



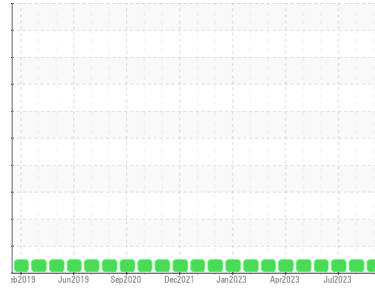
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**428050-402357**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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		<b>GFL0086371</b>	GFL0074775	GFL0074764
Sample Date	Client Info		<b>17 Sep 2023</b>	02 Aug 2023	09 Jul 2023
Machine Age	hrs	Client Info	<b>13918</b>	13678	13472
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>5</b>	12	8
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	4	4
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	2	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>9</b>	5	5
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>68</b>	73	65
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>953</b>	960	937
Calcium	ppm	ASTM D5185m	<b>1214</b>	1269	1182
Phosphorus	ppm	ASTM D5185m 1360	<b>1044</b>	1048	1022
Zinc	ppm	ASTM D5185m 1480	<b>1291</b>	1342	1301
Sulfur	ppm	ASTM D5185m	<b>3554</b>	3336	3528

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	8	6
Sodium	ppm	ASTM D5185m	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	2

## INFRA-RED

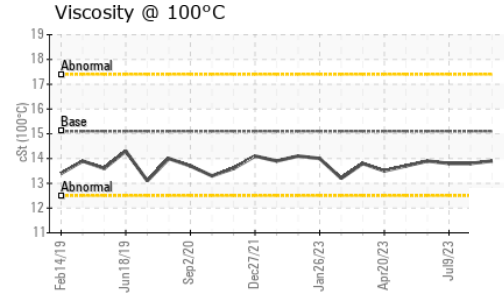
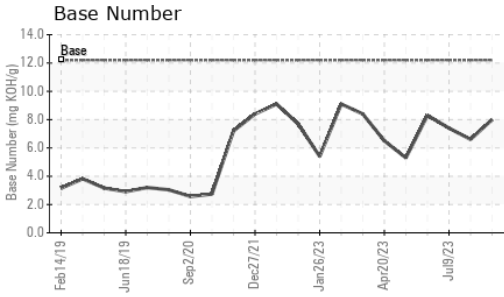
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.1</b>	8.5	7.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.8</b>	20.2	19.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.0</b>	16.3	16.4
Base Number (BN)	mg KOH/g	ASTM D2896 12.2	<b>8.0</b>	6.6	7.4



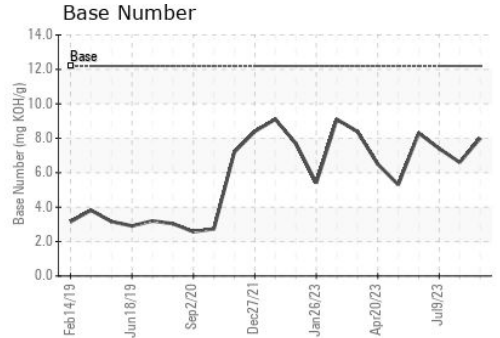
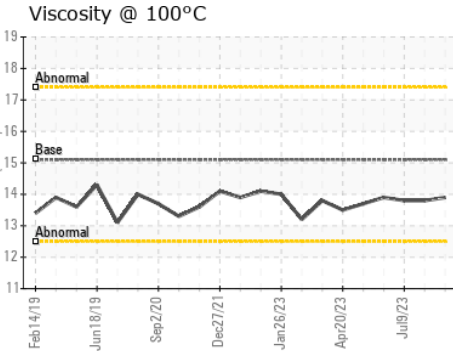
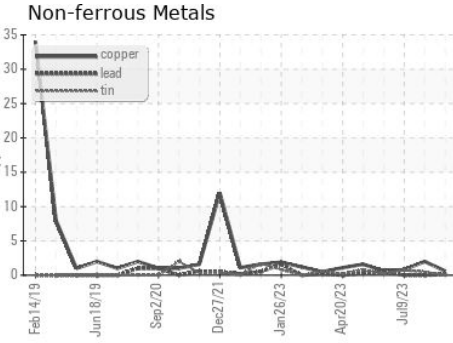
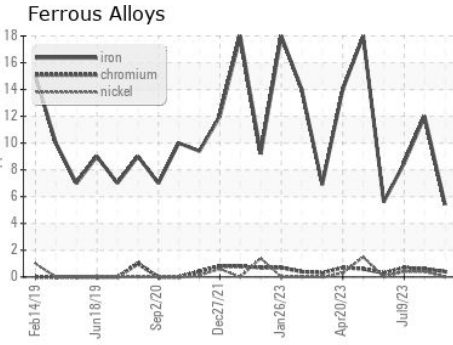
# OIL ANALYSIS REPORT



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	15.1	<b>13.9</b>	13.8	13.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0086371 **Received** : 18 Sep 2023  
**Lab Number** : 05954657 **Diagnosed** : 20 Sep 2023  
**Unique Number** : 10655870 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 816 - WCA of South Arkansas**  
 3083 Smackover Hwy  
 El Dorado, AR  
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 Contact: Mike Howell  
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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)