MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
RIG 6
Machine Id
R6-P-02G NKL
Component
Gearbox
Fluid
GEAR OIL (PAO) ISO 220 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system.
We recommend you service the filters on this component if applicable.
Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

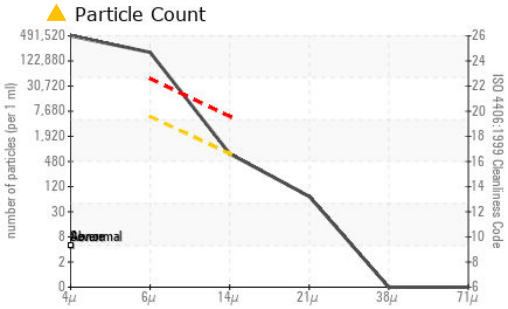
CONTAMINATION

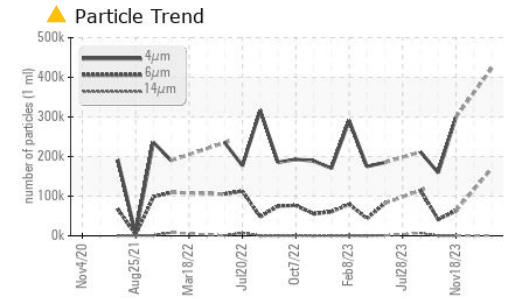
There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

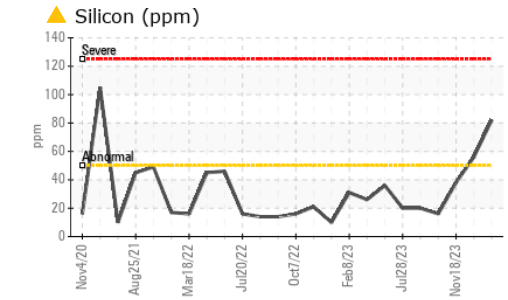
FLUID CONDITION

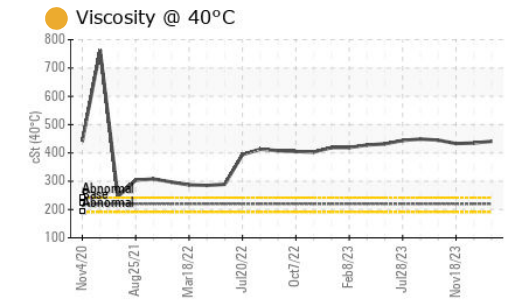
The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

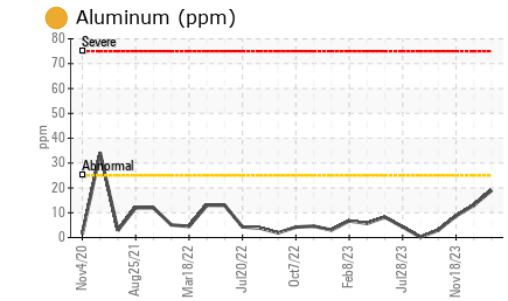
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013877	KL0013186	KL0013177
Sample Date		Client Info		20 Feb 2024	05 Jan 2024	18 Nov 2023
Machine Age	days	Client Info		45342	45297	45248
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	124	85	48
Chromium	ppm	ASTM D5185m	>10	2	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	19	13	9
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>200	16	12	10
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	82	56	38
Potassium	ppm	ASTM D5185m	>20	24	14	10
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647		422322	---	299326
Particles >6µm		ASTM D7647	>5000	169894	---	63326
Particles >14µm		ASTM D7647	>640	646	---	215
Particles >21µm		ASTM D7647	>160	62	---	43
Particles >38µm		ASTM D7647	>40	0	---	0
Particles >71µm		ASTM D7647	>10	0	---	0
Oil Cleanliness		ISO 4406 (c)	>19/16	25/17	---	23/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%	0.2%
Sodium	ppm	ASTM D5185m		272	150	88
Boron	ppm	ASTM D5185m	25	5	7	4
Barium	ppm	ASTM D5185m	12	56	33	28
Molybdenum	ppm	ASTM D5185m	5	<1	0	<1
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	25	30	24	21
Calcium	ppm	ASTM D5185m	25	159	118	86
Phosphorus	ppm	ASTM D5185m	375	172	127	190
Zinc	ppm	ASTM D5185m	25	14	13	6
Sulfur	ppm	ASTM D5185m	4900	6424	7085	7121
Acid Number (AN)	mg KOH/g	ASTM D8045	1.10	0.45	0.42	0.46
Visc @ 40°C	cSt	ASTM D445	220	441	435	433

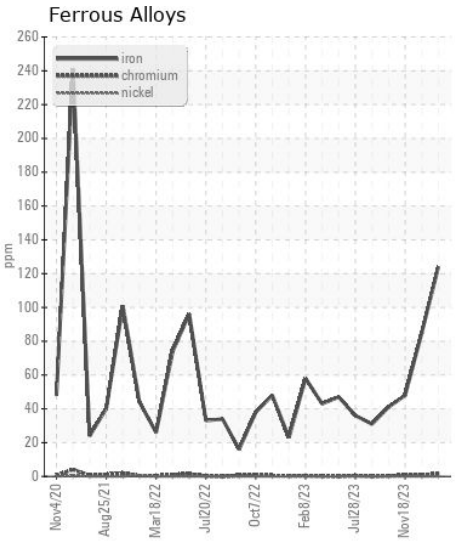


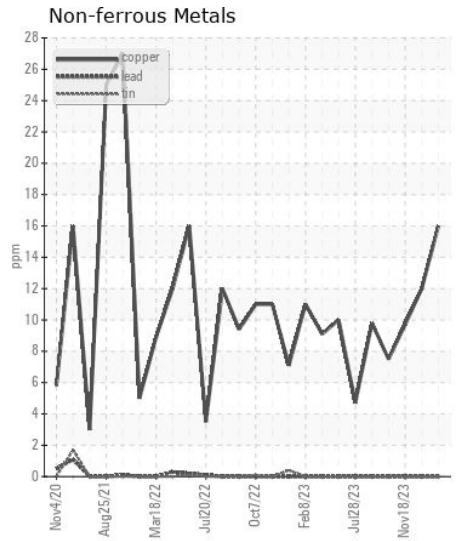


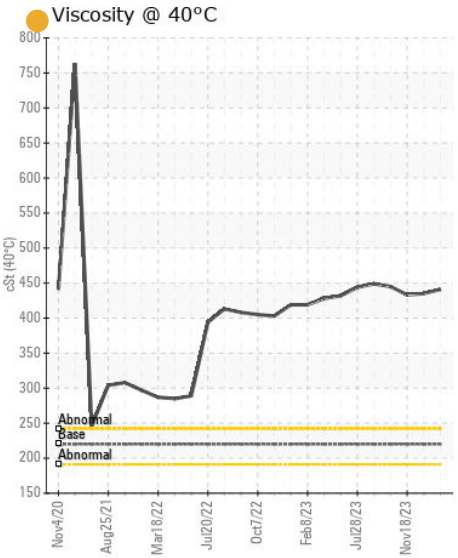


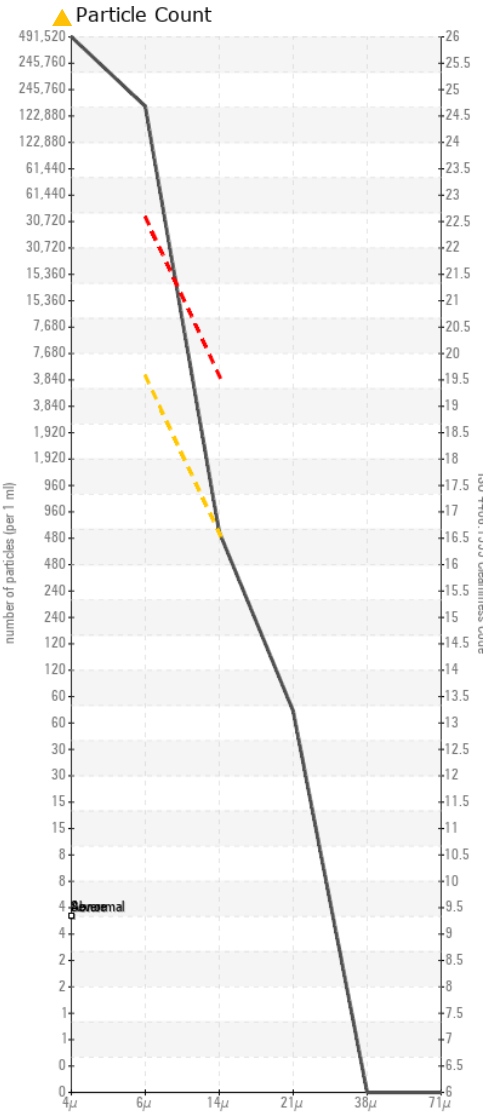


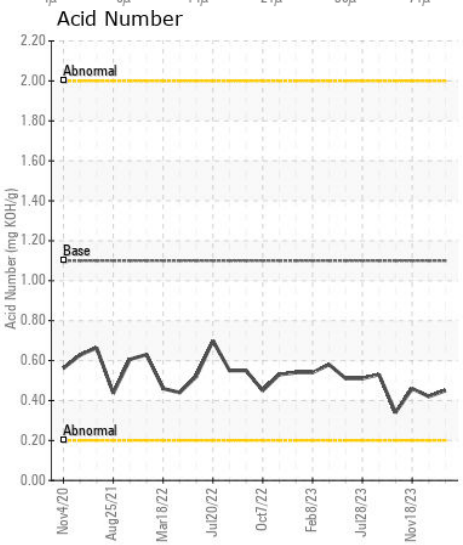












ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: KL0013877	**Received**	: 29 Feb 2024
Lab Number	: 06105190	**Tested**	: 01 Mar 2024
Unique Number	: 10903420	**Diagnosed**	: 04 Mar 2024 - Don Baldridge
Test Package	: MOB 2 (Additional Tests: PrtCount)		

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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