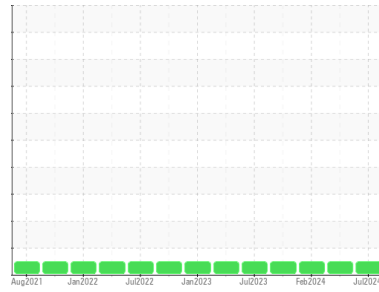


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**Pickle Line**  
 Machine Id  
**[Pickle Line] 535035-ENTRY LOOPER WINCH**  
 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>PCA0129255</b>	PCA0117636	PCA0101543
Sample Date	Client Info		<b>14 Jul 2024</b>	08 Apr 2024	14 Feb 2024
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>20</b>	12	7
Iron	ppm	ASTM D5185m >200	<b>3</b>	0	3
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>	0	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>0</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	<1	0
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>34</b>	52	58
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 0	<b>2</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	7
Phosphorus	ppm	ASTM D5185m 270	<b>246</b>	242	236
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 11200	<b>6783</b>	6729	5595

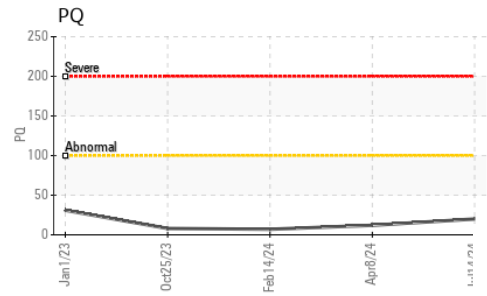
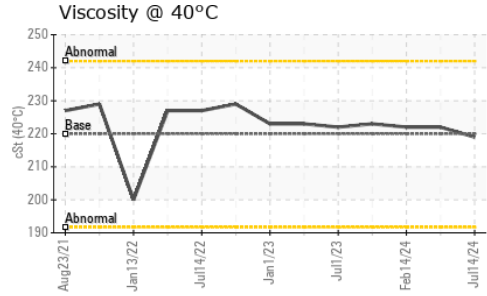
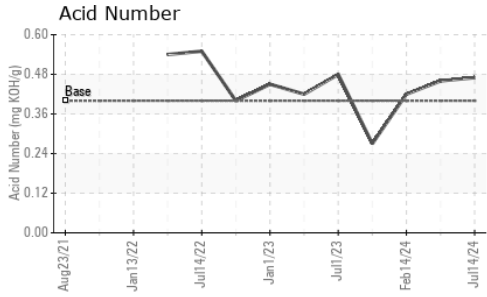
### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>12</b>	10	10
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.40	<b>0.47</b>	0.46	0.42

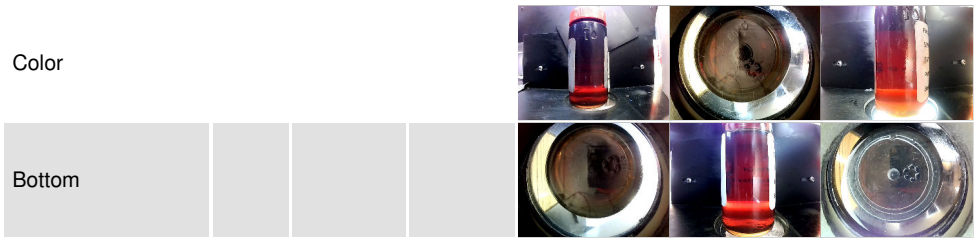
# OIL ANALYSIS REPORT



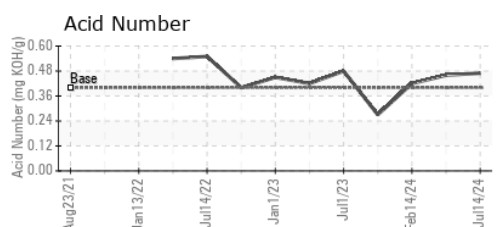
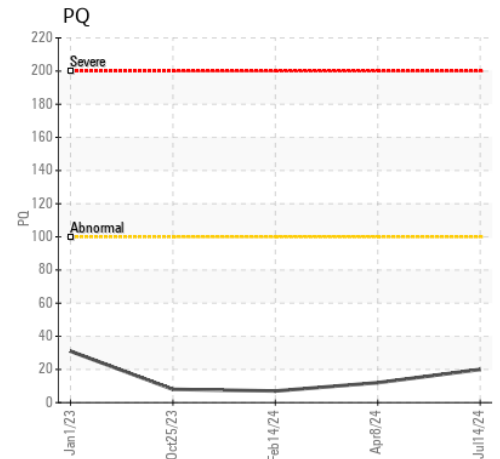
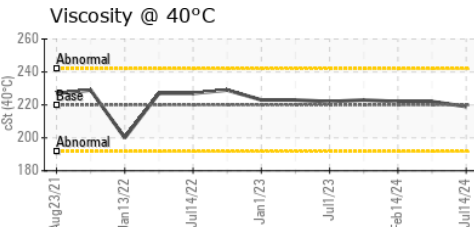
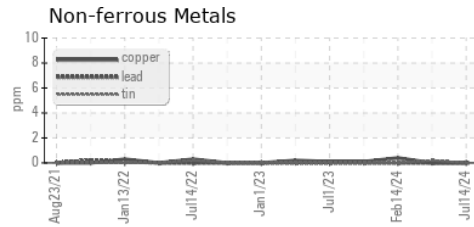
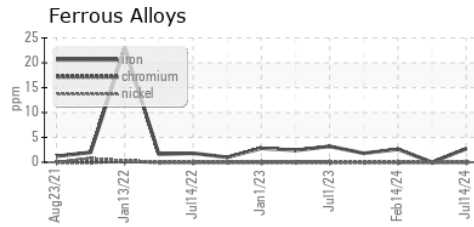
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	219	222

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0129255  
**Lab Number** : 06236193  
**Unique Number** : 11125027  
**Test Package** : PLANT

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

**SDI - Steel DynamicsInc. - 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)