

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



BREDE AER-FOR MAIN [BWR7442844] SM-CYCLO 936022 (S/N 0N0089661)

Gearbox

Gear Do.

BELRAY SENTRA 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

The condition of the oil is acceptable for the time in service.

		-eb2015 Ap	2015 Mar2018 Jan2022	May2023 Jan2024 Mar20	024 Apr2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		BR008188	BRI008127	BRI008124
Sample Date		Client Info		22 Apr 2024	20 Mar 2024	19 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				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	108	35	23
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	<1	<1
Titanium	ppm	ASTM D5185m		0	1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	3	3
Lead	ppm	ASTM D5185m	>100	0	<1	<1
Copper	ppm	ASTM D5185m	>200	0	<1	<1
Tin	ppm	ASTM D5185m	>25	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm		limit/base			
Boron Barium	ppm	ASTM D5185m	limit/base	0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	0	0	0 2
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0	0 1 <1	0 2 <1
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1	0 1 <1 <1	0 2 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 0	0 1 <1 <1 <1	0 2 <1 <1 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 0	0 1 <1 <1 <1 <1 6	0 2 <1 <1 <1 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 0 0 297	0 1 <1 <1 <1 <1 6 247	0 2 <1 <1 <1 <1 5 366
Boron 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 ASTM D5185m	limit/base	0 0 0 <1 0 0 297	0 1 <1 <1 <1 6 247	0 2 <1 <1 <1 5 366 7
Boron 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		0 0 0 <1 0 0 297 0 281	0 1 <1 <1 <1 <1 6 247 3 115	0 2 <1 <1 <1 5 366 7 320
Boron 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	limit/base	0 0 0 <1 0 0 297 0 281	0 1 <1 <1 <1 6 247 3 115	0 2 <1 <1 <1 <5 366 7 320 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 0 0 <1 0 0 297 0 281 current	0 1 <1 <1 <1 6 247 3 115 history1	0 2 <1 <1 <1 <1 <5 366 7 320 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50	0 0 0 <1 0 0 297 0 281 current	0 1 <1 <1 <1 6 247 3 115 history1 23 0	0 2 <1 <1 <1 <1 <5 366 7 320 history2 8 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20	0 0 0 <1 0 0 297 0 281 current 7 0	0 1 <1 <1 <1 6 247 3 115 history1 23 0 2	0 2 <1 <1 <1 <5 366 7 320 history2 8 0 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20 limit/base	0 0 0 0 <1 0 0 297 0 281 current 7 0	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2	0 2 <1 <1 <1 <1 <5 366 7 320 history2 8 0 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	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	limit/base >50 >20 limit/base NONE	0 0 0 0 <1 0 0 297 0 281 current 7 0 0	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2 history1 NONE	0 2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *Visual *Visual	limit/base >50 >20 limit/base NONE	0 0 0 0 <1 0 0 297 0 281 current 7 0 0 current NONE	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2 history1 NONE NONE	0 2 <1 <1 <1 <1 <5 366 7 320 history2 8 0 1 history2 NONE NONE
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *Visual *Visual	limit/base >50 >20 limit/base NONE NONE	0 0 0 0 <1 0 0 297 0 281 current 7 0 0 current NONE NONE	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2 history1 NONE NONE NONE	0 2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod *Visual *Visual *Visual	limit/base >50 >20 limit/base NONE NONE NONE	0 0 0 0 1 0 0 297 0 281 current 7 0 0 current NONE NONE NONE	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2 history1 NONE NONE NONE NONE	0 2 <1 <1 <1 <1 5 366 7 320 history2 8 0 1 history2 NONE NONE NONE NONE
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE	0 0 0 0 0 <1 0 0 297 0 281 current 7 0 0 current NONE NONE NONE NONE NONE NONE	0 1 <1 <1 <1 <1 6 247 3 115 history1 23 0 2 history1 NONE NONE NONE NONE NONE NONE NONE	0 2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1

Emulsified Water

Free Water

scalar

scalar *Visual

*Visual

>0.2

0.2%

NEG

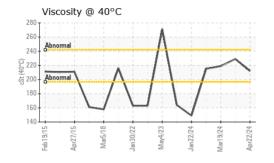
NEG

NEG

NEG



OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		212	229	219
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS Ferrous Alloys 120 E 60 20 Non-ferrous Metals Viscosity @ 40°C 280 260 \$200 \$2 200 200 200 180





Certificate 12367

Laboratory Sample No. Lab Number : 06201922 Unique Number : 11069383

: BR008188

140

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06 Jun 2024 Received **Tested** : 07 Jun 2024

Diagnosed

: 07 Jun 2024 - Wes Davis

BRIDGEWATER, VA

US 22812 Contact: Ashley Jarvis ashley.jarvis@perdue.com

T: (540)528-7828

PERDUE FARMS INC

100 QUALITY ST

Test Package : IND 1 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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Contact/Location: Ashley Jarvis - PERBRIVA

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