



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**17C01H07#02 - Aft Tuggers Power Pack**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA HYDREX MV 32 (175 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0747560</b>	WC0747568	WC0658569
Sample Date		Client Info		<b>28 Mar 2024</b>	31 Mar 2023	27 Mar 2022
Machine Age	hrs	Client Info		<b>0</b>	4078	3989
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	86	140
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<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)	>10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185(m)	>20	<b>34</b>	38	33
Tin	ppm	ASTM D5185(m)	>10	<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

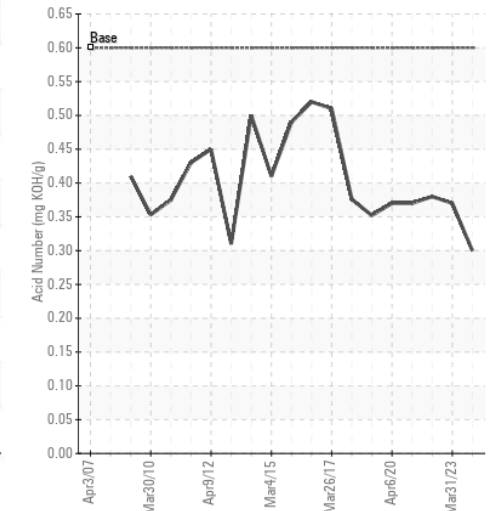
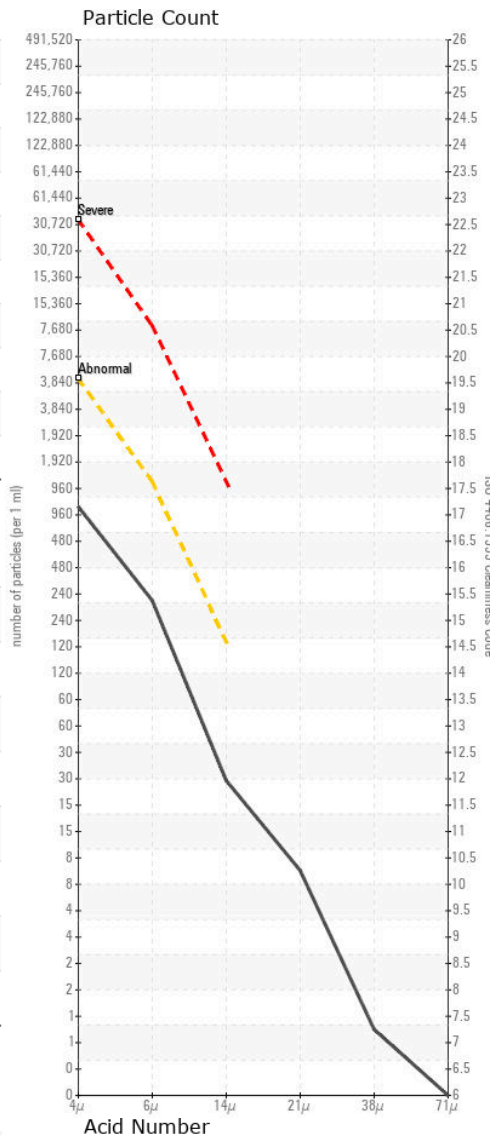
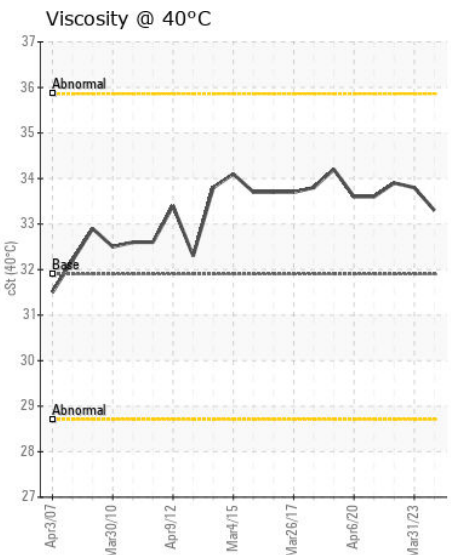
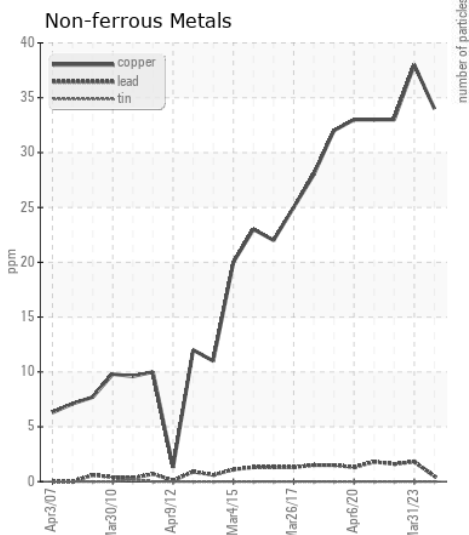
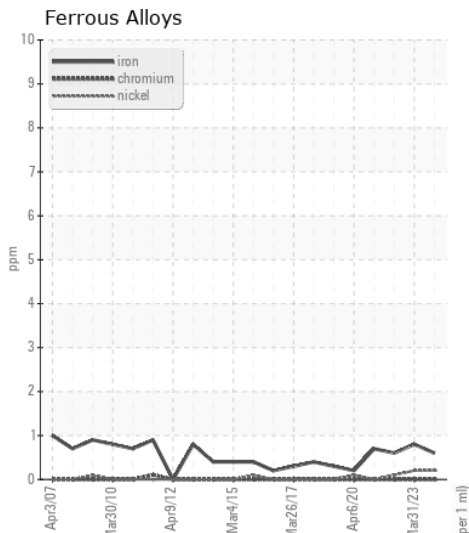
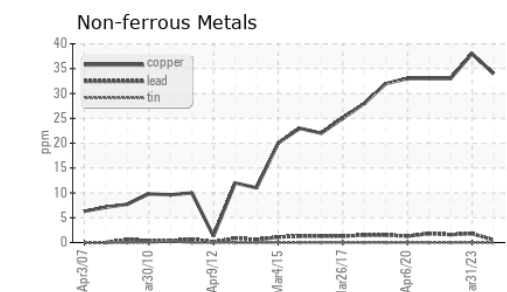
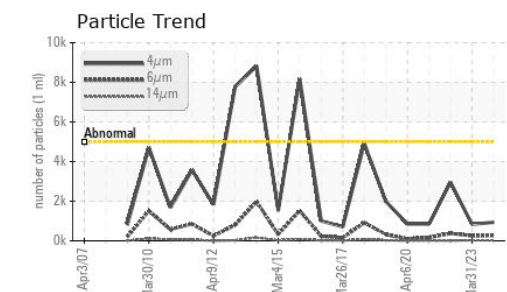
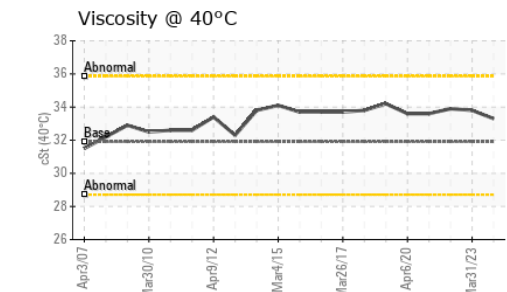
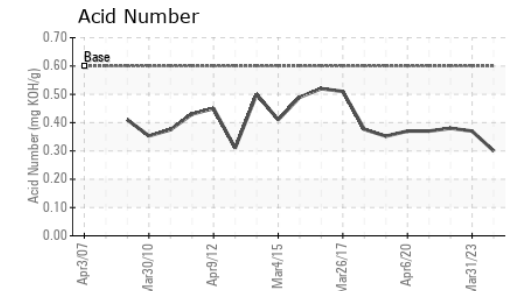
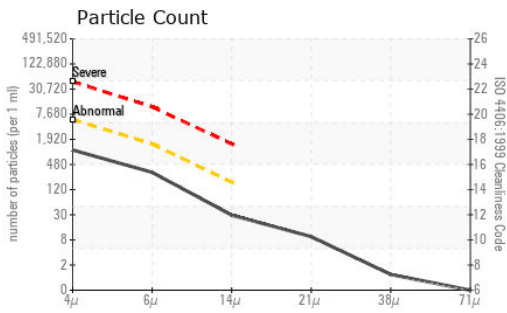
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	1
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>937</b>	832	2953
Particles >6µm		ASTM D7647	>1300	<b>274</b>	253	378
Particles >14µm		ASTM D7647	>160	<b>26</b>	29	10
Particles >21µm		ASTM D7647	>40	<b>8</b>	9	2
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/15/12</b>	17/15/12	19/16/10
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>2</b>	3	2
Boron	ppm	ASTM D5185(m)	0	<b>8</b>	9	10
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Calcium	ppm	ASTM D5185(m)	50	<b>101</b>	115	111
Phosphorus	ppm	ASTM D5185(m)	330	<b>290</b>	315	294
Zinc	ppm	ASTM D5185(m)	430	<b>314</b>	298	298
Sulfur	ppm	ASTM D5185(m)	760	<b>1401</b>	1563	1433
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.30</b>	0.37	0.38
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	<b>33.3</b>	33.8	33.9



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0747560  
**Lab Number** : 02628169  
**Unique Number** : 5761301  
**Test Package** : MAR 2

**Received** : 11 Apr 2024  
**Tested** : 12 Apr 2024  
**Diagnosed** : 12 Apr 2024 - Kevin Marson

**CANADIAN COAST GUARD**  
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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.