



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id  
**Koppers 3RD GRIND MILL 1 (S/N 79-746)**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 32 (100 LTR)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0872188</b>	WC0872200	WC0755981
Sample Date		Client Info		<b>13 May 2024</b>	08 Nov 2023	19 Apr 2023
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>1</b>	0	0
Filter Age	mths	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	1
Copper	ppm	ASTM D5185(m)	>20	<b>13</b>	12	29
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

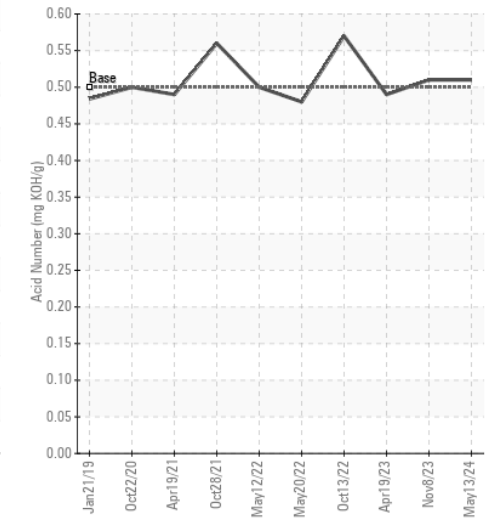
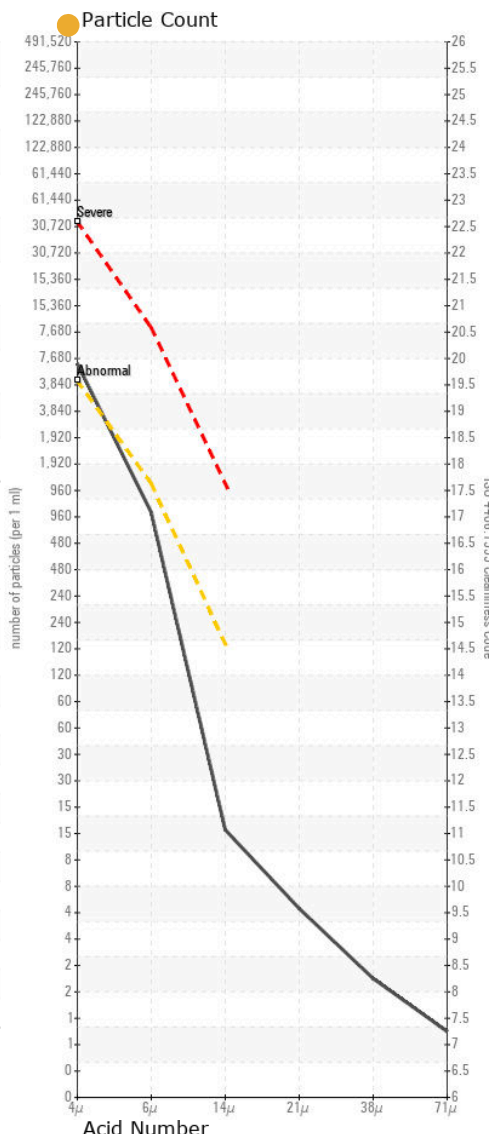
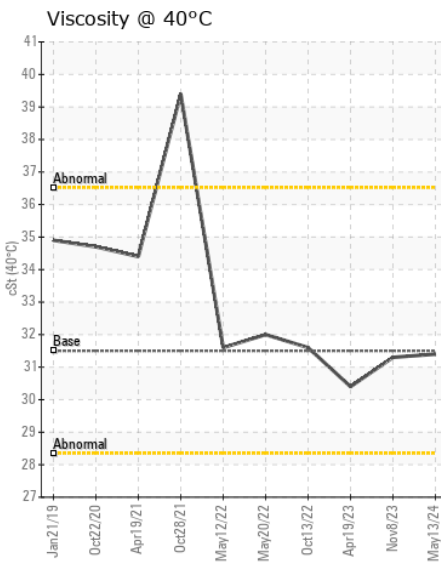
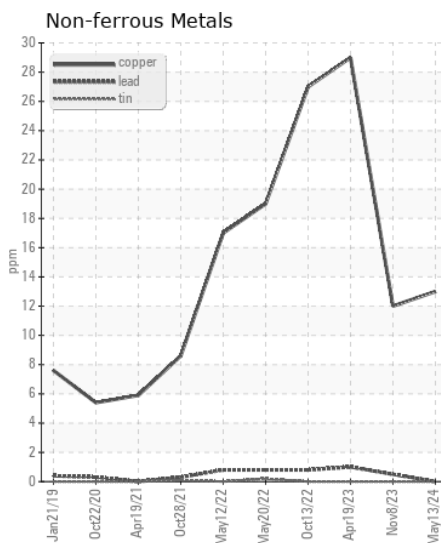
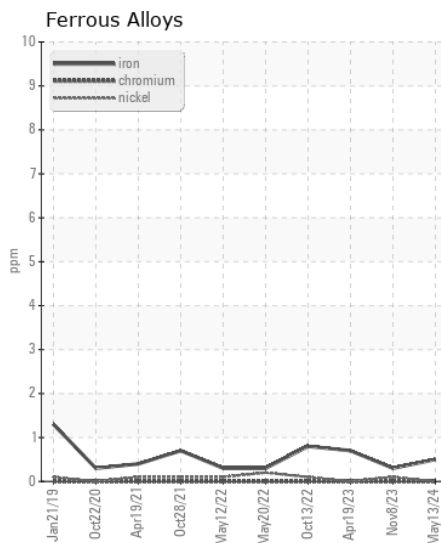
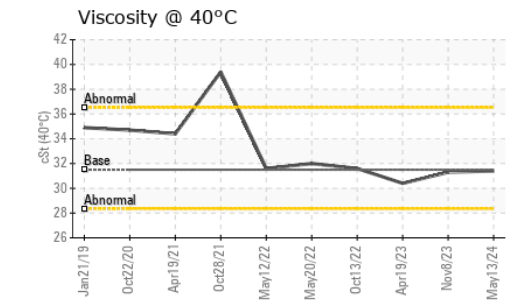
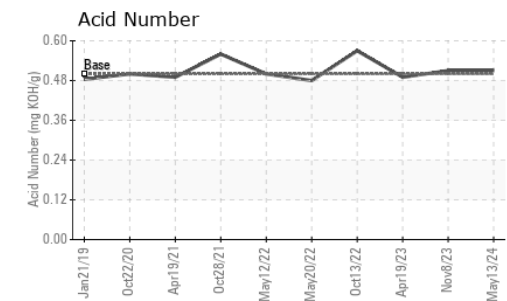
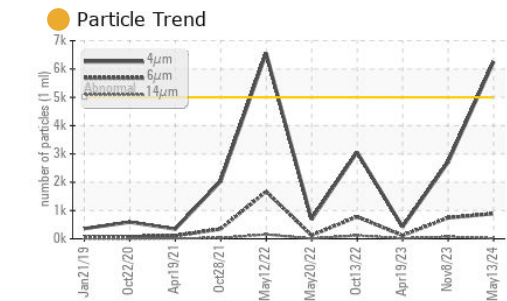
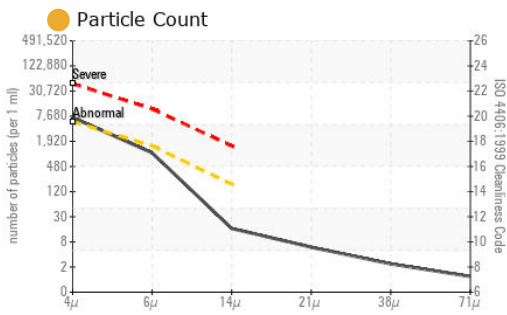
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	4	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>6255</b>	2706	423
Particles >6µm		ASTM D7647	>1300	<b>890</b>	742	118
Particles >14µm		ASTM D7647	>160	<b>14</b>	72	10
Particles >21µm		ASTM D7647	>40	<b>5</b>	10	4
Particles >38µm		ASTM D7647	>10	<b>2</b>	2	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	2	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/17/11</b>	19/17/13	16/14/10
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	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*	>0.05	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)	50	<b>24</b>	31	8
Phosphorus	ppm	ASTM D5185(m)	330	<b>331</b>	322	350
Zinc	ppm	ASTM D5185(m)	430	<b>394</b>	414	372
Sulfur	ppm	ASTM D5185(m)	760	<b>756</b>	731	732
Acid Number (AN)	mg KOH/g	ASTM D974*	0.50	<b>0.51</b>	0.51	0.49
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>31.4</b>	31.3	30.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0872188  
**Lab Number** : 02636027  
**Unique Number** : 5785189  
**Test Package** : IND 2  
**Received** : 16 May 2024  
**Tested** : 17 May 2024  
**Diagnosed** : 17 May 2024 - Wes Davis

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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.