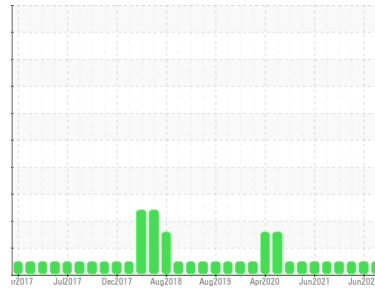




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CATERPILLAR D6T 8161 (S/N JML0276)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- QTS)**

## 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>WC0887941</b>	WC0797742	WC0755245
Sample Date	Client Info		<b>12 Mar 2024</b>	23 Jun 2023	23 Nov 2022
Machine Age	hrs	Client Info	<b>14106</b>	13291	12908
Oil Age	hrs	Client Info	<b>815</b>	383	454
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
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>44</b>	13	29
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>11</b>	3	12
Lead	ppm	ASTM D5185m >40	<b>12</b>	0	2
Copper	ppm	ASTM D5185m >330	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
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>9</b>	5	3
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	45	60
Manganese	ppm	ASTM D5185m 1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>883</b>	674	952
Calcium	ppm	ASTM D5185m 1070	<b>1372</b>	877	1174
Phosphorus	ppm	ASTM D5185m 1150	<b>983</b>	748	998
Zinc	ppm	ASTM D5185m 1270	<b>1184</b>	920	1266
Sulfur	ppm	ASTM D5185m 2060	<b>3374</b>	2658	3363

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	3	7
Sodium	ppm	ASTM D5185m	<b>2</b>	1	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0

## INFRA-RED

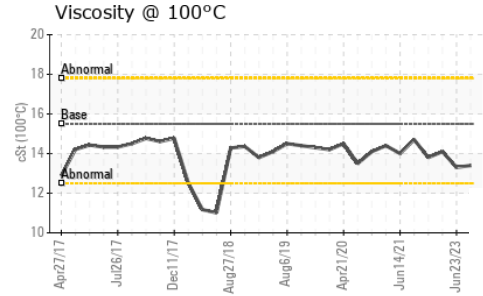
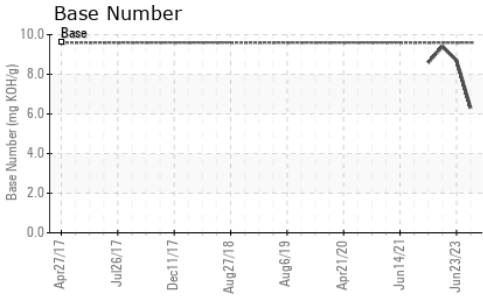
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.3</b>	0.8	1.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.9</b>	9.5	10.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.5</b>	20.2	22.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.7</b>	16.1	17.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>6.3</b>	8.7	9.4



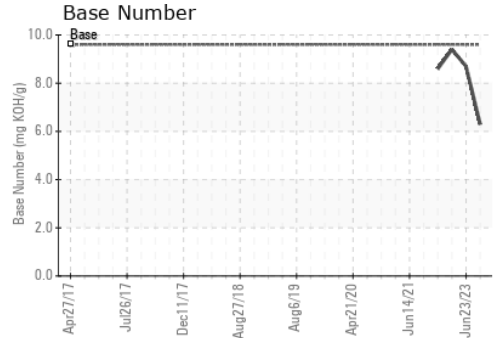
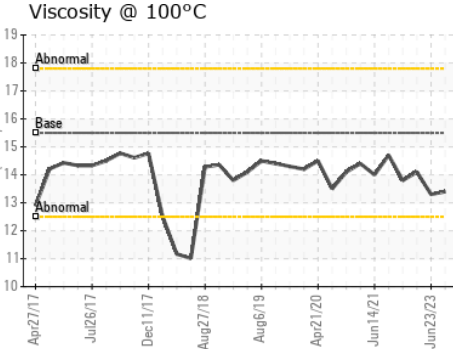
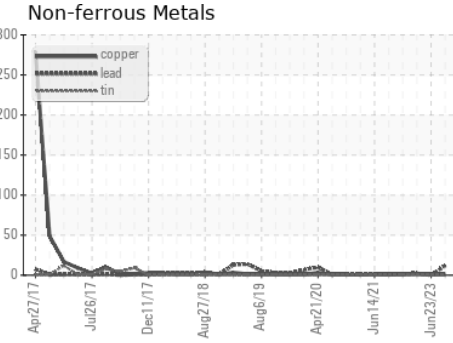
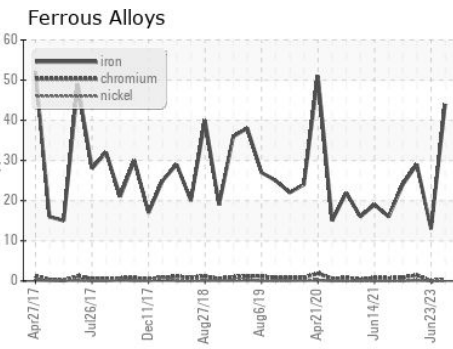
# OIL ANALYSIS REPORT



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>13.4</b>	13.3	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0887941      **Received** : 19 Mar 2024  
**Lab Number** : **06122055**      **Tested** : 19 Mar 2024  
**Unique Number** : 10936206      **Diagnosed** : 19 Mar 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRADER CONSTRUCTION CO.**  
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 NEW BERN, NC  
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 Contact: MIKE WYATT  
 mw Wyatt@traderconstruction.com  
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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)