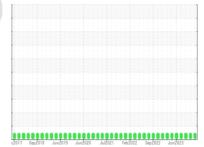


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **RED BUD LINE 3**

Component
Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

c2017 Sep2016 Jun2019 Jun2020 Ju2021 Feb2022 Sep2022 Jun2023						
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0005332	PTK0005466	PTK0005110
Sample Date		Client Info		23 Apr 2024	11 Mar 2024	12 Dec 2023
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				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	2	1
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		<1	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	11	11	11
Tin	ppm	ASTM D5185m	>10	<1	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	5	<1	0	0
Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m	5	1	<1	<1
Magnesium	ppm	ASTM D5185m	25	4	4	0
Calcium	ppm	ASTM D5185m	200	76	73	77
Phosphorus	ppm	ASTM D5185m	300	389	336	364
Zinc	ppm	ASTM D5185m	370	484		
2.110	PPIII			484	441	458
Sulfur	ppm	ASTM D5185m	2500	1290	441 1171	458 1101
Sulfur CONTAMINANTS	ppm	ASTM D5185m method				
		method	2500	1290	1171	1101
CONTAMINANTS	ppm ppm	method	2500 limit/base	1290 current	1171 history1	1101 history2
CONTAMINANTS Silicon	ppm	method ASTM D5185m	2500 limit/base >20	1290 current <1	1171 history1 <1	1101 history2 <1
CONTAMINANTS Silicon Sodium	ppm ppm	method ASTM D5185m ASTM D5185m	2500 limit/base >20	1290 current <1 2	1171 history1 <1 <1	1101 history2 <1 <1
CONTAMINANTS Silicon Sodium Potassium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2500 limit/base >20 >20	1290 current <1 2 2	1171 history1 <1 <1 <1	1101 history2 <1 <1 0
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	2500 limit/base >20 >20 limit/base	1290 current <1 2 2 current	1171 history1 <1 <1 <1 <1 history1	1101 history2 <1 <1 0 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647	2500 limit/base >20 >20 limit/base	1290	1171 history1 <1 <1 <1 <1 history1 939 347 40	1101 history2 <1 <1 0 history2 353 81 6
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647	2500 limit/base >20 >20 limit/base >20 >20 system syste	1290	1171 history1 <1 <1 <1 history1 939 347	1101 history2 <1 <1 0 history2 353 81 6 1
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 limit/base >20 >20 limit/base >2500 >2500 >320 >80 >20	1290 current <1 2 2 current 729 207 17 6 1	1171 history1 <1 <1 <1 <1 history1 939 347 40 9 0	1101 history2 <1 <1 0 history2 353 81 6 1 0
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 limit/base >20 >20 limit/base >2500 >2500 >320 >80 >20	1290 current <1 2 2 current 729 207 17 6	1171 history1 <1 <1 <1 <1 history1 939 347 40 9	1101 history2 <1 <1 0 history2 353 81 6 1
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 limit/base >20 >20 limit/base >2500 >2500 >320 >80 >20	1290 current <1 2 2 current 729 207 17 6 1	1171 history1 <1 <1 <1 <1 history1 939 347 40 9 0	1101 history2 <1 <1 0 history2 353 81 6 1 0

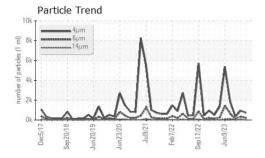
Acid Number (AN)

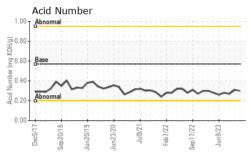
mg KOH/g ASTM D8045 0.57

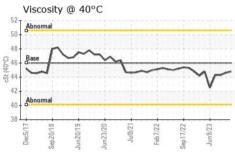
0.27

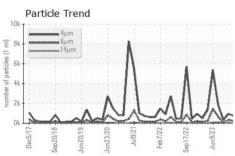


OIL ANALYSIS REPORT





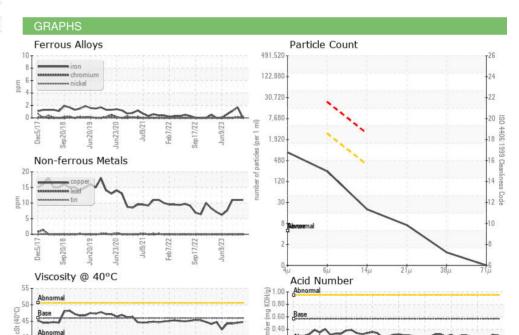




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2

Visc @ 40°C	cSt	ASTM D445	46	44.8	44.6	44.3

SAMPLE IMAGES	method		histor
Color			







Certificate 12367

Laboratory Sample No.

: PTK0005332 Lab Number : 06218221 Unique Number : 11096418 Test Package : MOB 2

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Bottom

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Jun 2024 **Tested** : 25 Jun 2024

Diagnosed

: 25 Jun 2024 - Wes Davis

Acid Num 0.20

US 55108 Contact: JUSTIN SCHMIDT justin.schmidt@qualitymetals.com

QUALITY METALS 2575 DOSWELL AVE

ST PAUL, MN

* - 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: QUASTPMN [WUSCAR] 06218221 (Generated: 06/25/2024 11:57:54) Rev: 1

Contact/Location: JUSTIN SCHMIDT - QUASTPMN

T:

F: