

PROBLEM SUMMARY

WESFALIA WHEY SEPARATOR (S/N 1662399)

Gearbox

PETRO CANADA ENDURATEX EP 320 (7 LTR)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL	ABNORMAL	SEVERE		
Visc @ 40°C	cSt	ASTM D7279(m)	325	🔺 239	2 36	4 241		
Visc @ 100°C	cSt	ASTM D7279(m)	25.22	A 20.6	2 0.4	a 20.9		

Customer Id: TAVTAV Sample No.: PC0077113 Lab Number: 02585661 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u> There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Apr 2023 Diag: Kevin Marson

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition Copper, iron and tin ppm levels are abnormal. Bearing and/or bushing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



21 Mar 2021 Diag: Kevin Marson

WEAR



We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Iron ppm levels are severe. PQ levels are abnormal. Tin ppm levels are abnormal. Gear wear is indicated. Bearing and/or bushing wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. The water content is negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.





26 Mar 2018 Diag: Kevin Marson

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Machine Id WESFALIA WHEY SEPARATOR (S/N 1662399) Component

Gearbox

Fluid PETRO CANADA ENDURATEX EP 320 (7 LTR)



Sample Rating Trend

DIAGNOSIS	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PC0077113	PC0061371	PC0035325
Resample at the next service interval to monitor.	Sample Date		Client Info		13 Sep 2023	01 Apr 2023	21 Mar 2021
Wear	Machine Age	mths	Client Info		0	0	0
All component wear rates are normal.	Oil Age	mths	Client Info		0	0	0
Contamination	Oil Changed		Client Info		N/A	N/A	N/A
There is no indication of any contamination in the	Sample Status				ABNORMAL	ABNORMAL	SEVERE
	WEAR METALS	;	method	limit/base	current	history1	history2
Fluid Condition Viesesity of sample indicates all is within ISO 220	PQ		ASTM D8184*		17	120	🔺 147
range advise investigate. The AN level is	Iron	ppm	ASTM D5185(m)	>200	53	<u> </u>	465
acceptable for this fluid. The condition of the oil is	Chromium	ppm	ASTM D5185(m)	>15	<1	3	4
suitable for further service.	Nickel	ppm	ASTM D5185(m)	>15	3	6	5
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)		<1	0	<1
	Aluminum	ppm	ASTM D5185(m)	>25	<1	1	1
	Lead	ppm	ASTM D5185(m)	>100	4	11	8
	Copper	ppm	ASTM D5185(m)	>200	173	4 32	282
	Tin	ppm	ASTM D5185(m)	>25	23	4 5	<u> </u>
	Antimony	ppm	ASTM D5185(m)	>5	0	<1	0
	Vanadium	ppm	ASTM D5185(m)		0	0	<1
	Beryllium	ppm	ASTM D5185(m)		0	0	0
	Cadmium	ppm	ASTM D5185(m)		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185(m)	55	3	2	16
	Barium	ppm	ASTM D5185(m)	0	<1	0	0
	Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
	Manganese	ppm	ASTM D5185(m)	0	0	2	3
	Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
	Calcium	ppm	ASTM D5185(m)	0	6	9	3
	Phosphorus	ppm	ASTM D5185(m)	240	153	157	255
	Zinc	ppm	ASTM D5185(m)	1	6	11	9
	Sulfur	ppm	ASTM D5185(m)	13700	11357	10671	3307

Lithium	ppm	ASTM D5185(m)		<1	2	<1
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	2	4	16
Sodium	ppm	ASTM D5185(m)		7	4	29
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	0.41	0.44	0.74



OIL ANALYSIS REPORT









VISUAL		method	limit/base	current	history1	history2
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	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	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	.2%
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	325	A 239	2 36	2 41
Visc @ 100°C	cSt	ASTM D7279(m)	25.22	<u> </u>	2 0.4	2 0.9
Viscosity Index (VI)	Scale	ASTM D2270*	100	100	100	101
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color						

Bottom



To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

CALA

ISO 17025:2017 Accredited Laboratory

T: (519)655-2337

F: (519)655-3449