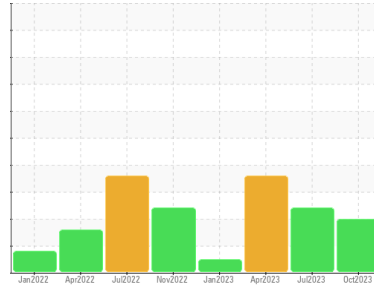




# PROBLEM SUMMARY

## Sample Rating Trend

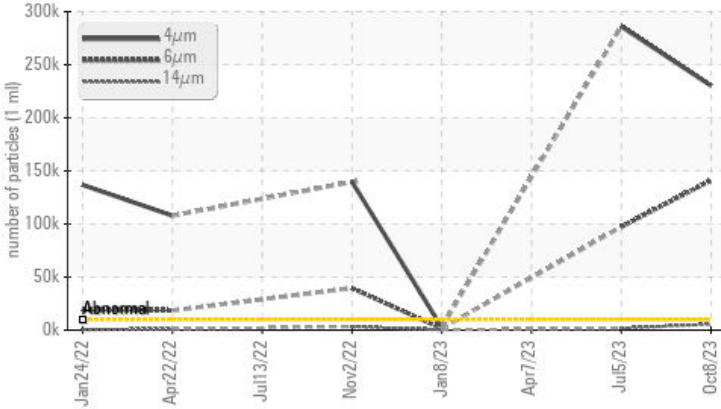
ISO



Area  
**FP-010**  
 Machine Id  
**B24610 - CONVEYOR KSI INCLINE SCREW RAW PROD #6**  
 Component  
**Auger**  
 Fluid  
**PETRO CANADA SYNDURO SHB ISO 460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 230244	▲ 286006	---
Particles >6µm	ASTM D7647	>2500	▲ 141096	▲ 97391	---
Particles >14µm	ASTM D7647	>320	▲ 5610	▲ 1713	---
Particles >21µm	ASTM D7647	>80	▲ 1008	▲ 406	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 25/24/20	▲ 25/24/18	---

Customer Id: HORAUS  
 Sample No.: WC0850222  
 Lab Number: 05978232  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 05 Jul 2023 Diag: Doug Bogart

#### VISCOSITY



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



### 07 Apr 2023 Diag: Jonathan Hester

#### WATER



We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. Gear wear is indicated. Appearance is unacceptable Free water present. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

view report



### 08 Jan 2023 Diag: Jonathan Hester

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

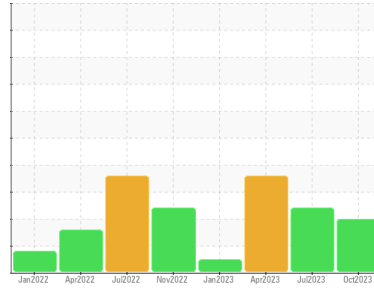
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**FP-010**  
 Machine Id  
**B24610 - CONVEYOR KSI INCLINE SCREW RAW PROD #6**  
 Component  
**Auger**  
 Fluid  
**PETRO CANADA SYNDURO SHB ISO 460 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil.

### 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>WC0850222</b>	WC0820609	WC0792023
Sample Date	Client Info		<b>08 Oct 2023</b>	05 Jul 2023	07 Apr 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>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>147</b>	89	▲ 196
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	1	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 5.0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>1</b>	<1	2
Magnesium	ppm	ASTM D5185m 5.0	<b>4</b>	1	<1
Calcium	ppm	ASTM D5185m 5.0	<b>7</b>	<1	2
Phosphorus	ppm	ASTM D5185m 60	<b>94</b>	102	277
Zinc	ppm	ASTM D5185m 5.0	<b>2</b>	0	6
Sulfur	ppm	ASTM D5185m 1900	<b>2122</b>	2800	1578

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>22</b>	5	5
Sodium	ppm	ASTM D5185m	<b>10</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>9</b>	2	3

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ <b>230244</b>	▲ 286006	---
Particles >6µm	ASTM D7647	>2500	▲ <b>141096</b>	▲ 97391	---
Particles >14µm	ASTM D7647	>320	▲ <b>5610</b>	▲ 1713	---
Particles >21µm	ASTM D7647	>80	▲ <b>1008</b>	▲ 406	---
Particles >38µm	ASTM D7647	>20	<b>14</b>	7	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ <b>25/24/20</b>	▲ 25/24/18	---

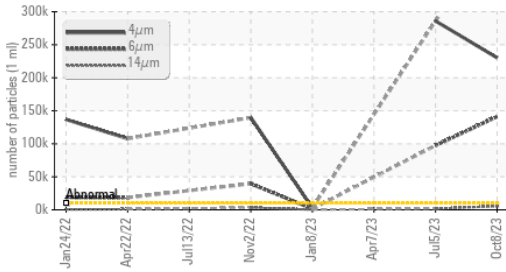
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.3	<b>0.48</b>	0.29	0.38

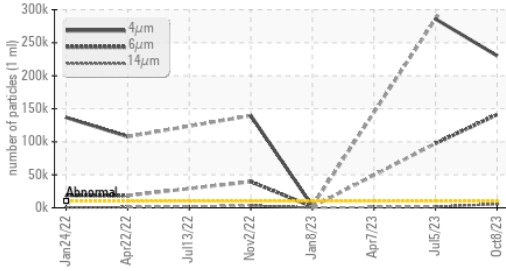


# OIL ANALYSIS REPORT

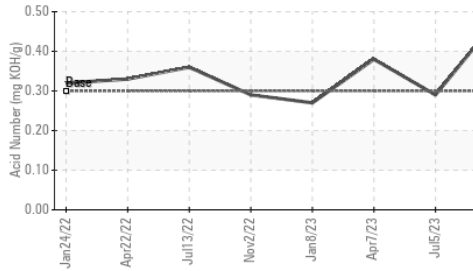
## Particle Trend



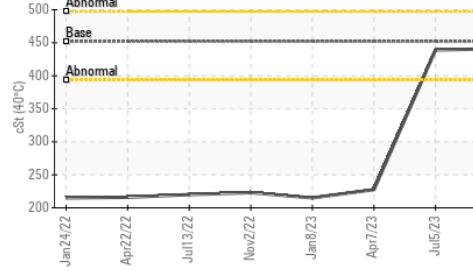
## Particle Trend



## Acid Number



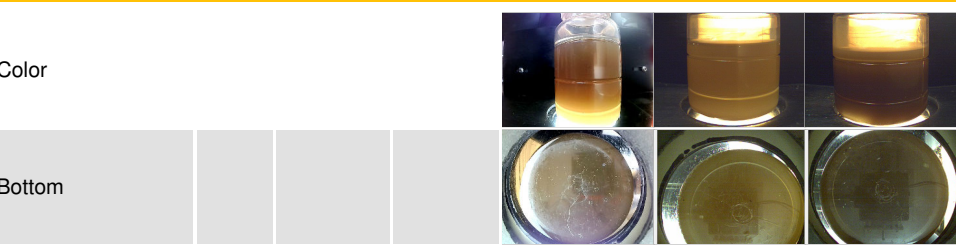
## Viscosity @ 40°C



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	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	▲ MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	▲ 1.0

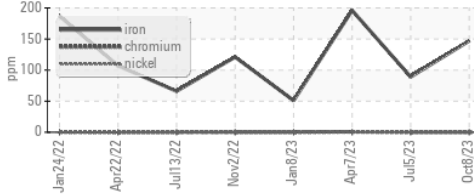
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	452	441	▲ 439

## SAMPLE IMAGES

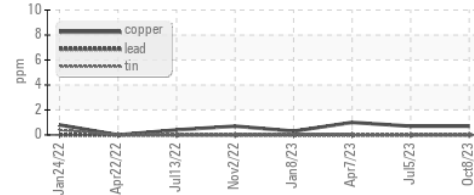


## GRAPHS

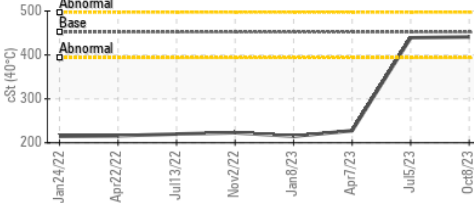
### Ferrous Alloys



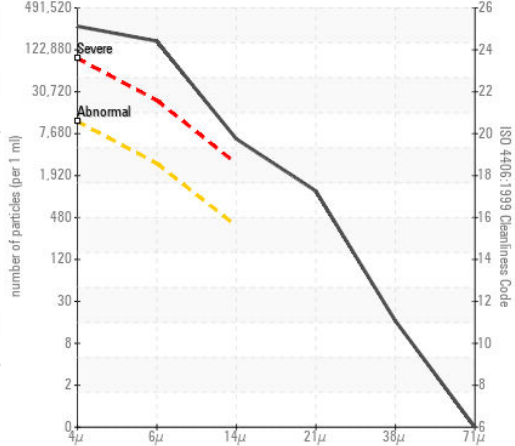
### Non-ferrous Metals



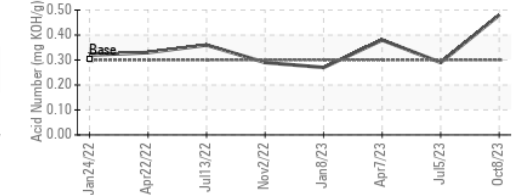
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0850222 Received : 13 Oct 2023  
 Lab Number : 05978232 Diagnosed : 17 Oct 2023  
 Unique Number : 10695527 Diagnostician : Jonathan Hester  
 Test Package : IND 2 ( Additional Tests: PrtCount )

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)

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