



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
RIG 816
Machine Id
R816-MP-02
Component
Gearbox
Fluid
GEAR OIL ISO 320 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

Appearance is unacceptable. There is a moderate concentration of water present in the oil. The high sodium (Na) level indicates the possible presence of salt water.

FLUID CONDITION

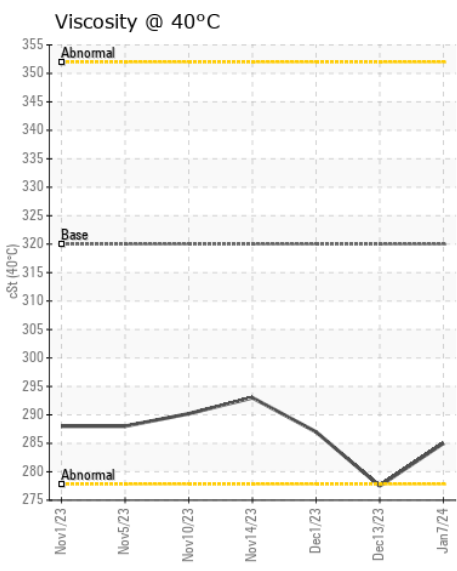
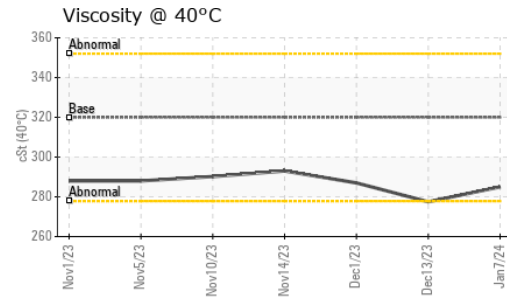
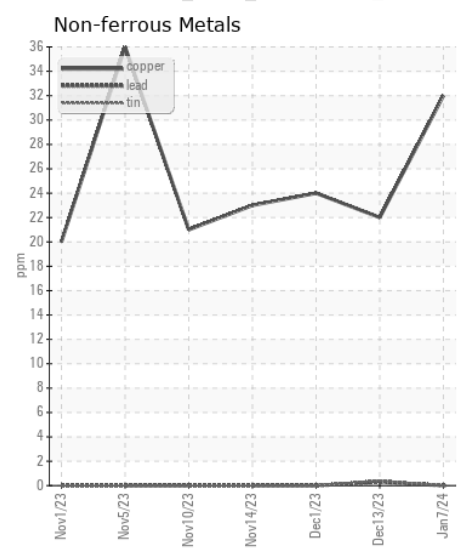
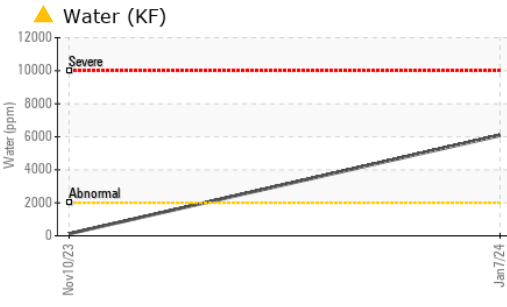
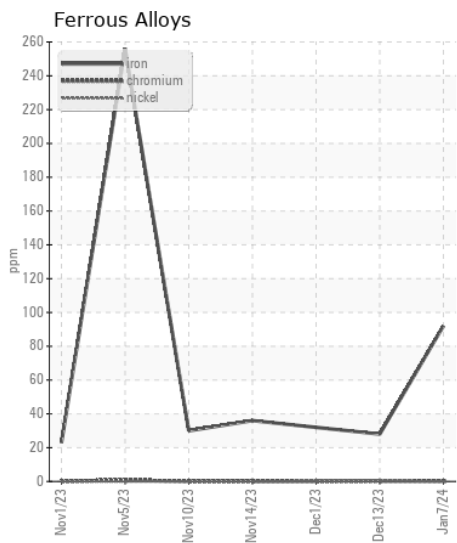
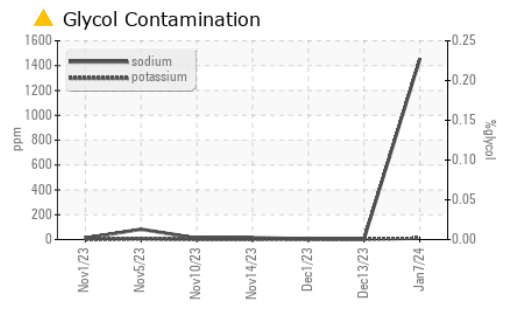
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011723	KL0013946	KL0013156
Sample Date		Client Info		07 Jan 2024	13 Dec 2023	01 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>200	92	28	32
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	1	1
Lead	ppm	ASTM D5185m	>50	0	<1	0
Copper	ppm	ASTM D5185m	>200	32	22	24
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>50	32	11	12
Potassium	ppm	ASTM D5185m	>20	11	1	2
Water	%	ASTM D6304	>0.2	▲ 0.608	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 6080	---	---
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	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG	NEG

Sodium	ppm	ASTM D5185m		▲ 1453	5	6
Boron	ppm	ASTM D5185m	50	4	<1	<1
Barium	ppm	ASTM D5185m	15	0	2	0
Molybdenum	ppm	ASTM D5185m	15	0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	50	8	4	1
Calcium	ppm	ASTM D5185m	50	75	24	24
Phosphorus	ppm	ASTM D5185m	350	194	160	133
Zinc	ppm	ASTM D5185m	100	31	34	33
Sulfur	ppm	ASTM D5185m	12500	8900	8462	8565
Visc @ 40°C	cSt	ASTM D445	320	285	277.5	287



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011723 **Received** : 10 Jan 2024
Lab Number : 06056982 **Diagnosed** : 11 Jan 2024
Unique Number : 10822931 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: KF)

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Certificate L2367
 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)