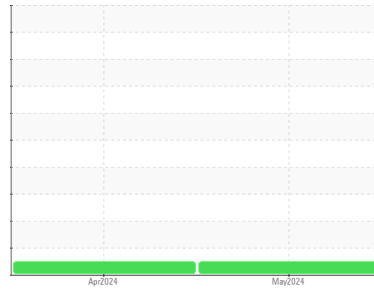


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR Cat Motor**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA SENTRON LA 2000 (--- GAL)**

### Sample Rating Trend



NORMAL

✓

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. 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>PCA0120907</b>	PCA0120916	---
Sample Date	Client Info		<b>22 May 2024</b>	01 Apr 2024	---
Machine Age	hrs	Client Info	<b>57459</b>	56340	---
Oil Age	hrs	Client Info	<b>1119</b>	2139	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
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>	4	---
Chromium	ppm	ASTM D5185m >4	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	4	---
Lead	ppm	ASTM D5185m >30	<b>0</b>	2	---
Copper	ppm	ASTM D5185m >35	<b>1</b>	2	---
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>0</b>	8	---
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 1	<b>83</b>	273	---
Manganese	ppm	ASTM D5185m 5	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 1	<b>5</b>	6	---
Calcium	ppm	ASTM D5185m 1237	<b>1510</b>	1562	---
Phosphorus	ppm	ASTM D5185m 270	<b>309</b>	362	---
Zinc	ppm	ASTM D5185m 330	<b>390</b>	397	---
Sulfur	ppm	ASTM D5185m 2670	<b>3572</b>	3282	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m	<b>3</b>	5	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	---
Fuel	%	ASTM D3524 >4.0	<b>0.2</b>	0.0	---

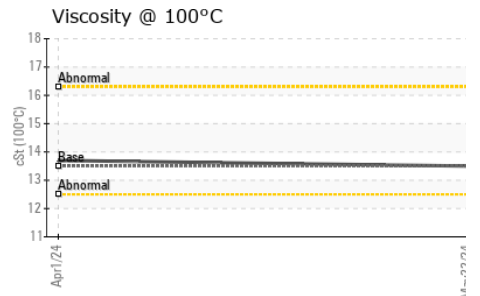
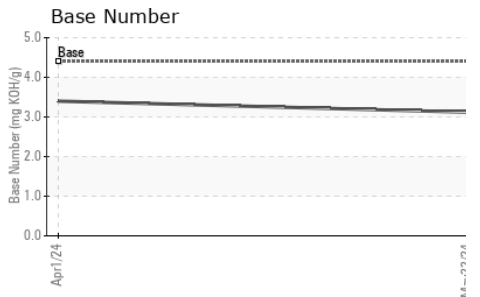
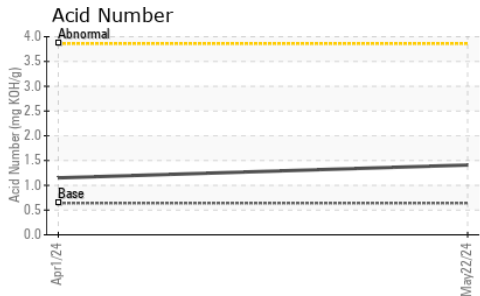
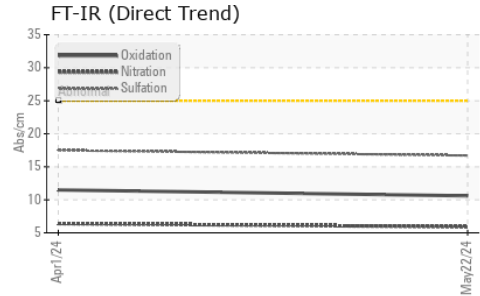
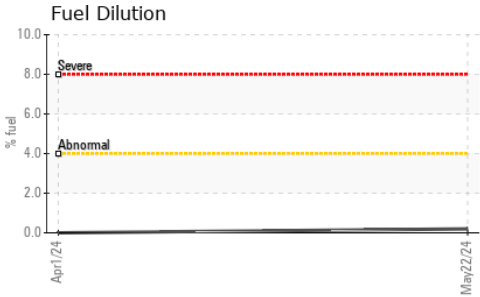
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.9</b>	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>16.7</b>	17.5	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>10.6</b>	11.5	---
Acid Number (AN)	mg KOH/g	ASTM D8045 0.64	<b>1.41</b>	1.15	---
Base Number (BN)	mg KOH/g	ASTM D2896 4.4	<b>3.12</b>	3.40	---

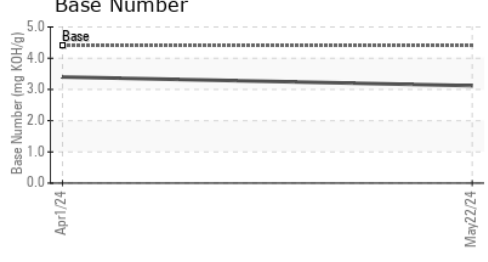
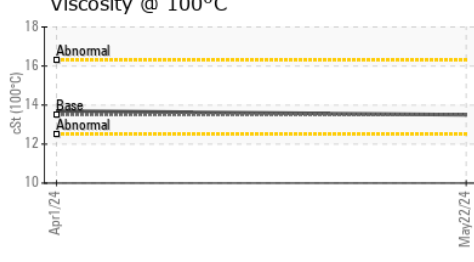
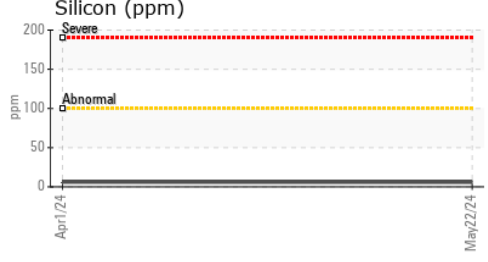
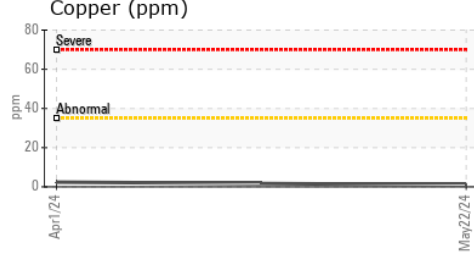
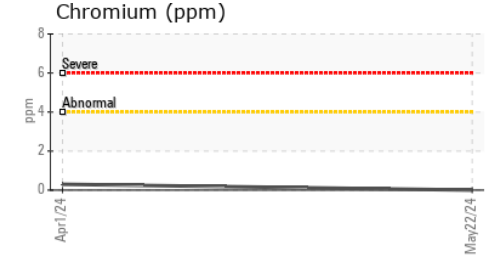
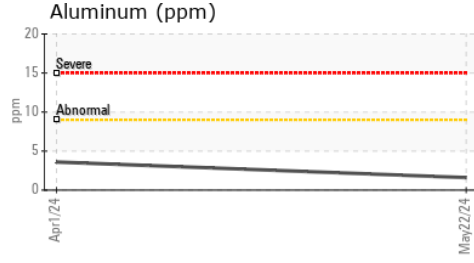
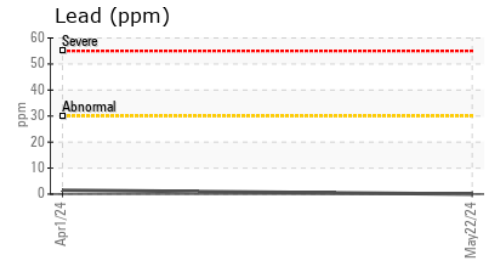
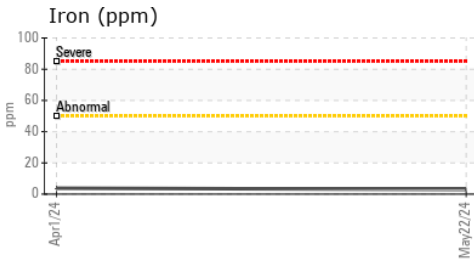
# OIL ANALYSIS REPORT



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 @ 100°C	cSt	ASTM D445	13.5	13.7	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0120907 **Received** : 30 May 2024  
**Lab Number** : 06196020 **Tested** : 03 Jun 2024  
**Unique Number** : 11058143 **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**FORK RIDGE ENERGY LLC**  
P.O. BOX 5356  
ONEIDA, TN  
US 37841  
Contact: James Lueking  
forkridgeenergy@gmail.com  
T: (423)539-8448  
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)