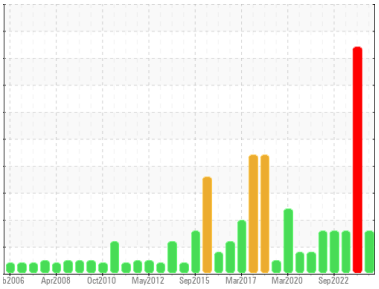
OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES

Area
1314
Machine Id
MILL FEED CONVEYOR
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX SYNTHETIC EP 220 (50 LTR)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. 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.

Wear

All component wear rates are normal.

Contamination

Particles >4µm and oil cleanliness are abnormally high. Particles >6µm are notably high. Lithium (Li) level abnormal at 29ppm., indicates possible grease contamination.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0077297**	PC0070110	PC0040305
Sample Date		Client Info		**25 Feb 2024**	11 Sep 2023	27 Apr 2023
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>200	**13**	18	11
Chromium	ppm	ASTM D5185(m)	>15	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	**1**	<1	<1
Lead	ppm	ASTM D5185(m)	>100	**0**	0	0
Copper	ppm	ASTM D5185(m)	>200	**<1**	2	<1
Tin	ppm	ASTM D5185(m)	>25	**0**	0	0
Antimony	ppm	ASTM D5185(m)	>5	**<1**	<1	1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
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)	33	**15**	14	13
Barium	ppm	ASTM D5185(m)	5	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	5	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	5	**2**	2	0
Phosphorus	ppm	ASTM D5185(m)	437	**417**	467	469
Zinc	ppm	ASTM D5185(m)	5	**16**	24	14
Sulfur	ppm	ASTM D5185(m)	5000	**2618**	2638	2633
Lithium	ppm	ASTM D5185(m)		▲ **29**	▲ 33	▲ 26

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**10**	10	9
Sodium	ppm	ASTM D5185(m)		**<1**	<1	0
Potassium	ppm	ASTM D5185(m)	>20	**2**	1	2

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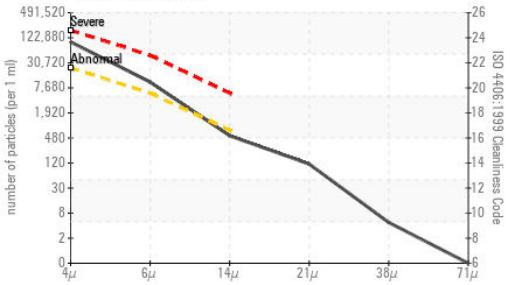
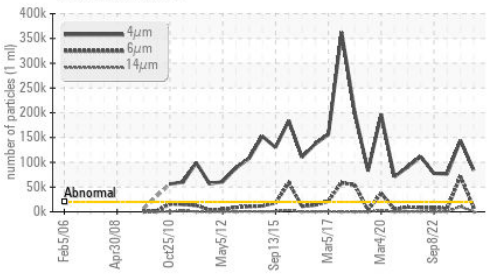
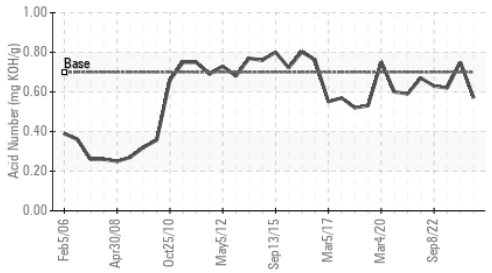
Particle Count



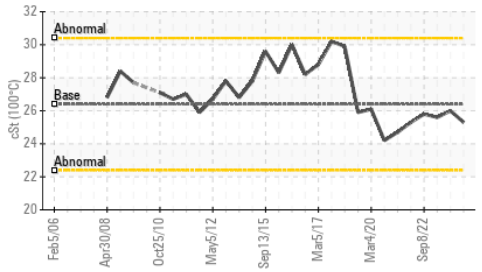
Particle Trend



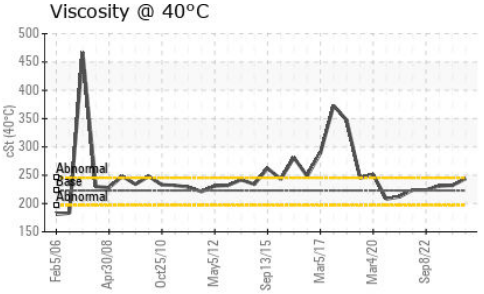
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ **84149**	▲ 144364	▲ 76537
Particles >6µm	ASTM D7647	>5000	● **9194**	▲ 71847	● 6924
Particles >14µm	ASTM D7647	>640	**479**	▲ 10298	395
Particles >21µm	ASTM D7647	>160	**100**	▲ 3239	105
Particles >38µm	ASTM D7647	>40	**4**	▲ 308	0
Particles >71µm	ASTM D7647	>10	**0**	▲ 45	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ **24/20/16**	▲ 24/23/21	▲ 23/20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.7	**0.57**	0.75	0.62

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**	VLITE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	VLITE	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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	223	**244**	232	231
Visc @ 100°C	cSt	ASTM D7279(m)	26.39	**25.3**	26.0	25.6
Viscosity Index (VI)	Scale	ASTM D2270*	151	**132**	143	141

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0077297 **Received** : 06 Mar 2024
Lab Number : 02620282 **Tested** : 08 Mar 2024
Unique Number : 5737392 **Diagnosed** : 08 Mar 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, PQ, PrtCount, VI)

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.

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