



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HYUNDAI L-14
Component
Diesel Engine
Fluid
FLEETLINE SUPERFLEET XHD 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001195	LP0001344	LP0000531
Sample Date		Client Info		12 Apr 2024	29 Jan 2024	12 Dec 2023
Machine Age	hrs	Client Info		9854	9492	9300
Oil Age	hrs	Client Info		359	192	427
Filter Age	hrs	Client Info		359	192	427
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	8	5
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	19	▲ 27
Lead	ppm	ASTM D5185m	>40	4	2	3
Copper	ppm	ASTM D5185m	>330	3	<1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

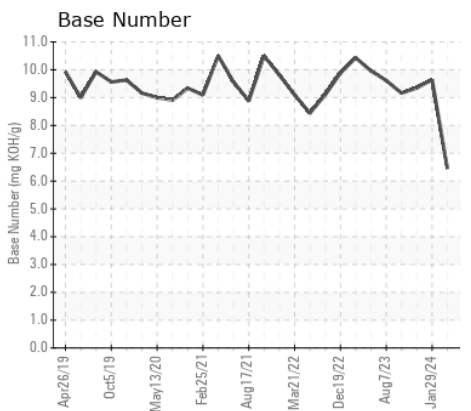
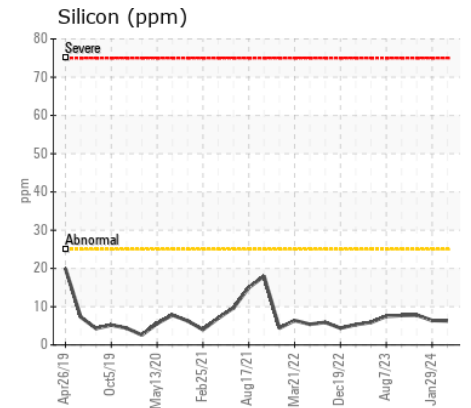
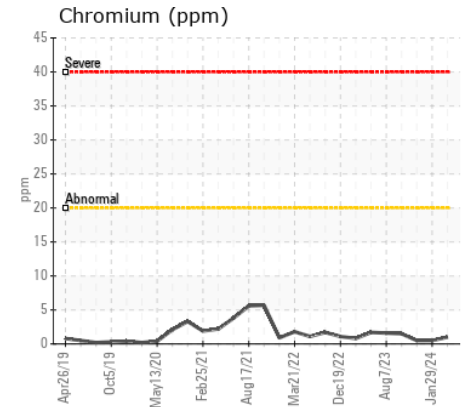
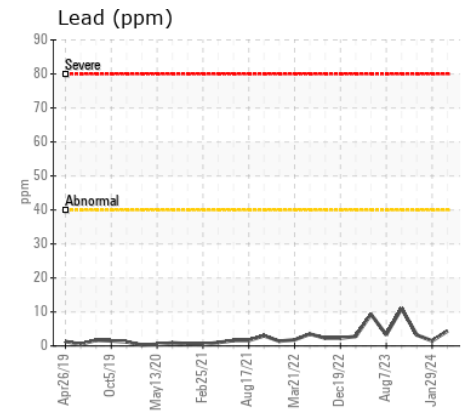
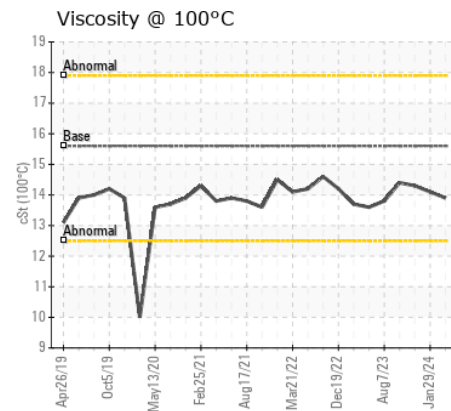
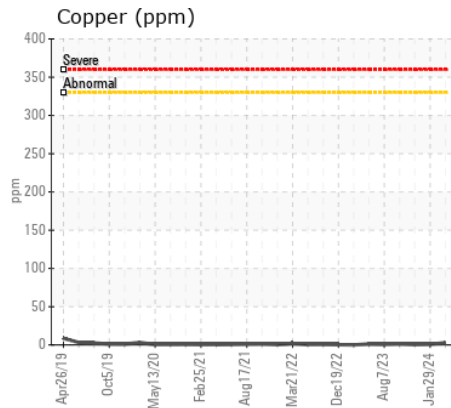
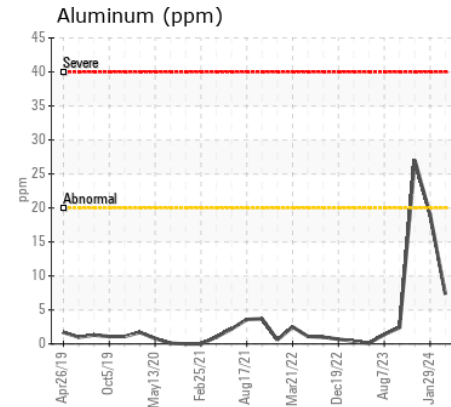
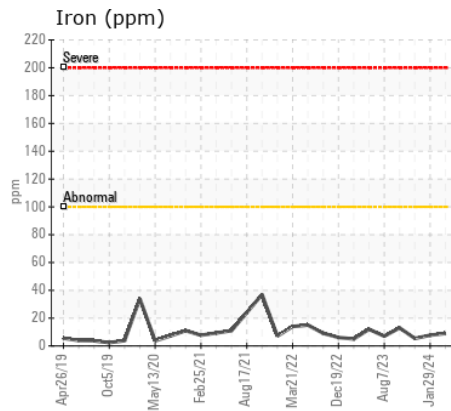
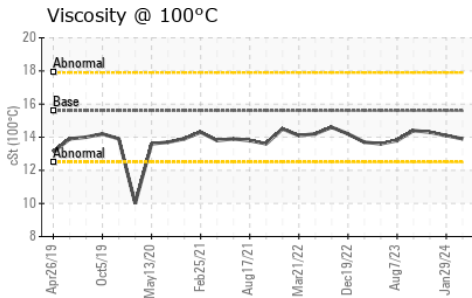
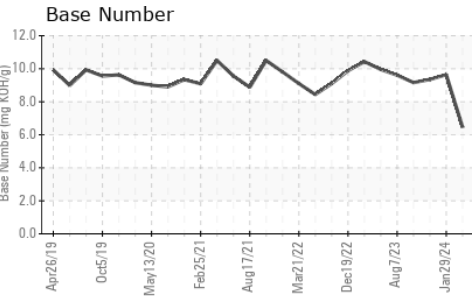
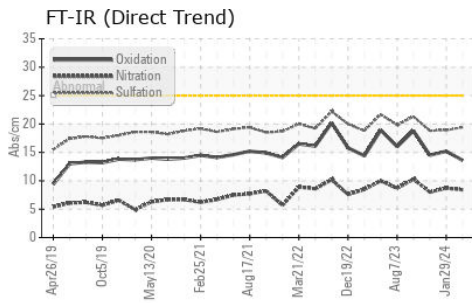
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	8
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.7	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	18.9	18.8
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	<1	<1
Boron	ppm	ASTM D5185m		26	18	18
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		26	58	57
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		187	615	702
Calcium	ppm	ASTM D5185m		2084	1537	1405
Phosphorus	ppm	ASTM D5185m		934	994	1031
Zinc	ppm	ASTM D5185m		1093	1236	1215
Sulfur	ppm	ASTM D5185m		3854	3256	3175
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	15.2	14.5
Base Number (BN)	mg KOH/g	ASTM D2896		6.45	9.64	9.35
Visc @ 100°C	cSt	ASTM D445	15.6	13.9	14.1	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001195
Lab Number : 06153823
Unique Number : 10989246
Test Package : MOB 2

Received : 18 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Jonathan Hester

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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)