



# OIL ANALYSIS REPORT

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

Machine Id  
**GROVE 3784 (S/N 320463)**  
 Component  
**Winch**  
 Fluid  
**GEAR OIL SAE 90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0034491</b>	---	---
Sample Date		Client Info		<b>08 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>51</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>80	<b>13</b>	---	---
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

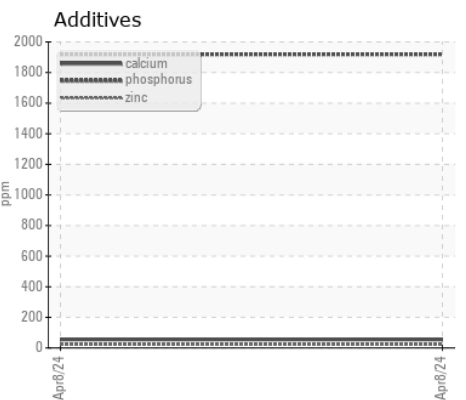
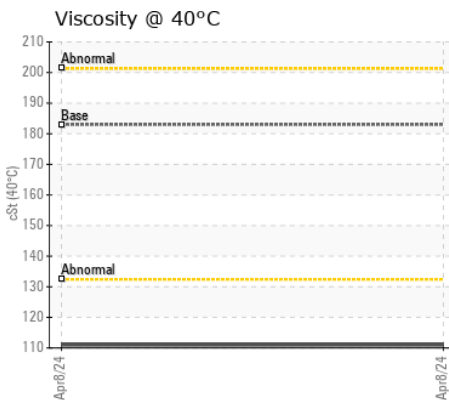
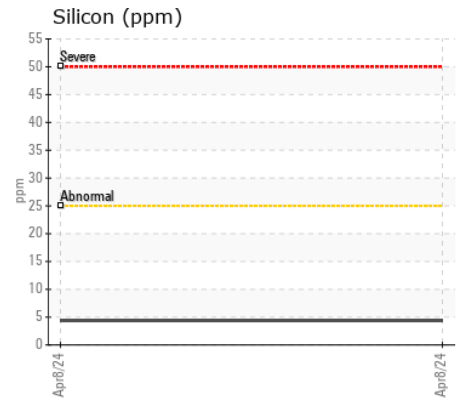
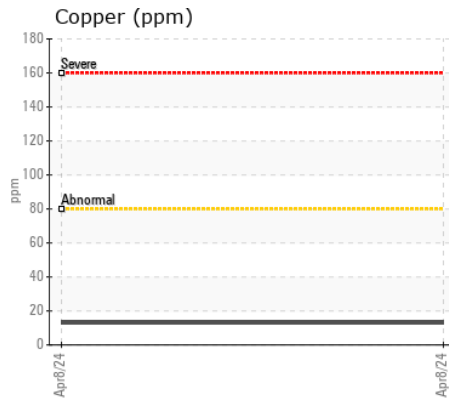
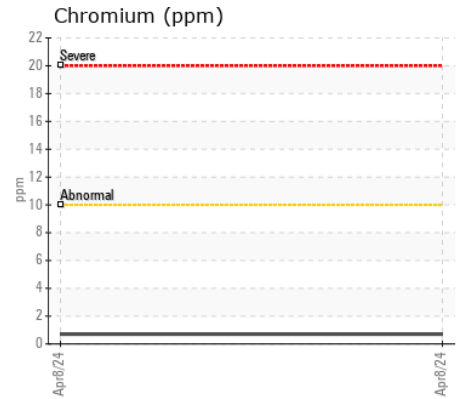
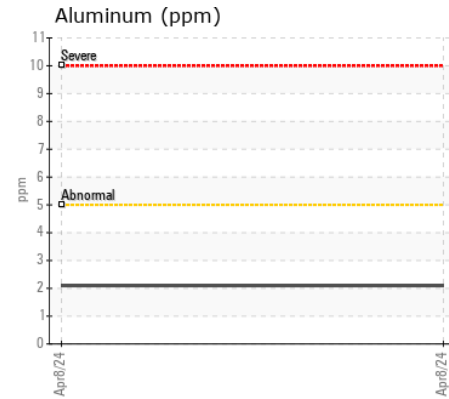
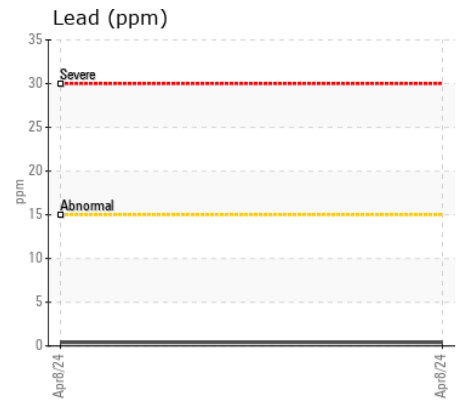
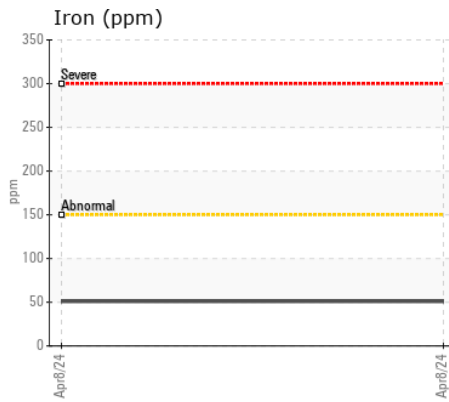
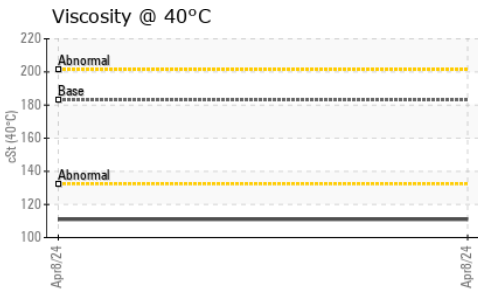
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>LIGHT</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>	---	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>5</b>	---	---
Boron	ppm	ASTM D5185m	400	<b>240</b>	---	---
Barium	ppm	ASTM D5185m	200	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>5</b>	---	---
Calcium	ppm	ASTM D5185m	150	<b>55</b>	---	---
Phosphorus	ppm	ASTM D5185m	1650	<b>1919</b>	---	---
Zinc	ppm	ASTM D5185m	125	<b>22</b>	---	---
Sulfur	ppm	ASTM D5185m	22500	<b>27393</b>	---	---
Visc @ 40°C	cSt	ASTM D445	183	<b>111</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034491  
**Lab Number** : 06158038  
**Unique Number** : 10993461  
**Test Package** : MOB 1

**Received** : 23 Apr 2024  
**Tested** : 24 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Wes Davis

**ABERDEEN PROVING GROUND**  
 6721 RARITON AVENUE  
 ABERDEEN, MD  
 US 21005

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F:

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)