



# OIL ANALYSIS REPORT

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

Area  
**HPP**  
Machine Id  
**VESSEL 1 PUMP 1 (S/N B44049)**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA PURITY FG AW HYDRAULIC 46 (90 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0887343</b>	WC0887345	WC0887312
Sample Date		Client Info		<b>30 Jan 2024</b>	03 Jan 2024	28 Dec 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>4	<b>0</b>	2	1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>60	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<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

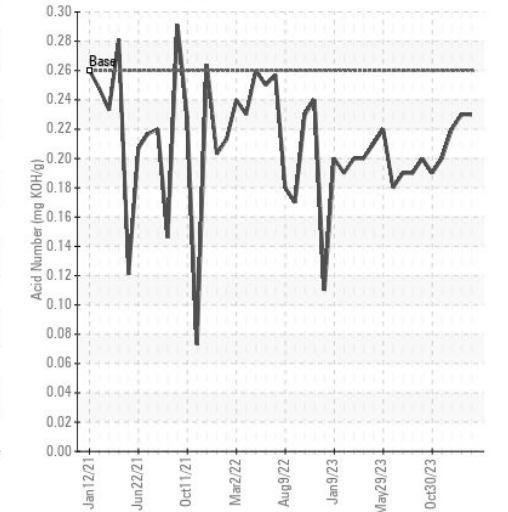
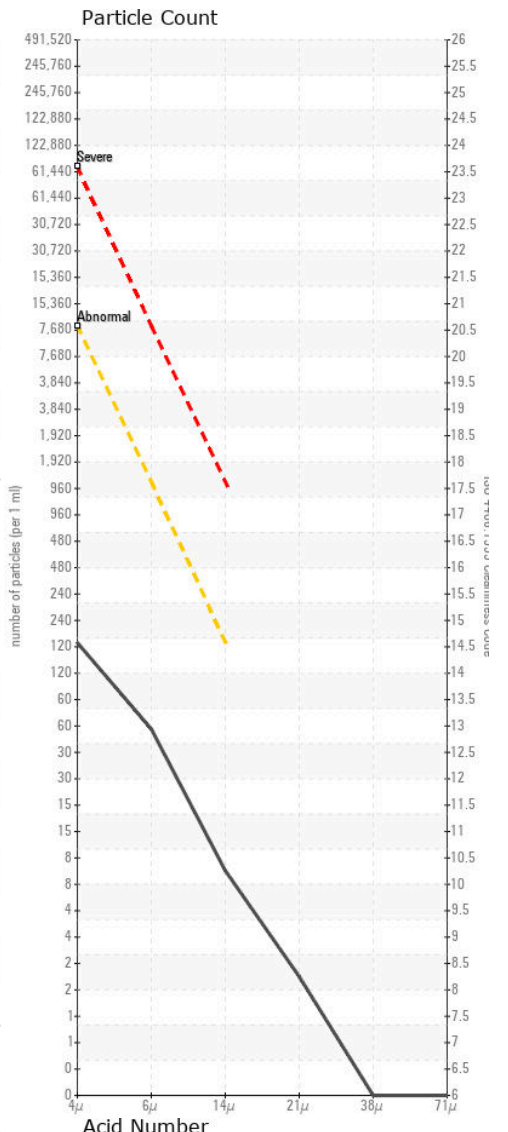
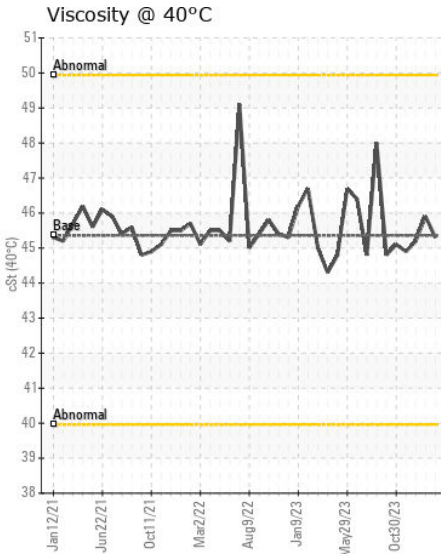
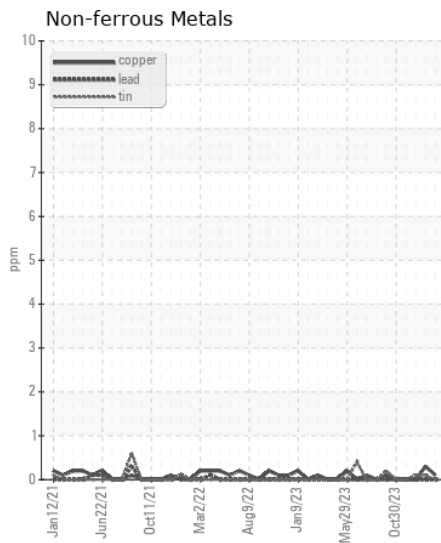
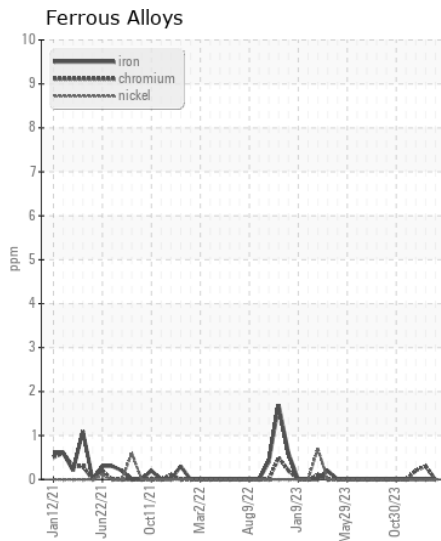
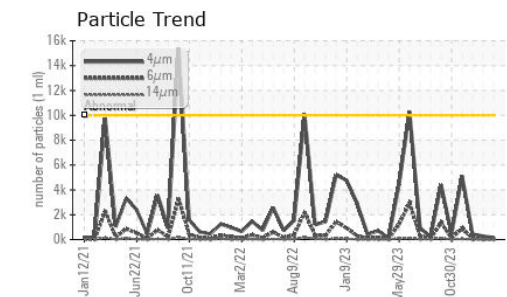
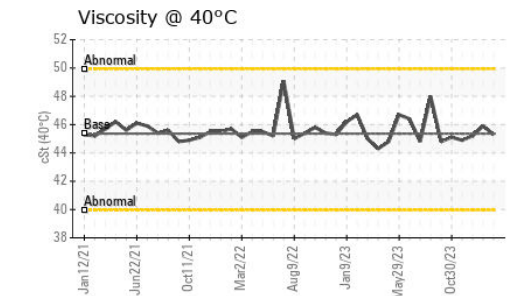
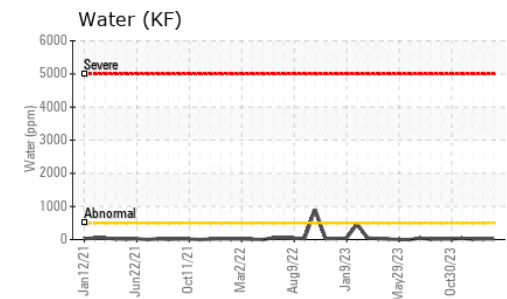
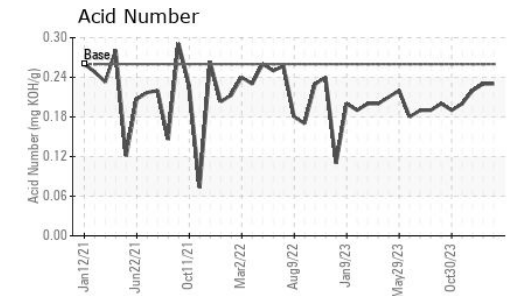
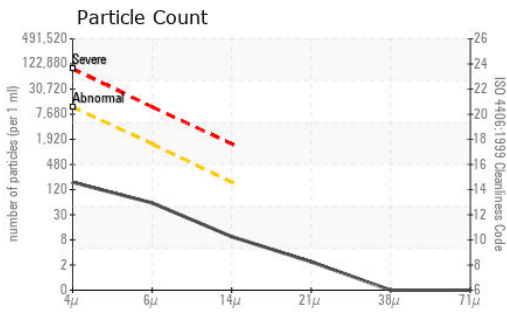
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water	%	ASTM D6304	>0.05	<b>0.002</b>	0.002	0.001
ppm Water	ppm	ASTM D6304	>500	<b>20</b>	21	10
Particles >4µm		ASTM D7647	>10000	<b>158</b>	279	437
Particles >6µm		ASTM D7647	>1300	<b>51</b>	58	112
Particles >14µm		ASTM D7647	>160	<b>8</b>	5	5
Particles >21µm		ASTM D7647	>40	<b>2</b>	1	1
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/17/14	<b>14/13/10</b>	15/13/10	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 D5185m		<b>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	10
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Phosphorus	ppm	ASTM D5185m		<b>422</b>	435	462
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>482</b>	469	479
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	<b>0.23</b>	0.23	0.22
Visc @ 40°C	cSt	ASTM D445	45.36	<b>45.3</b>	45.9	45.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0887343  
**Lab Number** : 06084809  
**Unique Number** : 10872254  
**Test Package** : IND 2 ( Additional Tests: KF )  
**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**OSCEOLA FOODS (HORMEL)**  
 1027 WARREN AVE  
 OSCEOLA, IA  
 US 50213  
 Contact: WADE MYERS  
 wlm Myers@hormel.com  
 T: (641)342-8043  
 F: (641)342-8047

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)