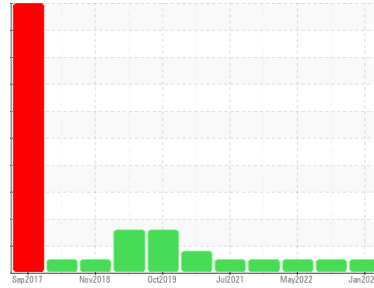


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**PETERBILT 150-13**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## 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>PCA0089565</b>	PCA0070768	PCA0060043	
Sample Date	Client Info	<b>25 Jan 2024</b>	05 Aug 2022	23 May 2022	
Machine Age	mls	Client Info	<b>0</b>	369000	554978
Oil Age	mls	Client Info	<b>10000</b>	10000	11000
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>16</b>	57	38
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	2	2
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	0
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>	2	2
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	3	2
Copper	ppm ASTM D5185m >330	<b>2</b>	4	6
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>3</b>	10	4
Barium	ppm ASTM D5185m 0	<b>2</b>	2	0
Molybdenum	ppm ASTM D5185m 60	<b>51</b>	62	62
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>835</b>	880	889
Calcium	ppm ASTM D5185m 1070	<b>927</b>	1178	1184
Phosphorus	ppm ASTM D5185m 1150	<b>907</b>	1051	1010
Zinc	ppm ASTM D5185m 1270	<b>1094</b>	1278	1228
Sulfur	ppm ASTM D5185m 2060	<b>2832</b>	3043	3056

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	5	4
Sodium	ppm ASTM D5185m	<b>3</b>	5	5
Potassium	ppm ASTM D5185m >20	<b>2</b>	5	5

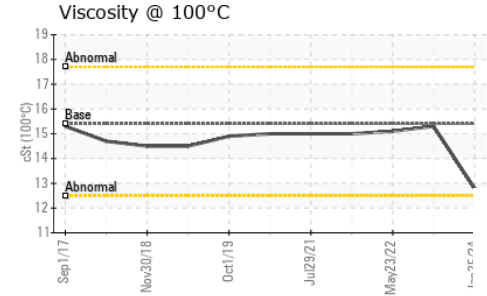
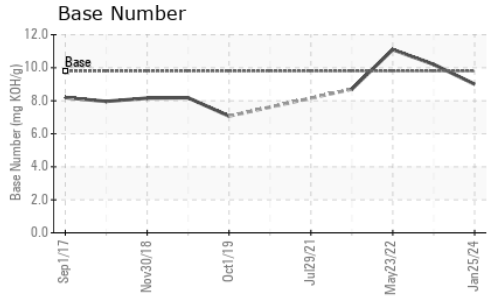
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	1.8	0.9
Nitration	Abs/cm *ASTM D7624 >20	<b>7.5</b>	11.0	11.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.0</b>	24.6	20.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.8</b>	18.8	15.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.0</b>	10.2	11.1

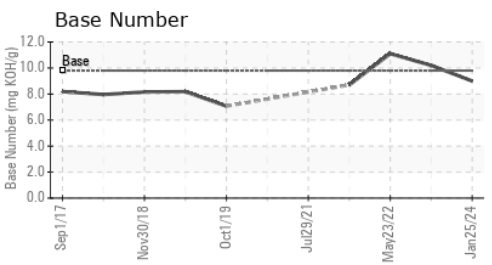
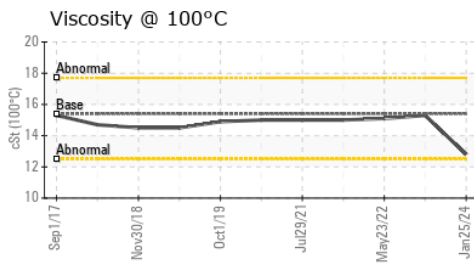
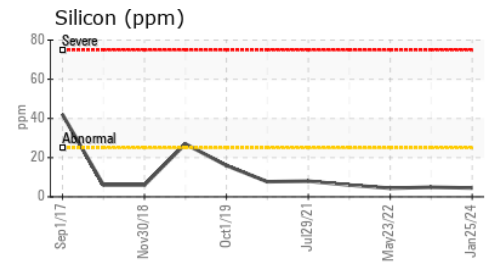
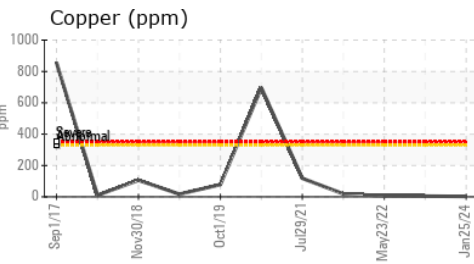
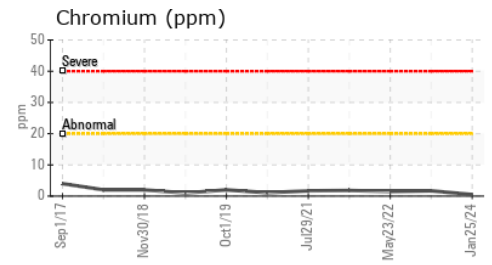
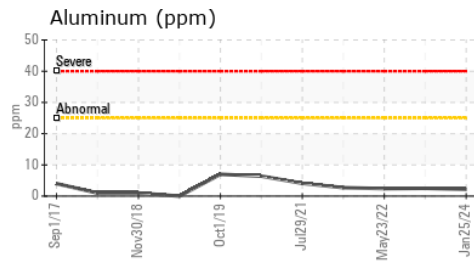
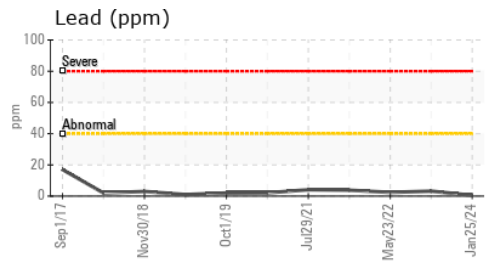
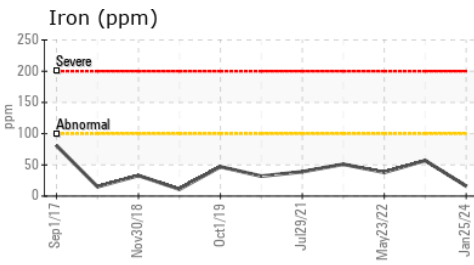
# OIL ANALYSIS REPORT



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>12.8</b>	15.3	15.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0089565 **Received** : 07 Feb 2024  
**Lab Number** : **06082217** **Tested** : 07 Feb 2024  
**Unique Number** : 10869662 **Diagnosed** : 07 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**GE MARSHALL EXCAVATION**  
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 Contact: MARK STEFFEL  
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 T:  
 F:

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)