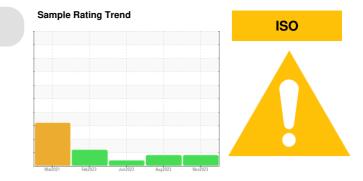


PROBLEM SUMMARY

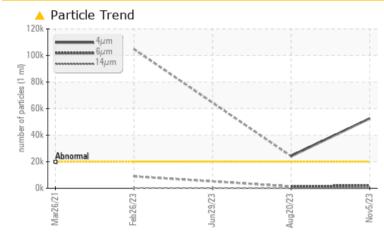


Machine Id B21613 - 4 (S/N 69700019) Component

Gearbox

JAX MAGNA-PLATE 85W140-FG (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	ATTENTION	ABNORMAL		
Particles >4µm	ASTM D7647	>20000	<u> </u>	4 24137			
Oil Cleanliness	ISO 4406 (c)	>21/19/16	A 23/18/13	🔺 22/18/13			

Customer Id: HORBEL Sample No.: WC0866691 Lab Number: 06012377 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

20 Aug 2023 Diag: Don Baldridge



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



29 Jun 2023 Diag: Don Baldridge

VIS DEBRIS



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



ISO

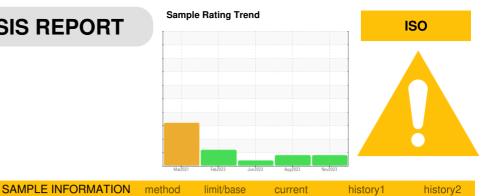
26 Feb 2023 Diag: Don Baldridge

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT



Machine Id B21613 - 4 (S/N 69700019) Component

Gearbox Fluid

JAX MAGNA-PLATE 85W140-FG (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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.

Sample Number						Thistory2
I		Client Info		WC0866691	WC0820484	WC0799730
Sample Date		Client Info		05 Nov 2023	20 Aug 2023	29 Jun 2023
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	1
Oil Changed		Client Info		N/A	N/A	Not Changd
Sample Status				ABNORMAL	ATTENTION	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water	•	WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	0	<1	<1
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	36	33	31
Tin	ppm	ASTM D5185m	>25	2	<1	2
Vanadium	ppm	ASTM D5185m	-	- <1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	<1	1
Calcium	ppm	ASTM D5185m		0	0	0
	ppm	ASTM D5185m		382	462	467
Phoephorue	ppiii	AO INI DO IODIII			702	407
Phosphorus		ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0 4610	0	0
Zinc Sulfur	ppm ppm	ASTM D5185m		4610	6592	6274
Zinc	ppm ppm		limit/base	-		
Zinc Sulfur	ppm ppm	ASTM D5185m	limit/base	4610	6592	6274
Zinc Sulfur CONTAMINANTS	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m		4610 current	6592 history1	6274 history2
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m		4610 current <1	6592 <mark>history1</mark> <1	6274 history2 <1
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	>50	4610 current <1 0 0	6592 history1 <1 0	6274 history2 <1 0
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20	4610 current <1 0 0	6592 history1 <1 0 0	6274 history2 <1 0 <1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	>50 >20 limit/base	4610 current <1 0 0 current	6592 history1 <1 0 0 history1	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647	>50 >20 limit/base >20000	4610 current <1 0 0 current ▲ 52586	6592 history1 <1 0 0 history1 ▲ 24137	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000	4610 current <1 0 0 current ≤2586 2003	6592 history1 <1 0 0 history1 ▲ 24137 1386	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640	4610 current <1 0 0 current 52586 2003 80	6592 history1 <1 0 0 history1 ▲ 24137 1386 55	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640 >160	4610 current <1 0 0 current ► 52586 2003 80 23	6592 history1 <1 0 0 history1 ▲ 24137 1386 55 14	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >5000 >640 >160 >40	4610 current <1 0 0 current ▲ 52586 2003 80 23 1	6592 history1 <1 0 0 history1 ▲ 24137 1386 55 14 1	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm JESS	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >20000 >5000 >640 >160 >40 >40 >10	4610 current <1 0 0 current ▲ 52586 2003 80 23 1 0	6592 history1 <1 0 0 history1 ▲ 24137 1386 55 14 1 0	6274 history2 <1 0 <1 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm JESS	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c)	>50 >20 limit/base >20000 >5000 >640 >160 >40 >10 >10 >21/19/16	4610 current <1 0 0 current ▲ 52586 2003 80 23 1 0 ▲ 23/18/13	6592 history1 <1 0 0 history1 ▲ 24137 1386 55 14 1 1 0 ▲ 22/18/13	6274 history2 <1 0 <1 history2 -

Report Id: HORBEL [WUSCAR] 06012377 (Generated: 11/22/2023 15:20:09) Rev: 1

Contact/Location: Craig Bennett - HORBEL



Acid Number

Feb26/23

Feb26/23

0.80

0.70-(B/H0.60-B 0.50 3 0.40 ua 0.40 Pice 0.20

0.10

0.00

800

70

() 600

400

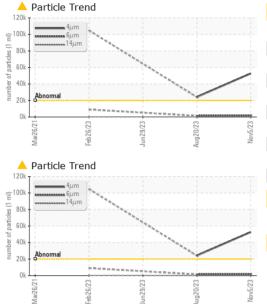
300

Mar26/

Abnorma

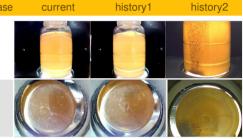
Mar26/21

OIL ANALYSIS REPORT

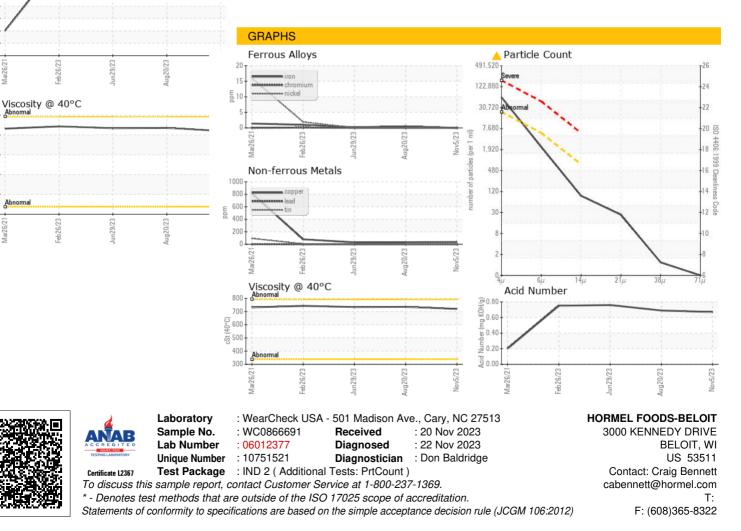


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	🔺 MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		720	735.6	734
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color						





Bottom



Contact/Location: Craig Bennett - HORBEL