

OIL ANALYSIS REPORT

Area [212217] EXCEL EX62 MENASHA EXCEL BALER (S/N EX-2164)

Component **Hydraulic System**

FIRE-RESISTANT FLUID ISO 46 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

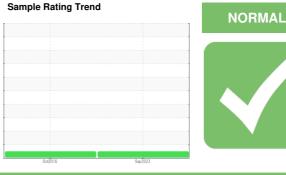
All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. 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.

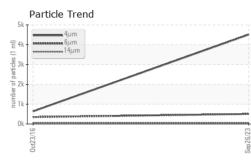


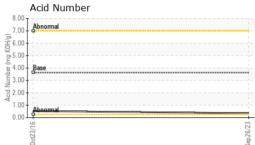


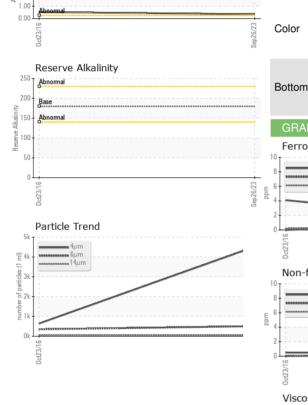
				Sep2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836600	WCI2300200	
Sample Date		Client Info		26 Sep 2023	23 Oct 2016	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Filtered	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	1	4	
Chromium	ppm	ASTM D5185m	>10	1	0	
Nickel	ppm	ASTM D5185m	>10	<1	<1	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>10	4	<1	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m	>75	<1	<1	
Tin	ppm	ASTM D5185m	>10	1	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		2	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	<1	
Barium	ppm	ASTM D5185m	5	0	0	
Molybdenum	ppm	ASTM D5185m	5	<1	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnasium		ASTM D5185m	5	2	0	
Magnesium	ppm					
Calcium	ppm ppm	ASTM D5185m	50	5	50	
-		ASTM D5185m ASTM D5185m	50 175	5 3	50 317	
Calcium	ppm					
Calcium Phosphorus	ppm ppm	ASTM D5185m	175	3	317	
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	175 62	3 2	317 446	
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	175 62 500	3 2 26	317 446 1126	
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	175 62 500 limit/base	3 2 26 current	317 446 1126 history1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	175 62 500 limit/base	3 2 26 current 2	317 446 1126 history1 2	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	175 62 500 limit/base >20	3 2 26 current 2 44	317 446 1126 history1 2 1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	175 62 500 limit/base >20 >20	3 2 26 current 2 44 8	317 446 1126 history1 2 1 1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	175 62 500 limit/base >20 >20 limit/base	3 2 26 current 2 44 8 current	317 446 1126 history1 2 1 1 1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	175 62 500 limit/base >20 >20 limit/base	3 2 26 current 2 44 8 current 4511	317 446 1126 history1 2 1 1 history1 639	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647	175 62 500 limit/base >20 >20 limit/base >5000 >5000 >640	3 2 26 current 2 44 8 current 4511 505	317 446 1126 history1 2 1 1 history1 639 348	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	175 62 500 limit/base >20 >20 limit/base >5000 >5000 >640	3 2 26 <u>current</u> 2 44 8 <u>current</u> 4511 505 52	317 446 1126 history1 2 1 1 history1 639 348 59	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	175 62 500 limit/base >20 >20 limit/base >5000 >640 >160	3 2 26 current 2 44 8 current 4511 505 52 19	317 446 1126 history1 2 1 1 history1 639 348 59 20	 history2 history2 history2
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	175 62 500 limit/base >20 >20 limit/base >5000 >640 >160 >40	3 2 26 current 2 44 8 current 4511 505 52 19 1	317 446 1126 history1 2 1 1 1 history1 639 348 59 20 3	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ESS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	175 62 500 imit/base >20 >20 imit/base >20 imit/base >5000 >640 >160 >40 >10	3 2 26 current 2 44 8 <u>current</u> 4511 505 52 19 1 1 0	317 446 1126 history1 2 1 1 1 history1 639 348 59 20 3 3 0	 history2 history2



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VISUAL	r	method	limit/base	current	history1	history
White Metal	scalar *V		NONE	NONE	NONE	
Yellow Metal	scalar *V	isual	NONE	NONE	NONE	
Precipitate	scalar *V	/isual	NONE	NONE	NONE	
Silt	scalar *V	isual	NONE	NONE	NONE	
Debris	scalar *V	/isual	NONE	NONE	VLITE	
Sand/Dirt	scalar *V	isual	NONE	NONE	NONE	
Cigram Appearance	scalar *V	/isual	NORML	NORML	NORML	
Ödor	scalar *V	isual	NORML	NORML	NORML	
Emulsified Water	scalar *V	isual :	>55	NEG	NEG	
Free Water	scalar *V	/isual		NEG	NEG	
FLUID PROPERTII	ES r	method	limit/base	current	history1	history
Visc @ 40°C	cSt AS	STM D445	46	42.7	28.01	
SAMPLE IMAGES	n	method	limit/base	current	history1	history
Color						no image
Bottom						no image
GRAPHS						
Ferrous Alloys				Particle Cour	nt	
10 iron			491,5	20		
S = 6			122,8	30 -		
E d d 4			30,7	20		
2						
	1999-1999-1999-1999-1999-1999-1999-199		7,6	30	×.	
0ct23/16			Sep26/23 s (per 1 ml)	20		
			<u>a</u>		N	
Non-ferrous Metals			oitred	30		
copper			per of	20-	1	
					~	
				30 -		
2-				8 Bisrevernal		
			~	2		
0ct23/16			Sep 26/23	-		
_			Sel	0 4µ 6µ	14µ 21µ	38µ 71
Viscosity @ 40°C				Acid Number		
Abnormal			(^B /H	Abnormal		
50 Base Abnormal			.8 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	00		
Contraction of the second seco			لة 194.	0 - Base		
30			N 2.	00		
20			- Acid	Abnormal		
0ct23/16			Sep26/23 .	0ct23/16 -		
			Sel	00		

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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