

OIL ANALYSIS REPORT

Area BUILDING 51 - CEREAL PRODUCTS Machine Id PREMIX CONVEYOR GEARBOX C5 (S/N 51C5-GB) Component

Gearbox

Fluid

LUBRICATION ENG DUOLEC 1604 ISO 150 (1 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

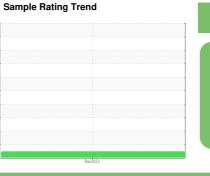
All component wear rates are normal.

Contamination

ISO Cleanliness Code (ISO 4406:1999): 22/19/15; Cumulative particle counts $>4\mu$ m = 23631, $>6\mu$ m = 3886, $>14\mu$ m = 244, $>21\mu$ m = 62, $>38\mu$ m = 4, $>71\mu$ m = 0. There is no indication of any contamination in the oil.

Fluid Condition

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





NORMAL

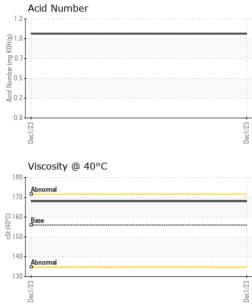
				Dec2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0865421		
Sample Date		Client Info		01 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	I	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	37		
Chromium	ppm	ASTM D5185(m)	>15	<1		
Nickel	ppm	ASTM D5185(m)	>15	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>25	<1		
Lead	ppm	ASTM D5185(m)	>100	<1		
Copper	ppm	ASTM D5185(m)	>200	<1		
Tin	ppm	ASTM D5185(m)	>25	0		
Antimony	ppm	ASTM D5185(m)	>5	0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		17		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		0		
Calcium	ppm	ASTM D5185(m)		2		
Phosphorus	ppm	ASTM D5185(m)		434		
Zinc	ppm	ASTM D5185(m)		2		
Sulfur	ppm	ASTM D5185(m)		4697		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<1		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	0		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	23631		
Particles >6µm		ASTM D7647	>5000	3886		
Particles >14µm		ASTM D7647	>640	244		
Particles >21µm		ASTM D7647	>160	62		
Particles >38µm		ASTM D7647	>40	4		
Particles >71µm		ASTM D7647		0		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/19/15		
				A A A A		

Contact/Location: Matt Morand - HIRWIN



OIL ANALYSIS REPORT

FLUID DEGRADATION



1.02		ASTM D974*	mg KOH/g	Acid Number (AN)	
mit/base current history1 history2	limit/base	method		VISUAL	
DNE NONE	NONE	Visual*	scalar	White Metal	
	NONE	Visual*	scalar	Yellow Metal	
	NONE	Visual*	scalar	Precipitate	
	NONE	Visual*	scalar	Silt	23
	NONE	Visual*	scalar	Debris	Dec1/23
	NONE	Visual*	scalar	Sand/Dirt	
	NORML	Visual*	scalar	Appearance	
	NORML	Visual*	scalar	Odor	
	>0.2	Visual*	scalar	Emulsified Water	
NEG	20.L	Visual*	scalar	Free Water	
	11 11 11				
	limit/base	method		FLUID PROPERT	
6 168	156	ASTM D7279(m)	cSt	Visc @ 40°C	
mit/base current history1 history2	limit/base	method	3	SAMPLE IMAGES	Dec1/23
no image no image				Color	-
no image no image				Bottom	
				GRAPHS	
Particle Count				Ferrous Alloys	
491,520 Severe	491,520			40 iron	
122,880	122,880			30 - chromium	
30,720 Abnormal +22	30.720			20 nickel	
20 T	Dec1/23			0ec1/23	
T T 7.680 -20 1.920 -18 -16 -16 1.920 -112 -112 -112	a l.920			Dec	
480 16			s	Non-ferrous Metal	
14 120	je 120			¹⁰ T	
	mpe			Leadersee lead	_
[∉] 30-	≅ 30			5 tin	lag
8 + +10	8				
	53				
	Dec1			Dec1	
	L			Viscosity @ 40°C	
Acid Number	S19			180-	1
H H H H H H H H H H H H H H H H H H H	KOH				1
	Ĕ 1.0			160 - Base	(40°C
聲 0.5-	qu 0.5				
				130	
Dec1/23 A	c1/23			c1/23	
	De			De	
on, ON L7L 5H9 HIRAM WALKER & SONS 2023 2072 RIVERSIDE DRIVE EAST, BOX	(0,10,10,10,10,10,10,10,10,10,10,10,10,10	:06 l ed::07 l	75 Apple Received Diagnose Diagnost	Viscosity @ 40°C	cst (40°C)

To discuss this sample rep Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Report Id: HIRWIN [WCAMIS] 02601318 (Generated: 12/07/2023 19:02:36) Rev: 1

CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Matt Morand - HIRWIN

F: (519)971-5719