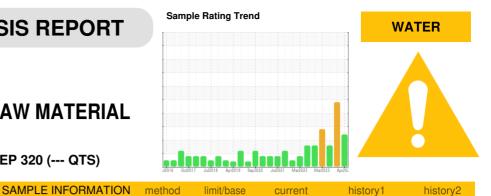


OIL ANALYSIS REPORT

Area FP-106 [10024086368] B23337-1 - AUGER 6 (SE) BIN RAW MATERIAL

Gearbox Fluid

PETRO CANADA ENDURATEX SYNTHETIC EP 320 (--- QTS)



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

Wear

All component wear rates are normal.

Contamination

Appearance is milky. There is a moderate concentration of water present in the oil.

Fluid Condition

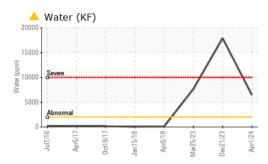
The AN level is acceptable for this fluid.

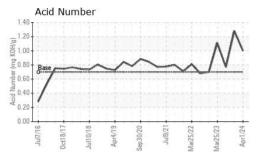
	Client Info		WC0907918	WC0872449	WC0820573
Sample Date 0	Client Info		01 Apr 2024	21 Dec 2023	01 Jul 2023
Machine Age hrs 0	Client Info		0	0	0
Oil Age hrs (Client Info		0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	SEVERE	ABNORMAL
WEAR METALS	method	limit/base	current	history1	history2
Iron ppm A	STM D5185m	>200	81	50	25
Chromium ppm A	ASTM D5185m	>15	<1	<1	0
Nickel ppm A	ASTM D5185m	>15	<1	<1	<1
Titanium ppm A	STM D5185m		<1	<1	0
	STM D5185m		0	0	0
Aluminum ppm A	ASTM D5185m	>25	2	2	1
Lead ppm A	ASTM D5185m	>100	<1	<1	0
Copper ppm A	ASTM D5185m	>200	1	<1	<1
	ASTM D5185m	>25	1	<1	<1
Vanadium ppm A	ASTM D5185m		<1	0	0
Cadmium ppm A	ASTM D5185m		<1	<1	0
ADDITIVES	method	limit/base	current	history1	history2
Boron ppm A	ASTM D5185m	33	22	14	12
Barium ppm A	ASTM D5185m	5	0	7	0
Molybdenum ppm A	ASTM D5185m		<1	<1	0
Manganese ppm A	ASTM D5185m		1	<1	<1
Magnesium ppm A	ASTM D5185m	5	2	2	0
Calcium ppm A	ASTM D5185m	5	10	8	1
Phosphorus ppm A	ASTM D5185m	437	456	367	453
Zinc ppm A	ASTM D5185m	5	24	18	<1
Sulfur ppm A	ASTM D5185m	5000	6168	6019	7377
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon ppm A	ASTM D5185m	>50	2	1	0
Sodium ppm A	ASTM D5185m		8	8	<1
Potassium ppm A	ASTM D5185m	>20	11	14	3
Water % A	ASTM D6304	>0.2	<u> </u>	1 .79	
ppm Water ppm A	ASTM D6304	>2000	6490	▲ 17900	
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000			▲ 86590
Particles >6µm	ASTM D7647	>5000			▲ 17562
Particles >14µm	ASTM D7647	>640			828
Particles >21µm	ASTM D7647	>160			221
Particles >38µm	ASTM D7647	>40			10
Particles >71µm	ASTM D7647	>10			0
Oil Cleanliness	SO 4406 (c)	>21/19/16			▲ 24/21/17
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g A	ASTM D8045	0.7	1.00	1.28	0.77

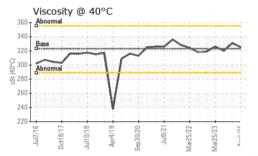
Contact/Location: RYAN LOWE - HORAUS Page 1 of 2



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	A HEAVY	LIGHT
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	🛑 MILKY	- HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	6.2%	▲ 0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	323	325	331	320
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				a		

Bottom

150 100

50

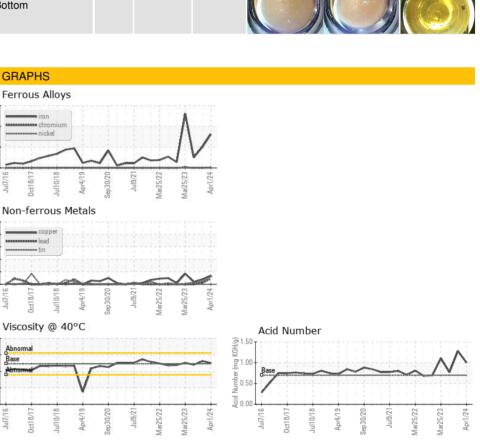
10

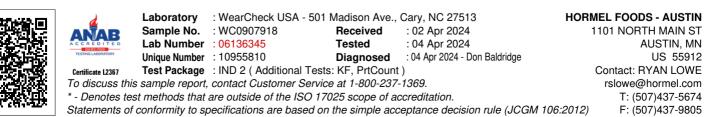
400

350 ()350 ()00 ()350 ()350 ()350 ()350 ()350 ()350

250

200





Contact/Location: RYAN LOWE - HORAUS Page 2 of 2