

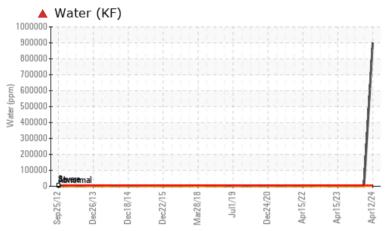
PROBLEM SUMMARY

Area **TUMBLE** Machine to **B37183 - W AMFEC HYD RES (S/N 960787)** Component

Hydraulic System

PETRO CANADA PURITY FG AW HYDRAULIC 46 (175 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a all tests.

PROBLEMATIC	TEST RI	ESULTS				
Sample Status				SEVERE	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	4 90.0	0.118	0.002
ppm Water	ppm	ASTM D6304	>500	4 900000	1 180	20.1

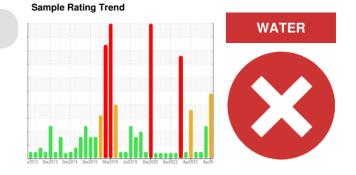
Customer Id: OSCOSC Sample No.: WC0914015 Lab Number: 06155018 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 <u>jhester@wearcheckusa.com</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com



RECOMMENDED /	ACTIONS			
Action	Status	Date	Done By	Description
Change Fluid			?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter			?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample			?	We recommend an early resample to monitor this condition.
Alert			?	Please note that there was too much water present in the oil to perform a viscosity test.
Check Water Access			?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

11 Oct 2023 Diag: Jonathan Hester

WATER

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.All component wear rates are normal. 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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



NORMAL Resa

16 Jul 2023 Diag: Wes Davis Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



\checkmark

26 Apr 2023 Diag: Angela Borella

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



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OIL ANALYSIS REPORT

Area TUMBLE B37183 - W AMFEC HYD RES (S/N 960787)

Hydraulic System

PETRO CANADA PURITY FG AW HYDRAULIC 46 (175 GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a all tests.

Wear

All component wear rates are normal.

Contamination

Sample consists almost entirely of free water. There is a high concentration of water present in the oil.

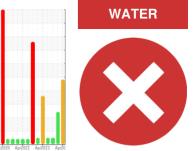
Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

Sample Date Client Info 12 Apr 2024 11 Oct 2023 16 Jul 2023 Machine Age hrs Client Info 0 0 0 0 Oll Age hrs Client Info 0 0 0 0 Oll Changed Client Info N/A N/A N/A N/A Sample Status Imethod Imit/base current History1 History1 Iron ppm ASTM D5185m >20 2 2 2 Iron ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m >20 0 0 0 0 Cadmium ppm ASTM D5185m 20 0 0 0 0 Cadmium ppm ASTM D5185m 0 0	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status Imit/base current history NoRMAL WEAR METALS method Imit/base current history NoRMAL WeAR METALS method Imit/base current history NoRMAL Iron ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m 20 0 0 0 Silver ppm ASTM D5185m 20 0 0 0 Copper ppm ASTM D5185m 20 0 0 0 Cadmium ppm ASTM D5185m 20 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>WC0914015</th> <td>WC0856687</td> <td>WC0828356</td>	Sample Number		Client Info		WC0914015	WC0856687	WC0828356
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Manganese ppm ASTM D5185m 0 <1 0 Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 2 0 Phosphorus ppm ASTM D5185m 441 446 558 Zinc ppm ASTM D5185m 6 2 5 Sulfur ppm ASTM D5185m 615 524 650 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >15 3 2 4 Sodium ppm ASTM D5185m >20 0 2 0 Water % ASTM D6304 >0.05 90.0 0.118 0.002 ppm Water ppm ASTM D6404 >500 900000 1180 20.1 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm <td< td=""><td>Barium</td><td>ppm</td><td>ASTM D5185m</td><td></td><th>0</th><td>0</td><td>2</td></td<>	Barium	ppm	ASTM D5185m		0	0	2
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Zinc ppm ASTM D5185m 6 2 5 Sulfur ppm ASTM D5185m 615 524 650 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >15 3 2 4 Sodium ppm ASTM D5185m >15 3 2 0 Potassium ppm ASTM D5185m >20 0 2 0 Water % ASTM D6304 >0.05 ● 90.0 △ 0.118 0.002 ppm Water ppm ASTM D6304 >500 ● 900000 △ 1180 20.1 FLUID CLEANLINESS method limit/base current history1 history Particles >4µm ASTM D7647 >10000 1800 1121 Particles >6µm ASTM D7647 >100 12 16 Particles >21µm ASTM D7647 >10 1 0 <td>Phosphorus</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>441</th> <td>446</td> <td>558</td>	Phosphorus	ppm	ASTM D5185m		441	446	558
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Particles >71μm ASTM D7647 >3 1 0 Oil Cleanliness ISO 4406 (c) >20/17/14 18/15/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history1			ASTM D7647	>10		1	0
Oil Cleanliness ISO 4406 (c) >20/17/14 18/15/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history			ASTM D7647	>3		1	0
						18/15/11	17/15/11
Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.24 0.23	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.26		0.24	0.23

Contact/Location: WADE MYERS - OSCOSC Page 3 of 4





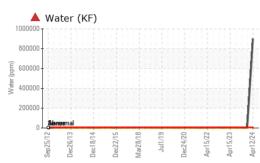


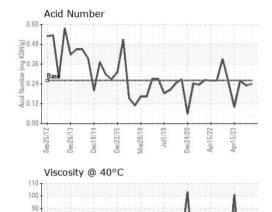
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OIL ANALYSIS REPORT

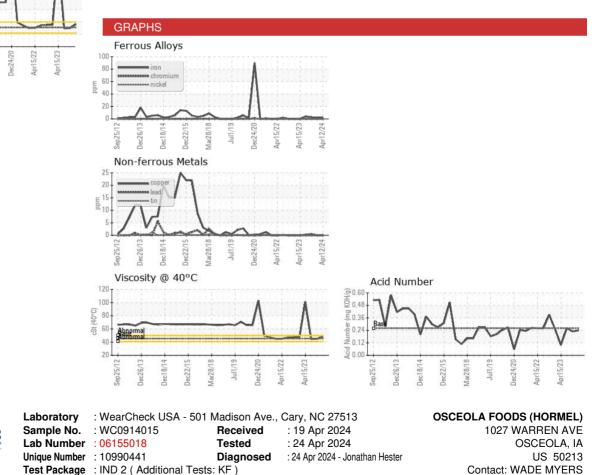




a78/18

ar18/14







Certificate 12367 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)

F: (641)342-8047 Contact/Location: WADE MYERS - OSCOSC

Report Id: OSCOSC [WUSCAR] 06155018 (Generated: 04/24/2024 12:02:52) Rev: 1

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