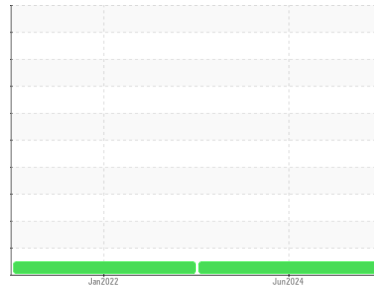


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**EMB 190 1\_29**

Component  
**Hydraulic System**

Fluid  
**TULCO LUBSOIL LUBVIS 746 (500 GAL)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO50000860</b>	TO90002012	---
Sample Date	Client Info			<b>04 Jun 2024</b>	31 Jan 2022	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	---
Lead	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Copper	ppm	ASTM D5185m	>20	<b>5</b>	4	---
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Antimony	ppm	ASTM D5185m		<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

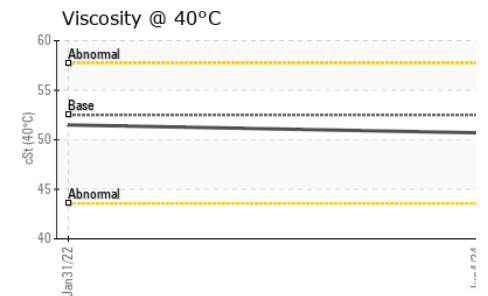
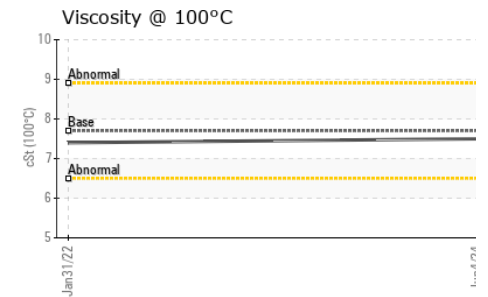
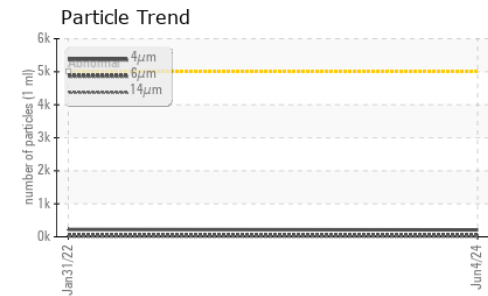
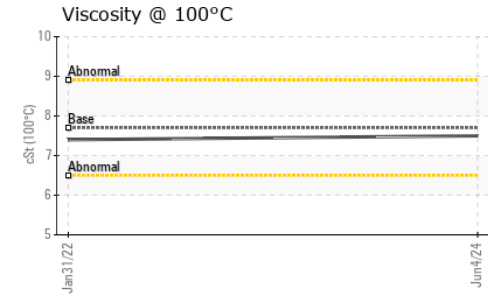
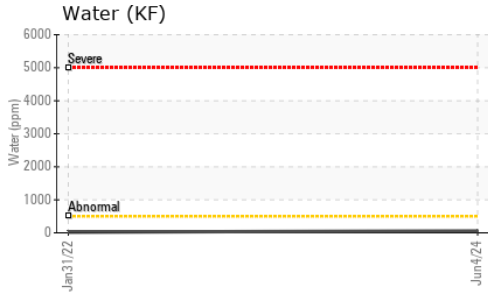
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>3</b>	<1	---
Calcium	ppm	ASTM D5185m		<b>13</b>	2	---
Phosphorus	ppm	ASTM D5185m	240	<b>217</b>	238	---
Zinc	ppm	ASTM D5185m		<b>62</b>	23	---
Sulfur	ppm	ASTM D5185m	7560	<b>6917</b>	6103	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>3</b>	3	---
Sodium	ppm	ASTM D5185m		<b>2</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Water	%	ASTM D6304	>0.05	<b>0.006</b>	0.002	---
ppm Water	ppm	ASTM D6304	>500	<b>61</b>	19.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>211</b>	224	---
Particles >6µm		ASTM D7647	>1300	<b>55</b>	70	---
Particles >14µm		ASTM D7647	>160	<b>6</b>	6	---
Particles >21µm		ASTM D7647	>40	<b>1</b>	2	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>15/13/10</b>	15/13/10	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.47</b>	0.43	---

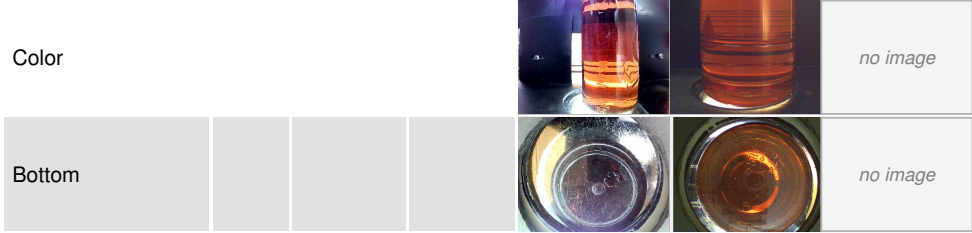
# OIL ANALYSIS REPORT



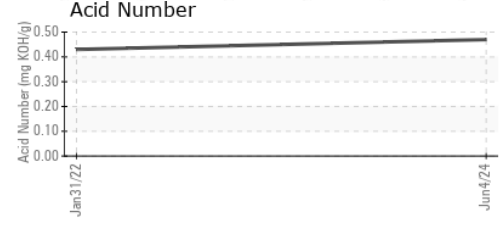
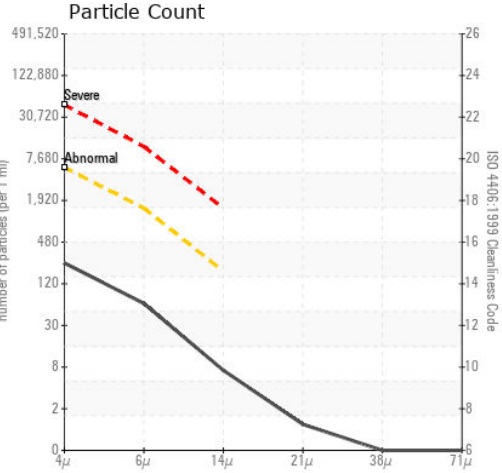
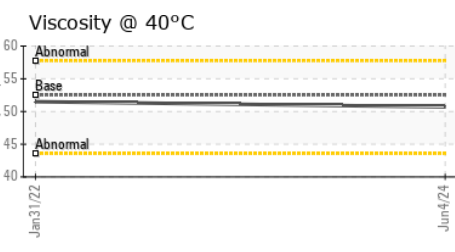
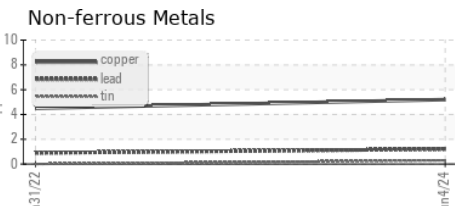
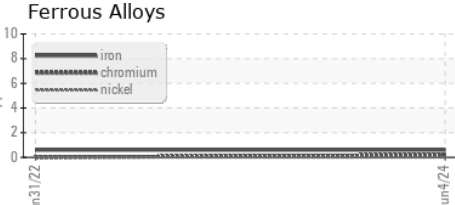
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
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	>0.05	<b>NEG</b>	NEG	---
Free Water	scalar	*Visual		<b>NEG</b>	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	52.5	<b>50.7</b>	51.5	---
Visc @ 100°C	cSt	ASTM D445	7.7	<b>7.5</b>	7.4	---
Viscosity Index (VI)	Scale	ASTM D2270	111	<b>110</b>	104	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000860 **Received** : 12 Jun 2024  
**Lab Number** : **06207780** **Tested** : 13 Jun 2024  
**Unique Number** : 11075241 **Diagnosed** : 13 Jun 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

**CAE SIMUFLITE**  
 2929 WEST AIRFIELD DR, DFW AIRPORT  
 DALLAS, TX  
 US 75261  
 Contact: SCOTT BOYD  
 scott.boyd@cae.com  
 T: (817)812-6165  
 F: x:

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)