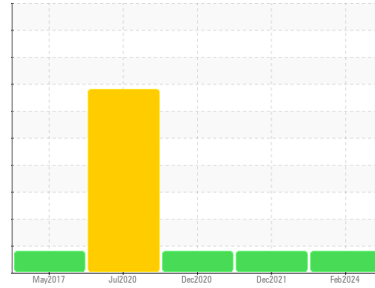




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



## Machine Id 95 TON ALLSTEEL PRESS

Component  
Hydraulic System

Fluid  
PETRO CANADA HYDREX AW 32 (75 GAL)

### DIAGNOSIS

#### Recommendation

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### Fluid Condition

The oil viscosity is higher than typical. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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>WC0597208</b>	WC0597202	WC0371738
Sample Date	Client Info			<b>15 Feb 2024</b>	10 Dec 2021	07 Dec 2020
Machine Age	yrs	Client Info		<b>0</b>	6	0
Oil Age	yrs	Client Info		<b>0</b>	6	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ATTENTION	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
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>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	2	<1
Copper	ppm	ASTM D5185(m)	>20	<b>9</b>	8	8
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
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

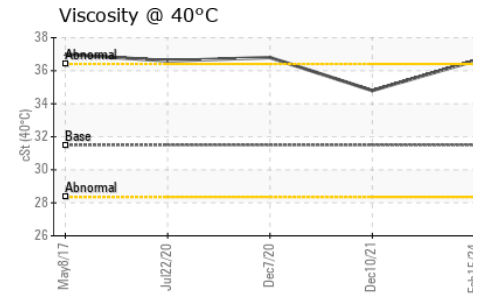
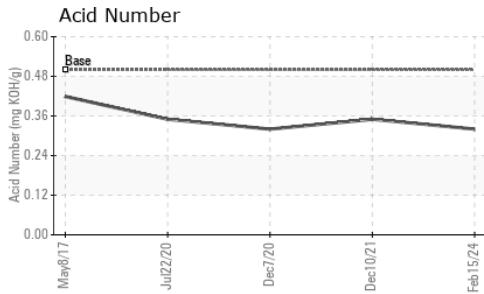
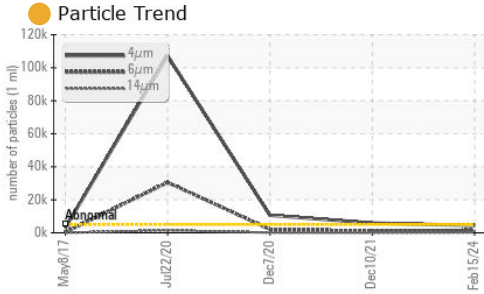
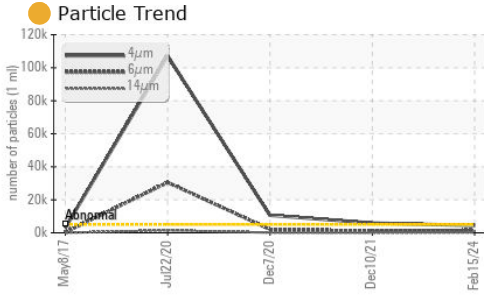
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>5</b>	6	5
Barium	ppm	ASTM D5185(m)	0	<b>17</b>	18	18
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	50	<b>107</b>	105	105
Phosphorus	ppm	ASTM D5185(m)	330	<b>320</b>	331	308
Zinc	ppm	ASTM D5185(m)	430	<b>348</b>	360	372
Sulfur	ppm	ASTM D5185(m)	760	<b>1470</b>	1386	1463
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>3</b>	4	4
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>4415</b>	5931	10596
Particles >6µm		ASTM D7647	>1300	<b>1473</b>	968	2092
Particles >14µm		ASTM D7647	>160	<b>152</b>	31	104
Particles >21µm		ASTM D7647	>40	<b>37</b>	5	18
Particles >38µm		ASTM D7647	>10	<b>2</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/18/14</b>	20/17/12	21/18/14



# OIL ANALYSIS REPORT

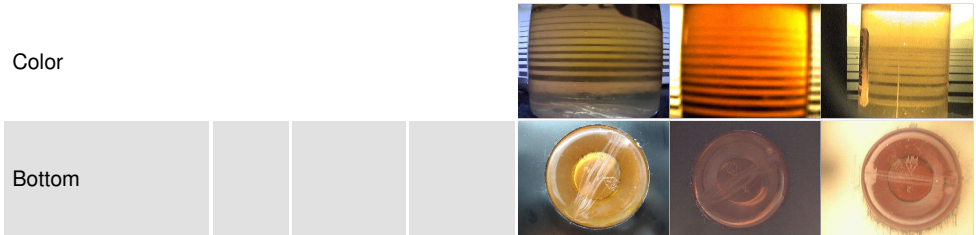


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.50	<b>0.32</b>	0.35	0.32

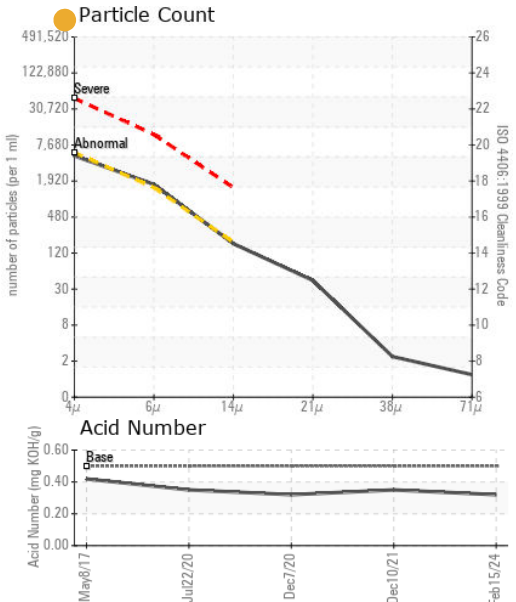
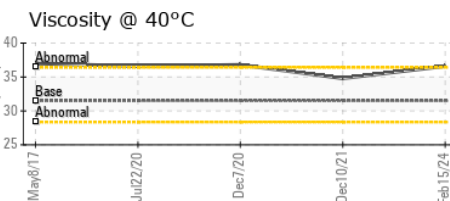
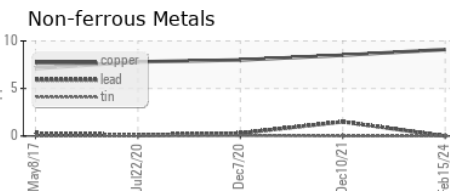
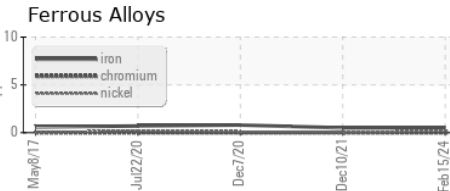
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>36.6</b>	34.8	36.8

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. : WC0597208  
 Lab Number : 02622678  
 Unique Number : 5747797  
 Test Package : IND 2

Received : 18 Mar 2024  
 Tested : 19 Mar 2024  
 Diagnosed : 19 Mar 2024 - Kevin Marson

**LARSEN & SHAW LTD**  
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 CA N0G 2V0  
 Contact: Derek Kuntz  
 dkuntz@larsenhinge.com  
 T: (519)881-1320  
 F: 519883593

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.