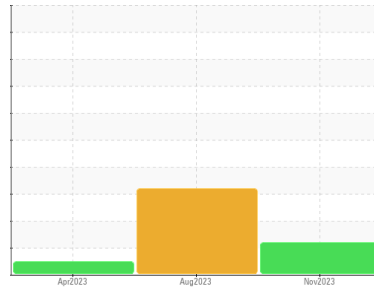




PROBLEM SUMMARY

Sample Rating Trend



VISUAL METAL



Machine Id
MLU-1
 Component
Outboard Pump
 Fluid
CHEVRON REGAL OIL R&O 32 (--- GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We suspect abnormal metal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	SEVERE	NORMAL
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: ENECOT
 Sample No.: RP0036171
 Lab Number: 06016566
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Aug 2023 Diag: Jonathan Hester

DEGRADATION



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. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is above the recommended limit. The oil is no longer serviceable.

view report



11 Apr 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

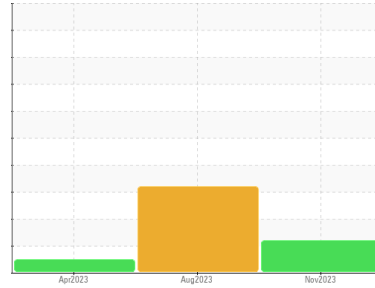


OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Machine Id
MLU-1
 Component
Outboard Pump
 Fluid
CHEVRON REGAL OIL R&O 32 (--- GAL)



DIAGNOSIS

Recommendation
 We suspect abnormal metal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
 Moderate concentration of visible metal present. All component wear rates are normal.

Contamination
 The water content is negligible. 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	RP0036171	RP0033375	RP0033388
Sample Date	Client Info	17 Nov 2023	01 Aug 2023	11 Apr 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	0	4	5
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m >5	<1	0	0
Titanium	ppm	ASTM D5185m >3	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	<1	<1	<1
Lead	ppm	ASTM D5185m >12	0	<1	0
Copper	ppm	ASTM D5185m >30	12	7	7
Tin	ppm	ASTM D5185m >9	2	10	6
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	74	2	2
Calcium	ppm	ASTM D5185m	2	0	0
Phosphorus	ppm	ASTM D5185m	4	17	15
Zinc	ppm	ASTM D5185m	0	1	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<1	<1	0
Sodium	ppm	ASTM D5185m	2	1	0
Potassium	ppm	ASTM D5185m >20	<1	1	0
Water	%	ASTM D6304 >.1	0.020	0.00	0.002
ppm Water	ppm	ASTM D6304 >1000	205	0.00	24.5

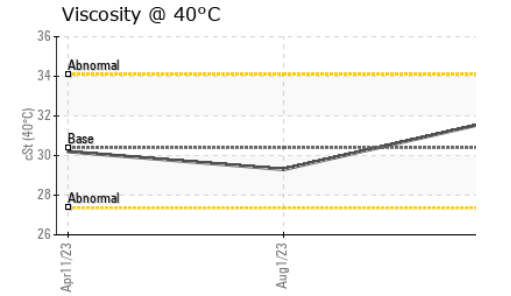
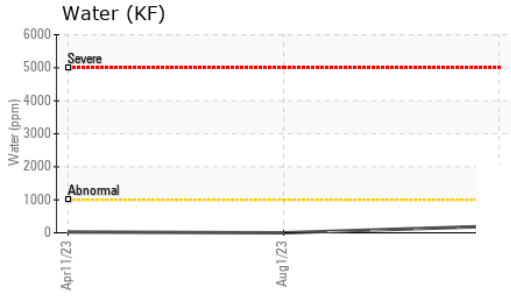
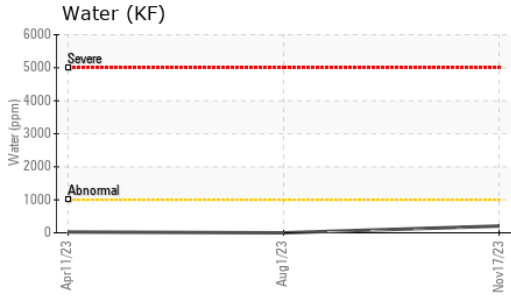
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	8.363	0.06

VISUAL

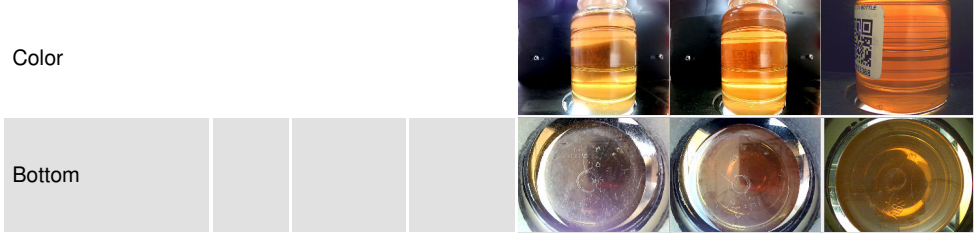
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	▲ MODER	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.1	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

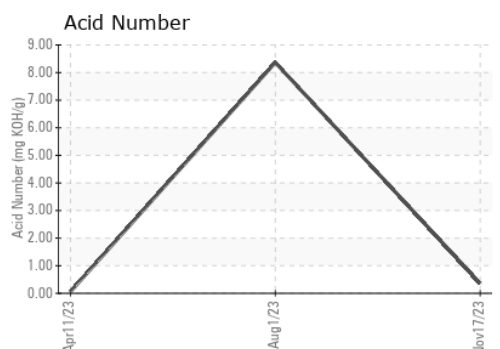
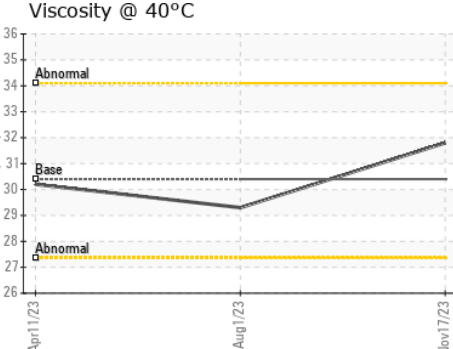
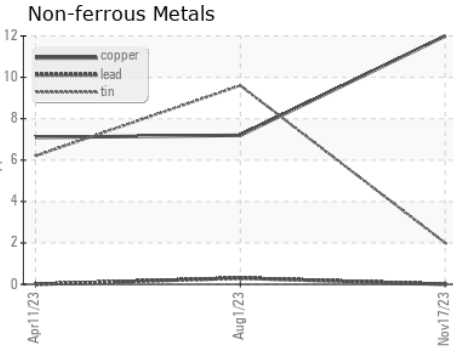
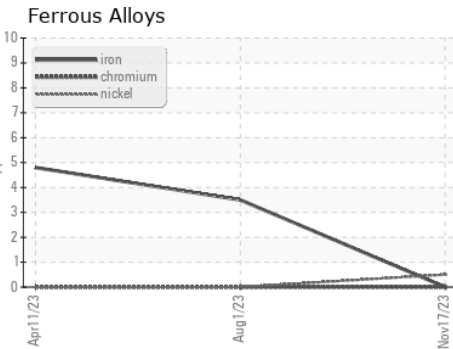


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	30.4	31.8	29.3	30.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0036171 **Received** : 24 Nov 2023
Lab Number : 06016566 **Diagnosed** : 28 Nov 2023
Unique Number : 10755710 **Diagnostician** : Jonathan Hester
Test Package : IND 2

ENERGY TRANSFER - COTTON VALLEY
 22394 HWY 371
 COTTON VALLEY, LA
 US 71018
 Contact: Service Manager
 Zach.Tinkle@energytransfer.com

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)

T:
F: