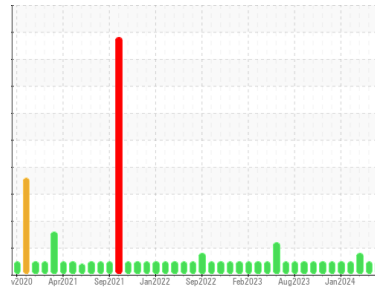




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

HPP [10024247868]

Machine Id

VESSEL 3 PUMP 2 (S/N B44046)

Component

Hydraulic System

Fluid

PETRO CANADA PURITY FG AW HYDRAULIC 46 (90 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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.

Fluid Condition

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	WC0936579	WC0802559	WC0916587
Sample Date	Client Info	28 May 2024	30 Apr 2024	25 Mar 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0
Chromium	ppm	ASTM D5185m >20	0	0
Nickel	ppm	ASTM D5185m >20	0	0
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >20	0	0
Lead	ppm	ASTM D5185m >20	0	<1
Copper	ppm	ASTM D5185m >20	0	0
Tin	ppm	ASTM D5185m >20	0	<1
Vanadium	ppm	ASTM D5185m	0	<1
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	<1	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	<1	<1
Magnesium	ppm	ASTM D5185m	0	1
Calcium	ppm	ASTM D5185m	1	2
Phosphorus	ppm	ASTM D5185m	453	448
Zinc	ppm	ASTM D5185m	6	0
Sulfur	ppm	ASTM D5185m	583	583

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	3
Sodium	ppm	ASTM D5185m	2	<1
Potassium	ppm	ASTM D5185m >20	2	2
Water	%	ASTM D6304 >0.05	0.018	0.00
ppm Water	ppm	ASTM D6304 >500	180	0

FLUID CLEANLINESS

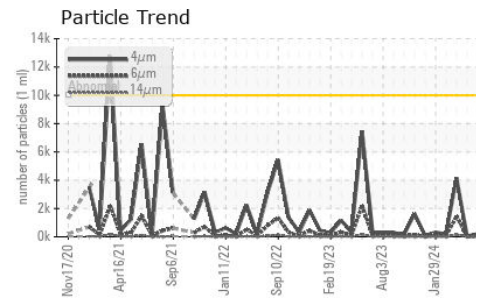
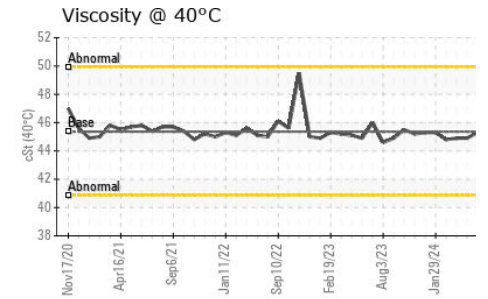
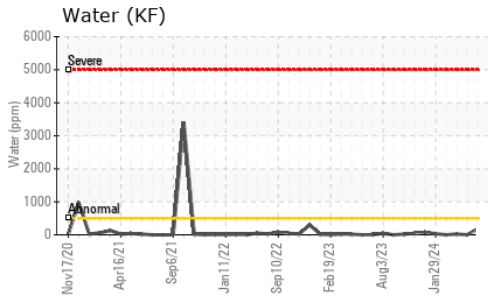
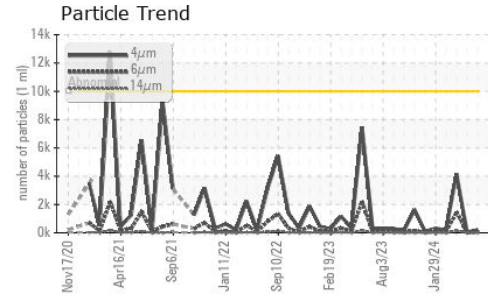
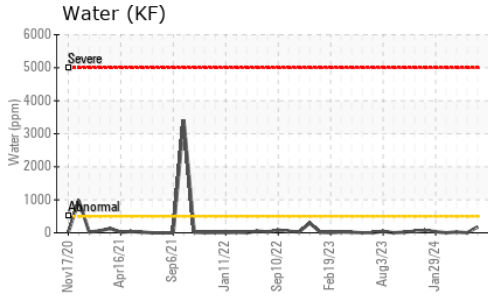
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	205	60	4157
Particles >6µm	ASTM D7647 >1300	64	5	1459
Particles >14µm	ASTM D7647 >160	7	0	156
Particles >21µm	ASTM D7647 >40	3	0	33
Particles >38µm	ASTM D7647 >10	0	0	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/17/14	15/13/10	13/10/7	19/18/14

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.26	0.24	0.23



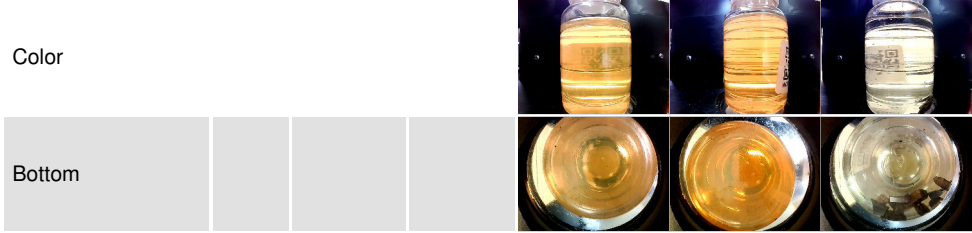
OIL ANALYSIS REPORT



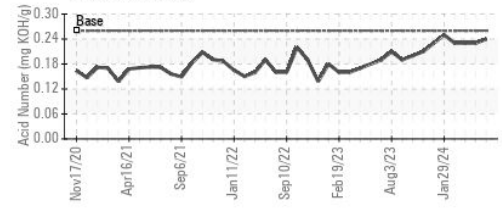
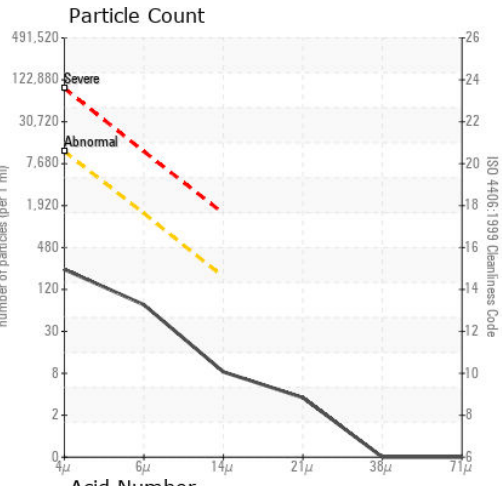
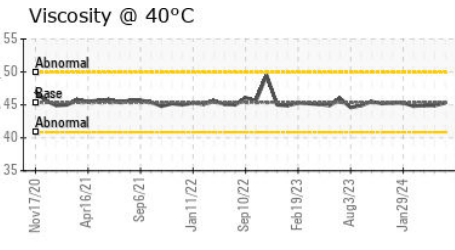
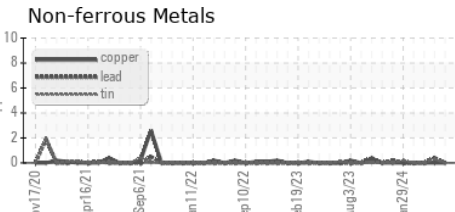
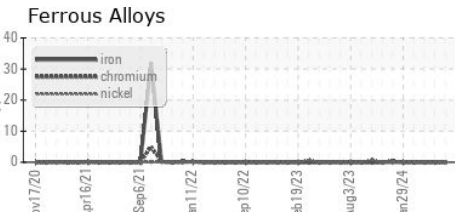
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	45.3	44.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936579 **Received** : 10 Jun 2024
Lab Number : 06204645 **Tested** : 12 Jun 2024
Unique Number : 11072106 **Diagnosed** : 12 Jun 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: KF)

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 1027 WARREN AVE
 OSCEOLA, IA
 US 50213
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 wlmyers@hormel.com
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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)