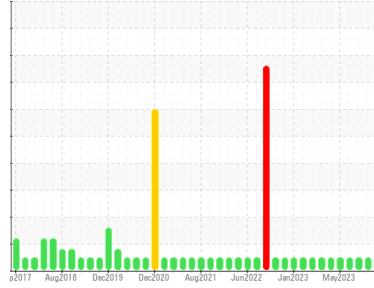


Area  
**TEAM 3**  
Machine Id  
**166133**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (3900 LTR)**



**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>PC0069907</b>	PC0069891	PC0074807
Sample Date	Client Info	<b>05 Oct 2023</b>	27 Sep 2023	08 Aug 2023
Machine Age	mths Client Info	<b>0</b>	0	0
Oil Age	mths Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<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	<1
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
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>&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>50</b>	51	48
Phosphorus	ppm	ASTM D5185(m)	330	<b>328</b>	336	349
Zinc	ppm	ASTM D5185(m)	430	<b>421</b>	432	419
Sulfur	ppm	ASTM D5185(m)	760	<b>721</b>	742	799
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	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1

**FLUID CLEANLINESS** method limit/base current history1 history2

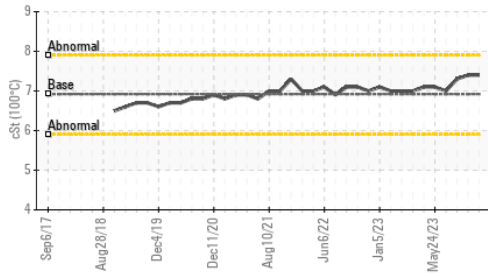
Particles >4µm	ASTM D7647	>5000	<b>1965</b>	2557	---
Particles >6µm	ASTM D7647	>1300	<b>331</b>	433	---
Particles >14µm	ASTM D7647	>160	<b>18</b>	32	---
Particles >21µm	ASTM D7647	>40	<b>4</b>	8	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/16/11</b>	19/16/12	---

**FLUID DEGRADATION** method limit/base current history1 history2

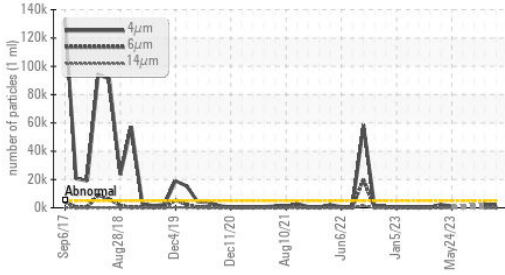
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.38</b>	0.42	---
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# OIL ANALYSIS REPORT

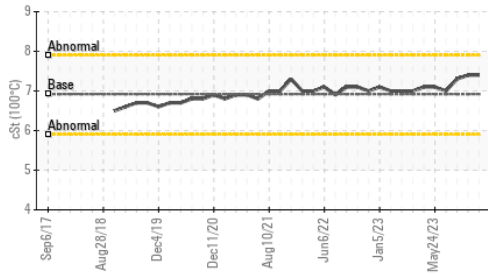
Viscosity @ 100°C



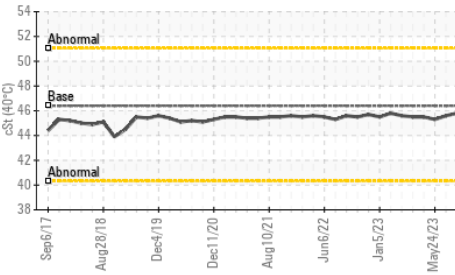
Particle Trend



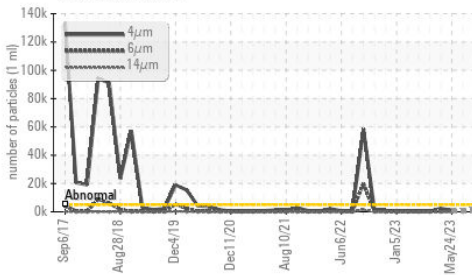
Viscosity @ 100°C



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

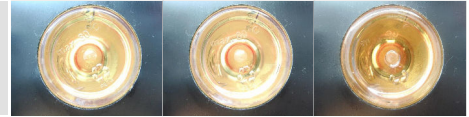
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	45.8	45.8
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	7.4	7.3
Viscosity Index (VI)	Scale	ASTM D2270*	104	125	121

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

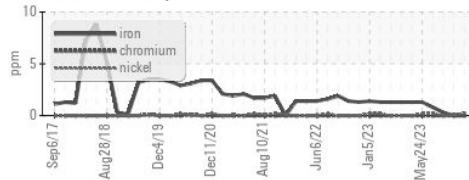


Bottom

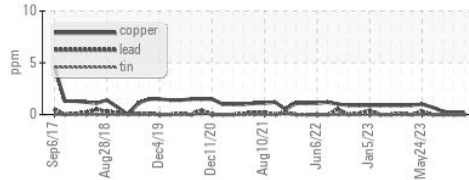


## GRAPHS

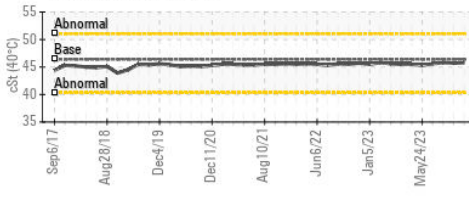
Ferrous Alloys



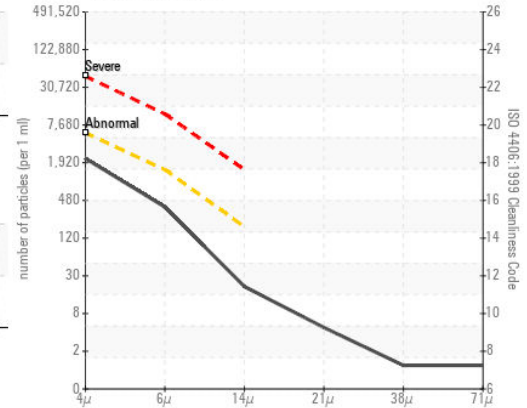
Non-ferrous Metals



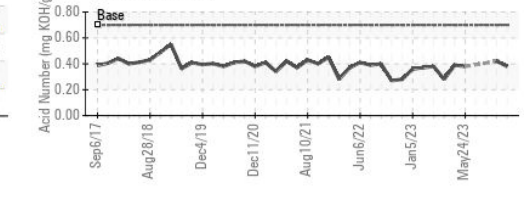
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0069907  
**Lab Number** : 02595001  
**Unique Number** : 5672080  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**Received** : 08 Nov 2023  
**Diagnosed** : 09 Nov 2023  
**Diagnostician** : Wes Davis

**Dryden Fibre**  
 Box 3001, 1 Duke Street  
 Dryden, ON  
 CA P8N 2Z7

Contact: Adebukola Adekanye  
 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.