

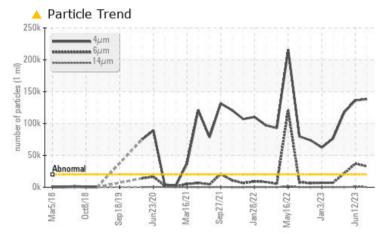
PROBLEM SUMMARY

Machine Id B46485 - KETTLE 11

Component Gearbox

PETRO CANADA ENDURATEX SYNTHETIC EP 220 (3 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL		
Particles >4µm	ASTM D7647	>20000	<u> </u>	▲ 136211	117780		
Particles >6µm	ASTM D7647	>5000	A 32930	A 37051	A 21550		
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<u> </u>	<u> </u>	▲ 24/22/15		

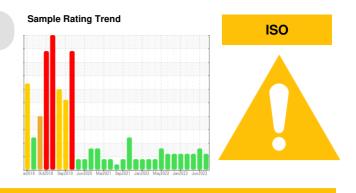
Customer Id: ROCROCUS Sample No.: WC0820520 Lab Number: 05926092 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Filter			?	We recommend you service the filters on this component if applicable.		

HISTORICAL DIAGNOSIS



12 Jun 2023 Diag: Jonathan Hester

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



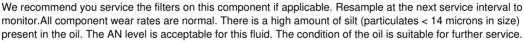
view report

17 Apr 2023 Diag: Don Baldridge



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

16 Feb 2023 Diag: Doug Bogart









OIL ANALYSIS REPORT

Machine Id B46485 - KETTLE 11 Component

Gearbox

PETRO CANADA ENDURATEX SYNTHETIC EP 220 (3 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

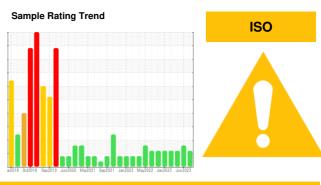
All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

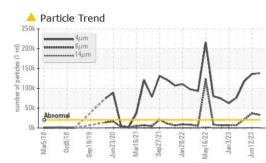
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

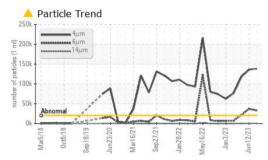


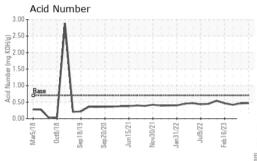
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0820520	WC0814163	WC0791994
Sample Date		Client Info		07 Aug 2023	12 Jun 2023	17 Apr 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	26	27	23
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	1	0
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>200	<1	0	0
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	33	0	0	0
Barium	ppm	ASTM D5185m	5	1	4	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	5	<1	<1	1
Calcium	ppm	ASTM D5185m	5	2	0	3
Phosphorus	ppm	ASTM D5185m	437	149	149	166
Zinc	ppm	ASTM D5185m	5	3	8	4
Sulfur	ppm	ASTM D5185m	5000	1111	1214	1164
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	5	4	6
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	138243	▲ 136211	1 17780
Particles >6µm		ASTM D7647	>5000	<u> </u>	▲ 37051	<u> </u>
Particles >14µm		ASTM D7647	>640	556	A 708	232
Particles >21µm		ASTM D7647	>160	71	78	17
Particles >38µm		ASTM D7647	>40	2	0	1
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	4/22/16	▲ 24/22/17	▲ 24/22/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2

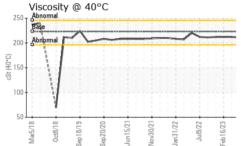


OIL ANALYSIS REPORT



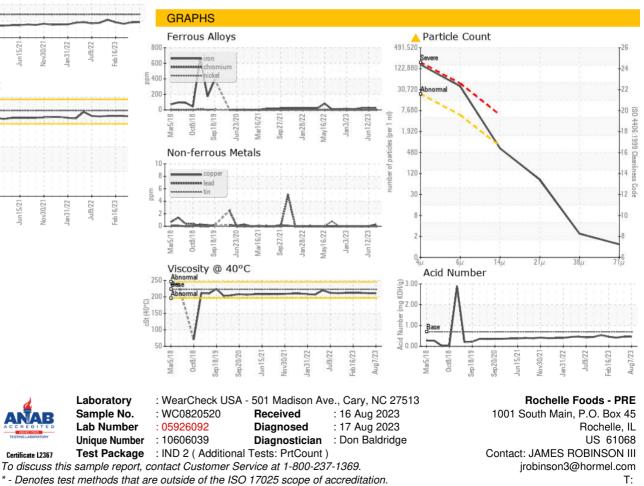






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	223	211	211	212
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Contact/Location: JAMES ROBINSON III - ROCROCUS

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