



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

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

Machine Id  
**CATERPILLAR 966H 966H-L05 A6D02689**  
 Component  
**Front Differential**  
 Fluid  
**CHEVRON DELO TORQFORCE SAE 30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06196011</b>	TR06119696	---
Sample Date		Client Info		<b>20 May 2024</b>	21 Feb 2024	---
Machine Age	hrs	Client Info		<b>17655</b>	17442	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>110</b>	101	---
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>30	<b>1</b>	2	---
Lead	ppm	ASTM D5185m	>13	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>103	<b>3</b>	4	---
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

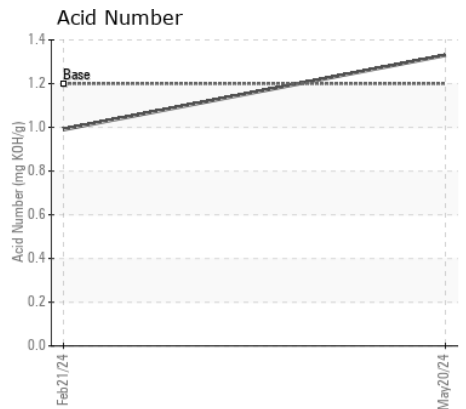
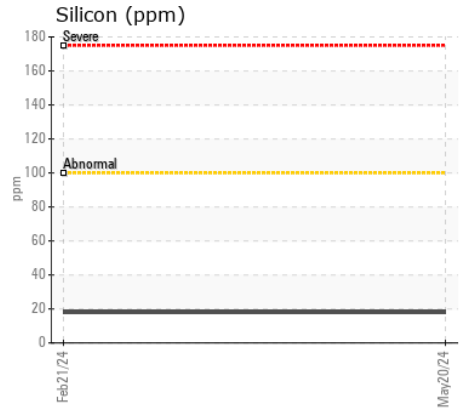
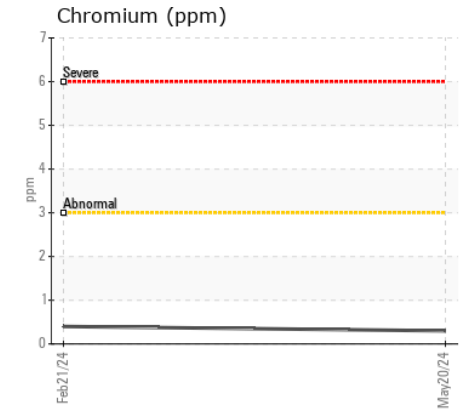
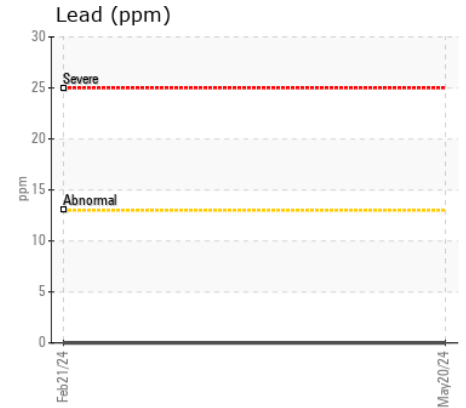
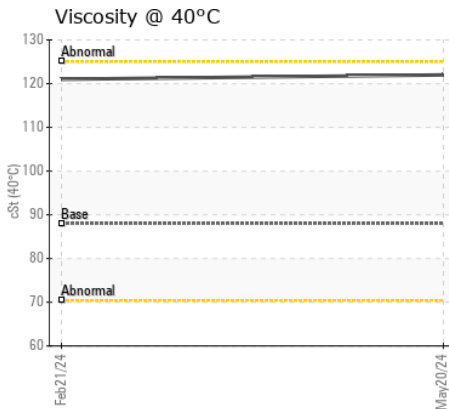
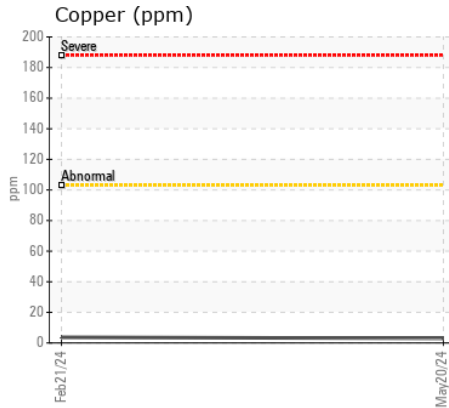
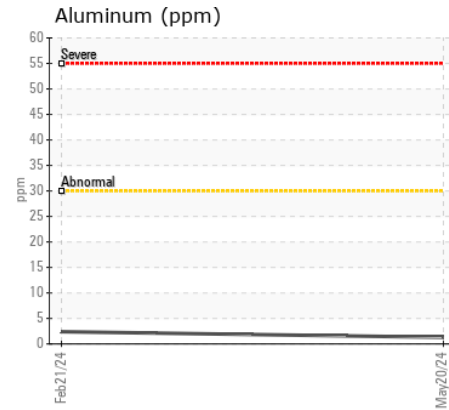
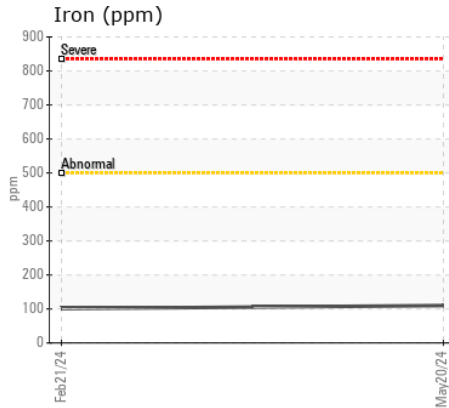
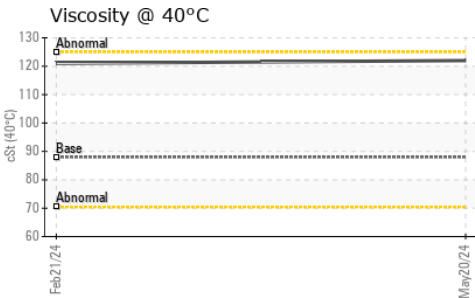
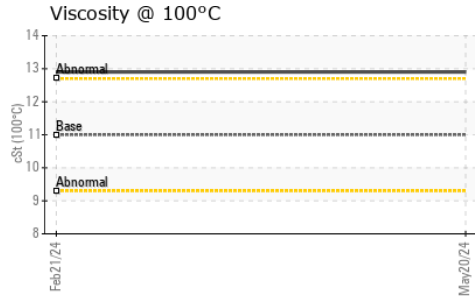
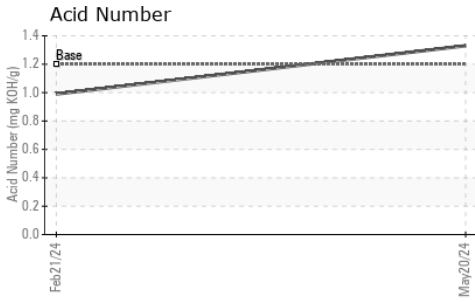
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	<b>18</b>	18	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	---
Water		WC Method	>.2	<b>NEG</b>	NEG	---
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	>.2	<b>NEG</b>	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		<b>&lt;1</b>	0	---
Boron	ppm	ASTM D5185m	4	<b>4</b>	4	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>21</b>	20	---
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	---
Magnesium	ppm	ASTM D5185m	13	<b>15</b>	15	---
Calcium	ppm	ASTM D5185m	4000	<b>3310</b>	3253	---
Phosphorus	ppm	ASTM D5185m	990	<b>929</b>	920	---
Zinc	ppm	ASTM D5185m	1310	<b>1116</b>	1090	---
Sulfur	ppm	ASTM D5185m	3010	<b>6174</b>	5717	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	<b>1.33</b>	0.99	---
Visc @ 40°C	cSt	ASTM D445	88	<b>122</b>	121	---
Visc @ 100°C	cSt	ASTM D445	11	<b>12.9</b>	12.9	---
Viscosity Index (VI)	Scale	ASTM D2270	110	<b>98</b>	99	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06196011 **Received** : 30 May 2024  
**Lab Number** : 06196011 **Tested** : 02 Jun 2024  
**Unique Number** : 11058134 **Diagnosed** : 02 Jun 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**BARR-TECH COMPOSTING**  
 9117 KALLENBERGER RD N  
 SPRAGUE, WA  
 US 99032  
 Contact: RON GROGAN

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: (509)590-0437

F: