

## **OIL ANALYSIS**

### Area Vessel KAT 010 (M/E Reduction Gear) Gearbox Fluid NOT GIVEN (250 LTR)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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SIS REPO	ORT	Samp	le Rating Tre	eno	N	IORMAL
ear)		Nov202	2 0=2023	Νονέα23 Μ	av/2024	
SAMPLE INFOF	RMATIO		limit/base	current	history1	history2
Sample Number		Client Info		PC0080252	PC0080268	PC0018593
Sample Date		Client Info		17 May 2024	22 Nov 2023	18 Oct 2023
Machine Age	hrs	Client Info		193900	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	1110	Client Info		N/A	N/A	0 N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINAT	ΓΙΟΝ	method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	5	6	5
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	0
Lead	ppm	ASTM D5185(m)	>65	2	3	3
Copper	ppm	ASTM D5185(m)	>80	10	11	11
Tin	ppm	ASTM D5185(m)	>8	0	<1	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		1	2	2
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	2	<1
Calcium	ppm	ASTM D5185(m)		54	238	57
Phosphorus	ppm	ASTM D5185(m)		288	306	278
Zinc	ppm	ASTM D5185(m)		19	55	19
Sulfur	ppm	ASTM D5185(m)		5733	5977	5836
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINAN	NTS	method	limit/base	current	history1	history2

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	0	1	2
Sodium	ppm	ASTM D5185(m)		3	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0

FLUID CLEANLINESS	S method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	7709	▲ 65415	
Particles >6µm	ASTM D7647	>5000	1649	<b>1</b> 9686	
Particles >14µm	ASTM D7647	>640	74	<b>1</b> 425	
Particles >21µm	ASTM D7647	>160	12	<b>A</b> 343	
Particles >38µm	ASTM D7647	>40	1	20	
Particles >71µm	ASTM D7647	>10	0	2	
Oil Cleanliness	ISO 4406 (c)	>21/19/16	20/18/13	23/21/18	



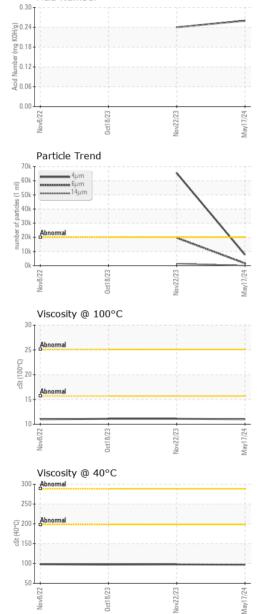
491,520 122,880 124,880 124,890 124,890 124,890 124

Particle Count

Acid Number

# **OIL ANALYSIS REPORT**

FLUID DEGRA	DATION	method	limit/base	current	history1	histor
Acid Number (AN)	ma KOH/a	ASTM D974*		0.26	0.24	· inotoi
( )	iliy KOH/y	ASTIVI D974		0.20	0.24	
VISUAL		method	limit/base	current	history1	histo
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	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORM
Odor	scalar	Visual*	NORML	NORML	NORML	NORM
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	histo
Visc @ 40°C	cSt	ASTM D7279(m)		96.7	97.6	97.1
Visc @ 100°C	cSt	ASTM D7279(m)		11.0	11.1	11.1
Viscosity Index (VI)	Scale	ASTM D2270*		98	98	99
SAMPLE IMAG	θES	method	limit/base	current	history1	histo
				674-		-
Color						
						6
						6



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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA : PC0080252 : 28 May 2024 Sample No. Received Lab Number : 02638253 Tested : 30 May 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5787415 Diagnosed : 30 May 2024 - Kevin Marson Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131. 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.

Bottom

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