



PROBLEM SUMMARY

Sample Rating Trend



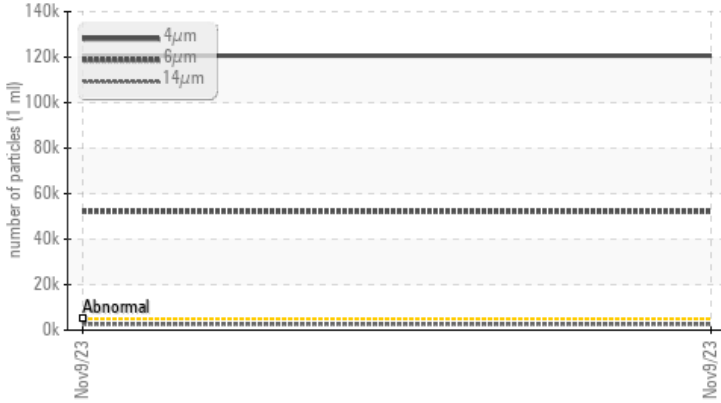
ISO



Machine Id
KD-1 LIQUID NOX
 Component
Gearbox
 Fluid
MOBIL SHC 630 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ISO 4406 (c)	ABNORMAL	---	---
Particles >4µm	>5000	>19/17/14	▲ 120632	---	---
Particles >6µm	>1300	>19/17/14	▲ 52134	---	---
Particles >14µm	>160	>19/17/14	▲ 2603	---	---
Particles >21µm	>40	>19/17/14	▲ 508	---	---
Oil Cleanliness	>19/17/14	>19/17/14	▲ 24/23/19	---	---

Customer Id: NRGDOV
 Sample No.: USP255341
 Lab Number: 06006384
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

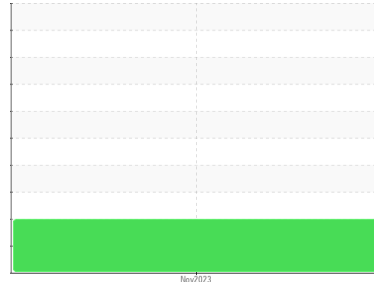
Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KD-1 LIQUID NOX
 Component
Gearbox
 Fluid
MOBIL SHC 630 (--- GAL)

DIAGNOSIS

▲ Recommendation

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 particulates present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USP255341	---	---
Sample Date	Client Info	09 Nov 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>200	3	---	---
Chromium ppm ASTM D5185m	>15	0	---	---
Nickel ppm ASTM D5185m	>15	0	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m		0	---	---
Aluminum ppm ASTM D5185m	>25	0	---	---
Lead ppm ASTM D5185m	>100	0	---	---
Copper ppm ASTM D5185m	>200	0	---	---
Tin ppm ASTM D5185m	>25	0	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		0	---	---
Barium ppm ASTM D5185m		0	---	---
Molybdenum ppm ASTM D5185m		0	---	---
Manganese ppm ASTM D5185m		0	---	---
Magnesium ppm ASTM D5185m		0	---	---
Calcium ppm ASTM D5185m		10	---	---
Phosphorus ppm ASTM D5185m		635	---	---
Zinc ppm ASTM D5185m		0	---	---
Sulfur ppm ASTM D5185m		229	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>50	8	---	---
Sodium ppm ASTM D5185m		<1	---	---
Potassium ppm ASTM D5185m	>20	0	---	---
Water % ASTM D6304	>0.2	0.003	---	---
ppm Water ppm ASTM D6304	>2000	34.6	---	---

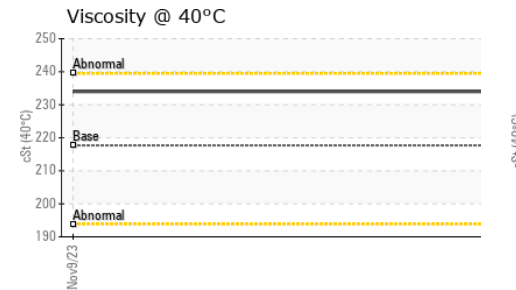
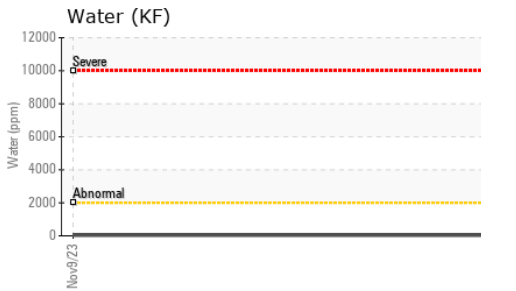
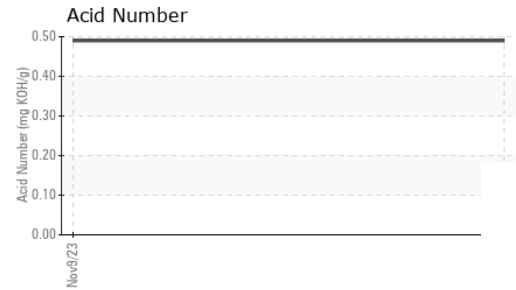
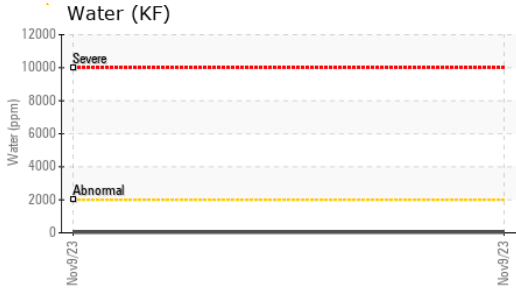
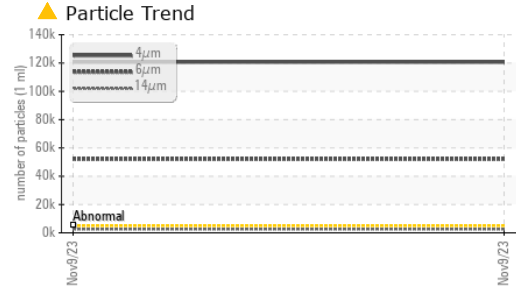
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	▲ 120632	---	---
Particles >6µm ASTM D7647	>1300	▲ 52134	---	---
Particles >14µm ASTM D7647	>160	▲ 2603	---	---
Particles >21µm ASTM D7647	>40	▲ 508	---	---
Particles >38µm ASTM D7647	>10	8	---	---
Particles >71µm ASTM D7647	>3	1	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	▲ 24/23/19	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045		0.49	---	---

OIL ANALYSIS REPORT



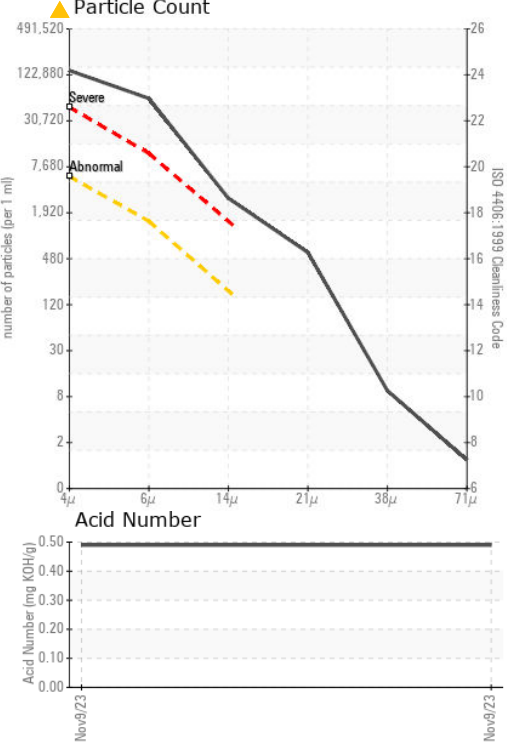
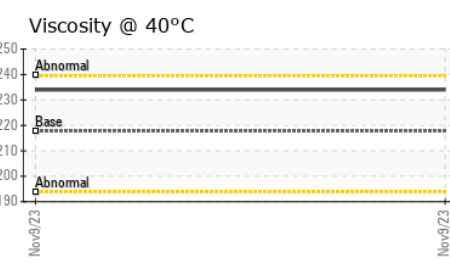
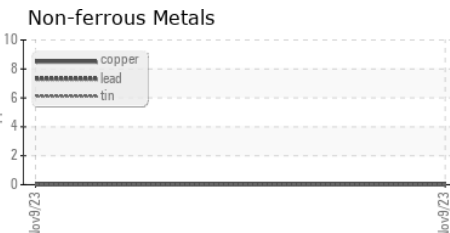
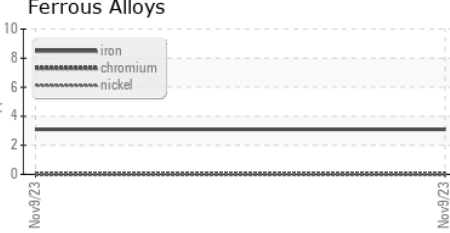
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	217.7	234	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP255341 **Received** : 13 Nov 2023
Lab Number : 06006384 **Diagnosed** : 14 Nov 2023
Unique Number : 10740146 **Diagnostician** : Doug Bogart
Test Package : IND 2

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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)