

Area

Turret [71133758]

Machine Id

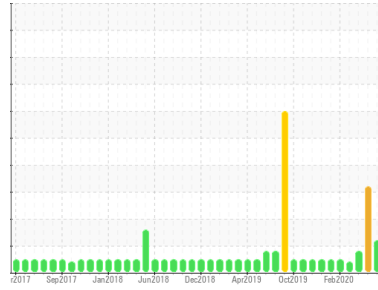
WHPU Return Reservoir Recirc Filter Supply (S/N Sample Tag CA-58604)

Component

Hydraulic System

Fluid

CASTROL TRANSAQUA HT2 (2250 LTR)



DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Particles 15-25µm are abnormally high. Particles 25-50µm are abnormally high. Particles 5-15µm are abnormally high. The water content is negligible. The system cleanliness is above the acceptable limit for the target SAE AS4059 (replaces NAS 1638) cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

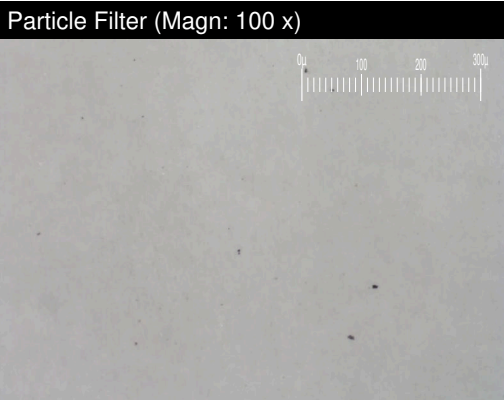
SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC	PC	PC0023116
Sample Date	Client Info			08 Jun 2020	15 May 2020	24 Mar 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	▲ 63	74
Iron	ppm	ASTM D5185(m)	>20	12	13	8
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)		2	8	4
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	2	6	● 9
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>10	1	2	3
Antimony	ppm	ASTM D5185(m)		0	2	0
Vanadium	ppm	ASTM D5185(m)		<1	<1	<1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		<1	<1	<1

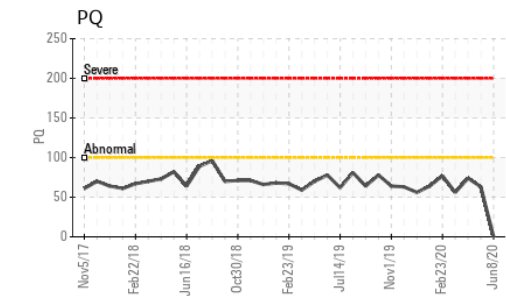
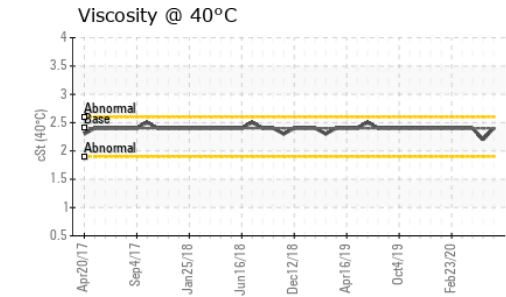
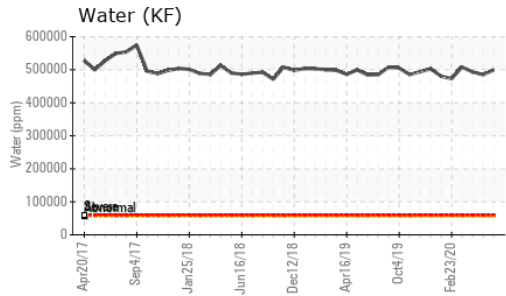
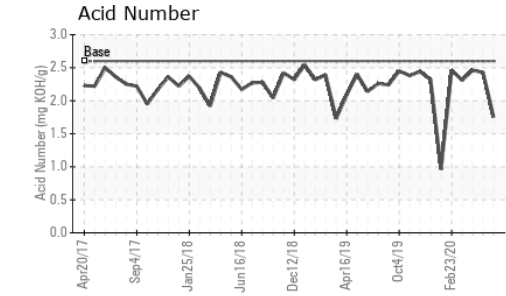
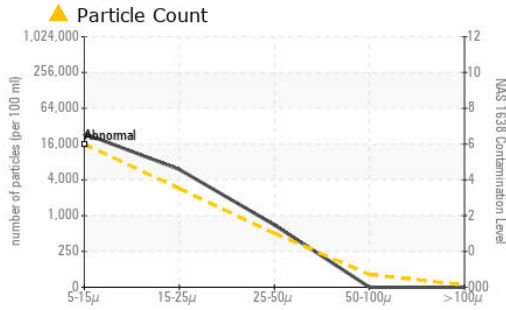
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		174	178	177
Barium	ppm	ASTM D5185(m)		1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<1	<1	<1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		2	2	3
Calcium	ppm	ASTM D5185(m)		10	20	27
Phosphorus	ppm	ASTM D5185(m)		158	181	161
Zinc	ppm	ASTM D5185(m)		6	7	8
Sulfur	ppm	ASTM D5185(m)		32	32	35
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	3	3
Sodium	ppm	ASTM D5185(m)	>651	686	613	621
Potassium	ppm	ASTM D5185(m)	>20	4	0	3
Water	%	ASTM D6304*	>55	49.9	48.5	49.3
ppm Water	ppm	ASTM D6304*	>55000	499000	485000	493000

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles 5-15µm	count	NAS 1638	>15999	▲ 24000	▲ 97000	6000
Particles 15-25µm	count	NAS 1638	>2849	▲ 6000	▲ 6000	1500
Particles 25-50µm	count	NAS 1638	>505	▲ 700	▲ 700	200
Particles 50-100µm	count	NAS 1638	>89	0	0	0
Particles >100µm	count	NAS 1638	>15	0	0	0
NAS 1638	Class	NAS 1638	>6	▲ 8	▲ 9	6



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02359393
Unique Number : 5058830
Test Package : MAR 2 (Additional Tests: KF, KV100, PQ, PrtCountNAS, PrtFilter, PrtFilterPrep)

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

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.

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.6	1.75	2.43	2.46
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*	>55	>10%	>10%	>10%
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	2.4	2.4	2.2	2.4
Visc @ 100°C	cSt	ASTM D7279(m)	0.8	---	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	
Bottom					no image	
PrtFilter						