

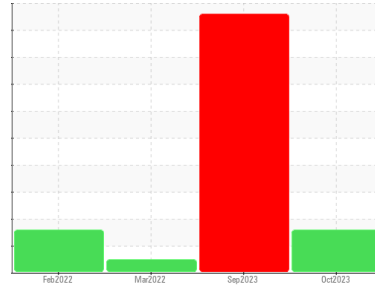


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR TRK218**  
 Component  
**Front Differential**  
 Fluid  
**PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate concentration of dirt present in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0848149</b>	WC0801051	WC0675188
Sample Date	Client Info		<b>03 Oct 2023</b>	04 Sep 2023	06 Mar 2022
Machine Age	hrs	Client Info	<b>0</b>	14060	6652
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>ABNORMAL</b>	SEVERE	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>500	<b>58</b>	11	30
Chromium	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	2	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>5</b>	<1	4
Lead	ppm	ASTM D5185(m)	>13	<b>1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>103	<b>37</b>	<1	22
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	2	<b>5</b>	▲ 118	8
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	9	<b>16</b>	<1	13
Calcium	ppm	ASTM D5185(m)	3114	<b>4217</b>	▲ 17	2977
Phosphorus	ppm	ASTM D5185(m)	1099	<b>879</b>	1058	1055
Zinc	ppm	ASTM D5185(m)	1245	<b>1047</b>	▲ 38	1194
Sulfur	ppm	ASTM D5185(m)	7086	<b>6479</b>	▲ 20661	5075
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0

## CONTAMINANTS

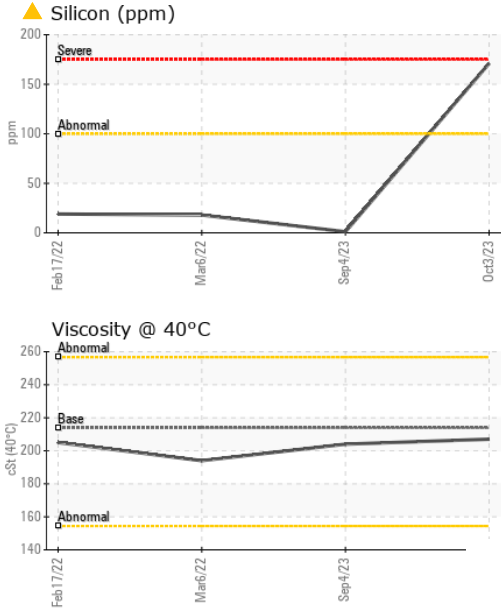
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>100	▲ <b>171</b>	1	18
Sodium	ppm	ASTM D5185(m)		<b>2</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1

## VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	MDHVV	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG



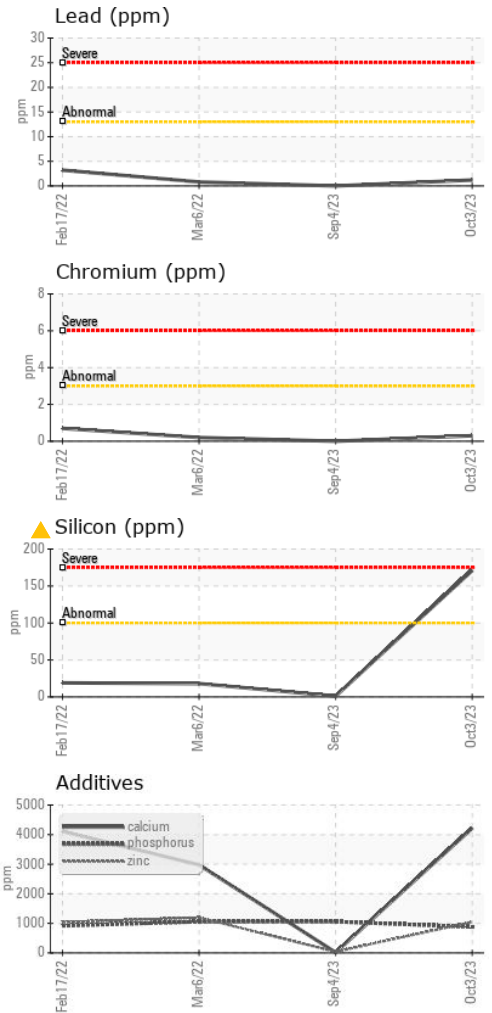
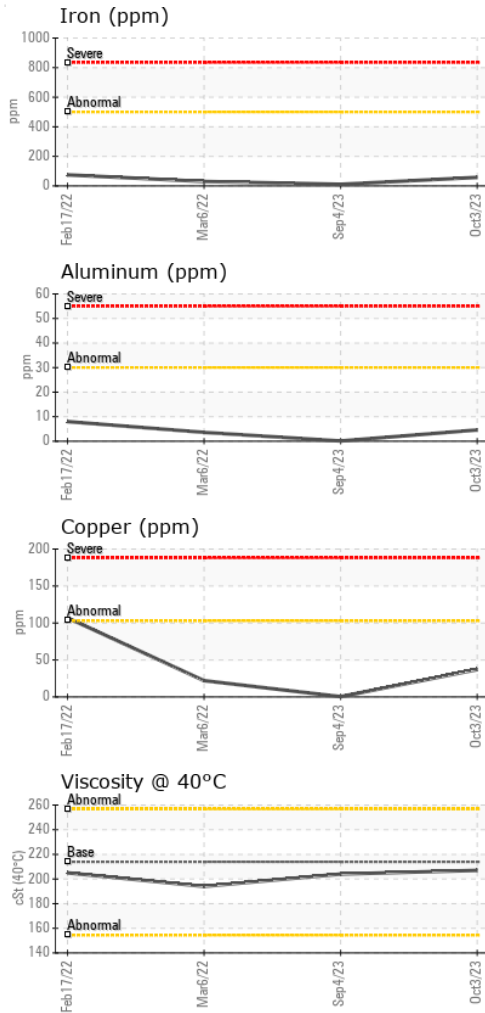
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	213.9	<b>207</b>	204	194

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						
PrtFilter						

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0848149  
**Lab Number** : 02588723  
**Unique Number** : 5657789  
**Test Package** : MOB 1

**Agnico Eagle Canada**  
 1350 Government Rd. W, MACASSA COMPLEX  
 Kirkland Lake, ON  
 CA P2N 3J1  
 Contact: Jay Gould  
 MacassaMobileUGPlanning@agnicoeagle.com  
 T: (705)567-5208  
 F: (705)567-5221

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.