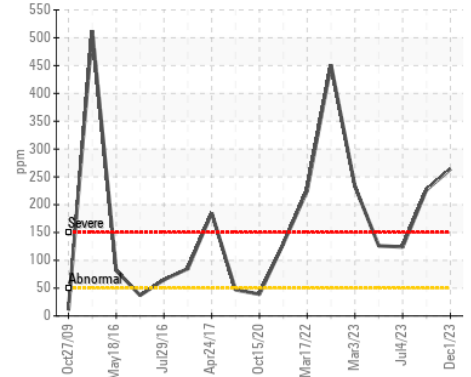
▲ Non-ferrous Metals



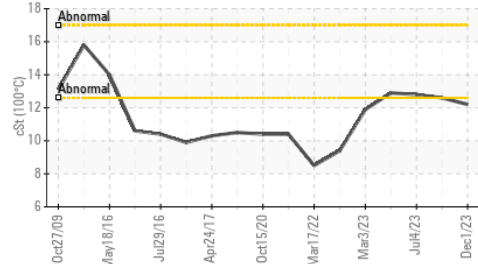
Iron (ppm)



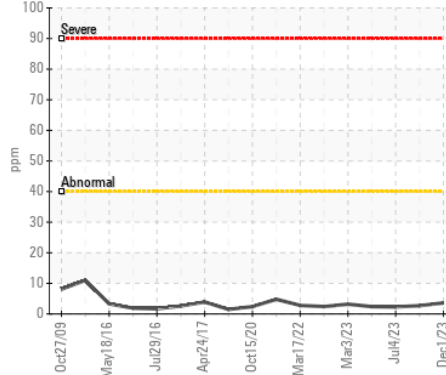
▲ Lead (ppm)



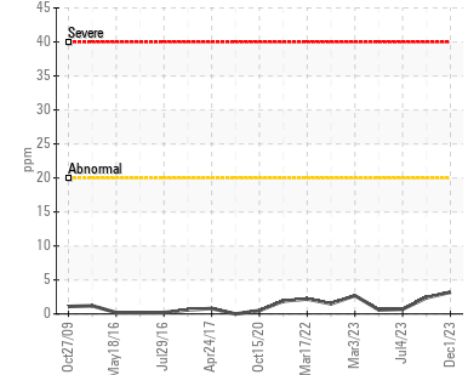
▲ Viscosity @ 100°C



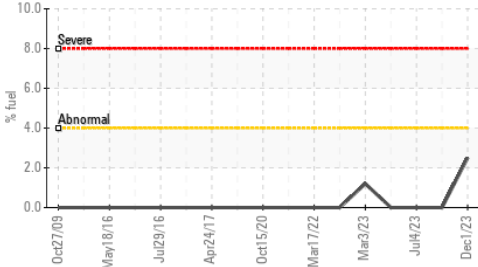
Aluminum (ppm)



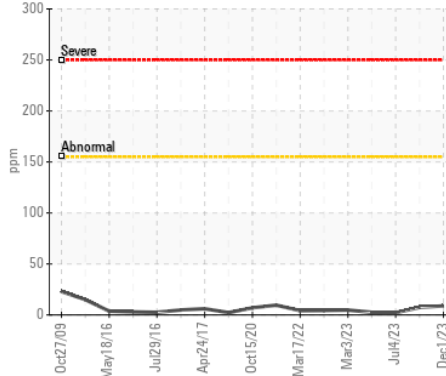
Chromium (ppm)



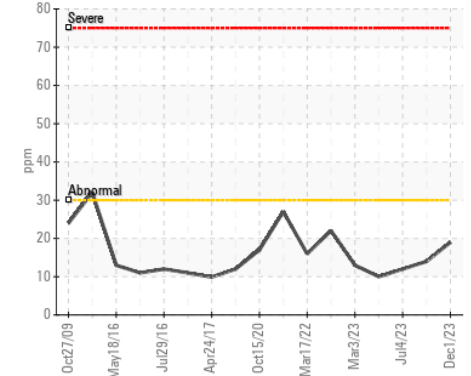
▲ Fuel Dilution



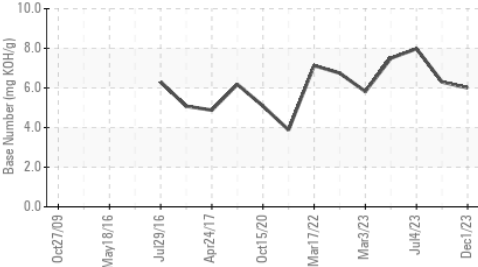
Copper (ppm)



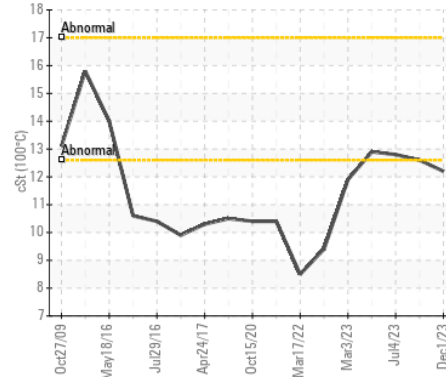
Silicon (ppm)



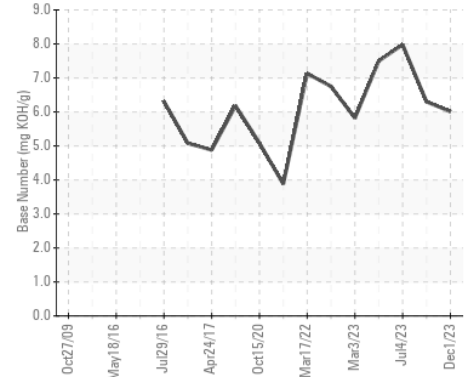
Base Number



▲ Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02618321 **Received** : 27 Feb 2024
Lab Number : 02618321 **Tested** : 28 Feb 2024
Unique Number : 5735431 **Diagnosed** : 28 Feb 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

ALLAN GAGNON
 311 DAVIES ROAD
 SASKATOON, SK
 CA S7K 7N7
 Contact: Allain Gagnon

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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)

T: (306)933-0518

F: