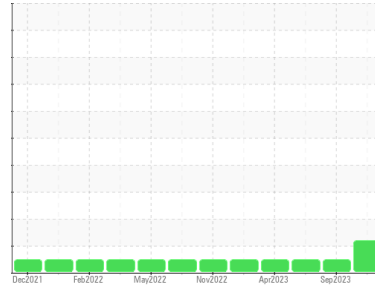




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**T2020**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0829003</b>	WC0829012	PCA0085445
Sample Date	Client Info		<b>26 Jan 2024</b>	07 Sep 2023	07 Jun 2023
Machine Age	mls	Client Info	<b>472101</b>	454716	436174
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>110	<b>16</b>	15	14
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>6</b>	5	4
Lead	ppm	ASTM D5185m	>45	<b>4</b>	5	6
Copper	ppm	ASTM D5185m	>85	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>122</b>	88	147
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>117</b>	120	128
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>636</b>	635	625
Calcium	ppm	ASTM D5185m		<b>1415</b>	1526	1534
Phosphorus	ppm	ASTM D5185m	760	<b>618</b>	635	677
Zinc	ppm	ASTM D5185m	800	<b>788</b>	781	850
Sulfur	ppm	ASTM D5185m	3000	<b>2294</b>	2732	2621

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>6</b>	6	6
Sodium	ppm	ASTM D5185m		<b>1</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Fuel	%	ASTM D3524	>5	<b>▲ 6.2</b>	<1.0	<1.0

## INFRA-RED

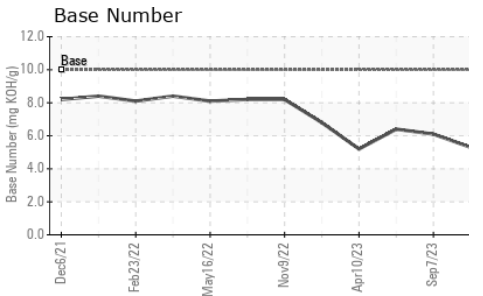
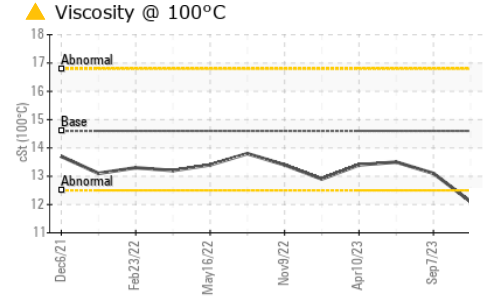
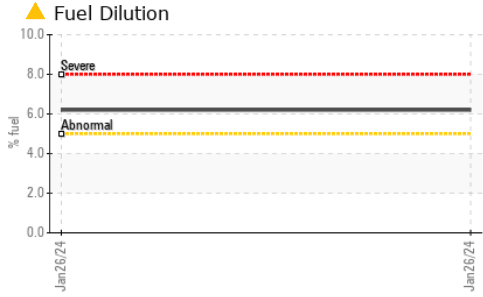
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	10.9	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.7</b>	25.9	26.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>25.1</b>	22.0	23.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>5.3</b>	6.1	6.4



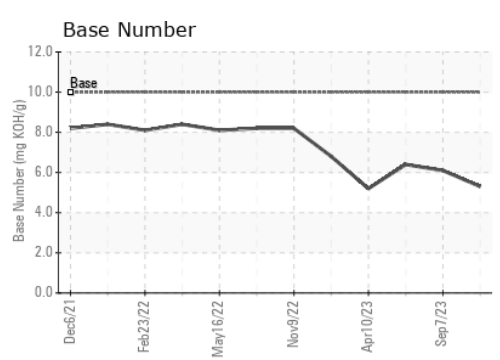
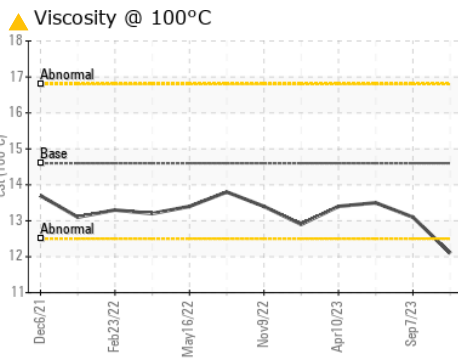
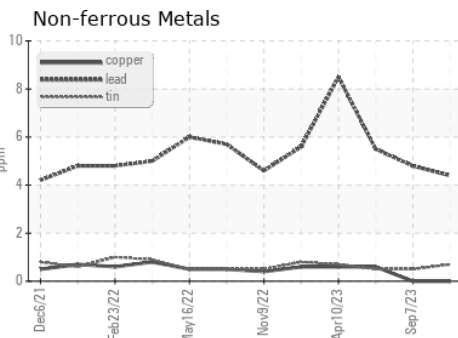
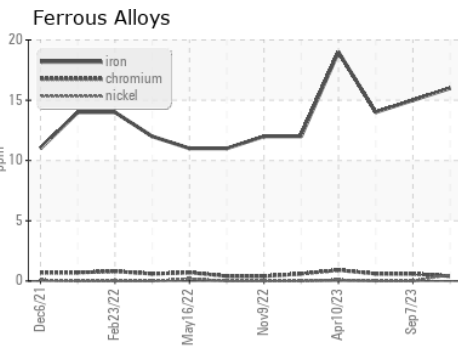
# OIL ANALYSIS REPORT



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	▲ 12.1	13.1	13.5

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0829003 **Received** : 30 Jan 2024  
**Lab Number** : 06073635 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10850312 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**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)