

WEAR



Area

Turret

Machine Id
WHPU - HP Manual Valve (S/N Sample Tag: WH-586960B)

Component
Hydraulic System

Fluid
CASTROL TRANSAQUA HT (--- GAL)

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

Iron ppm levels are abnormal.

Contamination

Particles 15-25µm are abnormally high. Particles 25-50µm are abnormally high. Particles 5-15µm are abnormally high. 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 pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	PC0029746	PC
Sample Date	Client Info	23 Jul 2020	04 Jun 2020	06 May 2020
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	0	73
Iron	ppm	112	39	9
Chromium	ppm	1	<1	<1
Nickel	ppm	<1	<1	<1
Titanium	ppm	<1	<1	<1
Silver	ppm	4	<1	1
Aluminum	ppm	<1	<1	<1
Lead	ppm	2	4	2
Copper	ppm	1	<1	<1
Tin	ppm	5	2	<1
Antimony	ppm	0	<1	0
Vanadium	ppm	<1	<1	<1
Beryllium	ppm	<1	0	0
Cadmium	ppm	<1	<1	<1

ADDITIVES

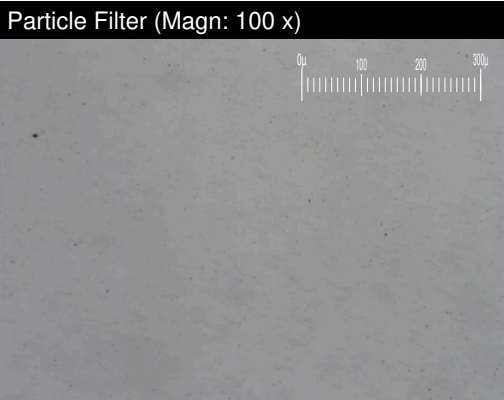
method	limit/base	current	history1	history2
Boron	ppm	197	194	237
Barium	ppm	<1	1	<1
Molybdenum	ppm	1	<1	<1
Manganese	ppm	2	<1	<1
Magnesium	ppm	2	2	<1
Calcium	ppm	11	18	3
Phosphorus	ppm	204	187	167
Zinc	ppm	14	7	22
Sulfur	ppm	35	35	29
Lithium	ppm	<1	<1	<1

CONTAMINANTS

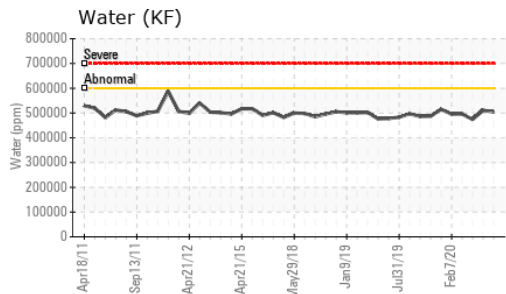
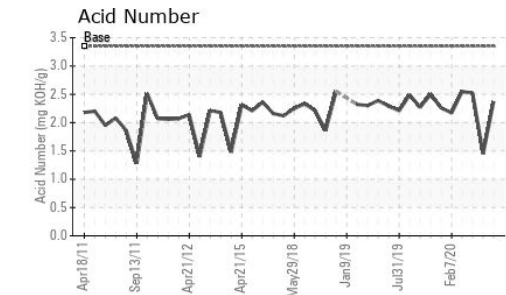
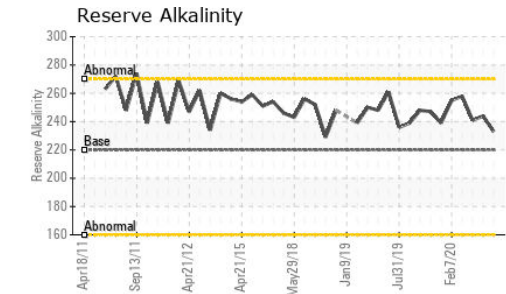
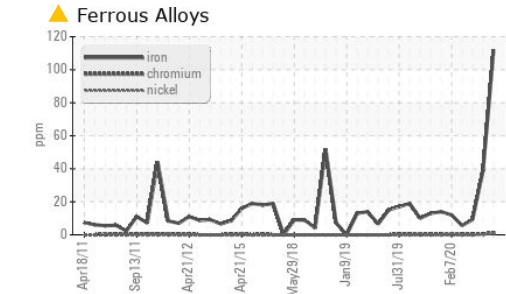
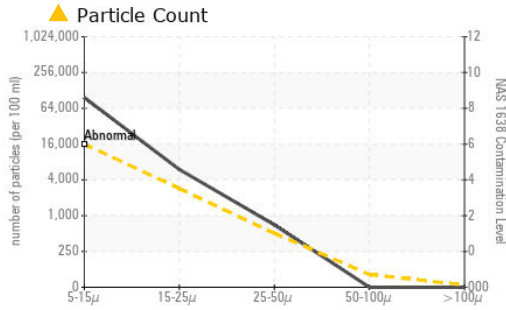
method	limit/base	current	history1	history2
Silicon	ppm	3	4	2
Sodium	ppm	685	675	686
Potassium	ppm	4	3	1
Water	%	50.4	51.1	47.4
ppm Water	ppm	504000	511000	474000

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles 5-15µm	count	97000	97000	12000
Particles 15-25µm	count	6000	6000	1500
Particles 25-50µm	count	700	700	200
Particles 50-100µm	count	0	0	0
Particles >100µm	count	0	0	0
NAS 1638	Class	9	9	6



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02368978
Unique Number : 5084425
Test Package : IND 2 (Additional Tests: KF, KV100, pH, PQ, PrtCountNAS, PrtFilter, PrtFilterPrep, ReserveAlk, TDS)

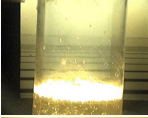



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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information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

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	3.35	2.37	1.45	2.52
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*	220	233	244	241

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*	>60	>10%	>10%	>10%
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287*		8.50	8.74	8.64
Visc @ 40°C	cSt	ASTM D7279(m)	2.3	2.3	2.4	2.3
Visc @ 100°C	cSt	ASTM D7279(m)		---	0.8	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						
PrtFilter					