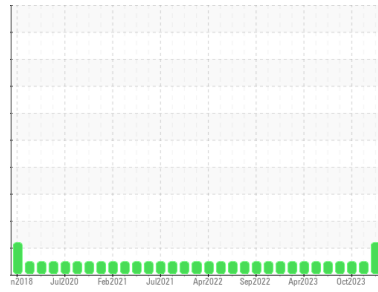


# OIL ANALYSIS REPORT

Sample Rating Trend



**VISUAL METAL**



Machine Id  
**PETERBILT 28 - RD688SX2788**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (36 QTS)**

**DIAGNOSIS**

**Recommendation**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

**Wear**

Moderate concentration of visible metal present. 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0104389</b>	PCA0104385	PCA0098375
Sample Date	Client Info			<b>07 Mar 2024</b>	29 Jan 2024	27 Oct 2023
Machine Age	mls	Client Info		<b>782000</b>	777589	773589
Oil Age	mls	Client Info		<b>4411</b>	4000	5333
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</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	>110	<b>10</b>	2	5
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>45	<b>0</b>	2	0
Copper	ppm	ASTM D5185m	>85	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
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		<b>25</b>	19	14
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>42</b>	38	28
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>667</b>	528	425
Calcium	ppm	ASTM D5185m		<b>1314</b>	1354	1688
Phosphorus	ppm	ASTM D5185m		<b>958</b>	863	918
Zinc	ppm	ASTM D5185m		<b>1116</b>	1037	1119
Sulfur	ppm	ASTM D5185m		<b>3684</b>	2996	3304

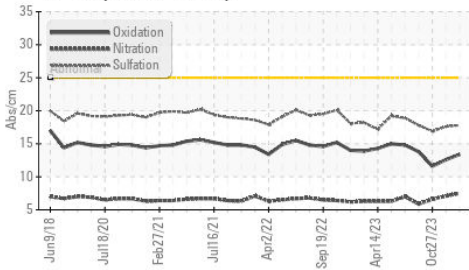
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>3</b>	0	3
Sodium	ppm	ASTM D5185m		<b>2</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	7.1	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.8</b>	17.6	16.9

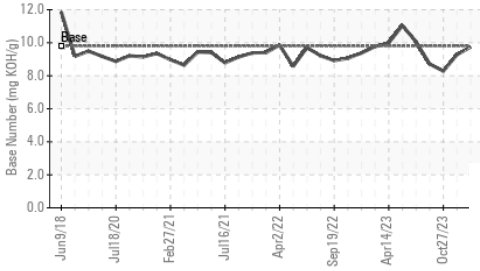
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.4</b>	12.6	11.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.74</b>	9.28	8.28

# OIL ANALYSIS REPORT

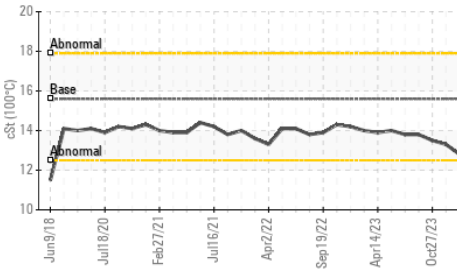
FT-IR (Direct Trend)



Base Number



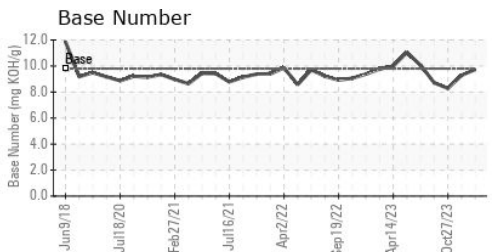
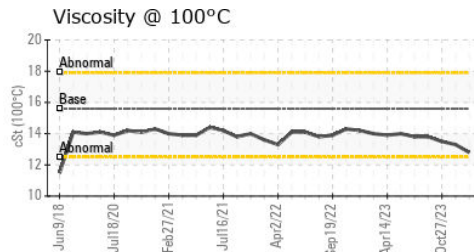
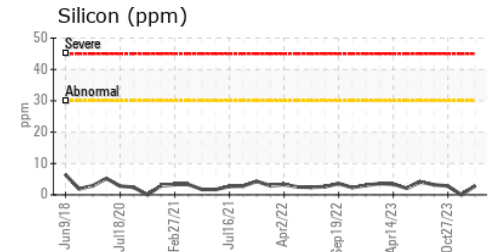
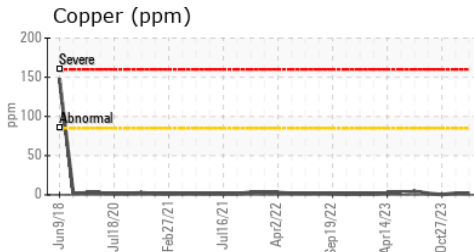
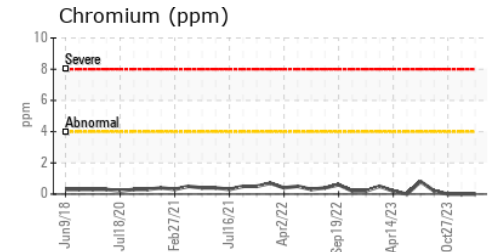
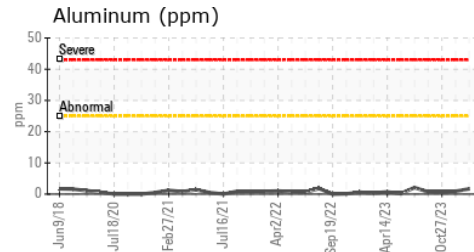
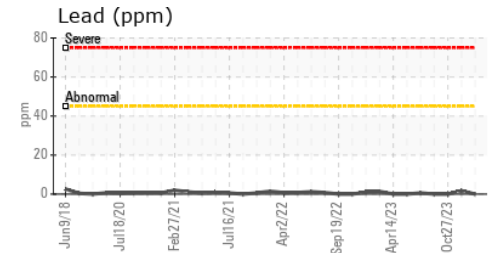
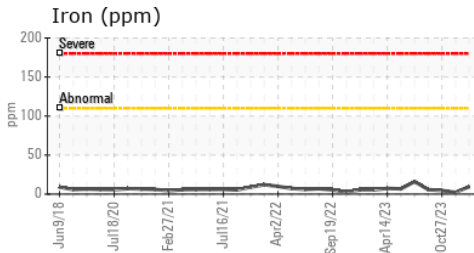
Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	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	15.6	12.8	13.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PCA0104389

**Lab Number** : 06140692

**Unique Number** : 10965500

**Test Package** : MOB 2

**Received** : 05 Apr 2024

**Tested** : 08 Apr 2024

**Diagnosed** : 09 Apr 2024 - Don Baldrige

**J F PRICE**

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US 02189

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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)