

# **OIL ANALYSIS REPORT**

# NAT CUTS [98675804 AFTER] LINE 1 CUBER

Component **Hydraulic System** 

AW HYDRAULIC OIL ISO 46 (--- GAL)





Sample Rating Trend



### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

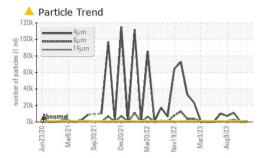
#### **Fluid Condition**

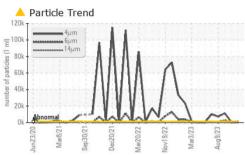
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

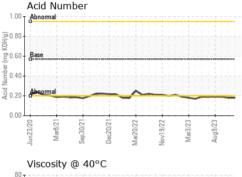
SAMPLE INFORM	AOLTAN	method	limit/base	current	history1	history2
	VIATION		mmodasc	PCA0114300	PCA0101639	
Sample Number		Client Info		08 Jan 2024	. 07.0.0.000	PCA0101640
Sample Date		Client Info			05 Oct 2023	02 Oct 2023
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	Filtered	Filtered
Sample Status				ATTENTION	NORMAL	ABNORMAL
CONTAMINATI	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	7	7
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	2	2
Lead	ppm	ASTM D5185m	>20	<1	2	2
Copper	ppm	ASTM D5185m		5	11	11
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m	<i>&gt;</i> 20	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ррпп					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
	PP		-	•	0	0
Barium	ppm	ASTM D5185m	-	0	0	0
Barium Molybdenum			-			
	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	5	0	0	0
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 0	0 0 0	0 0
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	0 0 0 0	0 0 0 <1	0 0 0 <1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	0 0 0 0	0 0 0 <1 <1	0 0 0 <1 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 0 0 0 0 236	0 0 0 <1 <1 342	0 0 0 <1 <1 <1 330
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 0 0 0 0 0 236 20	0 0 0 <1 <1 <1 342 26	0 0 0 <1 <1 <1 330 25
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 5 25 200 300 370 2500 limit/base	0 0 0 0 0 236 20 478	0 0 0 <1 <1 <1 342 26 825	0 0 0 <1 <1 <1 330 25 823
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 0 0 0 236 20 478	0 0 0 <1 <1 <1 342 26 825 history1	0 0 0 <1 <1 <1 330 25 823 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm 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 5 25 200 300 370 2500 limit/base >15	0 0 0 0 0 236 20 478	0 0 0 <1 <1 <1 342 26 825 history1	0 0 0 <1 <1 <1 330 25 823 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 0 0 0 0 236 20 478 current 2	0 0 0 <1 <1 <1 342 26 825 history1 4 0	0 0 0 <1 <1 <1 330 25 823 history2 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 0 0 0 0 236 20 478 current 2 0	0 0 0 <1 <1 <1 342 26 825 history1 4 0	0 0 0 <1 <1 <1 330 25 823 history2 4 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >1300	0 0 0 0 0 0 236 20 478 current 2 0	0 0 0 <1 <1 <1 342 26 825 history1 4 0 1	0 0 0 -1 -1 330 25 823 history2 4 0 1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >1300	0 0 0 0 0 236 20 478 current 2 0 0	0 0 0 <1 <1 <1 342 26 825 history1 4 0 1 history1 670	0 0 0 <1 <1 <1 330 25 823 history2 4 0 1 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647	5 5 5 5 5 5 200 300 370 2500 limit/base >15 >20 limit/base >1300 >320 >80	0 0 0 0 0 236 20 478 current 2 0 0	0 0 0 <1 <1 <1 342 26 825 history1 4 0 1 history1 670 171	0 0 0 <1 <1 <1 330 25 823 history2 4 0 1 history2  11308 2591
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 5 5 5 200 300 370 2500 limit/base >15 >20 limit/base >1300 >320 >80	0 0 0 0 0 236 20 478 current 2 0 0 current ▲ 1314 173 12	0 0 0 <1 <1 <1 342 26 825 history1 4 0 1 history1 670 171 13	0 0 0 <1 <1 330 25 823 history2 4 0 1 history2 ▲ 11308 ▲ 2591 75
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  METHOD  ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 236 20 478  current 2 0 0 current 1314 173 12 4	0 0 0 <1 <1 <1 342 26 825 history1 4 0 1 history1 670 171 13	0 0 0 <1 <1 <1 330 25 823 history2 4 0 1 history2  11308 2591 75 8
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 236 20 478 current 2 0 0 current 1314 173 12 4 0	0 0 0 <1 <1 342 26 825 history1 4 0 1 history1 670 171 13	0 0 0 <1 <1 330 25 823 history2 4 0 1 history2 ▲ 11308 ▲ 2591 75 8 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >1300 >320 >80 >20 >4	0 0 0 0 0 236 20 478 current 2 0 0 current ▲ 1314 173 12 4 0	0 0 0 1 <1 342 26 825 history1 4 0 1 history1 670 171 13 1 0 0	0 0 0 <1 <1 330 25 823 history2 4 0 1 history2 ▲ 11308 ▲ 2591 75 8 0 0

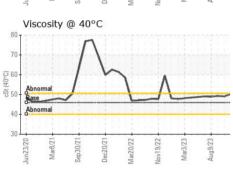


## **OIL ANALYSIS REPORT**









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
<b>Emulsified Water</b>	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROP	CHILO	method			riistory i	riistoryz
Visc @ 40°C	cSt	ASTM D445	46	50.3	49.1	49.3

SAMPL	.E II	MAG	ES
O, L		THE C	

A Particle Count

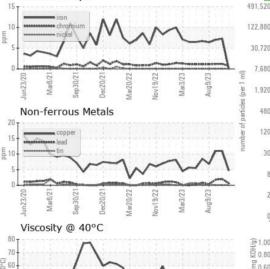


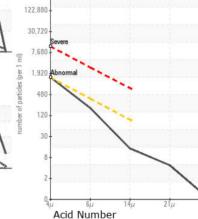


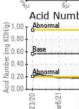


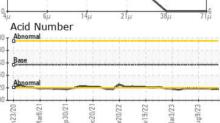
Color

**Bottom** 













Certificate L2367

Test Package : IND 2

Laboratory Sample No. Lab Number **Unique Number** 

: 10861853

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0114300 Recieved **Tested** : 06079762

: 06 Feb 2024 : 07 Feb 2024 Diagnosed

: 05 Feb 2024

KraftHeinz - Springfield - Plant 8311 PCA 2035 E BENNETT

SPRINGFIELD, MO US 65804

Contact: Service Manager

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)

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F: