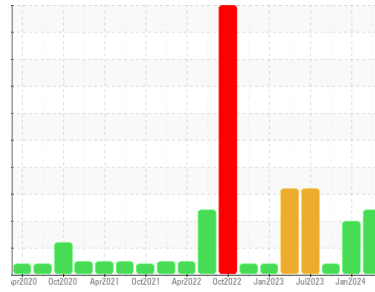


# OIL ANALYSIS REPORT

Area  
**GRIND ROOM [98874601]**  
 Machine Id  
**KR-GR-002931 - GRINDER A2 (WEST) (S/N GRIND A - 11513024)**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA 220 (6 QTS)**

Sample Rating Trend



## DIAGNOSIS

**Recommendation**  
 We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. ( Customer Sample Comment: 98874601 )

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Elemental level of silicon (Si) above normal. Moderate concentration of visible dirt/debris present in the oil.

**Fluid Condition**  
 Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0120384</b>	PCA0088769	PCA0091775
Sample Date	Client Info	<b>17 Apr 2024</b>	11 Jan 2024	23 Oct 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ATTENTION

## 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
Iron	ppm ASTM D5185m >200	<b>33</b>	22	14
Chromium	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>1</b>	2	2
Lead	ppm ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >200	<b>8</b>	7	5
Tin	ppm ASTM D5185m >25	<b>&lt;1</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>1</b>	2	2
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm ASTM D5185m	<b>10</b>	8	4
Magnesium	ppm ASTM D5185m	<b>1</b>	<1	<1
Calcium	ppm ASTM D5185m	<b>2</b>	3	5
Phosphorus	ppm ASTM D5185m	<b>83</b>	109	103
Zinc	ppm ASTM D5185m	<b>7</b>	0	0
Sulfur	ppm ASTM D5185m	<b>7355</b>	7335	6797

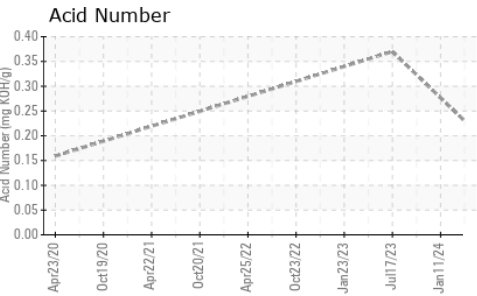
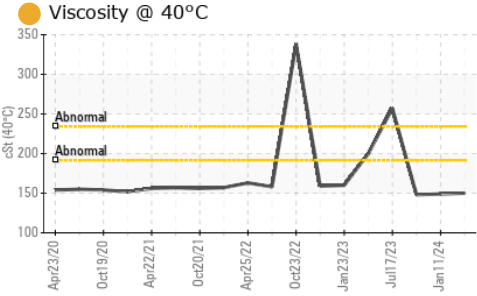
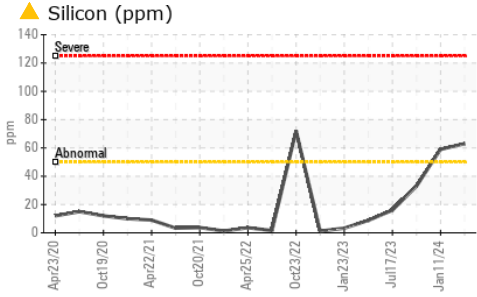
## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>▲ 63</b>	▲ 59	33
Sodium	ppm ASTM D5185m	<b>0</b>	0	0
Potassium	ppm ASTM D5185m >20	<b>1</b>	2	2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.23</b>	---	---

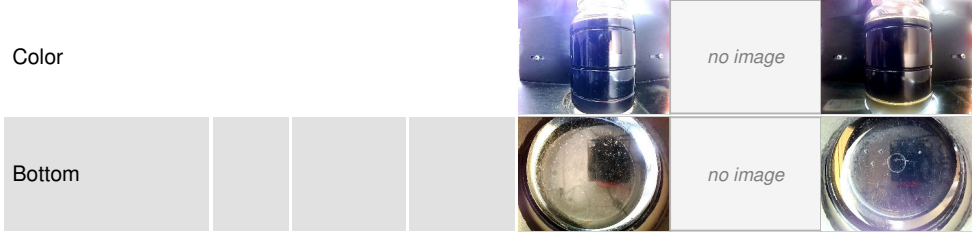
# OIL ANALYSIS REPORT



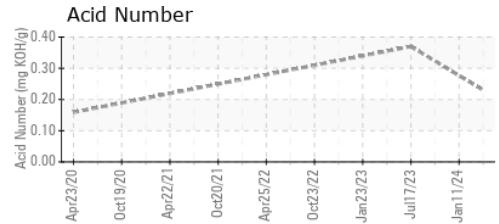
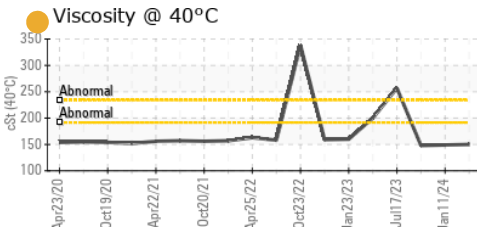
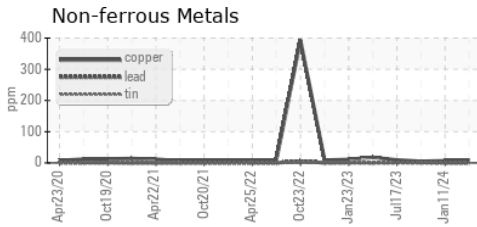
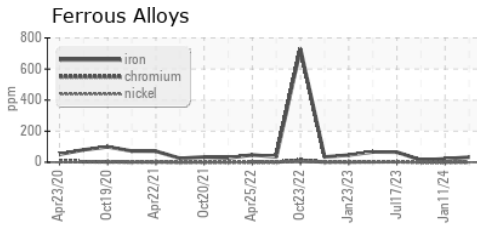
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>MODER</b>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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>150</b>	149	148

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.** : PCA0120384  
**Lab Number** : 06155852  
**Unique Number** : 10991275  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 22 Apr 2024  
**Tested** : 24 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Don Baldrige

**KraftHeinz - Kirksville - Plant 8333 PCA**  
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 KIRKSVILLE, MO  
 US 63501  
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 T: (660)627-1031  
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