

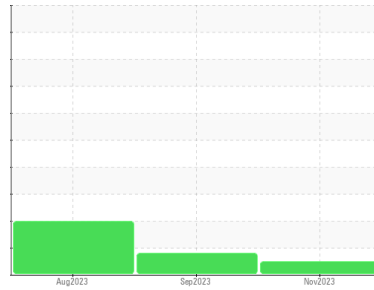


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR 745D 13397 (S/N 3T605921)**  
 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>WC0862900</b>	WC0831360	WC0837032
Sample Date	Client Info		<b>01 Nov 2023</b>	25 Sep 2023	29 Aug 2023
Machine Age	hrs	Client Info	<b>1575</b>	1000	621
Oil Age	hrs	Client Info	<b>575</b>	379	621
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	MARGINAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	▲ 3.3	▲ 4.3
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>28</b>	19	46
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>2</b>	2	13
Copper	ppm	ASTM D5185m >330	<b>60</b>	339	839
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	3
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
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	18
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>62</b>	60	46
Manganese	ppm	ASTM D5185m 1	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m 1010	<b>944</b>	823	▲ 646
Calcium	ppm	ASTM D5185m 1070	<b>1101</b>	1111	▲ 1582
Phosphorus	ppm	ASTM D5185m 1150	<b>952</b>	964	995
Zinc	ppm	ASTM D5185m 1270	<b>1238</b>	1185	1213
Sulfur	ppm	ASTM D5185m 2060	<b>2916</b>	3058	3072

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	15
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	4
Potassium	ppm	ASTM D5185m >20	<b>1</b>	1	2

## INFRA-RED

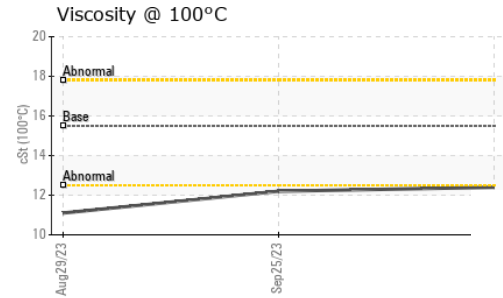
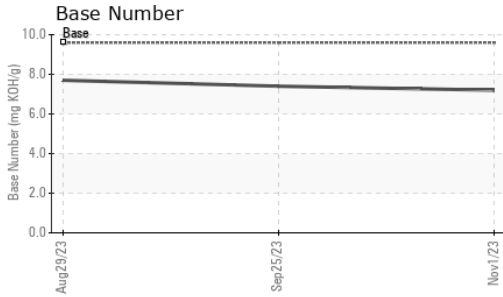
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.4</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.9</b>	8.3	9.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.6</b>	19.9	23.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.6</b>	16.3	21.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>7.2</b>	7.4	7.7



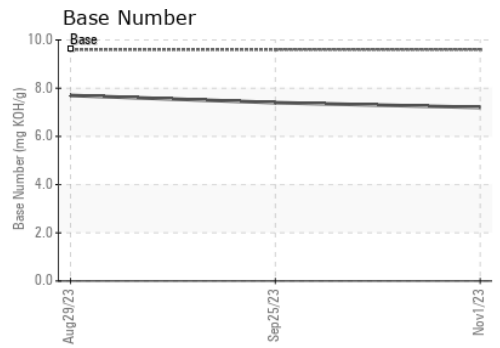
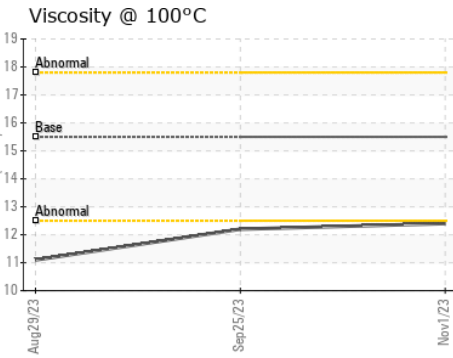
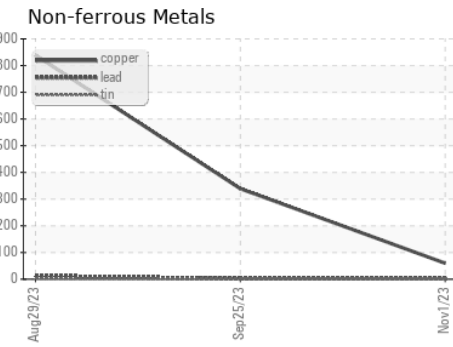
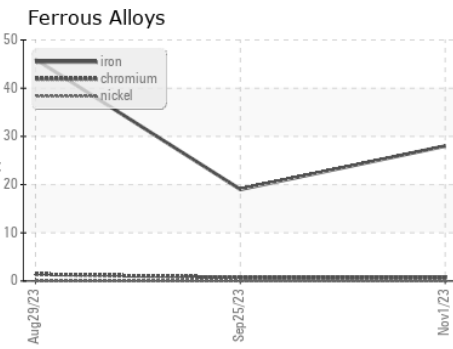
# OIL ANALYSIS REPORT



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	12.4	12.2 ▲ 11.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0862900      **Received** : 08 Nov 2023  
**Lab Number** : 06001252      **Diagnosed** : 08 Nov 2023  
**Unique Number** : 10729612      **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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)

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