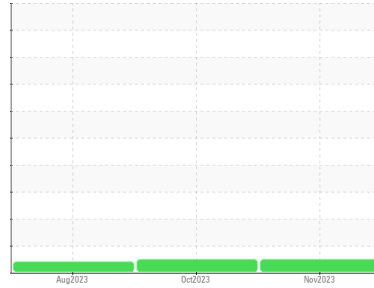




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2400

Component
Diesel Engine

Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0859283	WC0859247	WC0829022
Sample Date	Client Info			21 Nov 2023	05 Oct 2023	14 Aug 2023
Machine Age	mls	Client Info		56619	38589	20404
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.4
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	16	35	64
Chromium	ppm	ASTM D5185m	>20	1	3	5
Nickel	ppm	ASTM D5185m	>4	0	0	1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	17	52	90
Lead	ppm	ASTM D5185m	>40	<1	3	3
Copper	ppm	ASTM D5185m	>330	2	8	28
Tin	ppm	ASTM D5185m	>15	0	<1	3
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		250	159	44
Barium	ppm	ASTM D5185m		2	0	4
Molybdenum	ppm	ASTM D5185m		121	107	16
Manganese	ppm	ASTM D5185m		0	<1	5
Magnesium	ppm	ASTM D5185m		607	655	701
Calcium	ppm	ASTM D5185m		1442	1432	1238
Phosphorus	ppm	ASTM D5185m	760	657	643	669
Zinc	ppm	ASTM D5185m	800	803	815	811
Sulfur	ppm	ASTM D5185m	3000	2593	2319	2758

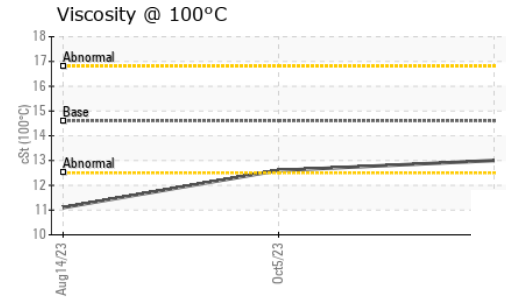
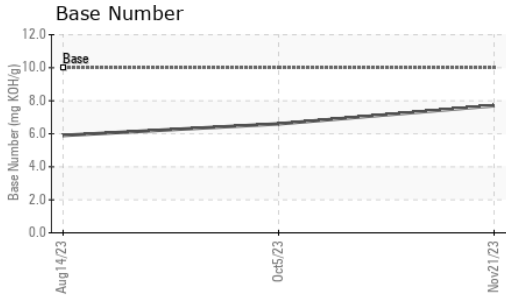
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	14	42
Sodium	ppm	ASTM D5185m		0	3	4
Potassium	ppm	ASTM D5185m	>20	45	145	238

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.2	8.5	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	23.1	20.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	18.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.7	6.6	5.9



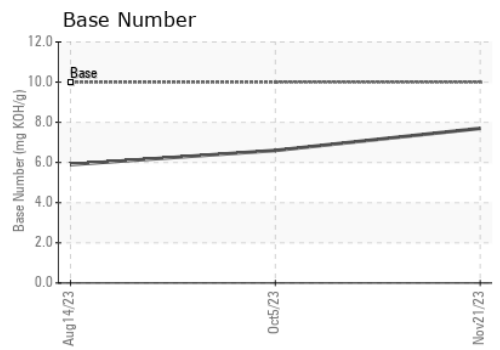
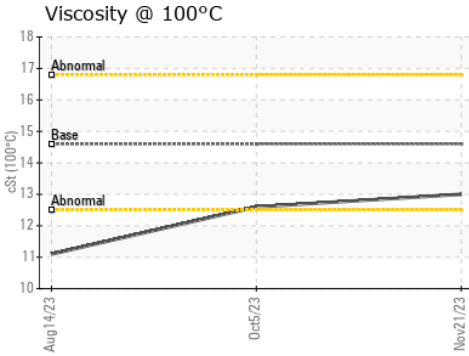
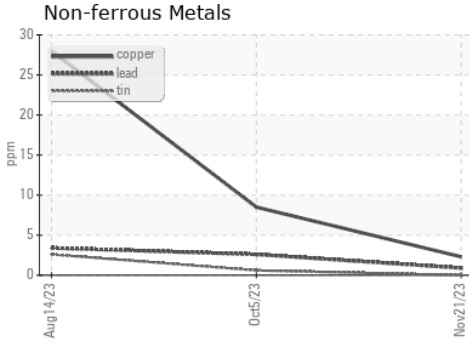
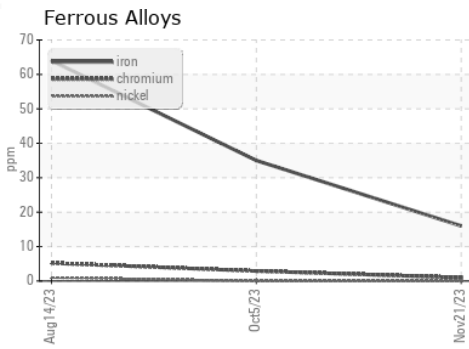
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.6	13.0	12.6	▲ 11.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859283 **Received** : 05 Dec 2023
Lab Number : **06025536** **Diagnosed** : 06 Dec 2023
Unique Number : 10770036 **Diagnostician** : Wes Davis
Test Package : FLEET

Ergon Trucking Inc. - MAG601
 11337 State Route 800
 Magnolia, OH
 US 44643
 Contact: Eddy Smith
 eddy.smith@ergon.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)