

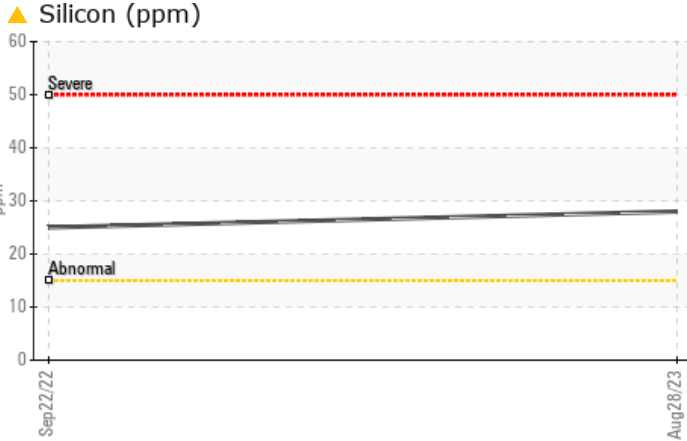
# PROBLEM SUMMARY

Sample Rating Trend



Machine Id  
**CRANE 15**  
 Component  
**Main Hoist**  
 Fluid  
**PETRO CANADA ENDURATEX EP 220 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	---
Silicon	ppm	ASTM D5185m	>15	▲ 28	▲ 25	---

Customer Id: SDITER  
 Sample No.: PCA0101511  
 Lab Number: 05937357  
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**22 Sep 2022 Diag: Jonathan Hester**

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



**DIRT**



Machine Id  
**CRANE 15**

Component  
**Main Hoist**

Fluid  
**PETRO CANADA ENDURATEX EP 220 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
Elemental level of silicon (Si) above normal.

**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>PCA0101511</b>	PCA0079669	---
Sample Date	Client Info	<b>28 Aug 2023</b>	22 Sep 2022	---
Machine Age	hrs	<b>0</b>	0	---
Oil Age	hrs	<b>0</b>	0	---
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	<b>15</b>	5	---	
Iron	ppm	ASTM D5185m >20	<b>2</b>	1	---
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	---
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >20	<b>0</b>	0	---
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 60	<b>6</b>	6	---
Barium	ppm	ASTM D5185m 0	<b>28</b>	12	---
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	---
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 0	<b>1</b>	1	---
Calcium	ppm	ASTM D5185m 0	<b>14</b>	14	---
Phosphorus	ppm	ASTM D5185m 270	<b>212</b>	204	---
Zinc	ppm	ASTM D5185m 0	<b>8</b>	4	---
Sulfur	ppm	ASTM D5185m 11200	<b>11464</b>	13230	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>▲ 28</b>	▲ 25	---
Sodium	ppm	ASTM D5185m	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	---

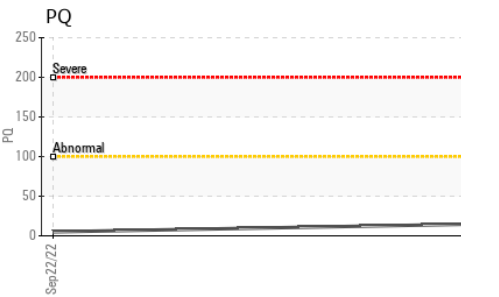
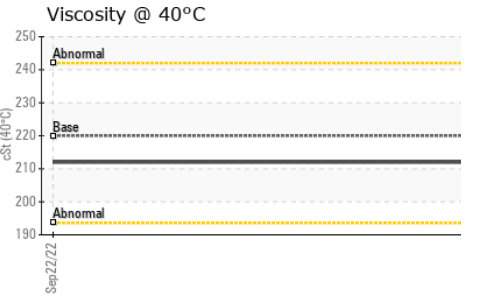
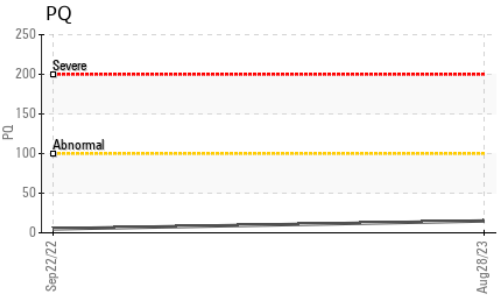
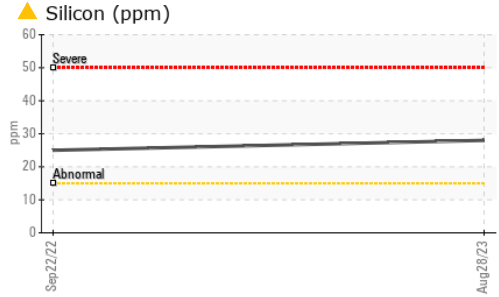
## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.40	<b>0.53</b>	0.54	---



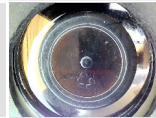
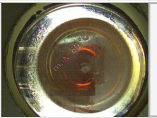
## VISUAL

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

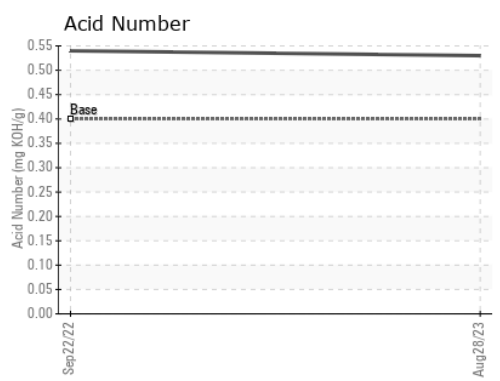
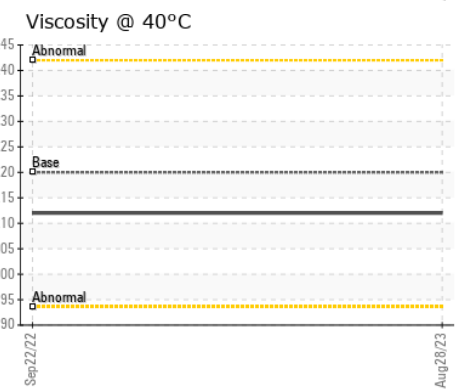
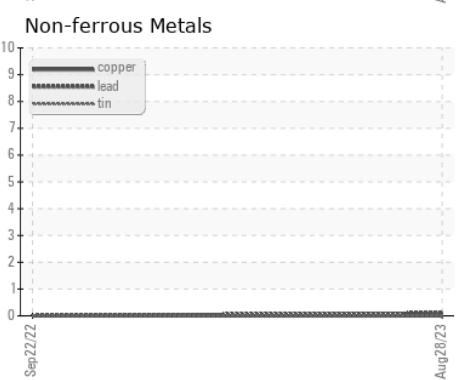
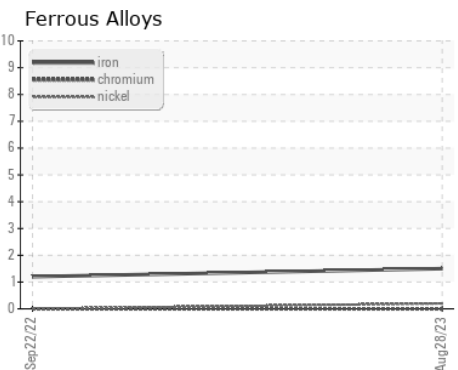
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	<b>212</b>	212	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						 no image
Bottom						 no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101511 **Received** : 29 Aug 2023  
**Lab Number** : 05937357 **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10622628 **Diagnostician** : Don Baldrige  
**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)