



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HYUNDAI L-4 - HYUNDAI
Component
Rear Differential
Fluid
GEAR OIL LS 80W90 (16 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0002091	LP0000719	WC0721530
Sample Date		Client Info		20 May 2024	01 Jul 2023	09 Sep 2022
Machine Age	hrs	Client Info		11406	9221	7025
Oil Age	hrs	Client Info		1185	2196	2009
Filter Age	hrs	Client Info		1185	2196	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	271	80	33
Chromium	ppm	ASTM D5185m	>10	1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>25	1	0	<1
Copper	ppm	ASTM D5185m	>100	96	52	41
Tin	ppm	ASTM D5185m	>10	5	2	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

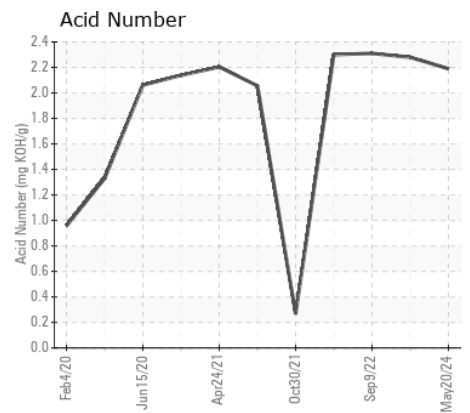
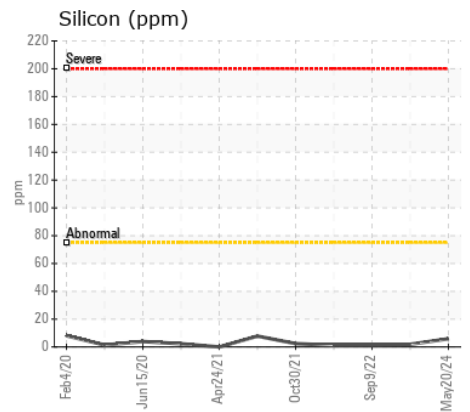
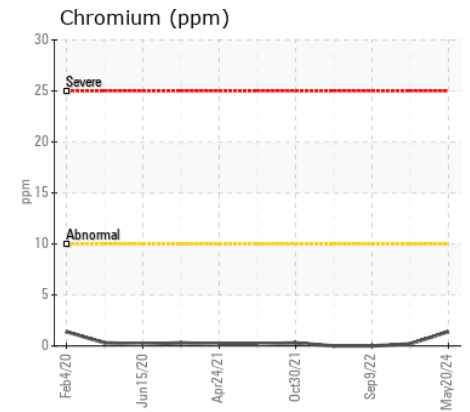
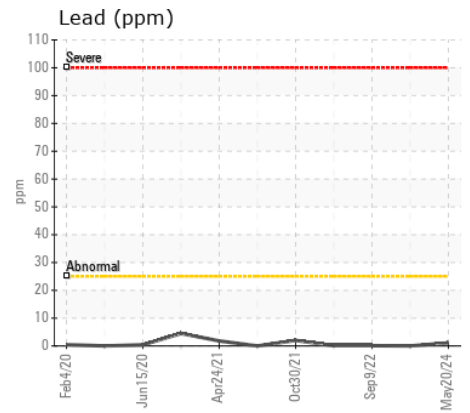
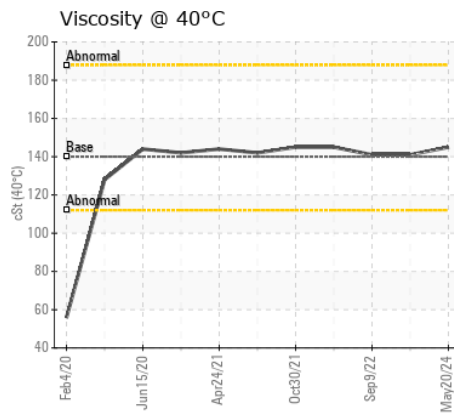
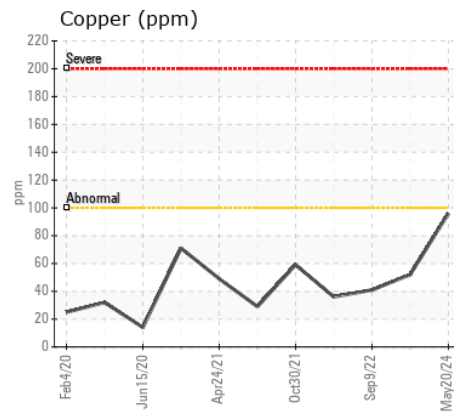
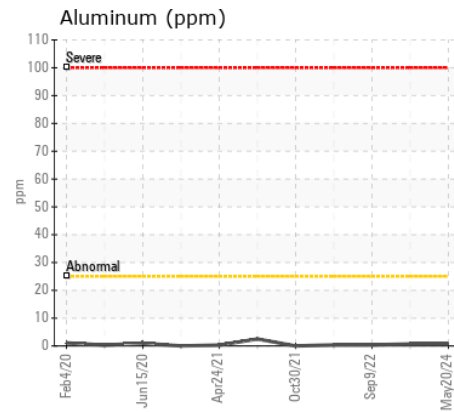
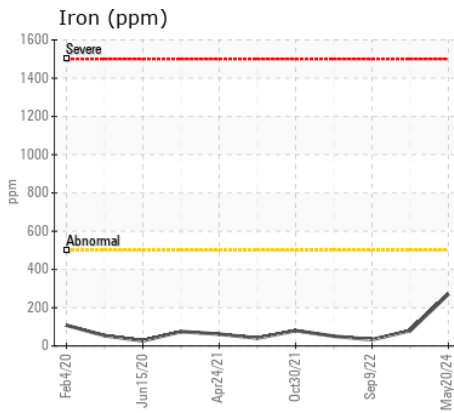
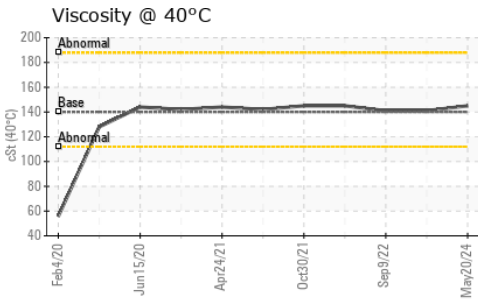
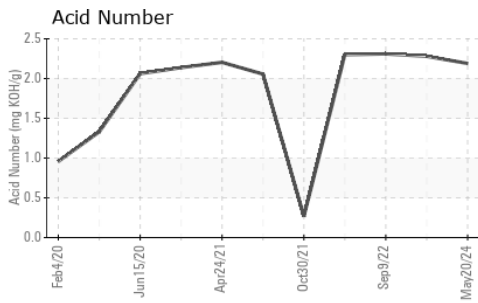
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	6	2	1
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Water		WC Method	>.2	NEG	NEG	NEG
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	>.2	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	1	<1
Boron	ppm	ASTM D5185m	150	14	25	36
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		<1	1	<1
Manganese	ppm	ASTM D5185m		5	1	<1
Magnesium	ppm	ASTM D5185m	10	2	12	5
Calcium	ppm	ASTM D5185m	70	25	58	28
Phosphorus	ppm	ASTM D5185m	2000	662	706	649
Zinc	ppm	ASTM D5185m	50	125	45	23
Sulfur	ppm	ASTM D5185m	20000	27105	30253	26250
Acid Number (AN)	mg KOH/g	ASTM D8045		2.19	2.28	2.31
Visc @ 40°C	cSt	ASTM D445	140	145	141	141



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0002091
Lab Number : 06195980
Unique Number : 11058103
Test Package : MOB 2

Received : 30 May 2024
Tested : 02 Jun 2024
Diagnosed : 02 Jun 2024 - Don Baldrige

S.M. LORUSSO & SONS
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 US 02081

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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)