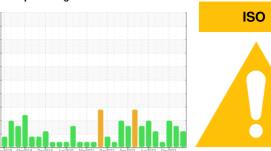


# **OIL ANALYSIS REPORT**

Sample Rating Trend



Area **CURING** 

**B37491 - EAST BLENDER** 

Hydraulic System

**AW HYDRAULIC OIL ISO 46 (--- GAL)** 

### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### 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**

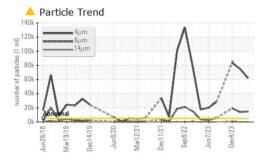
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

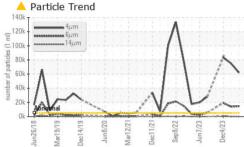
		in2018 Mar201	9 Dec2019 Jun2020 Mar	2021 Dec2021 Sep2022 Jun2023	Dec2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0930426	WC0907885	WC0872501
Sample Date		Client Info		06 Jun 2024	05 Mar 2024	04 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINATION	١	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	0	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	1	1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	<1	0	0
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	5	0	0	0
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	5 5	0 0		
				0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 0 <1	0 0 0 0	0 0 <1 0
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	0 0 0 <1 0	0 0 0 0 0	0 0 <1 0 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 0 0 <1 0 433	0 0 0 0 0 0 0 0 452	0 0 <1 0 0 0 451
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 <1 0 433	0 0 0 0 0 0 0 452	0 0 <1 0 0 0 0 451
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 ASTM D5185m	5 5 25 200 300 370 2500	0 0 0 <1 0 433	0 0 0 0 0 0 0 452 8 520	0 0 <1 0 0 0 451 0 475
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	0 0 0 <1 0 433 0 452	0 0 0 0 0 0 452 8 520	0 0 <1 0 0 0 451 0 475
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500	0 0 0 <1 0 433 0 452 current	0 0 0 0 0 0 452 8 520 history1	0 0 <1 0 0 0 451 0 475
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 433 0 452 current	0 0 0 0 0 0 452 8 520 history1	0 0 <1 0 0 0 451 0 475 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base	0 0 0 <1 0 433 0 452 current	0 0 0 0 0 0 452 8 520 history1	0 0 <1 0 0 0 451 0 475 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 433 0 452 current	0 0 0 0 0 0 452 8 520 history1	0 0 <1 0 0 0 451 0 475 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 limit/base >5000	0 0 0 <1 0 433 0 452 current 1 0 1 current ▲ 62148	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1	0 0 -<1 0 0 0 451 0 475 history2 3 0 -<1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 433 0 452 current 1 0 1 current △ 62148 △ 14697	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ^ 74953 △ 13966	0 0 -<1 0 0 0 451 0 475 history2 3 0 -<1 history2 ^ 83569 ^ 19276
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 limit/base >5000 >1300 >160	0 0 0 <1 0 433 0 452 current 1 0 1 current △ 62148 △ 14697 122	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ^ 74953 ^ 13966 ^ 173	0 0 0 <1 0 0 0 451 0 475 history2 3 0 <1 history2 ^ 83569 ^ 19276 ^ 766
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40	0 0 0 433 0 452  current 1 0 1  current  462148  14697 122 9	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ▲ 74953 ▲ 13966 ▲ 173 12	0 0 0 <1 0 0 0 451 0 475 history2 3 0 <1 history2 ▲ 83569 ▲ 19276 ▲ 766 ▲ 158
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20  >20 limit/base >40 >10	0 0 0 41 0 433 0 452 current 1 0 1 current  62148 14697 122 9 1	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ↑ 74953 ↑ 13966 ↑ 173 12 0	0 0 0 0 0 0 451 0 475 history2 3 0 <1 history2 ▲ 83569 ▲ 19276 ▲ 766 ▲ 158 6
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >160 >40 >10 >3	0 0 0 433 0 452 current 1 0 1 current  1 62148 14697 122 9 1	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ▲ 74953 ▲ 13966 ▲ 173 12 0 0	0 0 0 0 0 0 0 451 0 475 history2 3 0 <1 history2 ▲ 83569 ▲ 19276 ▲ 766 ▲ 158 6 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20  >20 limit/base >40 >10	0 0 0 41 0 433 0 452 current 1 0 1 current  62148 14697 122 9 1	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ↑ 74953 ↑ 13966 ↑ 173 12 0	0 0 0 0 0 0 451 0 475 history2 3 0 <1 history2 ▲ 83569 ▲ 19276 ▲ 766 ▲ 158 6
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN 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 D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >160 >40 >10 >3	0 0 0 433 0 452 current 1 0 1 current  1 62148 14697 122 9 1	0 0 0 0 0 0 452 8 520 history1 1 1 0 history1 ▲ 74953 ▲ 13966 ▲ 173 12 0 0	0 0 0 0 0 0 0 451 0 475 history2 3 0 <1 history2 ▲ 83569 ▲ 19276 ▲ 766 ▲ 158 6 0

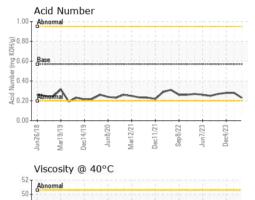
Contact/Location: JAMES ROBINSON III - ROCROCUS



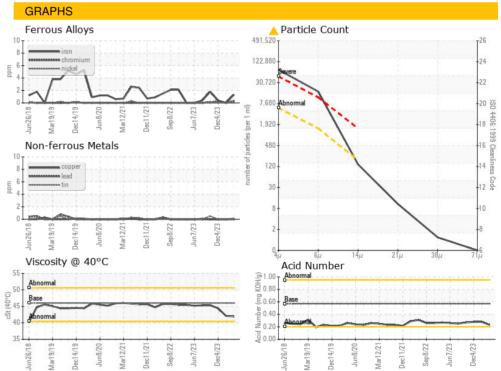
## **OIL ANALYSIS REPORT**







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	LIGHT	LIGHT	LIGHT
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	>0.1	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	41.9	42.1	44.4
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						





48

47

40



Laboratory Sample No.

Dec4/23

: WC0930426 Lab Number : 06214623 Unique Number : 11087487

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Jun 2024 **Tested** : 20 Jun 2024

Diagnosed : 21 Jun 2024 - Don Baldridge

Test Package : IND 2 Certificate 12367 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)

**Rochelle Foods - PRE** 

1001 South Main, P.O. Box 45 Rochelle, IL

US 61068

Contact: JAMES ROBINSON III

jrobinson3@hormel.com T:

F: (815)562-4147