

Area

Turret [300231614]

Machine Id

WHPU - LP1 Accumulator Bank/LP Umbilical Supply (S/N Sample Tag XX-58600-MV1/11)

Component

Hydraulic System

Fluid

CASTROL TRANSAQUA HT (4500 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

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. 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 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	PC
Sample Date	Client Info	26 Mar 2024	15 May 2020	24 Mar 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	SEVERE	NORMAL

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	3	7	11
Chromium	ppm	ASTM D5185(m)	>10	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)		<1	3	4
Aluminum	ppm	ASTM D5185(m)	>10	0	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	3	3
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>10	0	▲ 23	4
Antimony	ppm	ASTM D5185(m)		<1	0	<1
Vanadium	ppm	ASTM D5185(m)		<1	<1	<1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	<1	<1

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)		162	173	177
Barium	ppm	ASTM D5185(m)		2	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<1	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		2	2	2
Calcium	ppm	ASTM D5185(m)		8	17	23
Phosphorus	ppm	ASTM D5185(m)	145	137	164	161
Zinc	ppm	ASTM D5185(m)		6	● 24	5
Sulfur	ppm	ASTM D5185(m)		59	29	36
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

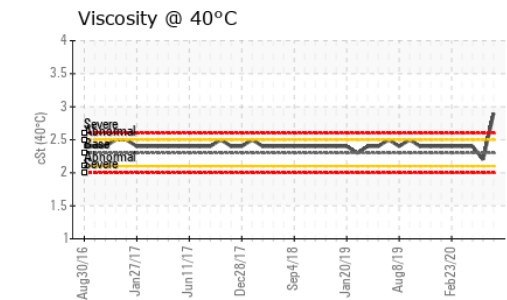
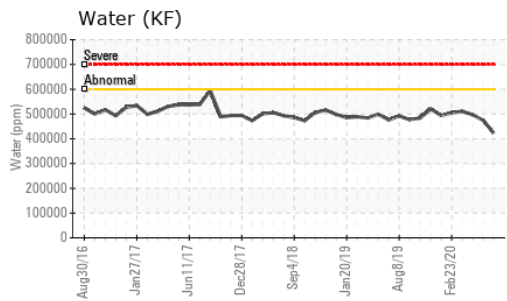
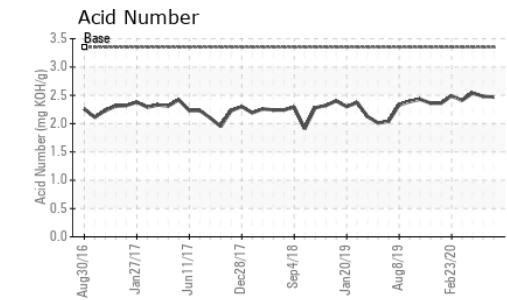
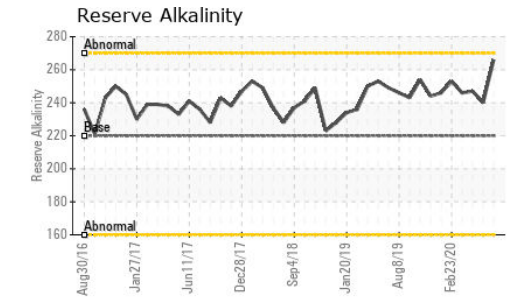
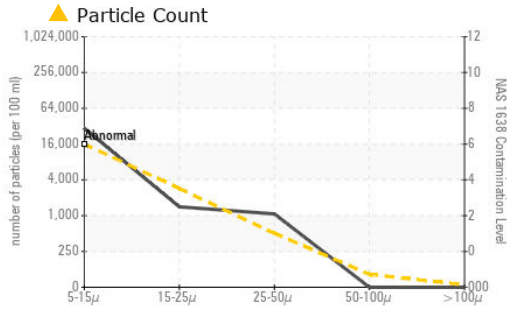
CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	5	3	4
Sodium	ppm	ASTM D5185(m)	>650	624	637	623
Potassium	ppm	ASTM D5185(m)	>20	8	0	3
Water	%	ASTM D6304*	>60	42.3	47.5	49.7
ppm Water	ppm	ASTM D6304*	>600000	423000	475000	497000

FLUID CLEANLINESS

method	limit/base	current	history1	history2		
Particles 5-15µm	count	NAS 1638	>16000	▲ 29527	▲ 97000	6000
Particles 15-25µm	count	NAS 1638	>2850	1407	▲ 12000	1500
Particles 25-50µm	count	NAS 1638	>506	▲ 1071	▲ 1500	200
Particles 50-100µm	count	NAS 1638	>90	0	▲ 200	0
Particles >100µm	count	NAS 1638	>16	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 : 02631239
Unique Number : 5772392
Test Package : MAR 2 (Additional Tests: KF, KV100, pH, PrtCountNAS, ReserveAlk, TAN Man, Visc @ 100°C)

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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	2.47	2.48	2.54
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*	220	266	240	247

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	FRGLY	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*		8.66	8.56	8.72
Visc @ 40°C	cSt	ASTM D7279(m)	2.3	2.9	2.2	2.4
Visc @ 100°C	cSt	ASTM D7279(m)		0.9	---	---

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

