

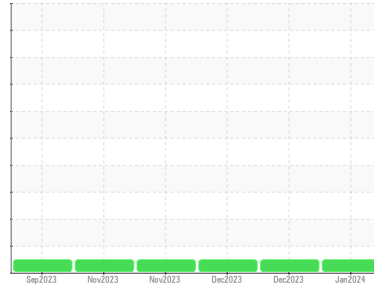
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**RES COAL**  
Machine Id  
**CATERPILLAR 777D 3091 (S/N AGC01447)**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 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>PCA0099888</b>	PCA0099886	PCA0099909
Sample Date	Client Info		<b>12 Jan 2024</b>	19 Dec 2023	07 Dec 2023
Machine Age	hrs	Client Info	<b>48728</b>	48547	48480
Oil Age	hrs	Client Info	<b>181</b>	493	426
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
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>8</b>	23	18
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	3	2
Lead	ppm	ASTM D5185m >40	<b>1</b>	1	2
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	4
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>6</b>	7	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	11
Molybdenum	ppm	ASTM D5185m 60	<b>55</b>	67	59
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>944</b>	1072	915
Calcium	ppm	ASTM D5185m 1070	<b>999</b>	1182	1026
Phosphorus	ppm	ASTM D5185m 1150	<b>1101</b>	1192	967
Zinc	ppm	ASTM D5185m 1270	<b>1270</b>	1351	1204
Sulfur	ppm	ASTM D5185m 2060	<b>3187</b>	3571	3405

## CONTAMINANTS

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

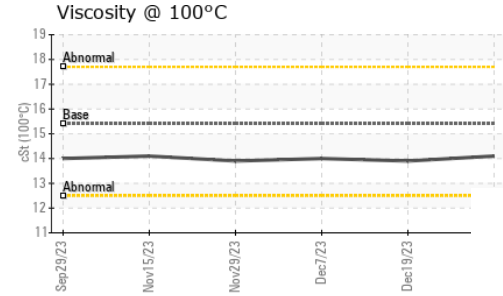
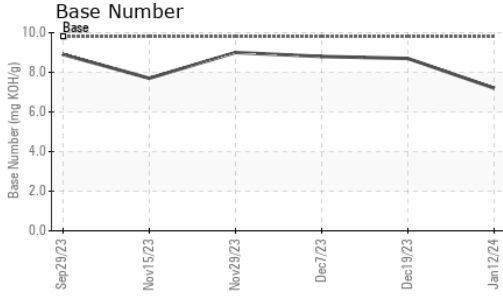
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.6</b>	7.0	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.6</b>	19.2	19.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.3</b>	14.6	14.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.2</b>	8.7	8.8

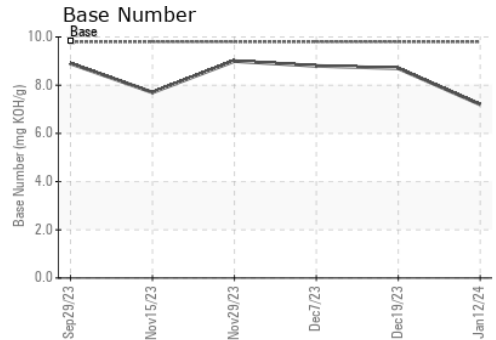
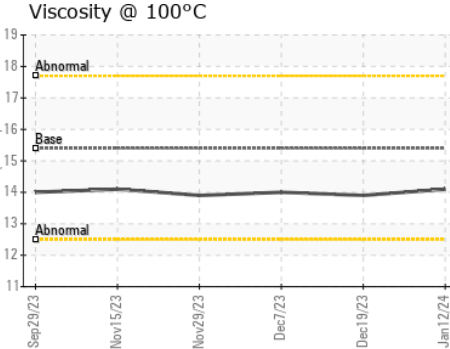
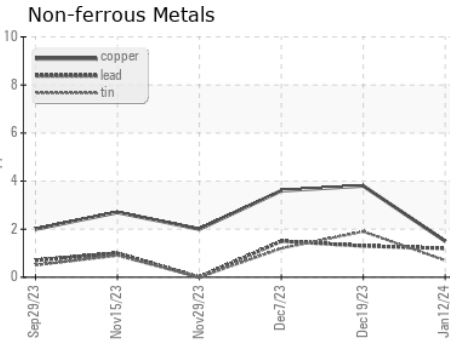
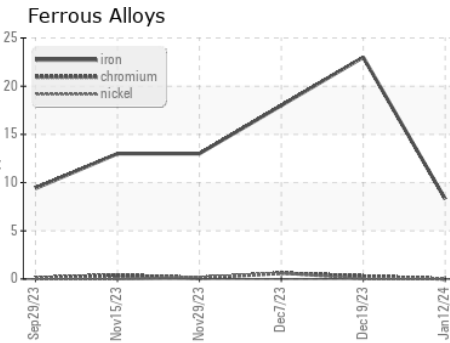
# OIL ANALYSIS REPORT



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	15.4	<b>14.1</b>	13.9	14.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099888 **Recieved** : 18 Jan 2024  
**Lab Number** : **06064148** **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835530 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**AMERICAN NATURAL SUPPLY**  
 12475 RTE 119 HWY N  
 ROCHESTER MILLS, PA  
 US 15771  
 Contact: SCOTT KINTER  
 skinter@americannatural.com

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)

T:  
F: