

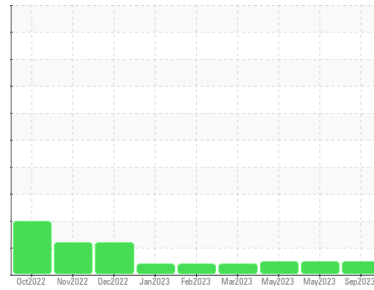


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR 374 10553 (S/N TNX10028)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>WC0831303</b>	WC0755205	WC0797728
Sample Date	Client Info		<b>19 Sep 2023</b>	30 May 2023	02 May 2023
Machine Age	hrs	Client Info	<b>5561</b>	4858	4361
Oil Age	hrs	Client Info	<b>703</b>	497	676
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>38</b>	19	32
Chromium	ppm	ASTM D5185m >6	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>4</b>	0	1
Lead	ppm	ASTM D5185m >10	<b>8</b>	8	9
Copper	ppm	ASTM D5185m >150	<b>10</b>	4	10
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	<b>0</b>	2	3
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>67</b>	61	63
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>939</b>	985	988
Calcium	ppm	ASTM D5185m 1070	<b>1096</b>	1176	1144
Phosphorus	ppm	ASTM D5185m 1150	<b>1028</b>	1017	957
Zinc	ppm	ASTM D5185m 1270	<b>1283</b>	1275	1243
Sulfur	ppm	ASTM D5185m 2060	<b>3572</b>	3530	3228

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>6</b>	4	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>1</b>	<1	2

## INFRA-RED

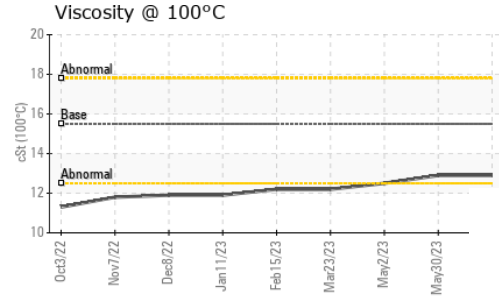
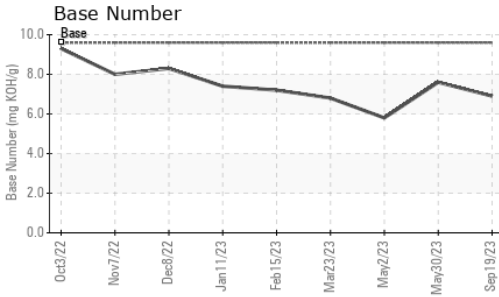
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.3</b>	9.8	9.5
Sulfation	Abs.1mm	*ASTM D7415 >30	<b>22.3</b>	22.5	20.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs.1mm	*ASTM D7414 >25	<b>18.3</b>	19.2	18.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>6.9</b>	7.6	5.8



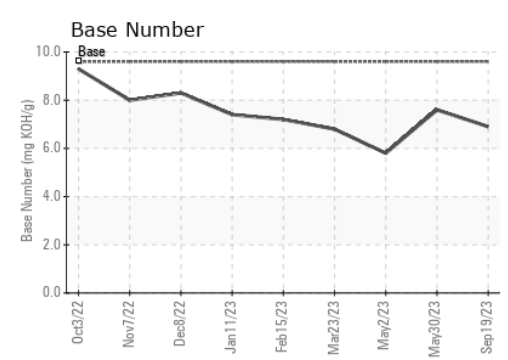
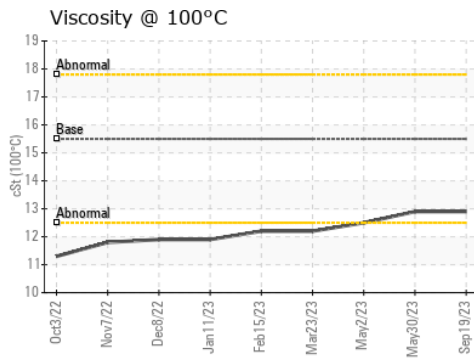
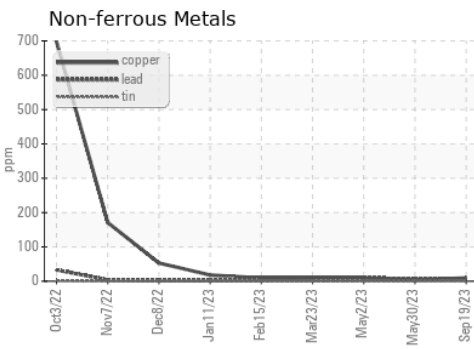
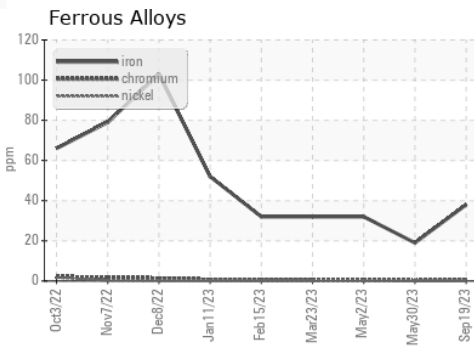
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.5	<b>12.9</b>	12.9	12.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0831303      **Received** : 29 Sep 2023  
**Lab Number** : **05965064**      **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10671615      **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRADER CONSTRUCTION CO.**  
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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)