TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HONDA 97 491GHP
Component
Gasoline Engine
Fluid
TRC PRO-SPEC 0W/40 SYNTHETIC MOTOR OIL (4 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. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

Lead ppm levels are severe. Bearing wear is indicated.

CONTAMINATION

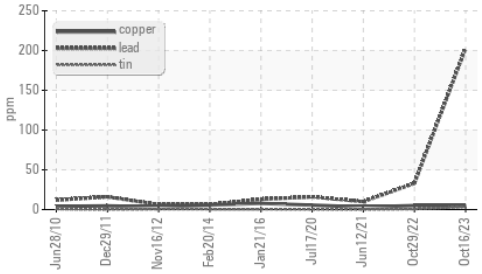
The water content is negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

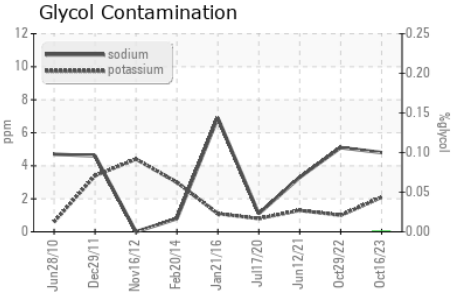
Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02640759	TR02533047	TR02428710
Sample Date		Client Info		16 Oct 2023	29 Oct 2022	12 Jun 2021
Machine Age	kms	Client Info		178798	172540	160813
Oil Age	kms	Client Info		6258	7138	4589
Filter Age	kms	Client Info		6258	7138	4589
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>150	5	5	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>40	3	3	3
Lead	ppm	ASTM D5185(m)	>50	▲ 203	33	10
Copper	ppm	ASTM D5185(m)	>155	5	5	3
Tin	ppm	ASTM D5185(m)	>10	3	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Silicon	ppm	ASTM D5185(m)	>30	17	19	14
Potassium	ppm	ASTM D5185(m)	>20	2	1	1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	0.078	---	---
ppm Water	ppm	ASTM D6304*	>2000	788	---	---
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.3	13.3	13.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	42.7	▲ 41.1	37.6
Emulsified Water	scalar	Visual*	>0.2	.2%	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>400	5	5	3
Boron	ppm	ASTM D5185(m)		36	31	40
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		95	86	86
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	6	45	135	174
Calcium	ppm	ASTM D5185(m)	1600	2046	1914	1810
Phosphorus	ppm	ASTM D5185(m)		791	843	873
Zinc	ppm	ASTM D5185(m)	1400	950	932	1067
Sulfur	ppm	ASTM D5185(m)		3022	2969	3000
Oxidation	Abs/.1mm	ASTM D7414*	>25	45.8	▲ 41.2	39.6
Base Number (BN)	mg KOH/g	ASTM D2896*	15	4.65	3.82	5.52
Visc @ 100°C	cSt	ASTM D7279(m)		11.9	11.7	11.9

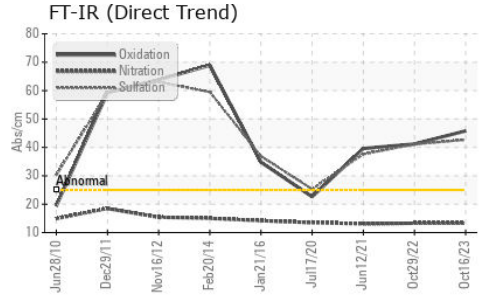
Non-ferrous Metals



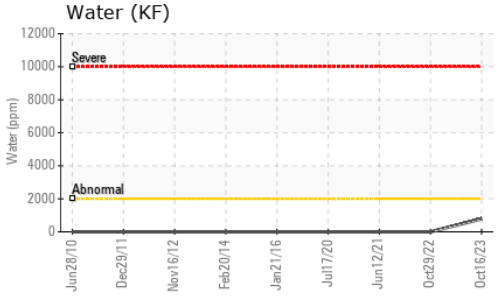
Glycol Contamination



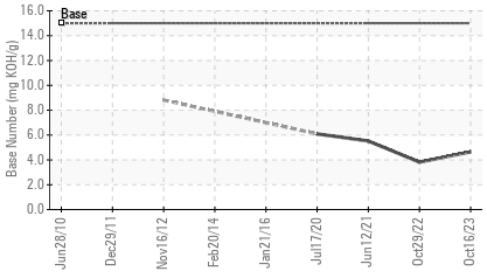
FT-IR (Direct Trend)



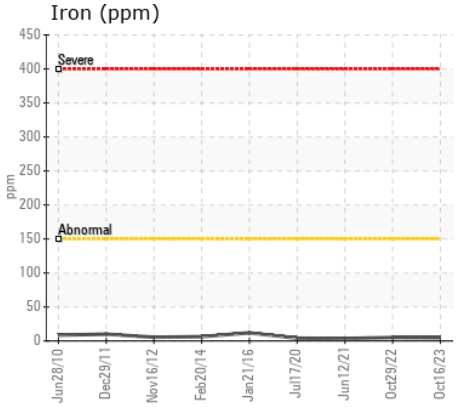
Water (KF)



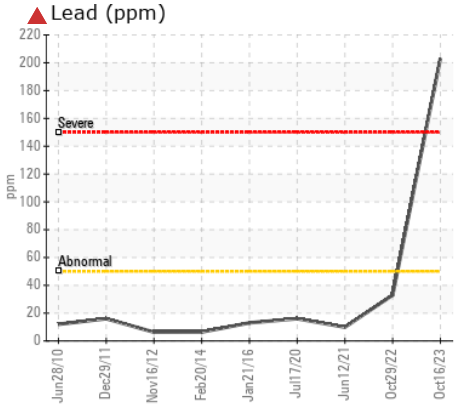
Base Number



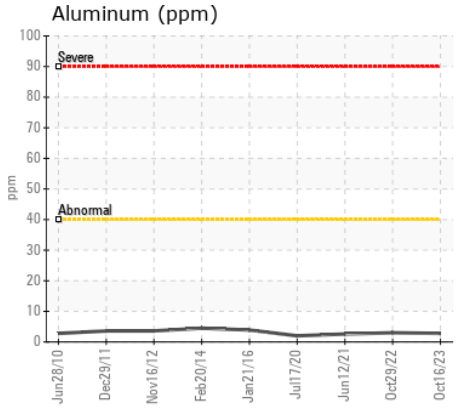
Iron (ppm)



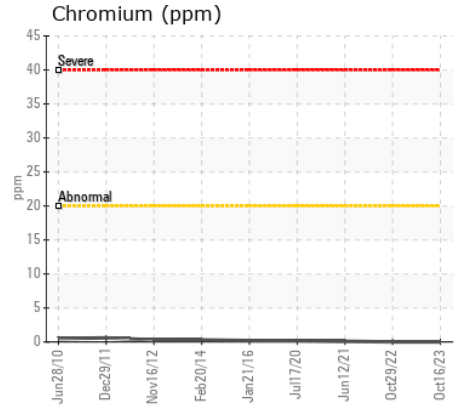
Lead (ppm)



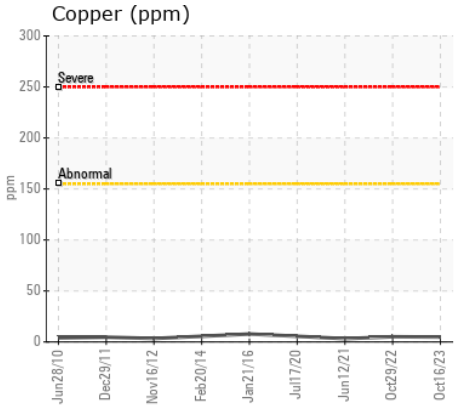
Aluminum (ppm)



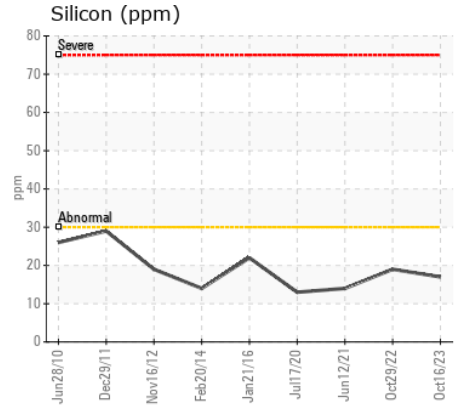
Chromium (ppm)



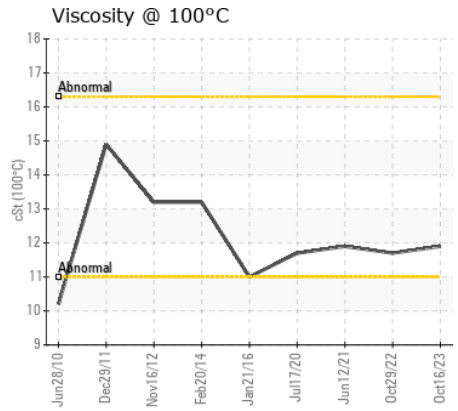
Copper (ppm)



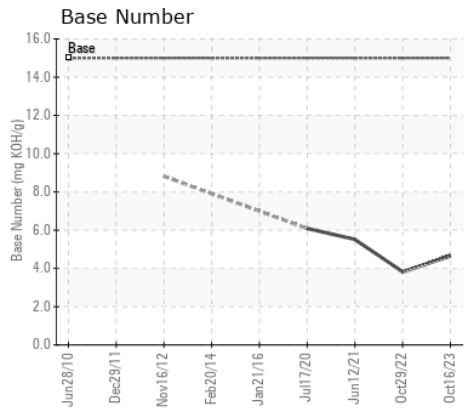
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02640759 **Received** : 10 Jun 2024
Lab Number : 02640759 **Tested** : 11 Jun 2024
Unique Number : 5789921 **Diagnosed** : 12 Jun 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol, KF)

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)

LAWRENCE DESLOURIES
131, CHARLEBOIS CRES
SASKATOON, SK
CA S7K 5J2
Contact: Cynthia Deslanries

T: (306)242-9260
F: