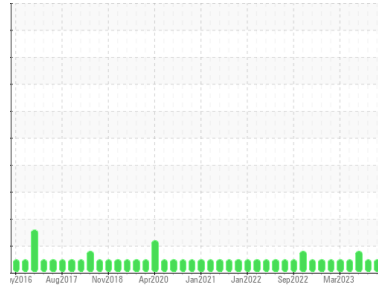


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**TEAM 3**  
Machine Id  
**165360**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 32 (83 GAL)**

**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>PC0069888</b>	PC0074852	PC0070251
Sample Date	Client Info	<b>27 Sep 2023</b>	19 Jul 2023	17 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	ATTENTION

**WEAR METALS**

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0
Aluminum	ppm	ASTM D5185(m) >20	<b>0</b>	<1
Lead	ppm	ASTM D5185(m) >20	<b>2</b>	1
Copper	ppm	ASTM D5185(m) >20	<b>8</b>	6
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0
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>	0
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</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>0</b>	0
Calcium	ppm	ASTM D5185(m) 50	<b>41</b>	42
Phosphorus	ppm	ASTM D5185(m) 330	<b>327</b>	344
Zinc	ppm	ASTM D5185(m) 430	<b>418</b>	402
Sulfur	ppm	ASTM D5185(m) 760	<b>718</b>	716
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1

**CONTAMINANTS**

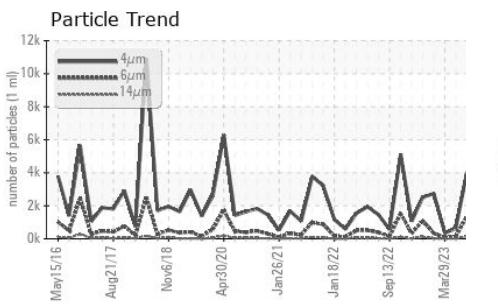
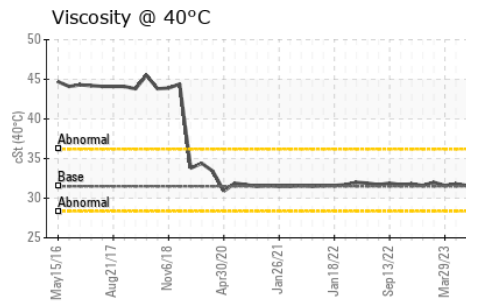
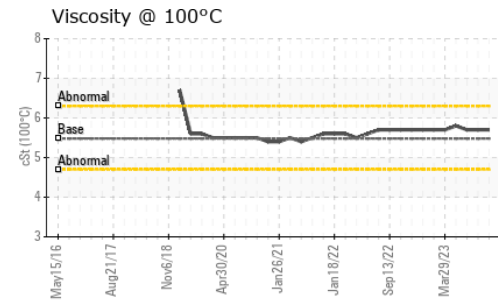
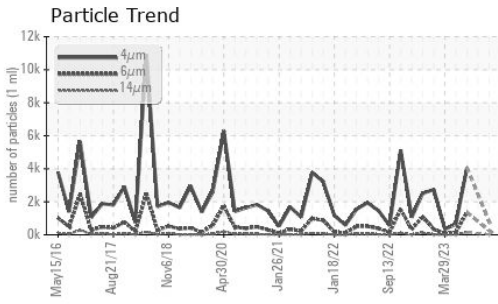
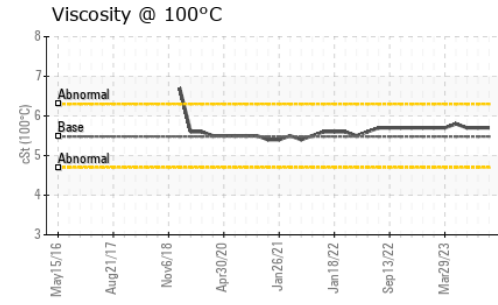
method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1

**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>839</b>	---	4075
Particles >6µm	ASTM D7647 >1300	<b>269</b>	---	▲ 1362
Particles >14µm	ASTM D7647 >160	<b>25</b>	---	141
Particles >21µm	ASTM D7647 >40	<b>7</b>	---	42
Particles >38µm	ASTM D7647 >10	<b>0</b>	---	2
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/14	<b>17/15/12</b>	---	▲ 19/18/14

**FLUID DEGRADATION**

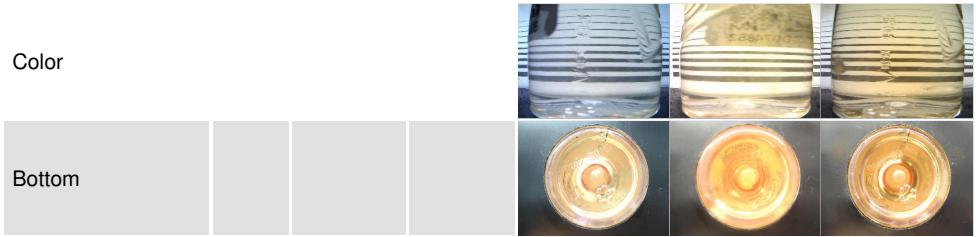
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.50	<b>0.36</b>	---	0.38



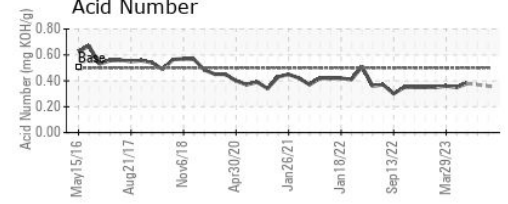
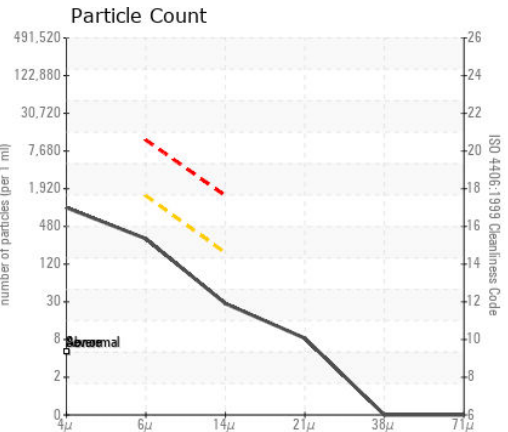
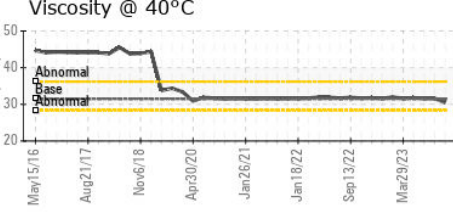
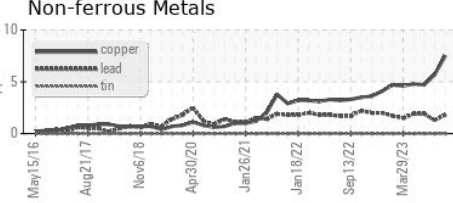
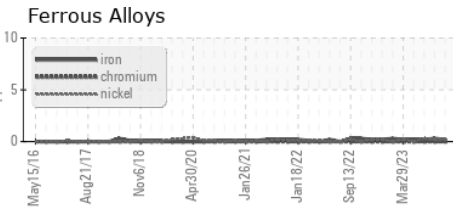
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>30.5</b>	31.6
Visc @ 100°C	cSt	ASTM D7279(m)	5.48	<b>5.7</b>	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	110	<b>129</b>	121

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0069888 **Received** : 28 Sep 2023  
**Lab Number** : 02585875 **Diagnosed** : 02 Oct 2023  
**Unique Number** : 5654941 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**Dryden Fibre**  
 Box 3001, 1 Duke Street  
 Dryden, ON  
 CA P8N 2Z7  
 Contact: Yvon St. Laurent  
 yvon.stlaurent@domtar.com  
 T: (807)223-9838  
 F: (807)223-9176

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.