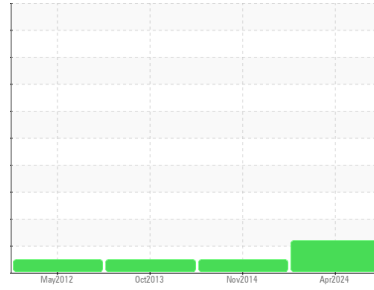




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**CENTRE PLANT/ROUTE #6**

Machine Id

**DODGE N/A 102335 LE-15 Elevator Reducer**

Component

**Gear Reducer**

Fluid

**ESSO SPARTAN EP 220 (15 LTR)**

## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### ▲ Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

### Contamination

Calcium and/or magnesium levels higher than normal indicating possible lime contamination, advise investigate.

### ● Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PP0000944</b>	WC	WC892131
Sample Date	Client Info		<b>09 Apr 2024</b>	14 Nov 2014	01 Oct 2013
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>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>32</b>	18	25
Iron	ppm	ASTM D5185(m) >150	<b>▲ 295</b>	193	172
Chromium	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	<1	0
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>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) .5	<b>15</b>	16	13
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)	<b>2</b>	2	1
Magnesium	ppm	ASTM D5185(m) 0	<b>2</b>	1	2
Calcium	ppm	ASTM D5185(m) 1.7	<b>● 136</b>	44	52
Phosphorus	ppm	ASTM D5185(m) 250	<b>282</b>	247	248
Zinc	ppm	ASTM D5185(m) .3	<b>5</b>	4	4
Sulfur	ppm	ASTM D5185(m)	<b>13168</b>	8928	9862
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>10</b>	13	11
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

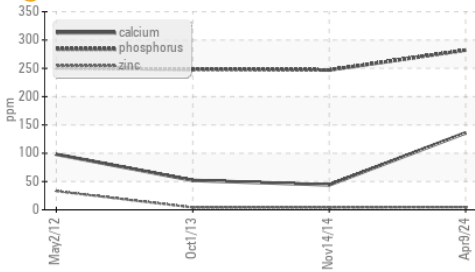
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.75	<b>0.56</b>	0.41	0.45

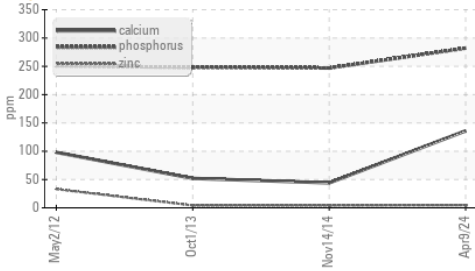


# OIL ANALYSIS REPORT

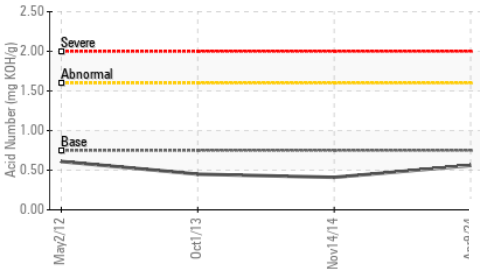
### ● Additives



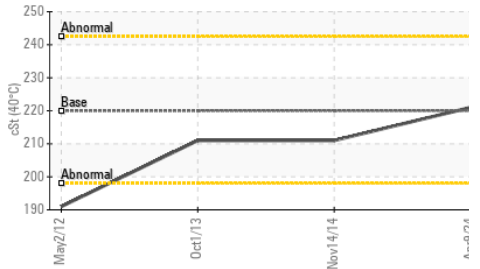
### ● Additives



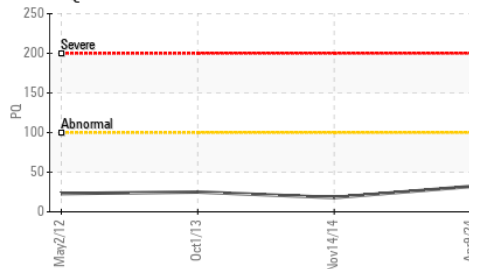
### Acid Number



### Viscosity @ 40°C



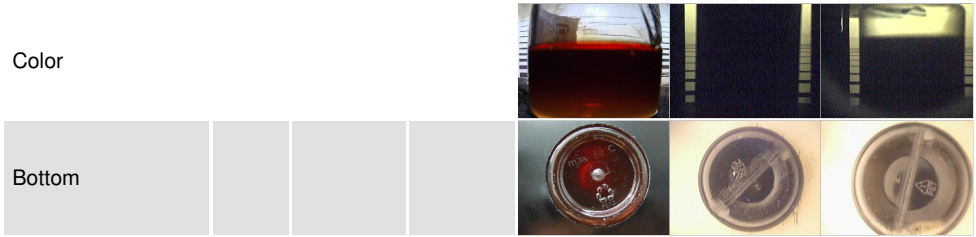
### PQ



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	LIGHT	VLITE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

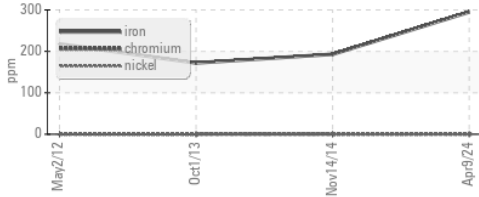
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	221	211

SAMPLE IMAGES	method	limit/base	current	history1	history2
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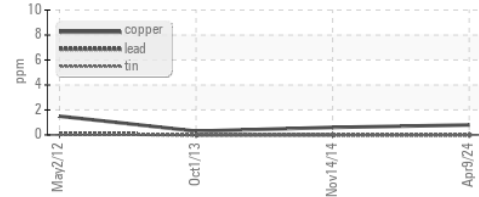


## GRAPHS

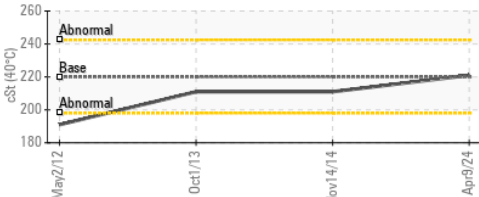
### ▲ Ferrous Alloys



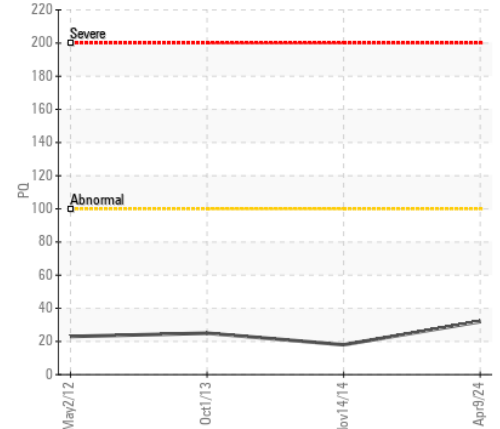
### Non-ferrous Metals



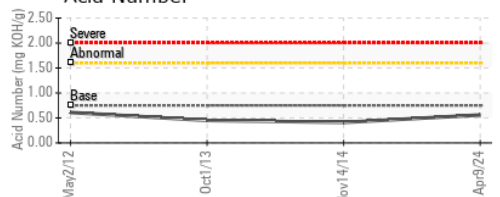
### Viscosity @ 40°C



### PQ



### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP0000944 **Received** : 10 Apr 2024  
**Lab Number** : 02628032 **Tested** : 10 Apr 2024  
**Unique Number** : 5761164 **Diagnosed** : 10 Apr 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**CARMEUSE LIME**  
 374681 OXFORD COUNTY ROAD 6., P.O. BOX 190  
 INGERSOLL, ON  
 CA N5C 3K5  
 Contact: Jeff Geddes  
 jeff.geddes@carmeusena.com  
 T: (519)423-6283  
 F: (519)423-6568

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.