

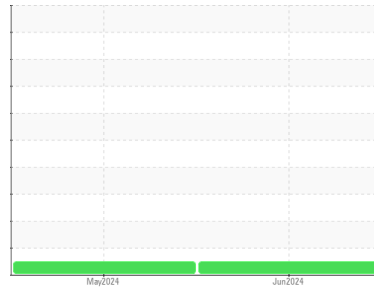


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR 3512 ULB CAT (S/N 7NJ00728)**  
 Component  
**Compressor**  
 Fluid  
**LO-ASH ENGINE OIL SAE 40 (50 GAL)**

### Sample Rating Trend



**NORMAL**



### 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 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>KL0013815</b>	KL0013823	---
Sample Date	Client Info			<b>03 Jun 2024</b>	06 May 2024	---
Machine Age	hrs	Client Info		<b>88692</b>	88024	---
Oil Age	hrs	Client Info		<b>668</b>	477	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>3</b>	3	---
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m		<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Lead	ppm	ASTM D5185m	>65	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>65	<b>0</b>	<1	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	37	<b>8</b>	0	---
Barium	ppm	ASTM D5185m	12	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	200	<b>2</b>	1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	5	<b>7</b>	0	---
Calcium	ppm	ASTM D5185m	1600	<b>1395</b>	1425	---
Phosphorus	ppm	ASTM D5185m	300	<b>291</b>	302	---
Zinc	ppm	ASTM D5185m	400	<b>349</b>	345	---
Sulfur	ppm	ASTM D5185m	2600	<b>3324</b>	3118	---

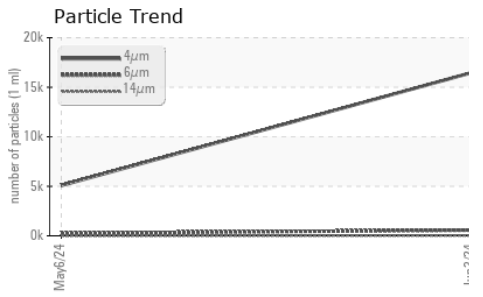
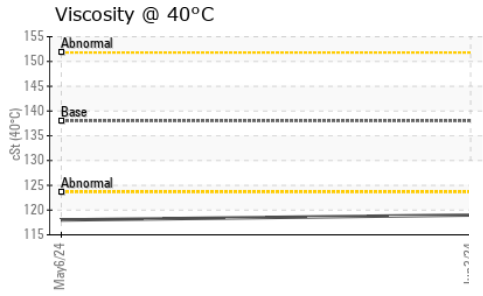
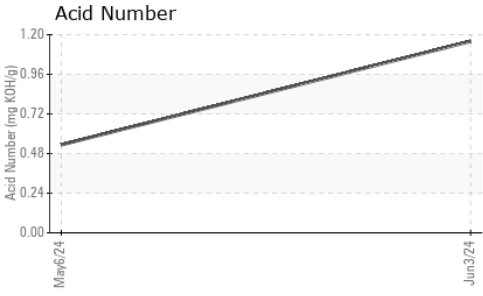
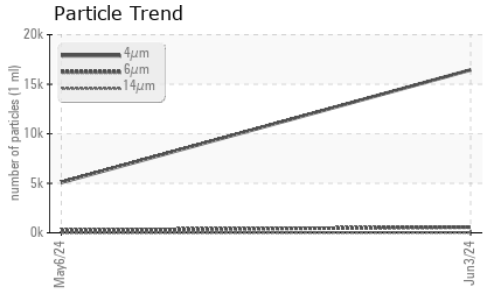
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	<b>2</b>	2	---
Sodium	ppm	ASTM D5185m		<b>1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>16445</b>	5077	---
Particles >6µm		ASTM D7647	>2500	<b>572</b>	266	---
Particles >14µm		ASTM D7647	>320	<b>29</b>	4	---
Particles >21µm		ASTM D7647	>80	<b>3</b>	1	---
Particles >38µm		ASTM D7647	>20	<b>0</b>	1	---
Particles >71µm		ASTM D7647	>4	<b>0</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>18/15	<b>16/12</b>	15/9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.16</b>	0.533	---



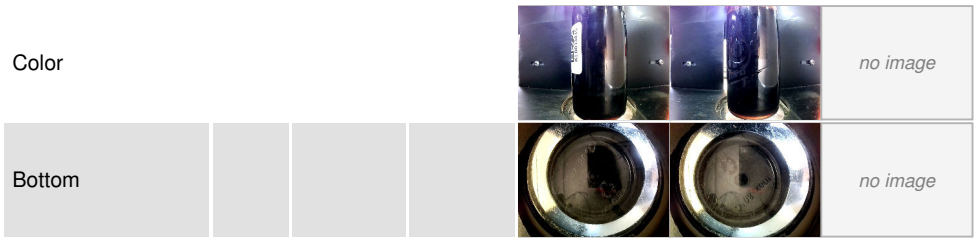
# OIL ANALYSIS REPORT



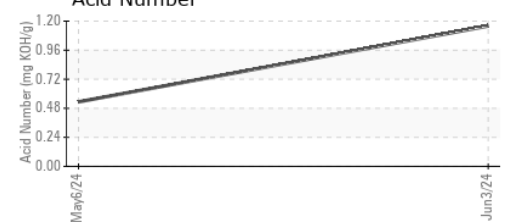
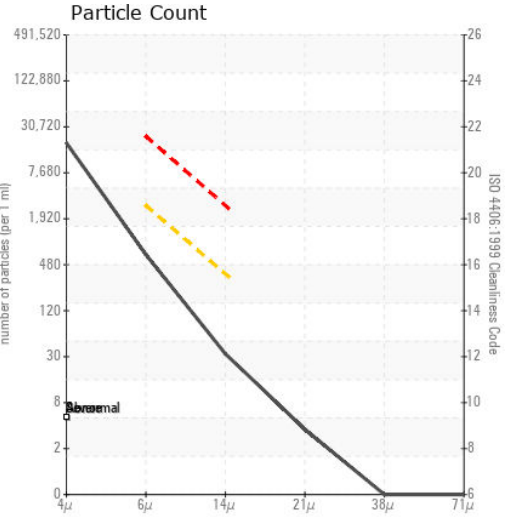
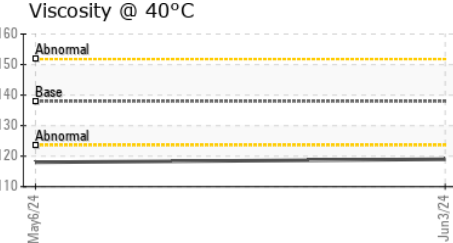
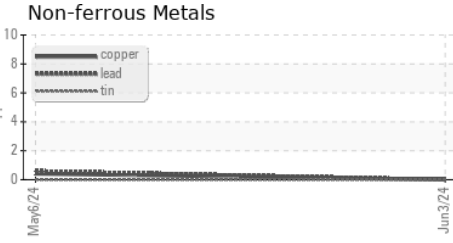
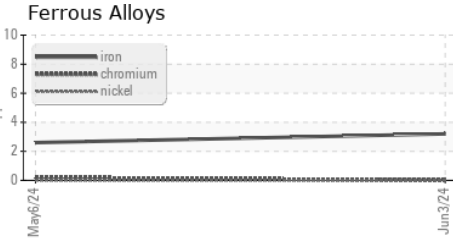
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	138	119	118

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013815      **Received** : 06 Jun 2024  
**Lab Number** : 06202118      **Tested** : 07 Jun 2024  
**Unique Number** : 11069579      **Diagnosed** : 07 Jun 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

**STRACHAN EXPLORATION**  
 992 S 4TH AVENUE  
 BRIGHTON, CT  
 US 80601  
 Contact: DENNIS JACKSON

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)

T:  
F: