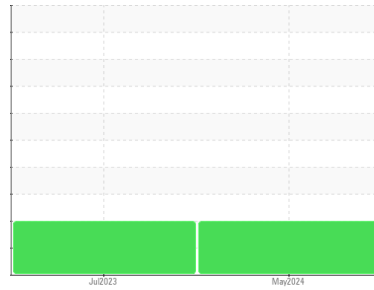




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**TEST STAND**

Component  
**Hydraulic System**

Fluid  
**TULCO LUBSOIL FG HYDRAULIC AW 46 (200 GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. The filtration at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of particulates present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

#### 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>PH0001111</b>	PH0001106	---
Sample Date	Client Info		<b>22 May 2024</b>	31 Jul 2023	---
Machine Age	days	Client Info	<b>200</b>	6	---
Oil Age	days	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Filtered</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	---

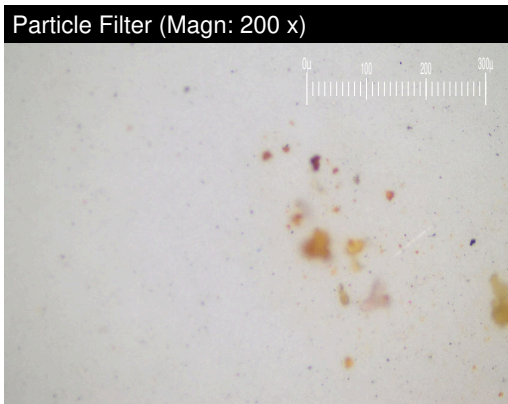
WEAR METALS	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>20	<b>3</b>	1	---
Tin	ppm	ASTM D5185m	>20	<b>0</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>	0	---
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>82</b>	90	---
Calcium	ppm	ASTM D5185m		<b>103</b>	88	---
Phosphorus	ppm	ASTM D5185m	170	<b>338</b>	326	---
Zinc	ppm	ASTM D5185m		<b>392</b>	402	---
Sulfur	ppm	ASTM D5185m		<b>2174</b>	2230	---

CONTAMINANTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>4</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---

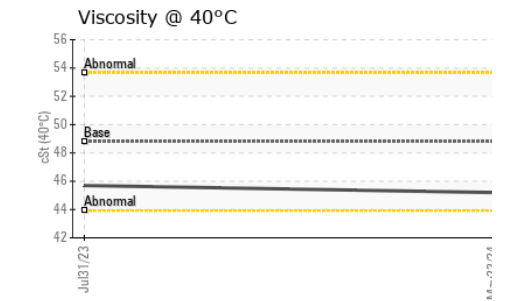
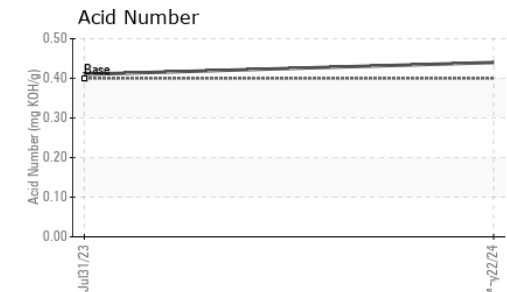
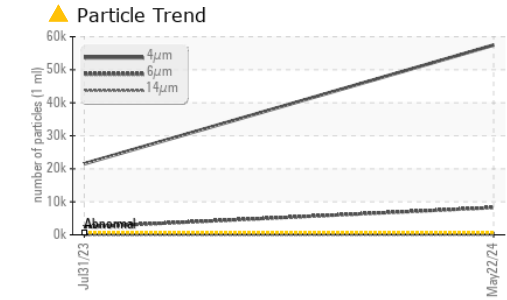
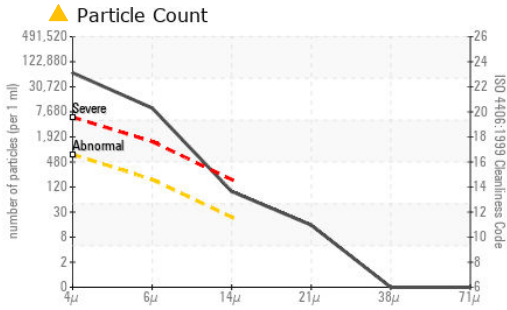
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	<b>▲ 57471</b>	▲ 21529	---
Particles >6µm	ASTM D7647	>160	<b>▲ 8250</b>	▲ 2383	---
Particles >14µm	ASTM D7647	>20	<b>▲ 83</b>	▲ 28	---
Particles >21µm	ASTM D7647	>4	<b>▲ 13</b>	▲ 6	---
Particles >38µm	ASTM D7647	>3	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>16/14/11	<b>▲ 23/20/14</b>	▲ 22/18/12	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.44</b>	0.41	---





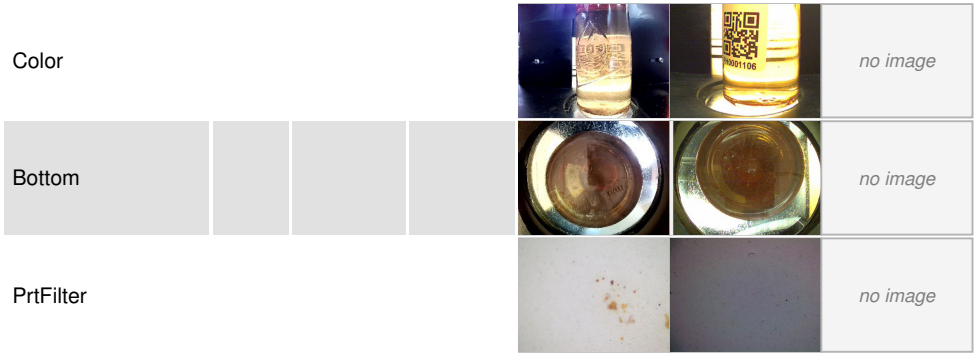
# OIL ANALYSIS REPORT



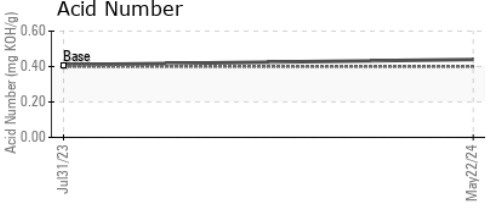
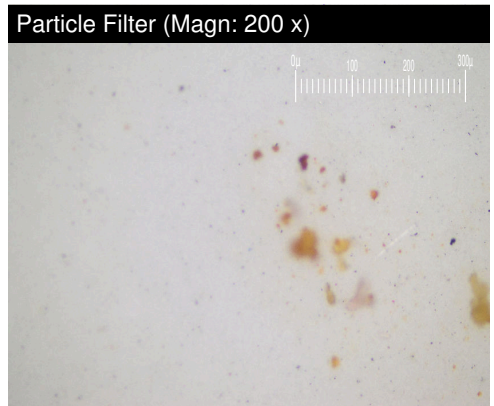
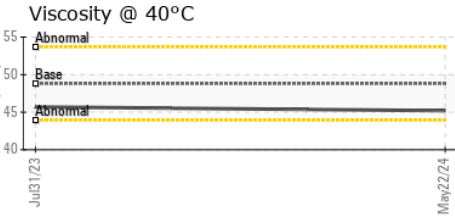
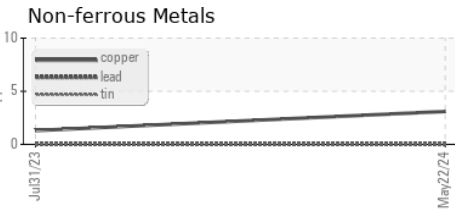
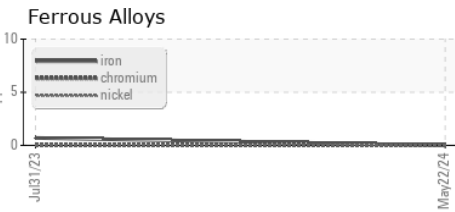
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	48.8	45.2	45.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



Certificate L2367  
 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)

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH0001111 **Received** : 03 Jun 2024  
**Lab Number** : 06197611 **Tested** : 05 Jun 2024  
**Unique Number** : 11059734 **Diagnosed** : 05 Jun 2024 - Doug Bogart  
**Test Package** : PLANT ( Additional Tests: PrtFilter )

**HYDRADYNE**  
 4221 SW 29TH ST  
 OKLAHOMA CITY, 47  
 US 73119  
 Contact: DON SEAGRAVES  
 dseagraves@hydradynellc.com  
 T: (405)670-3851  
 F: