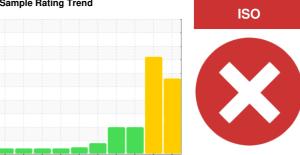


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

EZ CRUSHER EZ CRUSHER

Hydraulic System

AW HYDRAULIC OIL ISO 15 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 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.

		Mar2019 Mar2	021 Jul2021 Dec2021 Mar2	022 Jun2022 Sep2022 Mar2023 Sep2	023 Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0005509	PTK0004137	PTK0004516
Sample Date		Client Info		29 Mar 2024	12 Sep 2023	15 Mar 2023
Machine Age	hrs	Client Info		0	5612	4871
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
CONTAMINATIO	N	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	<1	<1	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	<1
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>75	<1	<1	0
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
_						
Boron	ppm	ASTM D5185m	5	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	5	0 <1	0 <1	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 <1 <1	0 <1 0	0 0 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	0 <1 <1 3	0 <1 0	0 0 <1 4
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	0 <1 <1 3 39	0 <1 0 1 39	0 0 <1 4 36
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 <1 <1 3 39 239	0 <1 0 1 39 263	0 0 <1 4 36 240
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	0 <1 <1 3 39 239 312	0 <1 0 1 39 263 355	0 0 <1 4 36 240 291
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500	0 <1 <1 3 39 239 312 659	0 <1 0 1 39 263 355 771	0 0 <1 4 36 240 291 394
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base	0 <1 <1 3 39 239 312 659 current	0 <1 0 1 39 263 355 771 history1	0 0 0 <1 4 36 240 291 394 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 <1 <1 3 39 239 312 659 current	0 <1 0 1 39 263 355 771 history1 1	0 0 0 <1 4 36 240 291 394 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 <1 <1 3 39 239 312 659 current 1 <1	0 <1 0 1 39 263 355 771 history1 1 0	0 0 0 <1 4 36 240 291 394 history2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 <1 <1 3 39 239 312 659 current 1 <1 1 current 53366	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1 80059	0 0 0 <1 4 36 240 291 394 history2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 >20	0 <1 <1 3 39 239 312 659 current 1 <1 1 current 53366 △ 19123	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1	0 0 0 <1 4 36 240 291 394 history2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 >20 >300 >370 2500 >370 >2500 >370 >	0 <1 <1 <1 3 39 239 312 659 current 1 <1 1 current 53366 19123 2572	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1 80059 ▲ 29134 ▲ 4316	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 12646 1488
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 	0 <1 <1 3 39 239 312 659 current 1 <1 1 1 current 53366 △ 19123 △ 2572 △ 856	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1 80059	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 12646 1488 535
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 	0 <1 <1 3 39 239 312 659 current 1 <1 1 1 current 53366 △ 19123 △ 2572 △ 856 ○ 29	0 <1 0 1 39 263 355 771 history1 1 0 <1	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 ▲ 12646 ▲ 1488 ▲ 535 ▲ 23
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm	ASTM D5185m MEthod ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 	0 <1 <1 <1 3 39 239 312 659 current 1 <1 1 <1 1	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1 80059 ▲ 29134 ▲ 4316 ▲ 1748 ▲ 71 2	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 ▲ 12646 ▲ 1488 ▲ 535 ▲ 23 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 	0 <1 <1 3 39 239 312 659 current 1 <1 1 1 current 53366 △ 19123 △ 2572 △ 856 ○ 29	0 <1 0 1 39 263 355 771 history1 1 0 <1	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 ▲ 12646 ▲ 1488 ▲ 535 ▲ 23
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm	ASTM D5185m MEthod ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 >2500 >20 >2500 >20 >2500 >2500 >20 >2500 >20 >2500 >20 >20 >2500 >20 >20 >20 >20 >20 >20 >20 >	0 <1 <1 3 39 239 312 659 current 1 <1 1 1 current 53366 19123	0 <1 0 1 39 263 355 771 history1 1 0 <1 history1 80059 ▲ 29134 ▲ 4316 ▲ 1748 ▲ 71 2	0 0 0 <1 4 36 240 291 394 history2 <1 0 0 history2 37645 ▲ 12646 ▲ 1488 ▲ 535 ▲ 23 1

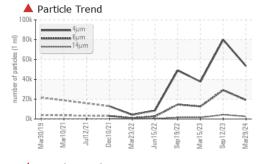
Acid Number (AN)

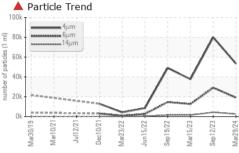
mg KOH/g ASTM D8045 0.57

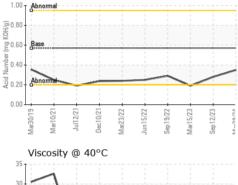


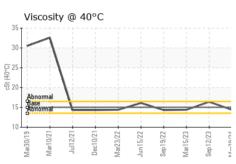
Acid Number

OIL ANALYSIS REPORT







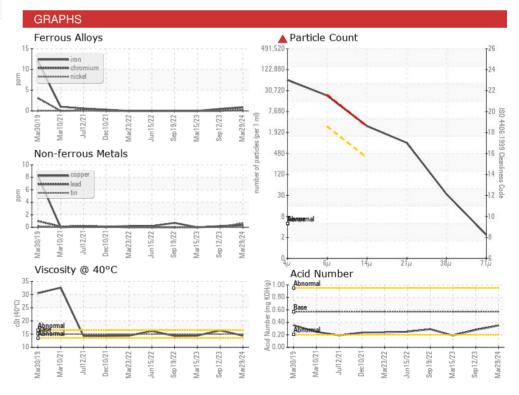


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPER	HES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	15	14.4	16.4	14.4

OAMI LE IMAGEO	mounou	III III Daoc
Color		
Bottom		









Certificate L2367

Laboratory Sample No.

Lab Number : 06138042 Unique Number: 10962850 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PTK0005509

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

Received **Tested** Diagnosed

: 03 Apr 2024 : 04 Apr 2024

: 04 Apr 2024 - Wes Davis

LKQ BALTIMORE 6201 ERDMAN AVE BALTIMORE, MD

US 21205

Contact: ALAN PORTERFIELD aporterfield@lkqcorp.com

* - 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) T:

F: