

# **OIL ANALYSIS REPORT**

#### Area **INJECT B ROOM [98938388]** Machine to **KR-GR-003106 - DUMPER 3B - SOUTH (S/N INJECT B - 11513037)** Component

Hydraulic System

AW HYDRAULIC OIL ISO 68 (--- GAL)

## DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. ( Customer Sample Comment: 98938388 )

#### Wear

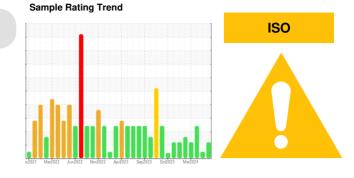
All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0055970	PCA0122294	PCA0119598
Sample Date		Client Info		24 May 2024	24 May 2024	20 Mar 2024
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				ABNORMAL		ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	2	<1
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	3
Lead	ppm	ASTM D5185m	>20	_ <1	<1	<1
Copper	ppm	ASTM D5185m		1	1	2
Tin	ppm	ASTM D5185m	>20	، <1	<1	<1
Vanadium	ppm	ASTM D5185m	~20	0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1
ADDITIVES	ppin	method	limit/base	current	history1	history2
				0	0	0
Boron	ppm	ASTM D5185m	5 5	-	<1	<1
Barium Makukalan	ppm	ASTM D5185m		<1		
Molybdenum	ppm	ASTM D5185m	5	<1	<1	0
	ppm	ASTM D5185m		0	0	0
-			05			
Magnesium	ppm	ASTM D5185m	25	1	1	<1
Magnesium Calcium	ppm ppm	ASTM D5185m	200	9	10	13
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m	200 300	9 455	10 411	13 453
Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370	9 455 59	10 411 ▲ 57	13 453 55
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	200 300	9 455	10 411	13 453
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370	9 455 59	10 411 ▲ 57 785 history1	13 453 55
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base	9 455 59 883	10 411 57 785	13 453 55 862
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	200 300 370 2500 limit/base	9 455 59 883 current	10 411 ▲ 57 785 history1	13 453 55 862 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	200 300 370 2500 limit/base >15	9 455 59 883 current 2	10 411 ▲ 57 785 history1 3	13 453 55 862 history2 3
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base >15	9 455 59 883 <u>current</u> 2 2 2 <1 current	10 411 ▲ 57 785 history1 3 2	13 453 55 862 history2 3 1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base >15 >20 limit/base >10000	9 455 59 883 current 2 2 2 <1 2 <1 2 <1 2 4 774	10 411 ▲ 57 785 history1 3 2 <1	13 453 55 862 history2 3 1 <1 <1 history2 1575
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base >15 >20 limit/base >10000	9 455 59 883 <u>current</u> 2 2 2 <1 current	10 411 ▲ 57 785 history1 3 2 <1 history1	13 453 55 862 history2 3 1 <1 <1 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 limit/base >15 >20 limit/base >10000 >2500 >640	9 455 59 883 current 2 2 2 <1 2 <1 2 <1 2 4 774	10 411 ▲ 57 785 history1 3 2 <1 ×1 history1	13 453 55 862 history2 3 1 <1 <1 history2 1575
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647	200 300 370 2500 limit/base >15 >20 limit/base >10000 >2500 >640	9 455 59 883 current 2 2 2 <1 2 <1 0 0 0 0 47774 ● 4406	10 411 ▲ 57 785 history1 3 2 <1 4 history1 	13 453 55 862 history2 3 1 <1 <1 history2 1575 858
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEAN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 limit/base >15 >20 limit/base >10000 >2500 >640	9 455 59 883 current 2 2 2 <1 current 47774 4406 165	10 411 ▲ 57 785 history1 3 2 <1 history1  	13 453 55 862 history2 3 1 <1 <1 history2 1575 858 146
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 imit/base >15 >20 imit/base >200 >10000 >2500 >2500 >640 >160 >40	9 455 59 883 <u>current</u> 2 2 2 <1 <u>current</u> ▲ 47774 ● 4406 165 40	10 411 ▲ 57 785 history1 3 2 <1 history1    	13 453 55 862 history2 3 1 <1 <1 history2 1575 858 146 49
Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm JTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 imit/base >15 >20 imit/base >200 >10000 >2500 >2500 >640 >160 >40	9 455 59 883 current 2 2 <1 2 <1 0 47774 4406 165 40 4	10 411 ▲ 57 785 history1 3 2 <1 history1     	13 453 55 862 history2 3 1 <1 <1 history2 1575 858 146 49 8
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEAN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm pm JTS ppm ppm LINESS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 imit/base >15 >20 imit/base >200 >10000 >2500 >640 >160 >40 >40	9 455 59 883 current 2 2 <1 current 4 47774 4406 165 40 4 4 0	10 411 ▲ 57 785 history1 3 2 <1 history1     	13 453 55 862 history2 3 1 <1 <1 history2 1575 858 146 49 8 8 1

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Submitted By: Wilberto Pacheco Garcia



0

1.00

0.80 0.60 0.60 0.40

0.00

85 80

cSt (40°C)

65

60 - Abnorma

50

Ba

Var29/22

Dec7

0.20 AL

Dec)

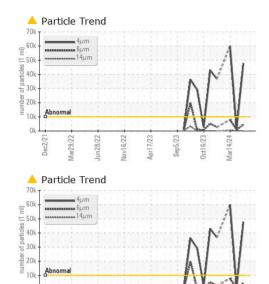
Acid Number

1028/27

Viscosity @ 40°C

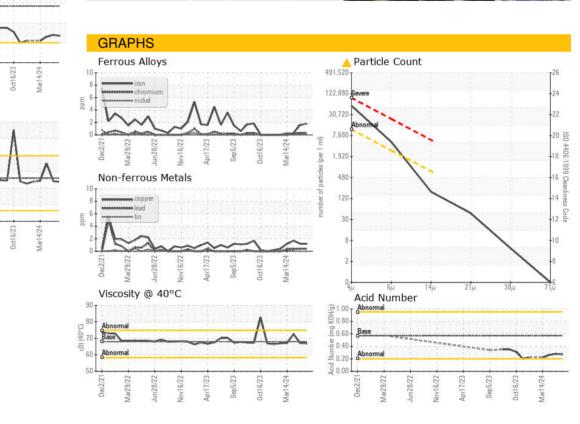
lov16/22 Apr17/23 Seo5/23

# **OIL ANALYSIS REPORT**



Aar14/24





Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 KraftHeinz - Kirksville - Plant 8333 PCA Sample No. : PCA0055970 Received : 30 May 2024 2504 INDUSTRIAL DR Lab Number : 06195381 KIRKSVILLE, MO Tested : 31 May 2024 Unique Number : 11057504 Diagnosed : 31 May 2024 - Angela Borella US 63501 Test Package : IND 2 Contact: WALLACE WARD Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. wallace.ward@kraftheinzcompany.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (660)627-1031 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (660)627-5887

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