MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
HYUNDAI 5NMS5CAA0LH266769
Component
Gasoline Engine
Fluid
DEXOS 5W30 (5 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

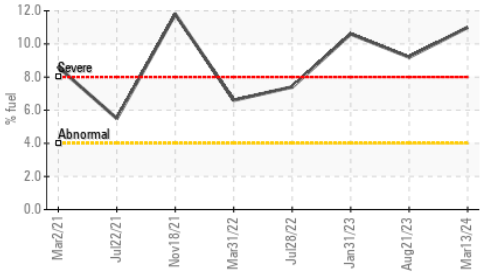
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

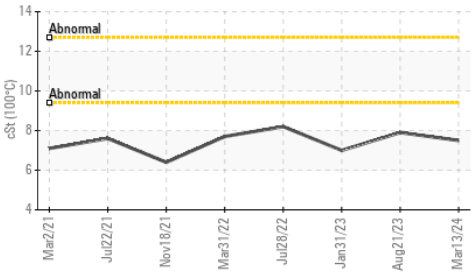
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0046040	PC0081783	PC0046035
Sample Date		Client Info		13 Mar 2024	21 Aug 2023	31 Jan 2023
Machine Age	kms	Client Info		56200	48660	0
Oil Age	kms	Client Info		0	0	7411
Filter Age	kms	Client Info		0	0	7411
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>150	10	12	12
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	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	4	4
Lead	ppm	ASTM D5185(m)	>50	0	0	0
Copper	ppm	ASTM D5185(m)	>155	3	3	2
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Silicon	ppm	ASTM D5185(m)	>30	8	7	11
Potassium	ppm	ASTM D5185(m)	>20	10	5	3
Fuel	%	ASTM D7593*	>4.0	▲ 11	▲ 9.2	▲ 10.6
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	11.5	11.5	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	20.4	20.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>400	2	3	2
Boron	ppm	ASTM D5185(m)		35	34	32
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		136	138	129
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		387	382	361
Calcium	ppm	ASTM D5185(m)		1185	1187	1218
Phosphorus	ppm	ASTM D5185(m)		596	612	643
Zinc	ppm	ASTM D5185(m)		696	712	691
Sulfur	ppm	ASTM D5185(m)		1509	1559	1566
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.9	13.5	11.9
Visc @ 40°C	cSt	ASTM D7279(m)		36.3	39.5	▲ 33.9
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 7.5	▲ 7.9	▲ 7
Viscosity Index (VI)	Scale	ASTM D2270*		180	176	174

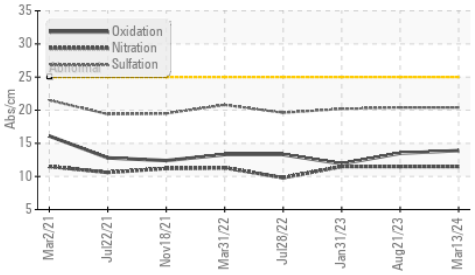
Fuel Dilution



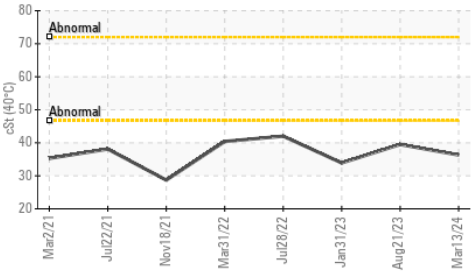
Viscosity @ 100°C



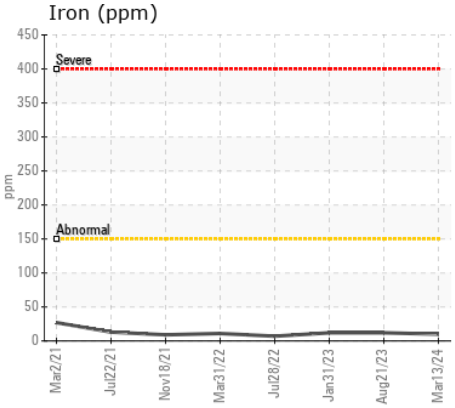
FT-IR (Direct Trend)



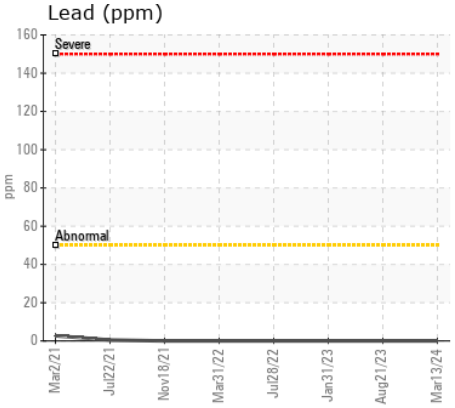
Viscosity @ 40°C



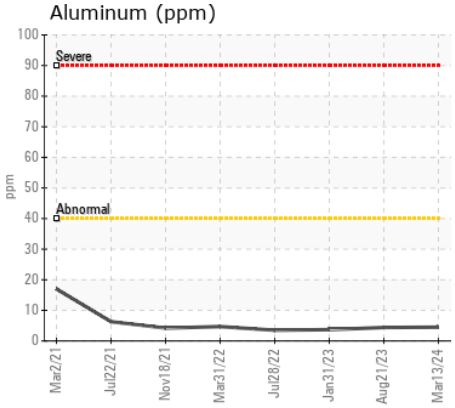
Iron (ppm)



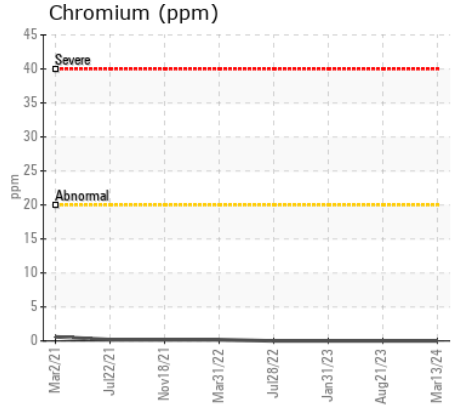
Lead (ppm)



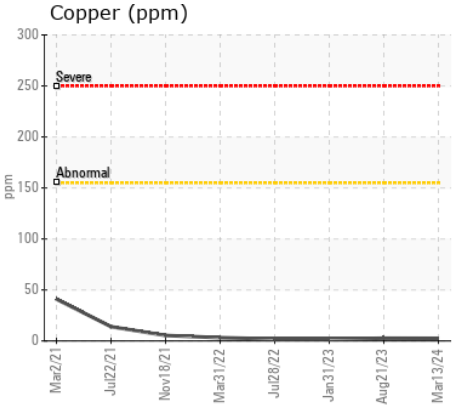
Aluminum (ppm)



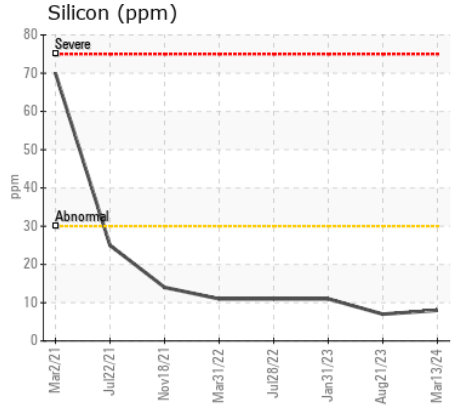
Chromium (ppm)



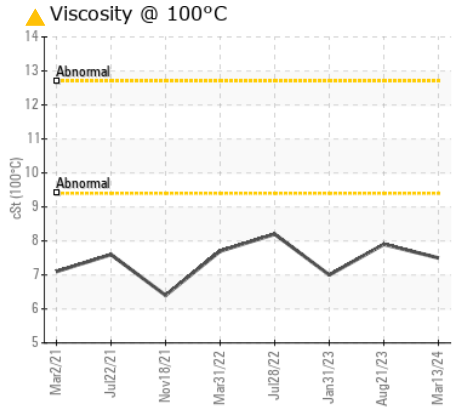
Copper (ppm)



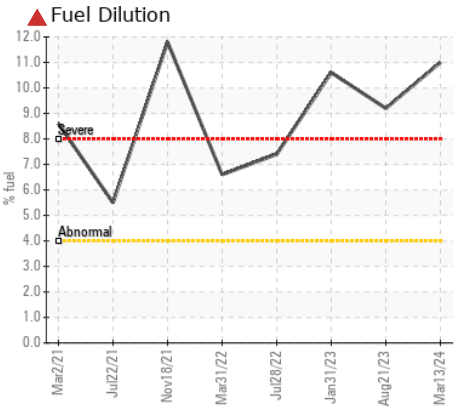
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0046040 **Received** : 15 Apr 2024
Lab Number : 02628706 **Tested** : 16 Apr 2024
Unique Number : 5761838 **Diagnosed** : 16 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI)

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.

PETE & SHELLEY O`HARE
BOX 1063
MAPLE CREEK, ON
CA S0N 1N0
Contact: Pete O'Hare
shelley.ohare@sasktel.net
T: (306)661-9808
F: