

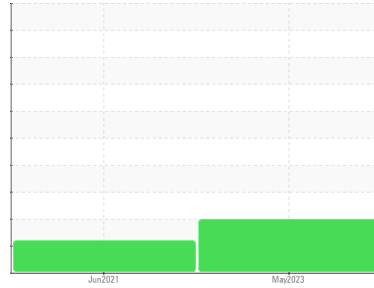
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**EBI DE COSTA RICA**  
Machine Id  
**MACK 1517**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 68 (45 GAL)**



## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PC0069043</b>	PC0044647	---
Sample Date	Client Info		<b>15 May 2023</b>	28 Jun 2021	---
Machine Age	hrs	Client Info	<b>38393</b>	34762	---
Oil Age	hrs	Client Info	<b>2762</b>	1847	---
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	---
Sample Status			<b>SEVERE</b>	SEVERE	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	<b>14</b>	10	---
Chromium	ppm	ASTM D5185(m) >10	<b>1</b>	<1	---
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >5	<b>3</b>	2	---
Lead	ppm	ASTM D5185(m) >4	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m) 0	<b>2</b>	1	---
Calcium	ppm	ASTM D5185(m) 50	<b>54</b>	55	---
Phosphorus	ppm	ASTM D5185(m) 330	<b>339</b>	337	---
Zinc	ppm	ASTM D5185(m) 430	<b>403</b>	410	---
Sulfur	ppm	ASTM D5185(m) 760	<b>729</b>	798	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

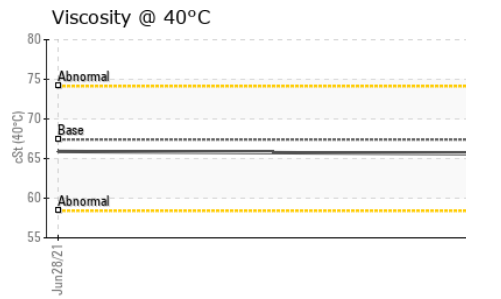
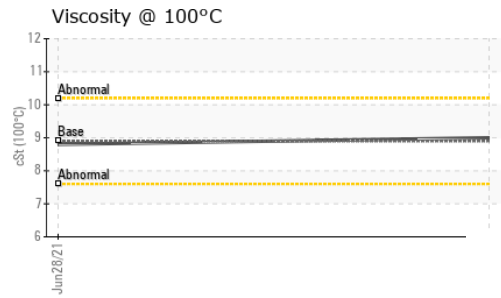
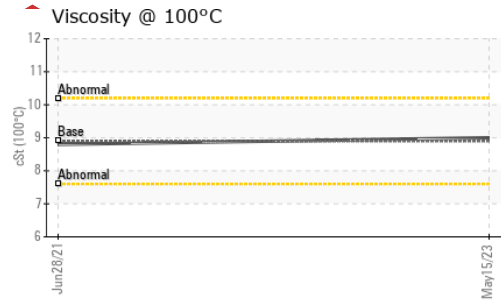
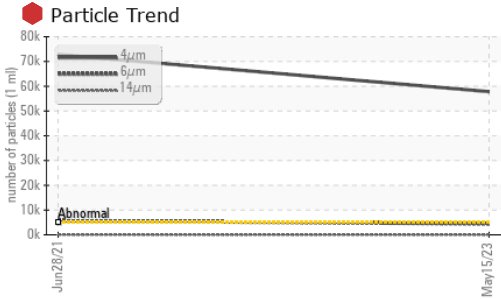
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>6</b>	4	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	1	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>57796</b>	72820	---
Particles >6µm	ASTM D7647	>1300	<b>4387</b>	5674	---
Particles >14µm	ASTM D7647	>160	<b>7</b>	30	---
Particles >21µm	ASTM D7647	>40	<b>2</b>	5	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>23/19/10</b>	23/20/12	---

# OIL ANALYSIS REPORT



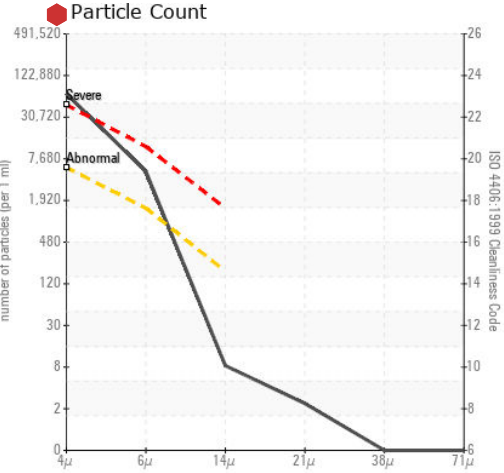
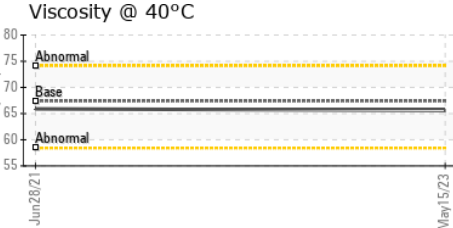
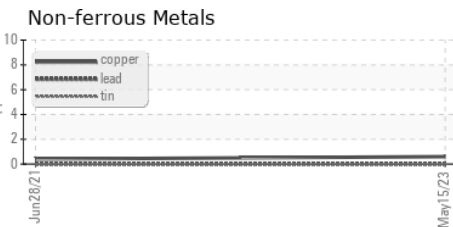
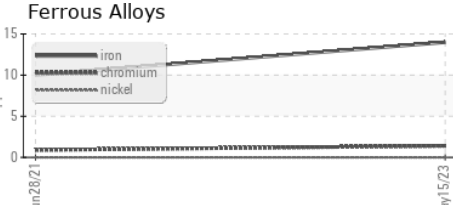
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	67.4	65.6	65.9
Visc @ 100°C	cSt	ASTM D7279(m)	8.9	9	8.8
Viscosity Index (VI)	Scale	ASTM D2270*	105	112	106

**SAMPLE IMAGES** method limit/base current history1 history2



**GRAPHS**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **INDUSTRIAS del PETROLEO CANAD. SA**  
**Sample No.** : PC0069043 **Received** : 06 Jul 2023 Contiguo FANAL, frente a la Autopista Bernardo Soto  
**Lab Number** : 02568275 **Diagnosed** : 07 Jul 2023 Grecia, A  
**Unique Number** : 5605321 **Diagnostician** : Wes Davis CR  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

To discuss this sample report, contact Customer Service at 1-800-268-2131. **Contact: Erick Bogantes**  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. **cotizaciones@lubricantescanada.com**  
 Validity of results and interpretation are based on the sample and information as supplied. **T: 1(115)062-1598**  
**F: 1(115)062-2870**