

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Plant Bulk Oil**  
 Machine Id  
**[Plant Bulk Oil] Petro Canada Hydrex AW 46**  
 Component  
**Bulk Fluid Tank**  
 Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are 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>PCA0112983</b>	---	---
Sample Date	Client Info	<b>26 Dec 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m		<b>&lt;1</b>	---	---
Chromium ppm ASTM D5185m		<b>0</b>	---	---
Nickel ppm ASTM D5185m		<b>0</b>	---	---
Titanium ppm ASTM D5185m		<b>0</b>	---	---
Silver ppm ASTM D5185m		<b>0</b>	---	---
Aluminum ppm ASTM D5185m		<b>0</b>	---	---
Lead ppm ASTM D5185m		<b>0</b>	---	---
Copper ppm ASTM D5185m		<b>&lt;1</b>	---	---
Tin ppm ASTM D5185m		<b>0</b>	---	---
Vanadium ppm ASTM D5185m		<b>0</b>	---	---
Cadmium ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	0	<b>0</b>	---	---
Barium ppm ASTM D5185m	0	<b>0</b>	---	---
Molybdenum ppm ASTM D5185m	0	<b>0</b>	---	---
Manganese ppm ASTM D5185m	0	<b>0</b>	---	---
Magnesium ppm ASTM D5185m	0	<b>0</b>	---	---
Calcium ppm ASTM D5185m	50	<b>56</b>	---	---
Phosphorus ppm ASTM D5185m	330	<b>358</b>	---	---
Zinc ppm ASTM D5185m	430	<b>465</b>	---	---
Sulfur ppm ASTM D5185m	760	<b>953</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m		<b>&lt;1</b>	---	---
Sodium ppm ASTM D5185m		<b>&lt;1</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>0</b>	---	---
Water % ASTM D6304		<b>NEG</b>	---	---

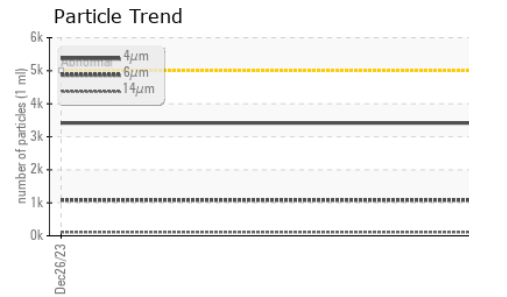
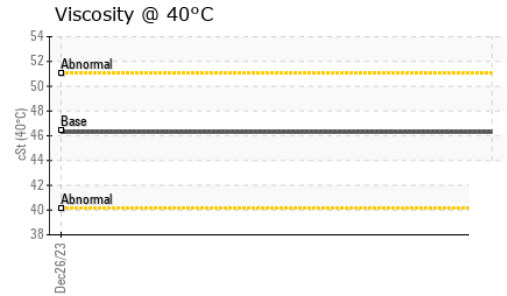
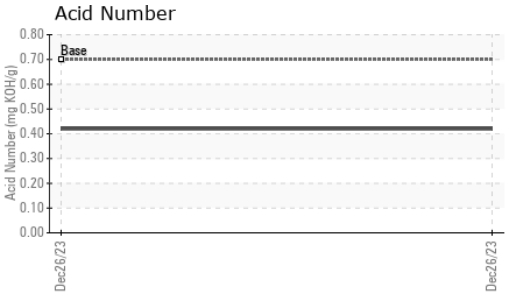
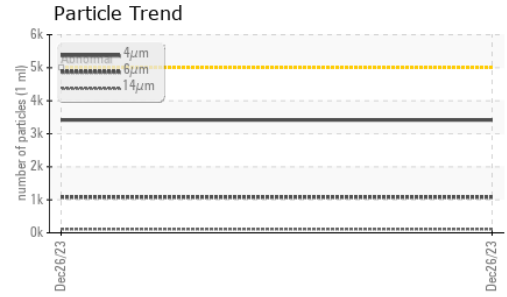
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	<b>3416</b>	---	---
Particles >6µm ASTM D7647	>1300	<b>1081</b>	---	---
Particles >14µm ASTM D7647	>160	<b>112</b>	---	---
Particles >21µm ASTM D7647	>40	<b>33</b>	---	---
Particles >38µm ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	<b>19/17/14</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	0.70	<b>0.42</b>	---	---

# 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	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---

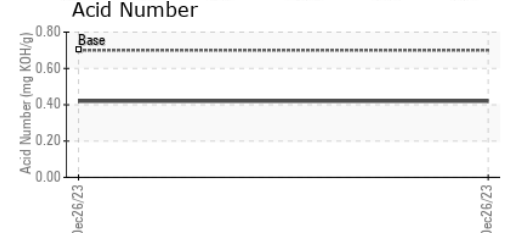
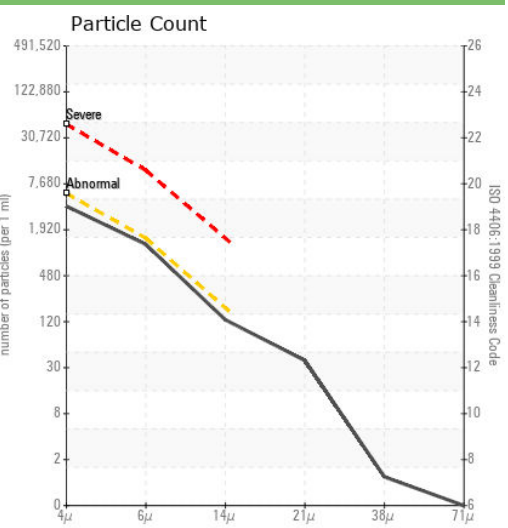
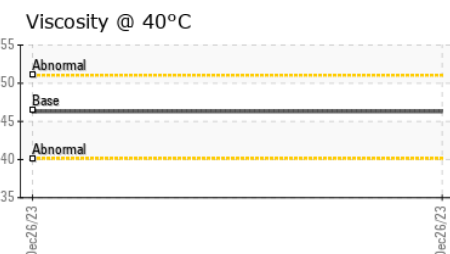
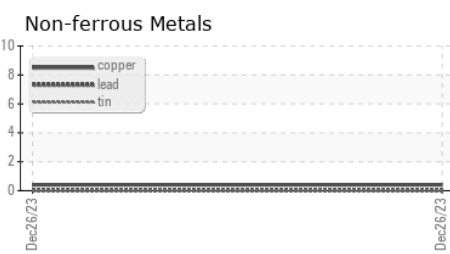
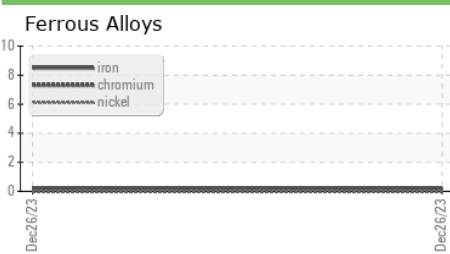
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.4	<b>46.3</b>	---

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

	no image	no image
<b>Bottom</b>		no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112983 **Received** : 27 Dec 2023  
**Lab Number** : 06046114 **Diagnosed** : 29 Dec 2023  
**Unique Number** : 10806722 **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT

**SDI - Steel Dynamics Inc. - Heartland**  
 455 West Industrial Drive  
 Terre Haute, IN  
 US 47802  
 Contact: BRAD ELLIS  
 brad.ellis@steeldynamics.com  
 T:  
 F:

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)