



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
GROVE 7164 (S/N 227867)
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0022800	---	---
Sample Date		Client Info		22 Aug 2022	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	4	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m		0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	<1	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	<1	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

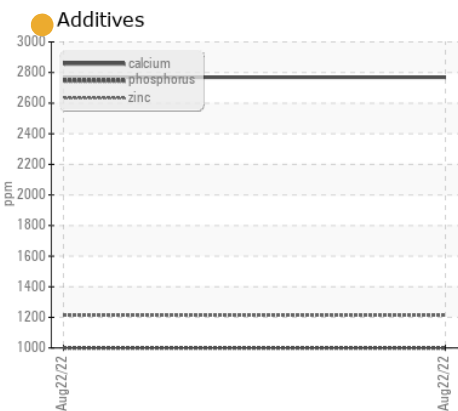
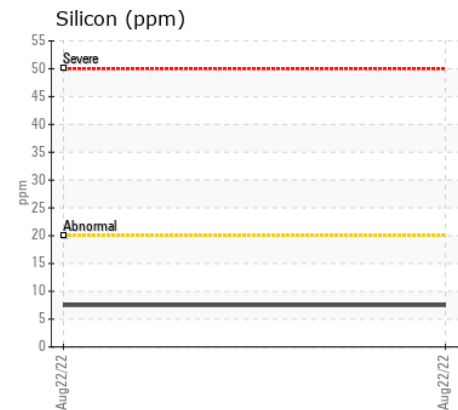
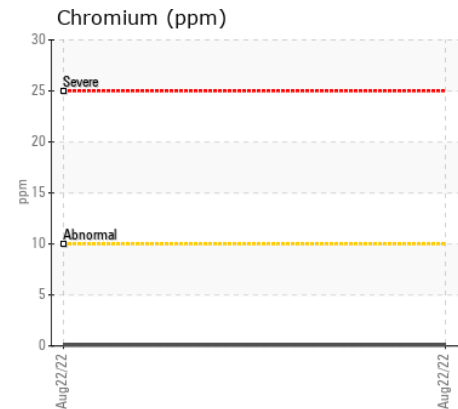
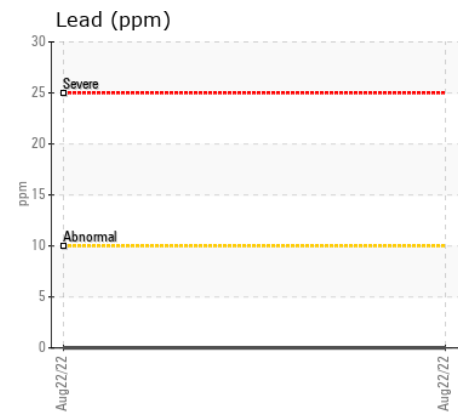
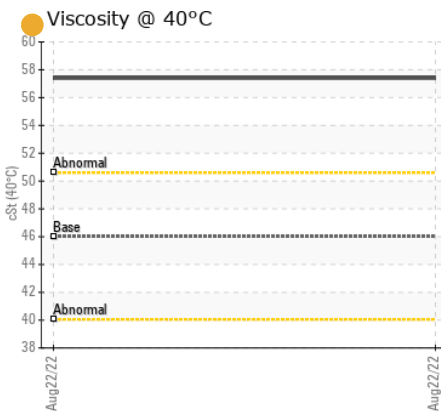
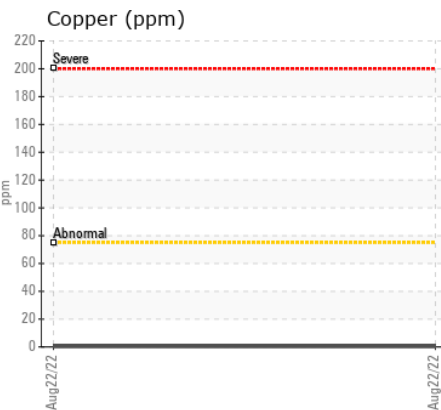
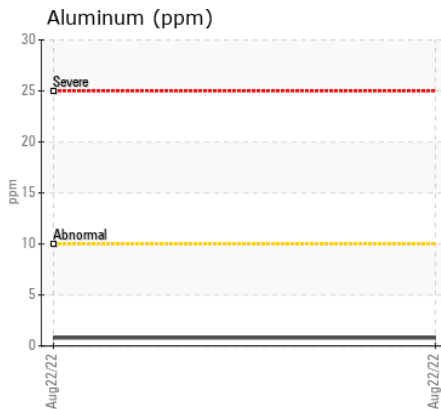
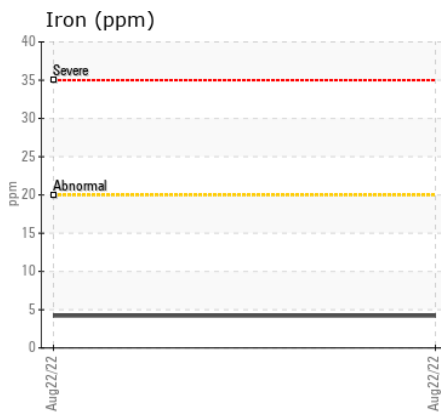
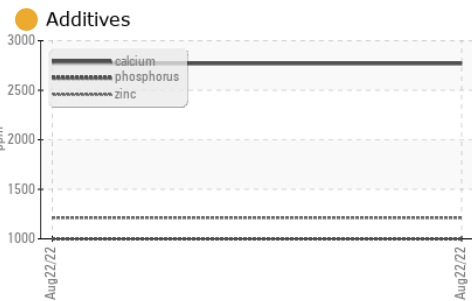
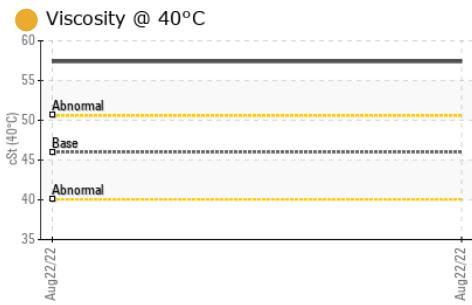
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	8	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	5	47	---	---
Barium	ppm	ASTM D5185m	5	1	---	---
Molybdenum	ppm	ASTM D5185m	5	5	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	25	33	---	---
Calcium	ppm	ASTM D5185m	200	● 2769	---	---
Phosphorus	ppm	ASTM D5185m	300	● 1000	---	---
Zinc	ppm	ASTM D5185m	370	● 1212	---	---
Sulfur	ppm	ASTM D5185m	2500	● 5693	---	---
Visc @ 40°C	cSt	ASTM D445	46	● 57.4	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : DC0022800

Lab Number : 05634780

Unique Number : 10124310

Test Package : MOB 1

Received : 06 Sep 2022

Tested : 09 Sep 2022

Diagnosed : 09 Sep 2022 - Jonathan Hester

ABERDEEN PROVING GROUND

6721 RARITON AVENUE

ABERDEEN, MD

US 21005

Contact: TONY DAVIS

tDavis@vacranetworks.com

T: (410)688-1725

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)