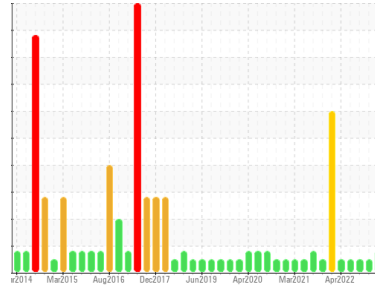




# PROBLEM SUMMARY

Sample Rating Trend



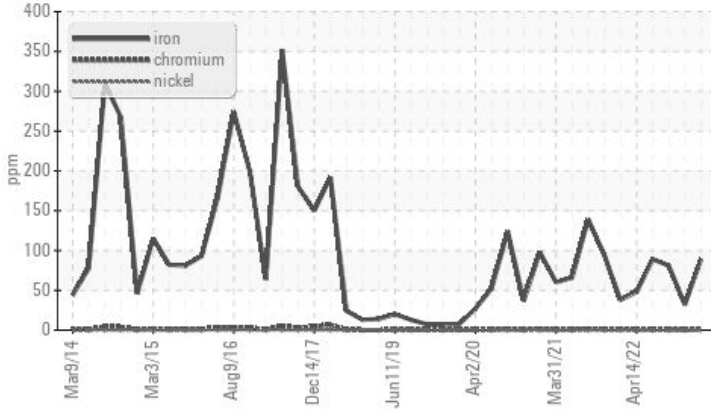
WEAR



Area  
**[21940461]**  
 Machine Id  
**129-162B Plug Screw Bearing Unit**  
 Component  
**Bearing**  
 Fluid  
**ESSO SPARTAN EP 220 (4 LTR)**

## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>20	▲ 89	32	81

Customer Id: FLASTS  
 Sample No.: WC0840189  
 Lab Number: 02575491  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

### 12 Jun 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 13 Sep 2022 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 28 Jun 2022 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

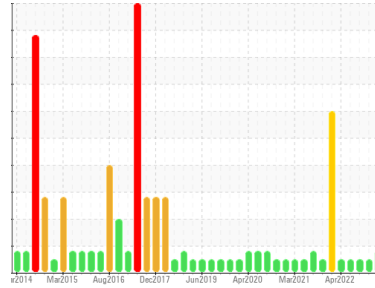
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**[21940461]**

Machine Id  
**129-162B Plug Screw Bearing Unit**

Component  
**Bearing**

Fluid  
**ESSO SPARTAN EP 220 (4 LTR)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

Iron ppm levels are noted. A sharp increase in the iron level is noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal.

### Contamination

The water content is negligible. 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>WC0840189</b>	WC0813443	WC0729477
Sample Date	Client Info		<b>03 Aug 2023</b>	12 Jun 2023	13 Sep 2022
Machine Age	days	Client Info	<b>0</b>	0	0
Oil Age	days	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>46</b>	0	21
Iron	ppm	ASTM D5185(m) >20	<b>▲ 89</b>	32	81
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<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>25</b>	26	22
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	1	0
Calcium	ppm	ASTM D5185(m) 1.7	<b>1</b>	7	<1
Phosphorus	ppm	ASTM D5185(m) 250	<b>327</b>	348	349
Zinc	ppm	ASTM D5185(m) .3	<b>5</b>	42	2
Sulfur	ppm	ASTM D5185(m)	<b>13975</b>	12536	13478
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

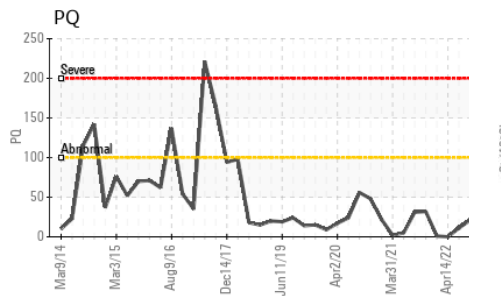
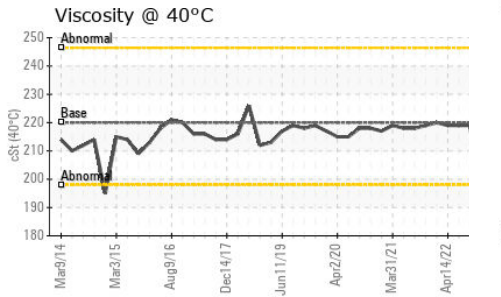
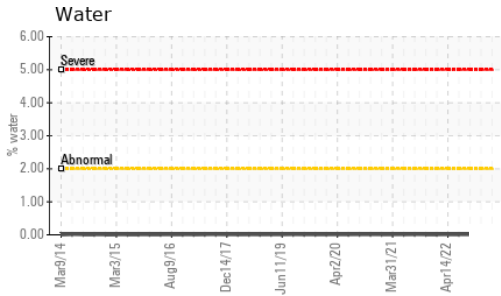
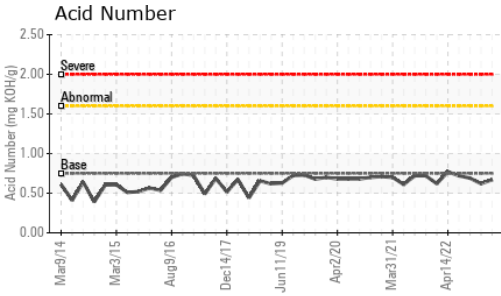
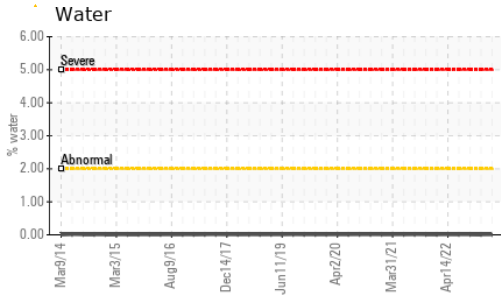
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>7</b>	<1	2
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0
Water	%	ASTM D6304* >2	<b>0.006</b>	0.001	0.006
ppm Water	ppm	ASTM D6304*	<b>68.8</b>	10.9	64.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.75	<b>0.67</b>	0.62	0.69



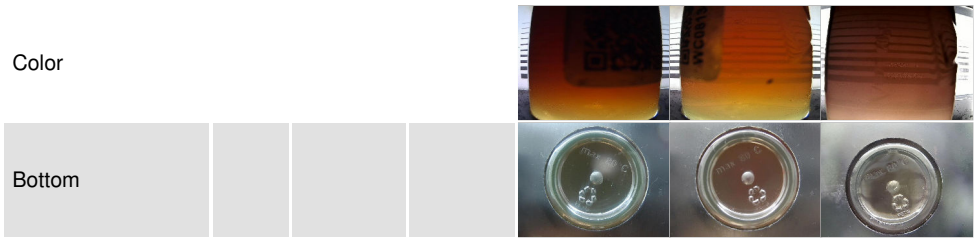
# OIL ANALYSIS REPORT



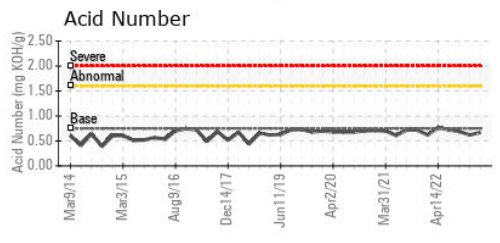
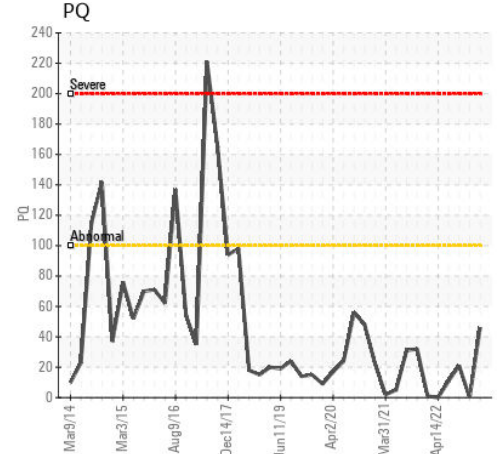
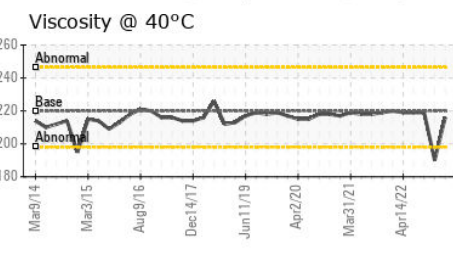
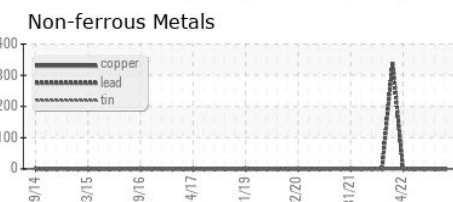
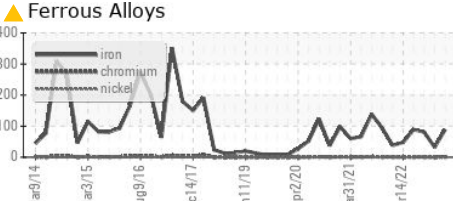
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	220	216	190	219

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0840189 **Received** : 11 Aug 2023  
**Lab Number** : 02575491 **Diagnosed** : 14 Aug 2023  
**Unique Number** : 5620542 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )

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

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.