



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HYUNDAI 22356459**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 10W30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP425528</b>	VCP425539	---
Sample Date		Client Info		<b>11 Jul 2024</b>	21 Jan 2024	---
Machine Age	hrs	Client Info		<b>2593</b>	1655	---
Oil Age	hrs	Client Info		<b>300</b>	300	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>10</b>	12	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	2	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	3	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

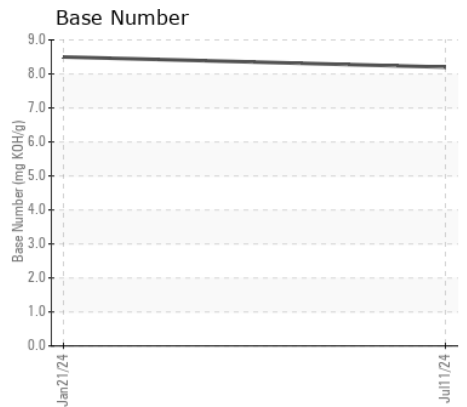
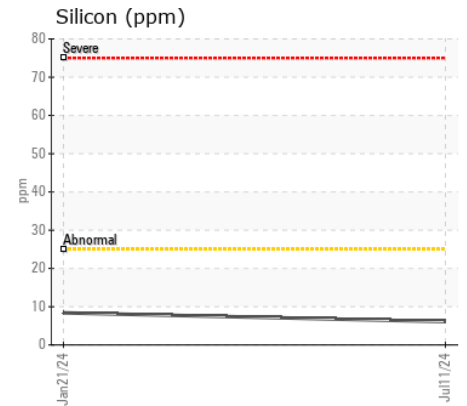
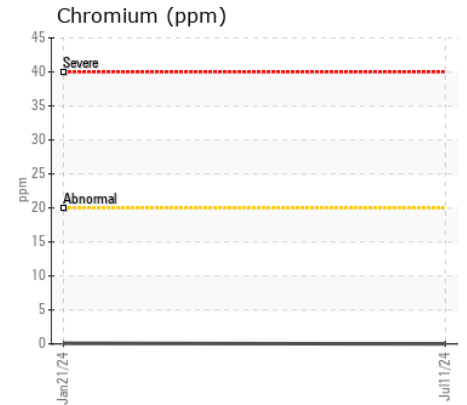
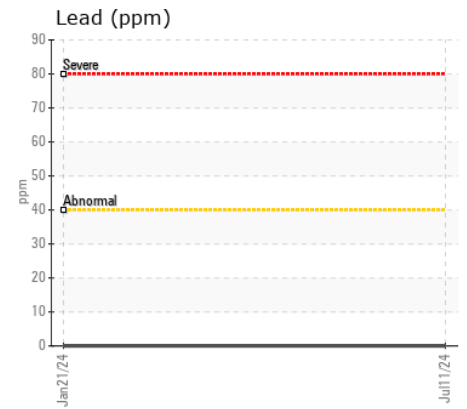
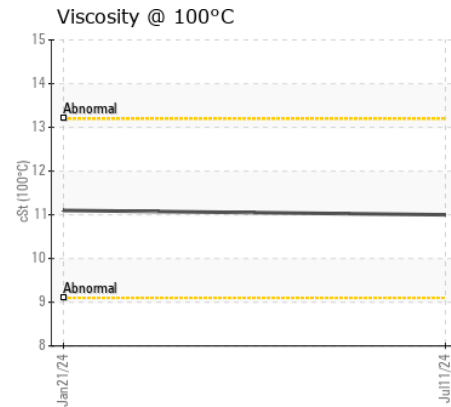
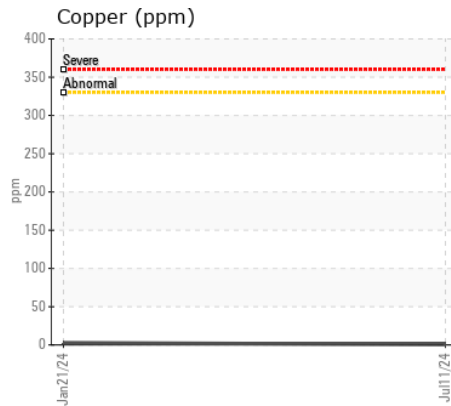
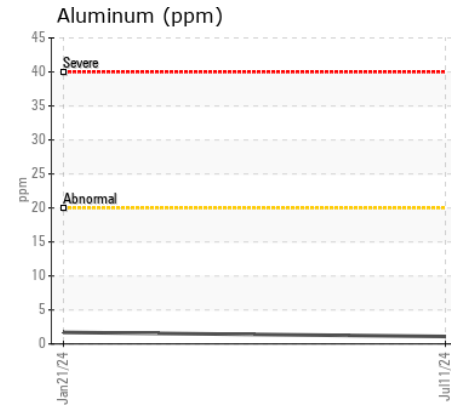
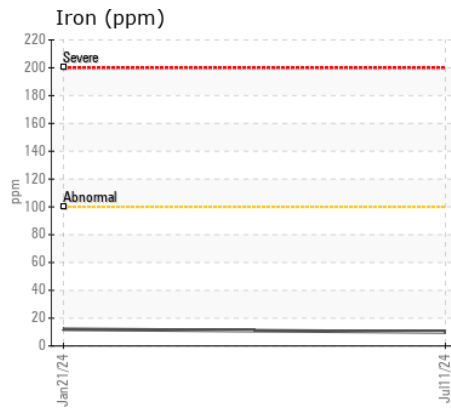
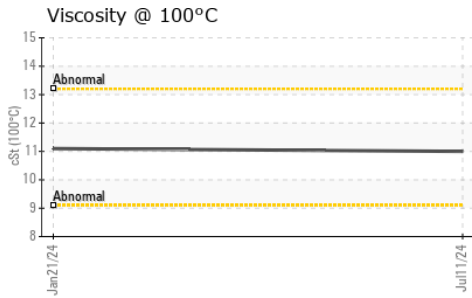
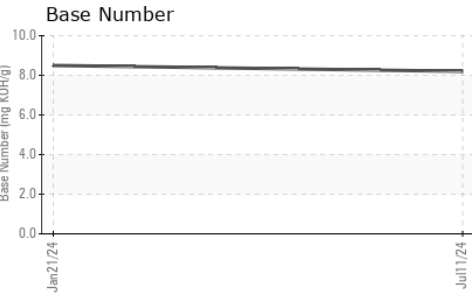
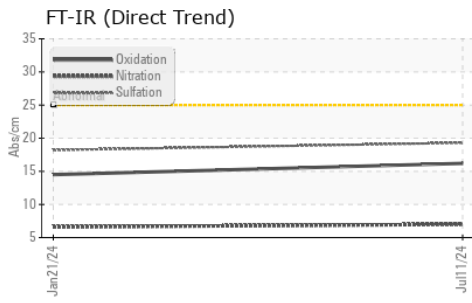
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.0</b>	6.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.3</b>	18.2	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>1</b>	1	---
Boron	ppm	ASTM D5185m		<b>1</b>	4	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>59</b>	54	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>1013</b>	918	---
Calcium	ppm	ASTM D5185m		<b>1098</b>	1038	---
Phosphorus	ppm	ASTM D5185m		<b>1086</b>	1009	---
Zinc	ppm	ASTM D5185m		<b>1283</b>	1162	---
Sulfur	ppm	ASTM D5185m		<b>3696</b>	2948	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	14.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	8.5	---
Visc @ 100°C	cSt	ASTM D445		<b>11.0</b>	11.1	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP425528  
**Lab Number** : 06235422  
**Unique Number** : 11124256  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 15 Jul 2024  
**Tested** : 15 Jul 2024  
**Diagnosed** : 15 Jul 2024 - Wes Davis

**WOODBED CORP dba DELULLO TRUCKING**  
 1022 DELAUM RD  
 ST MARYS, PA  
 US 15857

Contact: CRYSTAL WILLIAMS  
 crystal@woodbed.com

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)

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