



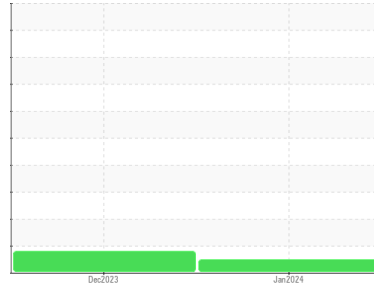
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR 745D 13405 (S/N 3T606094)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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 condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0887974</b>	WC0879406	---
Sample Date	Client Info		<b>08 Jan 2024</b>	04 Dec 2023	---
Machine Age	hrs	Client Info	<b>1176</b>	713	---
Oil Age	hrs	Client Info	<b>463</b>	713	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	MARGINAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	▲ 2.4	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>18</b>	46	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m >2	<b>2</b>	<1	---
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	2	---
Lead	ppm	ASTM D5185m >40	<b>2</b>	3	---
Copper	ppm	ASTM D5185m >330	<b>132</b>	860	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	<b>0</b>	19	---
Barium	ppm	ASTM D5185m 1	<b>0</b>	4	---
Molybdenum	ppm	ASTM D5185m 60	<b>56</b>	48	---
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m 1010	<b>976</b>	649	---
Calcium	ppm	ASTM D5185m 1070	<b>1165</b>	1470	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1051</b>	946	---
Zinc	ppm	ASTM D5185m 1270	<b>1375</b>	1162	---
Sulfur	ppm	ASTM D5185m 2060	<b>2839</b>	2742	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	13	---
Sodium	ppm	ASTM D5185m	<b>0</b>	2	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	---

## INFRA-RED

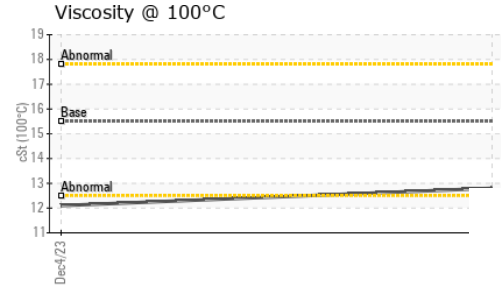
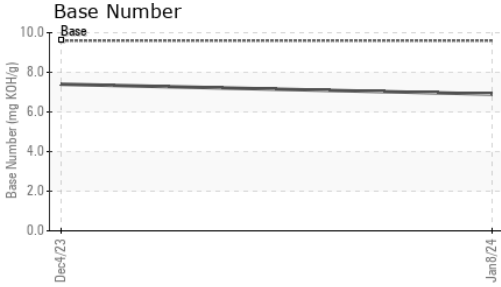
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.2</b>	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.9</b>	23.2	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.0</b>	22.6	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>6.9</b>	7.4	---



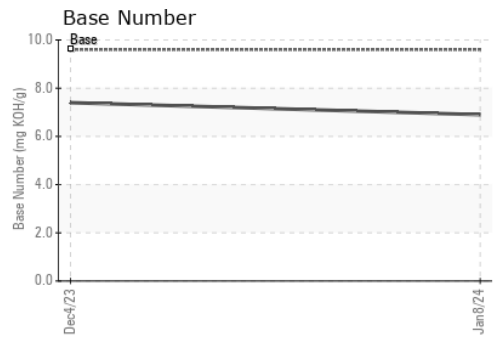
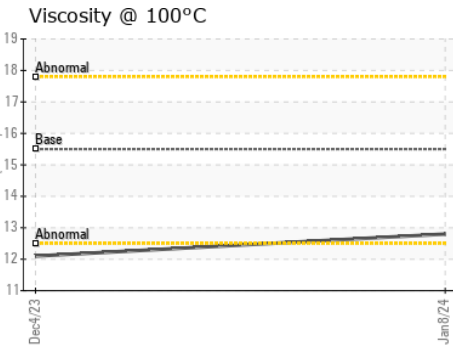
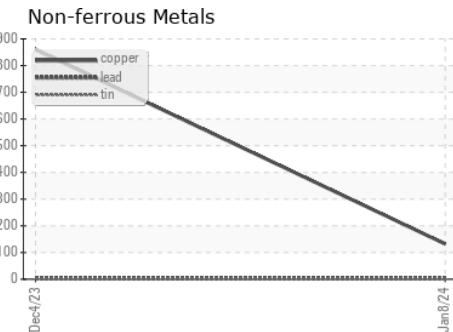
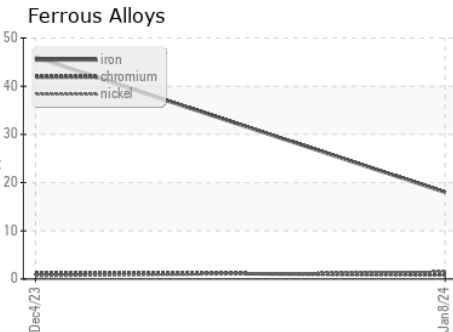
# OIL ANALYSIS REPORT



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	>0.2	<b>NEG</b>	NEG	---
Free Water	scalar	*Visual		<b>NEG</b>	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.5	<b>12.8</b>	12.1	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0887974 **Recieved** : 12 Jan 2024  
**Lab Number** : **06059121** **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10830503 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRADER CONSTRUCTION CO.**  
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 US 28563  
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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)