

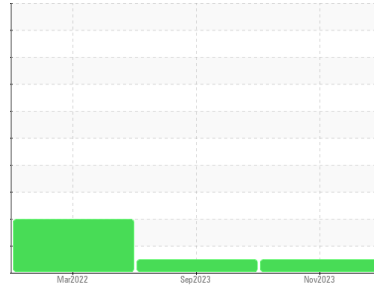


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR D6 8186 (S/N JJ601001)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- QTS)**

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>WC0863004</b>	WC0837007	WC0674201
Sample Date	Client Info		<b>16 Nov 2023</b>	08 Sep 2023	01 Mar 2022
Machine Age	hrs	Client Info	<b>4000</b>	3472	510
Oil Age	hrs	Client Info	<b>528</b>	1458	510
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	0.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>31</b>	53	41
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>2</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	<1	5
Lead	ppm	ASTM D5185m >40	<b>2</b>	7	3
Copper	ppm	ASTM D5185m >330	<b>31</b>	108	71
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	4
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>10</b>	13	34
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>56</b>	51	49
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m 1010	<b>902</b>	743	633
Calcium	ppm	ASTM D5185m 1070	<b>1246</b>	1946	1668
Phosphorus	ppm	ASTM D5185m 1150	<b>999</b>	1033	1016
Zinc	ppm	ASTM D5185m 1270	<b>1288</b>	1353	1281
Sulfur	ppm	ASTM D5185m 2060	<b>2672</b>	3327	2515

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	6	▲ 44
Sodium	ppm	ASTM D5185m	<b>12</b>	8	4
Potassium	ppm	ASTM D5185m >20	<b>3</b>	1	5

## INFRA-RED

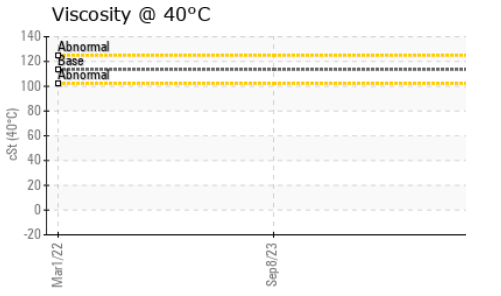
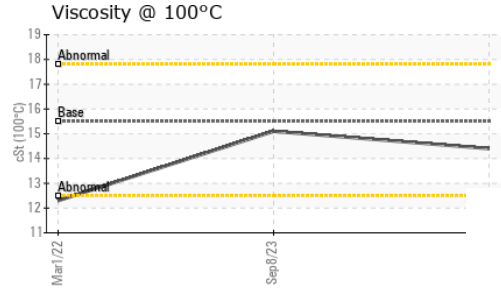
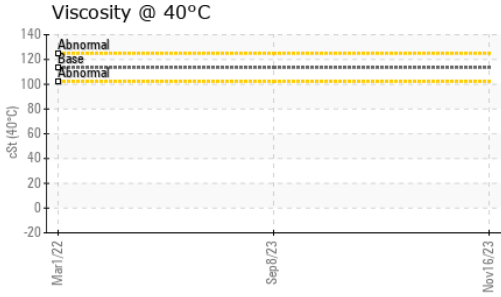
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.4</b>	1.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	11.5	8.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.4</b>	24.9	24.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.1</b>	21.6	22.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>7.7</b>	7.4	10.3



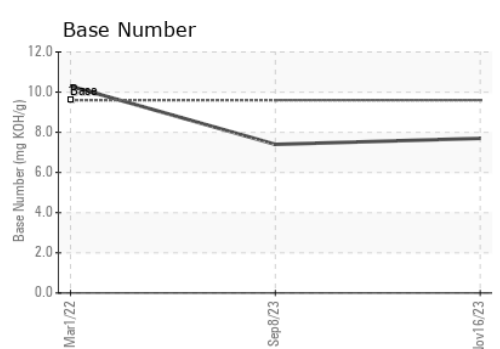
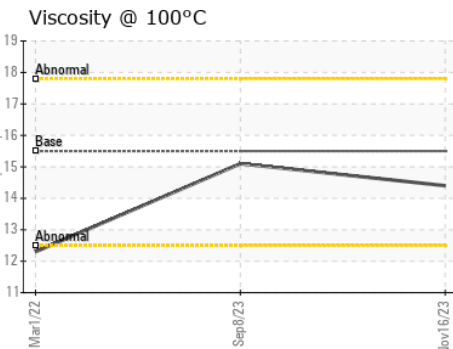
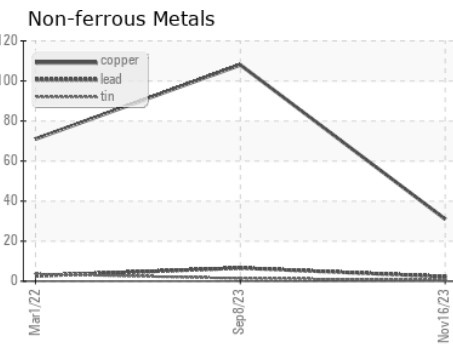
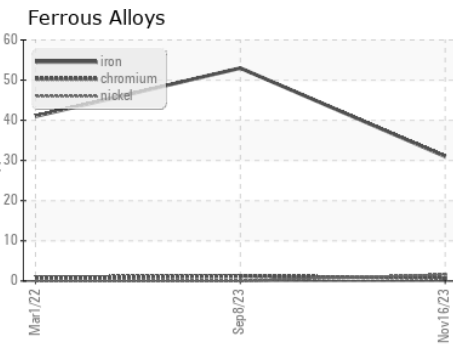
# OIL ANALYSIS REPORT



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>14.4</b>	15.1 ▲ 12.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0863004 **Received** : 20 Nov 2023  
**Lab Number** : **06012254** **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10751398 **Diagnostician** : Sean Felton  
**Test Package** : CONST ( Additional Tests: KV40, TBN )

**TRADER CONSTRUCTION CO.**  
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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)