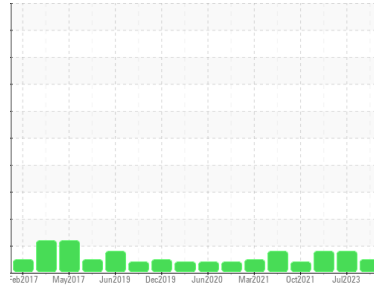


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**IMM #26 (S/N 5142159)**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA HYDREX AW 46 (1000 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC0080862</b>	PC0076975	PC0062148
Sample Date	Client Info	<b>15 Jan 2024</b>	11 Jul 2023	21 Sep 2022
Machine Age	mths	Client Info	<b>0</b>	0
Oil Age	mths	Client Info	<b>0</b>	72
Oil Changed	Client Info	<b>N/A</b>	N/A	Not Chngd
Sample Status		<b>NORMAL</b>	SEVERE	SEVERE

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
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) 0	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	2	0
Calcium	ppm	ASTM D5185(m) 50	<b>52</b>	26	36
Phosphorus	ppm	ASTM D5185(m) 330	<b>340</b>	349	341
Zinc	ppm	ASTM D5185(m) 430	<b>419</b>	326	346
Sulfur	ppm	ASTM D5185(m) 760	<b>780</b>	684	695
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

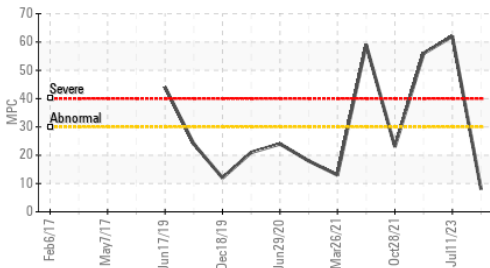
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

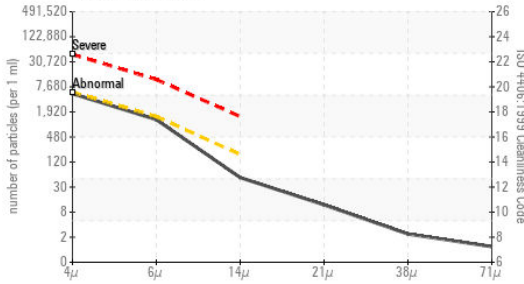
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>4587</b>	3509	1919
Particles >6µm	ASTM D7647 >1300	<b>1099</b>	577	475
Particles >14µm	ASTM D7647 >160	<b>45</b>	22	26
Particles >21µm	ASTM D7647 >40	<b>10</b>	6	6
Particles >38µm	ASTM D7647 >10	<b>2</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>19/17/13</b>	19/16/12	18/16/12

# OIL ANALYSIS REPORT

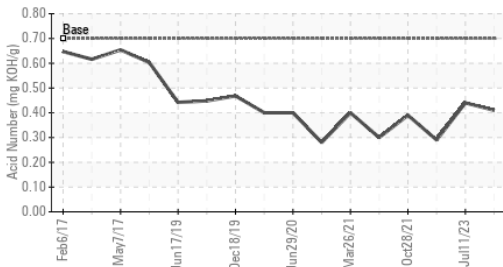
Varnish Potential



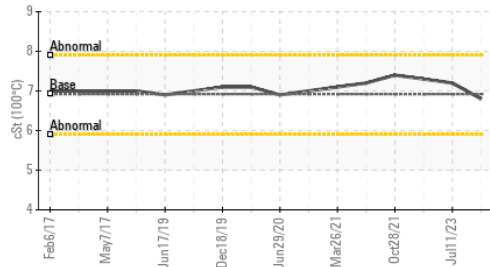
Particle Count



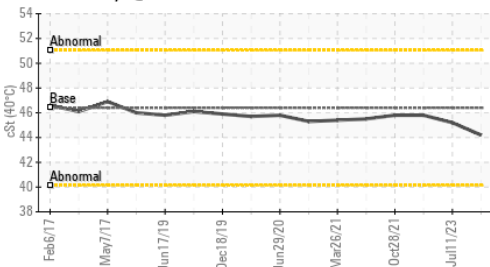
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C

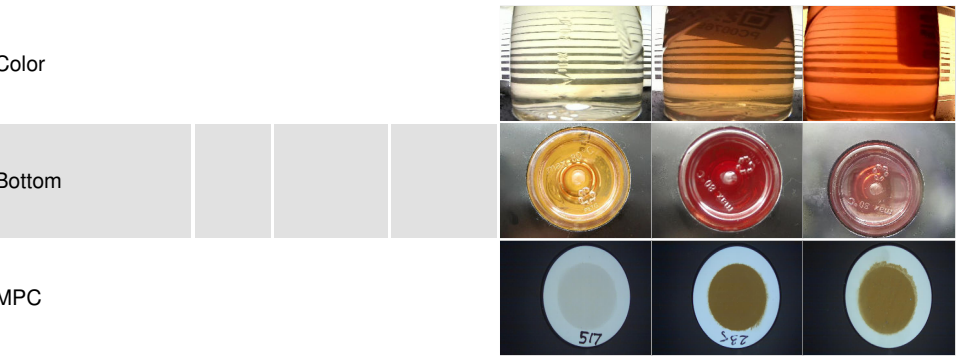


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.41</b>	0.44	0.29
MPC Varnish Potential	Scale	ASTM D7843(m)*	>15	<b>8</b>	62	56

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>	NONE	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>	VLITE	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*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>44.2</b>	45.2	45.8
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	<b>6.8</b>	7.2	7.3
Viscosity Index (VI)	Scale	ASTM D2270*	104	<b>108</b>	119	121

**SAMPLE IMAGES**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0080862  
**Lab Number** : **02611517**  
**Unique Number** : 5720612  
**Test Package** : IND 2 ( Additional Tests: KV100, MPC, VI )

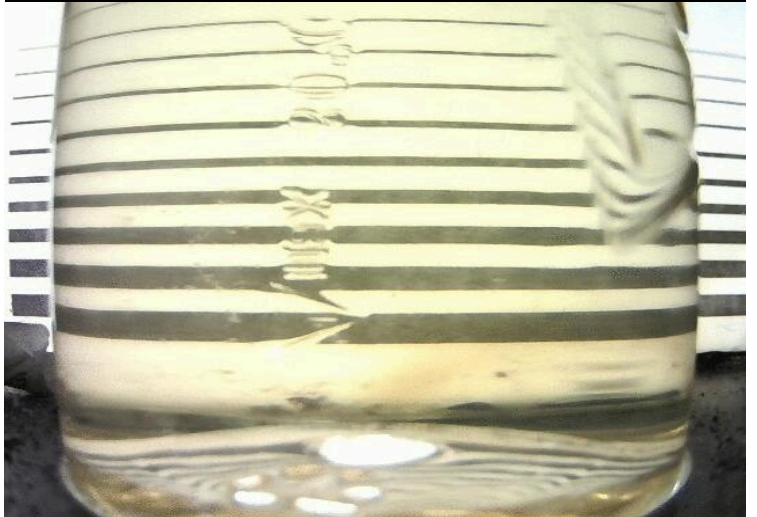
**ROPAK PACKAGING CANADA**  
 2240 WYECROFT RD  
 OAKVILLE, ON  
 CA L6L 6M1  
 Contact: Frank Maio  
 Frank.Maio@mauserpackaging.com  
 T: (905)465-9019  
 F:

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.

MPC (Varnish Test)



Sample Color & Clarity



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