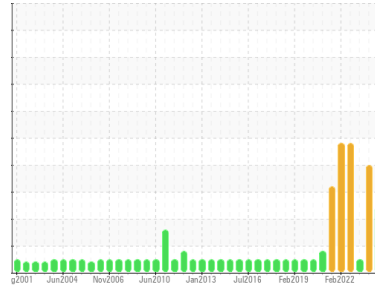




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area

[22096594]

Machine Id

139-208 RECLAIM HOPPER TRUCK DUMPER #2

Component

Gearbox

Fluid

ESSO SPARTAN EP 220 (20 GAL)

## DIAGNOSIS

### Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Free water present.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0813433</b>	WC0840169	WC0760276
Sample Date	Client Info		<b>15 Jan 2024</b>	26 Jul 2023	18 Jan 2023
Machine Age	yrs	Client Info	<b>0</b>	0	0
Oil Age	yrs	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	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	2
Iron	ppm	ASTM D5185(m) >200	<b>104</b>	95	76
Chromium	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	1	<1
Lead	ppm	ASTM D5185(m) >100	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m) >200	<b>6</b>	4	4
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) .5	<b>16</b>	20	13
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 1.7	<b>6</b>	6	2
Phosphorus	ppm	ASTM D5185(m) 250	<b>323</b>	338	348
Zinc	ppm	ASTM D5185(m) .3	<b>27</b>	26	16
Sulfur	ppm	ASTM D5185(m)	<b>13532</b>	13047	13469
Lithium	ppm	ASTM D5185(m)	<b>1</b>	<1	1

## CONTAMINANTS

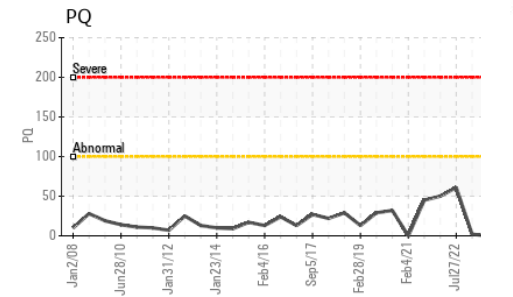
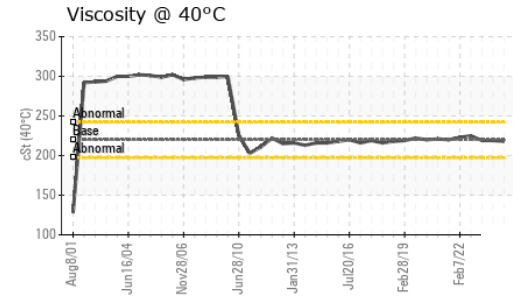
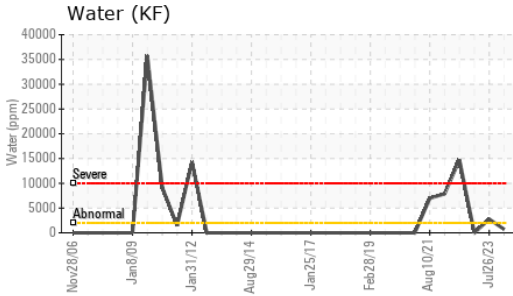
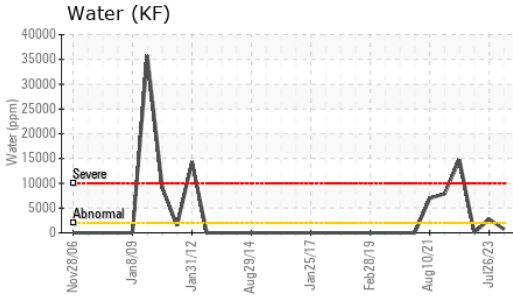
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>4</b>	6	2
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1
Water	%	ASTM D6304* >0.2	<b>0.071</b>	▲ 0.276	---
ppm Water	ppm	ASTM D6304* >2000	<b>712</b>	▲ 2761.0	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.75	<b>0.58</b>	0.67	0.67



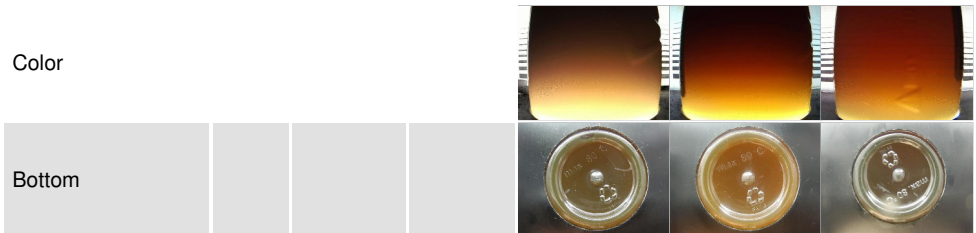
# OIL ANALYSIS REPORT



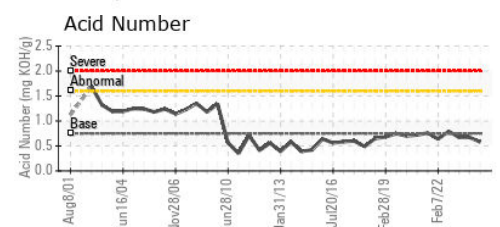
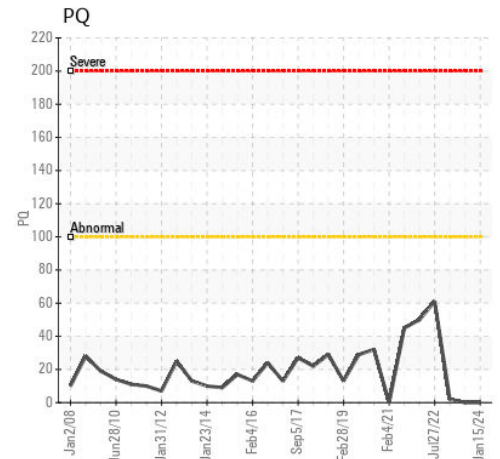
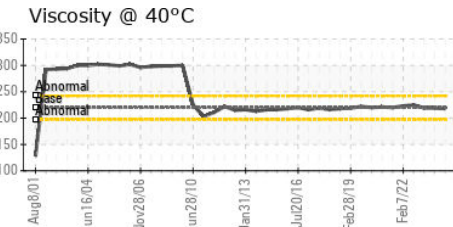
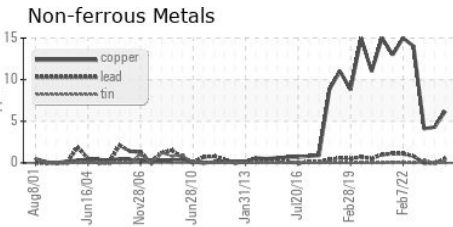
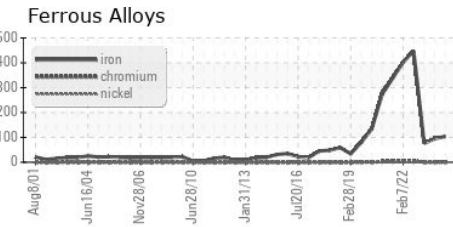
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ WGOIL	▲ WGOIL
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	▲ .2%	NEG
Free Water	scalar	Visual*		▲ 1%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	218	219

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0813433 **Received** : 23 Jan 2024  
**Lab Number** : 02610687 **Diagnosed** : 25 Jan 2024  
**Unique Number** : 5711773 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KF )

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

**ARAUCO - St. Stephen**  
 151 Church Street  
 St. Stephen, NB  
 CA E3L 3A6  
 Contact: Jim Sears  
 Jim.Sears@arauco.com  
 T: (506)465-2858  
 F: (506)465-2831