

OIL ANALYSIS REPORT

Sample Rating Trend

WATER

B63927 - 13K BLENDER

Hydraulic System

PETRO CANADA PURITY FG AW HYDRAULIC 46 (50 GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

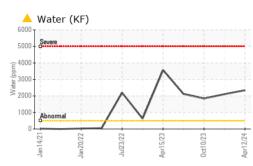
The AN level is acceptable for this fluid.

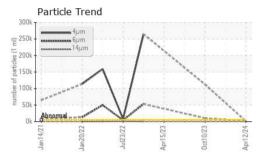
Sample Date Client Info 12 Apr 2024 08 Jan 2024 10 Oct 202 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info NA N/A N/A ABNORMAL ABNO	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Client Info N/A ABNORMAL ABNORMAL ABNORMAL WEAR METALS method limit/base current history history Iron ppm ASTM D5165m >20 4 5 12 Chromium ppm ASTM D5165m >20 0 <1	Sample Number		Client Info		WC0914016	WC0894816	WC0856685
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info NA NA NA NA Sample Status Image Client Info NA ABNORMAL ABNORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >20 4 5 12 Chromium ppm ASTM D5185m >20 0 <1	Sample Date		Client Info		12 Apr 2024	08 Jan 2024	10 Oct 2023
Oil Changed Client Info N/A N/A N/A N/A N/A N/A N/A ABNORMAL <	Machine Age	hrs	Client Info		0	0	0
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Nickel ppm ASTM D5185m >20 0 <1 <1 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >20 <1	Chromium	ppm	ASTM D5185m	>20	<1	<1	2
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Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >20 <1	Titanium		ASTM D5185m		0	<1	0
Aluminum ppm ASTM D5185m >20 <1 2 2 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 <1	Silver				0	0	
Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 <1				>20	-		
Copper ppm ASTM D5185m >20 <1 <1 <1 Tin ppm ASTM D5185m >20 0 <1							
Tin ppm ASTM D5185m >20 0 <1 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Magnese ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 2 0 0 Phosphorus ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 588 496 463 CONTAMINANTS method limit/base current history1 history1					-		
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Calcium ppm ASTM D5185m 0 2 0 Phosphorus ppm ASTM D5185m 440 420 447 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 588 496 463 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >15 3 3 4 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		<1	0	<1
Phosphorus ppm ASTM D5185m 440 420 447 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 588 496 463 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >15 3 3 4 Sodium ppm ASTM D5185m >15 3 3 4 Sodium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D5185m >20 <1 <1 0.184 ppm Water ppm ASTM D6304 >0.05 ▲ 0.234 △ 0.211 △ 1840 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >5000 1051 △ 112454 Particles >14µm ASTM D7647	Magnesium	ppm	ASTM D5185m		0	0	0
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Silicon ppm ASTM D5185m >15 3 3 4 Sodium ppm ASTM D5185m >20 <1 <1 0 Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D6304 >0.05 ▲ 0.234 ▲ 0.211 ▲ 0.184 ppm Water ppm ASTM D6304 >500 ▲ 2340 ▲ 2110 ▲ 1840 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >5000 1051 ▲ 112454 Particles >6µm ASTM D7647 >1300 573 ▲ 10288 Particles >14µm ASTM D7647 >160 97 25 Particles >21µm ASTM D7647 >10 5 0 Particles >38µm ASTM D7647 >3 1 0 Particles >71µm ASTM D7647 >3 1 24/21/12	Sulfur	ppm	ASTM D5185m		588	496	463
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Water % ASTM D6304 >0.05 ▲ 0.234 ▲ 0.211 ▲ 0.184 ppm Water ppm ASTM D6304 >500 ▲ 2340 ▲ 2110 ▲ 1840 FLUID CLEANLINESS method limit/base current history1 history Particles >4µm ASTM D7647 >5000 1051 ▲ 112454 Particles >6µm ASTM D7647 >1300 573 ▲ 10288 Particles >14µm ASTM D7647 >160 97 25 Particles >21µm ASTM D7647 >10 5 0 Particles >38µm ASTM D7647 >3 1 0 Particles >71µm ASTM D7647 >3 1 24/21/12 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history1	Sodium	ppm	ASTM D5185m		2	0	3
Water % ASTM D6304 >0.05 ▲ 0.234 ▲ 0.211 ▲ 0.184 ppm Water ppm ASTM D6304 >500 ▲ 2340 ▲ 2110 ▲ 1840 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >5000 1051 ▲ 112454 Particles >6µm ASTM D7647 >1300 573 ▲ 10288 Particles >14µm ASTM D7647 >160 97 25 Particles >21µm ASTM D7647 >40 33 4 Particles >38µm ASTM D7647 >10 5 0 Particles >71µm ASTM D7647 >3 1 24/21/12 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history1	Potassium	ppm	ASTM D5185m	>20	<1	<1	0
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Particles >6µm ASTM D7647 >1300 573 ▲ 10288 Particles >14µm ASTM D7647 >160 97 25 Particles >21µm ASTM D7647 >40 33 4 Particles >38µm ASTM D7647 >10 5 0 Particles >38µm ASTM D7647 >3 1 0 Particles >71µm ASTM D7647 >3 1 0 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history1	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
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Particles >21μm ASTM D7647 >40 33 4 Particles >38μm ASTM D7647 >10 5 0 Particles >37μm ASTM D7647 >3 1 0 Particles >71μm ASTM D7647 >3 1 0 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history1	Particles >14µm				97		25
Particles >38μm ASTM D7647 >10 5 0 Particles >71μm ASTM D7647 >3 1 0 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history	•		ASTM D7647	>40	33		4
Particles >71μm ASTM D7647 >3 1 0 Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 ▲ 24/21/12 FLUID DEGRADATION method limit/base current history1 history1							0
Oil Cleanliness ISO 4406 (c) >19/17/14 17/16/14 24/21/12 FLUID DEGRADATION method limit/base current history1 history1							
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.12	0.13	0.14

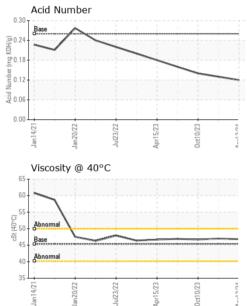
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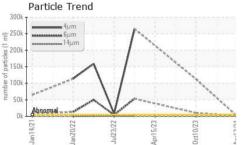


OIL ANALYSIS REPORT



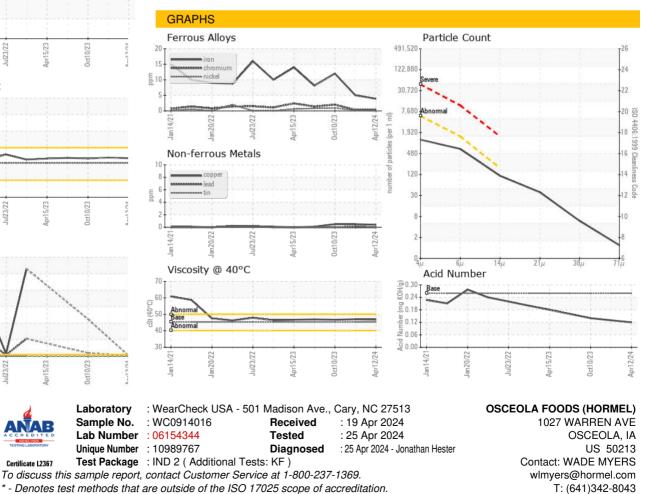






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VISUAL		method	limit/base	current	history1	history2
VIOUAL		method	in in Dase	Current	Thistory	Thistory2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	🔺 MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	🛑 HAZY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	46.8	47.0	46.7
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color				•		
Bottom						



* - 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)

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