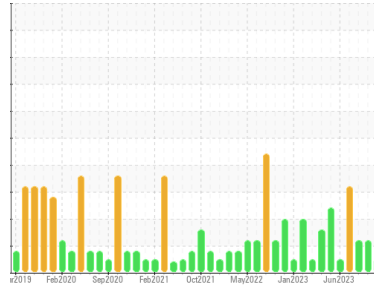


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**TEAM 15**  
Machine Id  
**156319**

Component  
**Hydraulic System**  
Fluid

**PETRO CANADA HYDREX AW 46 (110 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>PC0069904</b>	PC0069893	PC0069839
Sample Date	Client Info	<b>20 Oct 2023</b>	27 Sep 2023	23 Aug 2023
Machine Age	days	Client Info	<b>0</b>	0
Oil Age	days	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</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>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>20	<b>2</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	<1

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	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>0</b>	0	<1
Calcium	ppm	ASTM D5185(m)	50	<b>19</b>	25	48
Phosphorus	ppm	ASTM D5185(m)	330	<b>329</b>	350	383
Zinc	ppm	ASTM D5185(m)	430	<b>418</b>	442	470
Sulfur	ppm	ASTM D5185(m)	760	<b>721</b>	773	808
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>0</b>	<1	0
Sodium	ppm	ASTM D5185(m)		<b>7</b>	7	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1

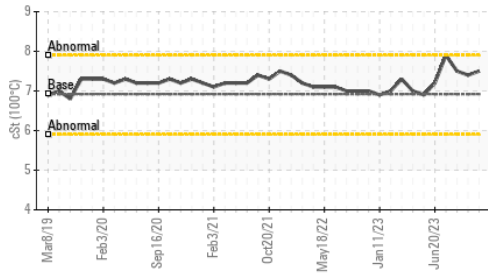
## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	<b>1927</b>	▲ 9580	▲ 18863
Particles >6µm	ASTM D7647	>1300	<b>600</b>	▲ 2357	▲ 3426
Particles >14µm	ASTM D7647	>160	<b>30</b>	72	40
Particles >21µm	ASTM D7647	>40	<b>6</b>	13	4
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/16/12</b>	▲ 20/18/13	▲ 21/19/12

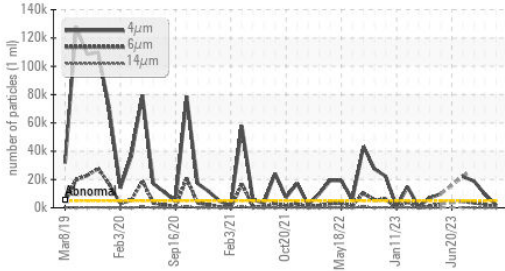
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.41</b>	0.44	0.43

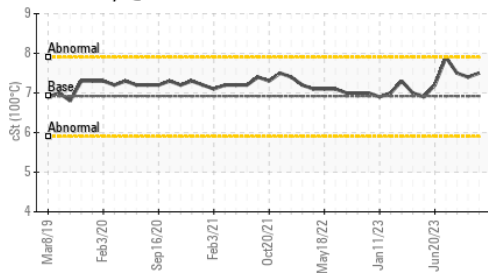
Viscosity @ 100°C



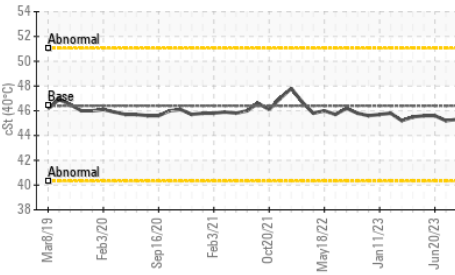
Particle Trend



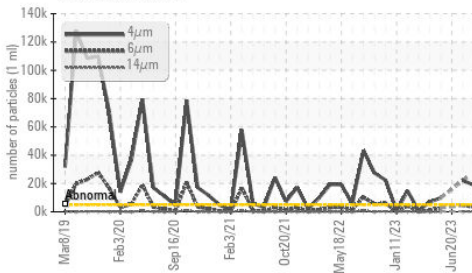
Viscosity @ 100°C



Viscosity @ 40°C



Particle Trend

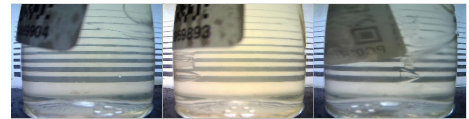


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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)	46.4	45.5	45.3
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	7.5	7.5
Viscosity Index (VI)	Scale	ASTM D2270*	104	126	131

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom

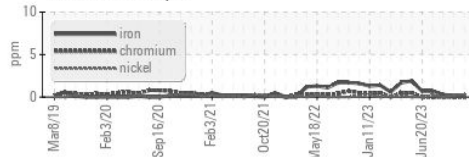


PrntFilter

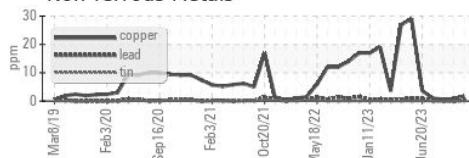


## GRAPHS

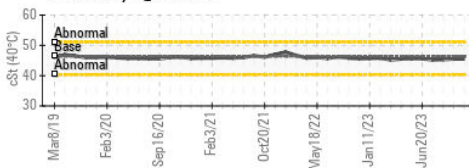
Ferrous Alloys



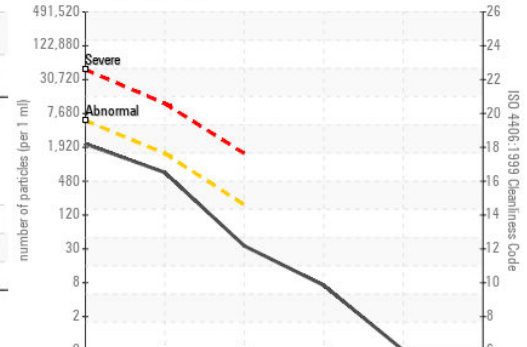
Non-ferrous Metals



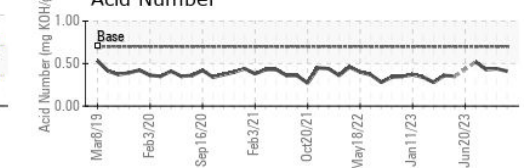
Viscosity @ 40°C



Particle Count



Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0069904 **Received** : 08 Nov 2023  
**Lab Number** : 02595004 **Diagnosed** : 09 Nov 2023  
**Unique Number** : 5672083 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**Dryden Fibre**  
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 AADEKANYE@DRYDENFIBRE.CA  
 T: (807)223-9950  
 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.