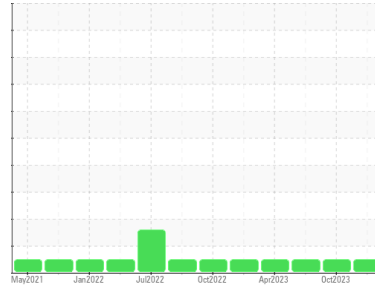


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Pickle Line**  
 Machine Id  
**[Pickle Line] 530005-SQUARING SHEAR**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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>PCA0112990</b>	PCA0101628	PCA0101505
Sample Date	Client Info		<b>14 Feb 2024</b>	25 Oct 2023	01 Jul 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	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

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>6</b>	16	---
Iron	ppm	ASTM D5185m >200	<b>4</b>	5	4
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 60	<b>33</b>	32	30
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>5</b>	9	7
Phosphorus	ppm	ASTM D5185m 270	<b>224</b>	224	225
Zinc	ppm	ASTM D5185m 0	<b>0</b>	9	8
Sulfur	ppm	ASTM D5185m 11200	<b>9690</b>	9811	10979

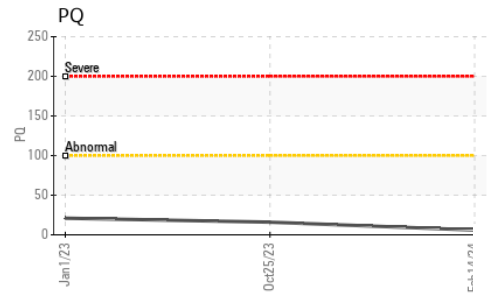
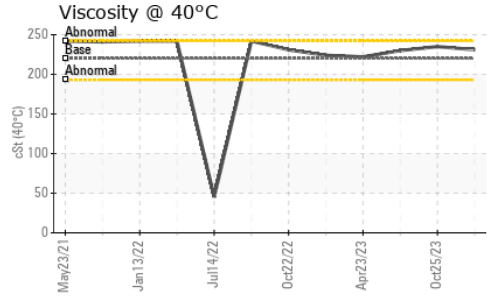
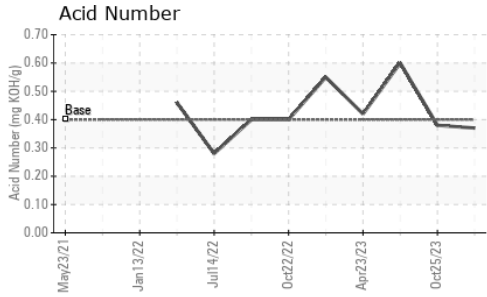
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>4</b>	5	3
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.40	<b>0.37</b>	0.38	0.60

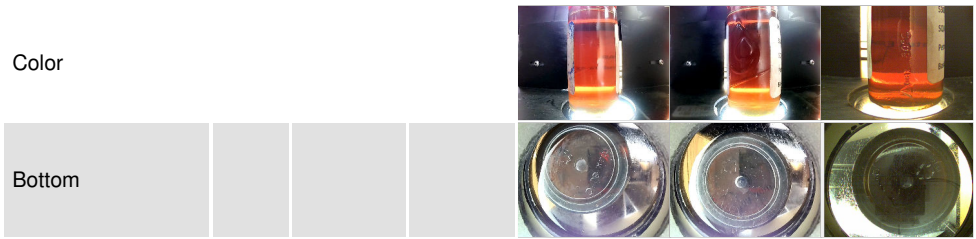
# OIL ANALYSIS REPORT



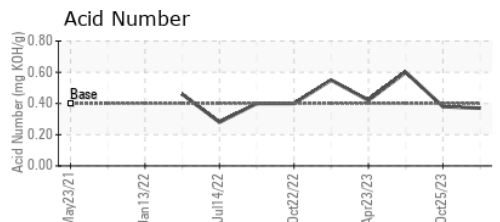
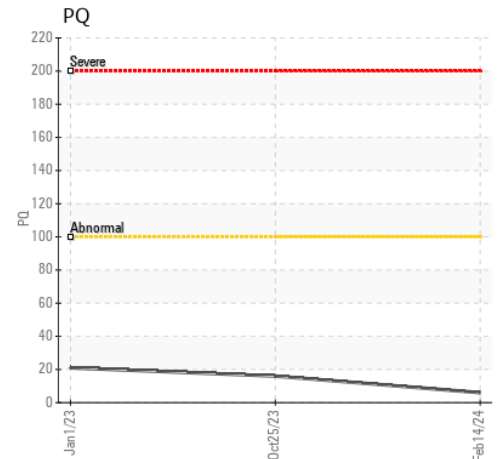
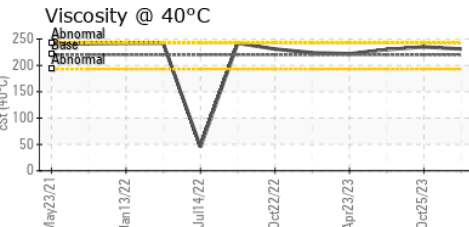
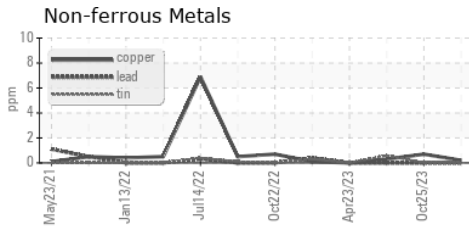
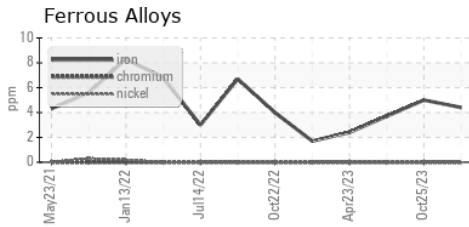
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	<b>231</b>	235	230

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112990  
**Lab Number** : 06091098  
**Unique Number** : 10883951  
**Test Package** : PLANT

**Received** : 15 Feb 2024  
**Tested** : 16 Feb 2024  
**Diagnosed** : 16 Feb 2024 - Wes Davis

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

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)

T:  
F: