



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

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

Machine Id  
**VOLVO A40G VCE0A40GKE0338**

Component  
**Front Left Planetary**

Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

## WEAR

Copper ppm levels are severe. Thrust washer and/or bearing/bushing wear is indicated.

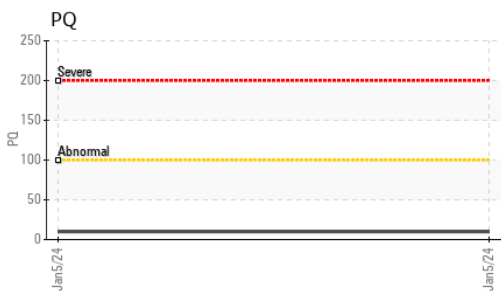
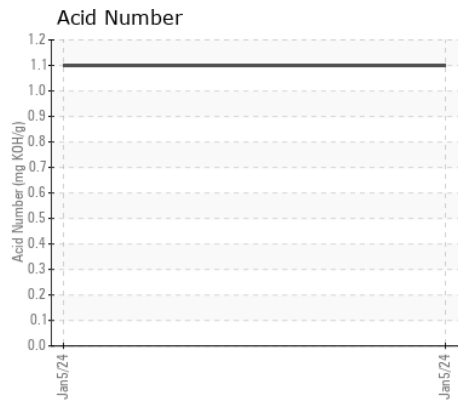
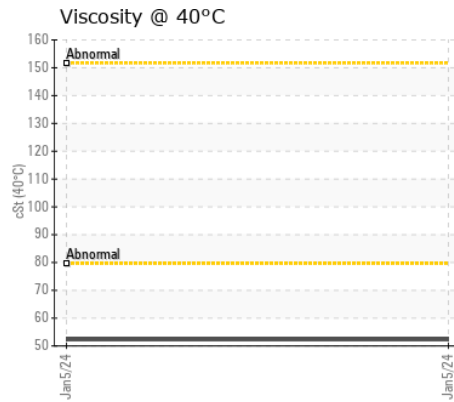
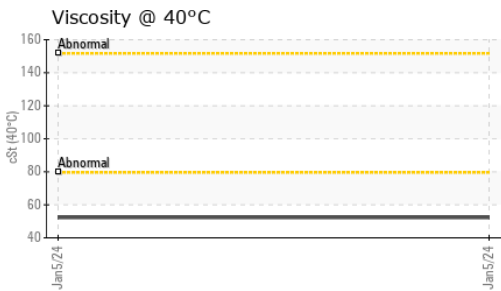
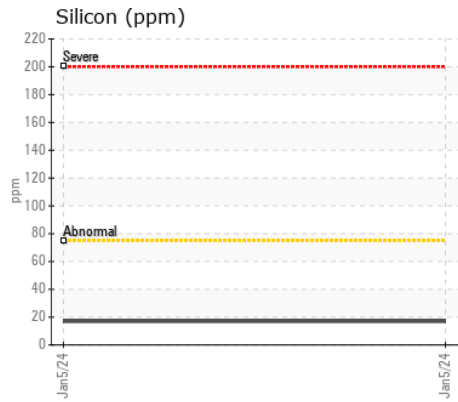
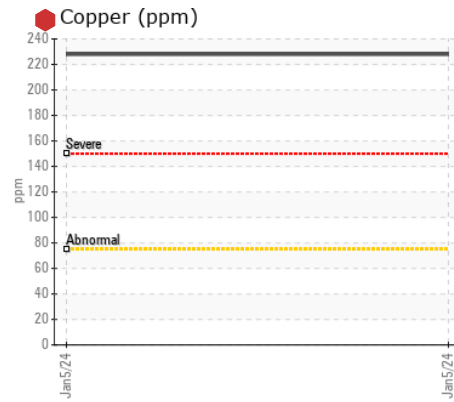
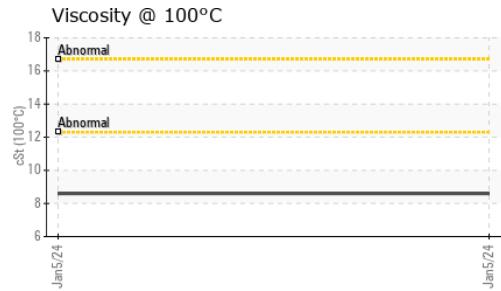
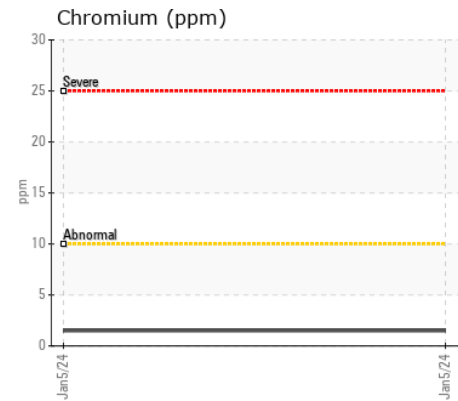
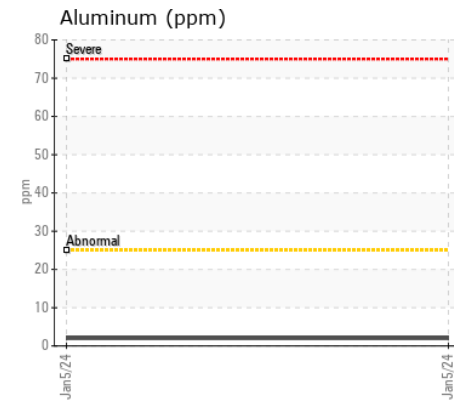
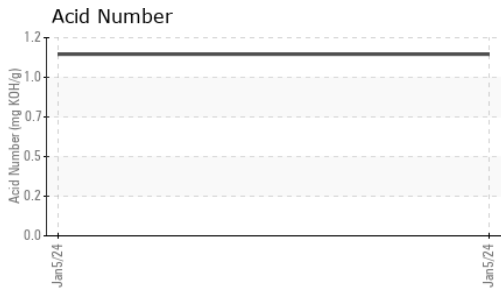
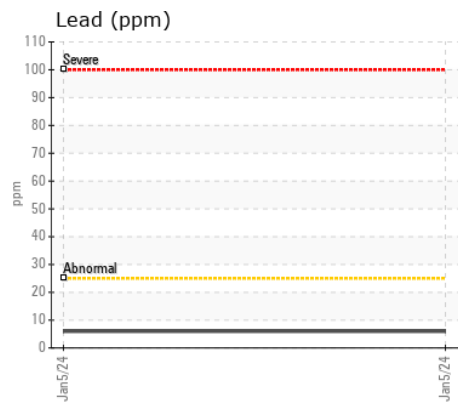
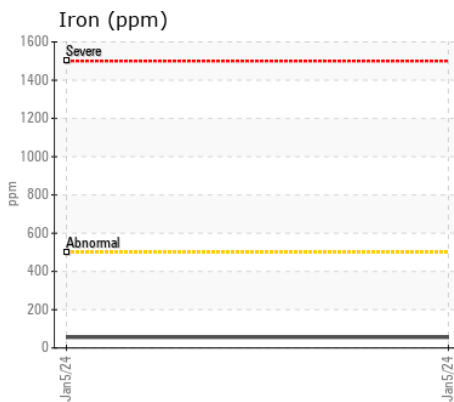
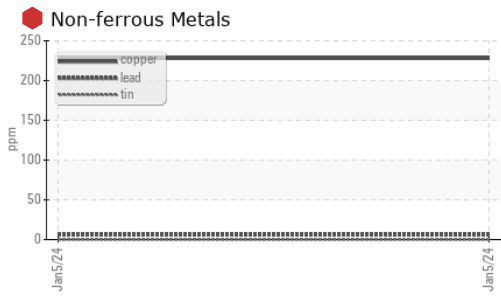
## CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

The AN level is acceptable for this fluid. 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		TR02609050	---	---
Sample Date		Client Info		05 Jan 2024	---	---
Machine Age	kms	Client Info		9762	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				<b>SEVERE</b>	---	---
PQ		ASTM D8184*		<b>10</b>	---	---
Iron	ppm	ASTM D5185(m)	>500	<b>56</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>2</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>3</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m)	>25	<b>6</b>	---	---
Copper	ppm	ASTM D5185(m)	>75	<b>228</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>LIGHT</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185(m)	>75	<b>17</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>73</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>1</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>17</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>3670</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>1124</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1284</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>4023</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>1.10</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)		<b>52.3</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>8.6</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		<b>140</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : TR02609050 **Received** : 16 Jan 2024  
**Lab Number** : 02609050 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 5710136 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**GARDEN PLANE COLONY**  
 BOX # 399  
 FRONTIER, SK  
 CA S0N 0W0  
 Contact: David Hofer

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)

T: (306)296-4472  
 F: (306)296-4476