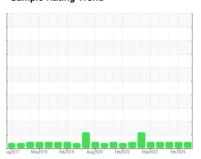


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **BLUE HPU (S/N 155)**

Component
Hydraulic System

{not provided} (150 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		ug2017 Ma	sy2018 Feb2019 Au	ng 2020 Feb 2022 Mar 2023	Feb 2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0003387	PTK0003396	PTK0003371
Sample Date		Client Info		23 May 2024	13 Feb 2024	22 Aug 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	1	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	1
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	2	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	<1	2	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		151	142	159
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	3	2
Calcium	ppm	ASTM D5185m		56	54	55
Phosphorus	ppm	ASTM D5185m		455	414	433
Zinc	ppm	ASTM D5185m		417	404	434
Sulfur	ppm	ASTM D5185m		1605	1246	1409
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm		>20	0	3	2
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	0	1	<1
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647		694	1631	1025
Particles >6μm		ASTM D7647		218	325	315
Particles >14µm		ASTM D7647	>320	12	16	42
Particles >21µm		ASTM D7647		4	4	14
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647		0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15	15/11	16/11	15/13
FLUID DEGRADA	TION	method	limit/base		history1	history2
A -! -! Al I (AAI)	m = 1/011/=	ACTM DODAE		0.56	0 11	0.50

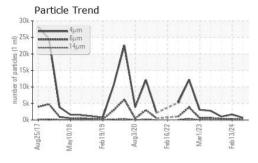
Acid Number (AN)

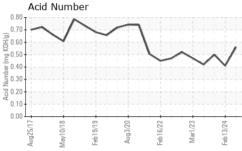
mg KOH/g ASTM D8045

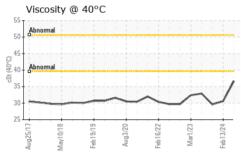
0.41

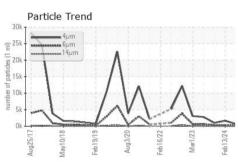


OIL ANALYSIS REPORT









VISUAL		method				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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIFS	method	limit/hase	current	history1	history2

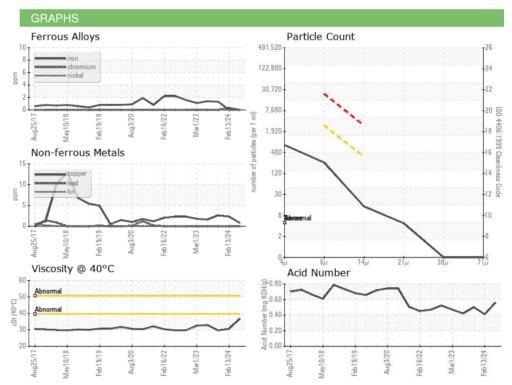
/isc @ 40°C	cSt	ASTM D445	36.7	30.6	29.6

SAMPLE IMAGES	method		

Color











Certificate 12367

Laboratory Sample No.

: PTK0003387 Lab Number : 06197591 Unique Number : 11059714 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 03 Jun 2024 **Tested** : 04 Jun 2024

Diagnosed

: 04 Jun 2024 - Don Baldridge

KENT, WA US 98032 Contact: SUTTON CHRISTIANSON schristianson@mutualmaterials.com

MUTUAL MATERIALS

7414 S 206TH ST

T: (253)395-7376

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: MUTKEN [WUSCAR] 06197591 (Generated: 06/04/2024 14:30:39) Rev: 1

Contact/Location: SUTTON CHRISTIANSON - MUTKEN

F: