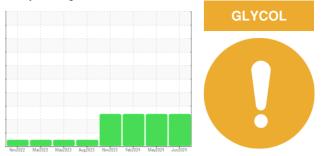


## **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Machine Id **2312** Component **Diesel Engine** Fluid **CHEVRON 15W40 (--- GAL)**

#### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

#### Contamination

Sodium and/or potassium levels remain high. Test for glycol is negative.

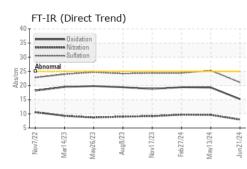
#### Fluid Condition

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

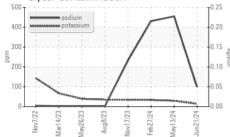
Sample Number         Client Info         WC0944465         WC0859273         WC085           Sample Date         Client Info         21 Jun 2024         13 May 2024         27 Feb           Machine Age         mls         Client Info         138084         128649         108958           Oil Age         mls         Client Info         0         0         0	
Sample Date         Client Info         21 Jun 2024         13 May 2024         27 Feb           Machine Age         mls         Client Info         138084         128649         108958	59291
Machine Age         mls         Client Info         138084         128649         108958	2024
	3
Oil Changed Client Info Not Change Changed Change	ed
Sample Status ATTENTION ABNORMAL ABNOF	RMAL
CONTAMINATION method limit/base current history1 his	story2
Fuel         WC Method         >3.0         <1.0	
Water         WC Method         >0.2         NEG         NEG	ż
WEAR METALS method limit/base current history1 his	story2
Iron ppm ASTM D5185m >90 10 23 25	
Chromium         ppm         ASTM D5185m         >20         <1	
Nickel         ppm         ASTM D5185m         >2         0         <1	
Titanium         ppm         ASTM D5185m         >2         7         0         <1	
Silver ppm ASTM D5185m >2 0 0 0	
Aluminum         ppm         ASTM D5185m         >20         6         11         12	
Lead ppm ASTM D5185m >40 <1 2 2	
Copper ppm ASTM D5185m >330 <1 <1 <1	
Tin         ppm         ASTM D5185m         >15         0         0         0	
Vanadium         ppm         ASTM D5185m         0         <1	
Cadmium         ppm         ASTM D5185m         0         0         0	
ADDITIVES method limit/base current history1 his	tory2
Boron         ppm         ASTM D5185m         187         224         203	
Barium         ppm         ASTM D5185m         0         0         0	
Molybdenum         ppm         ASTM D5185m         86         202         185	
Manganese         ppm         ASTM D5185m         <1	
Manganese         ppm         ASTM D5185m         <1	
	2
Magnesium         ppm         ASTM D5185m         688         705         715	2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632	2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777	
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842	
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842	2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842	2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         8         12         8	2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         hist           Silicon         ppm         ASTM D5185m<>25         8         12         8           Sodium         ppm         ASTM D5185m<>50         99         4 455         4 431	2 story2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         8         12         8           Sodium         ppm         ASTM D5185m         >20         14         29         33           Glycol         %         *XSTM D2982         NEG         NEG         NEG	2 story2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         his           Silicon         ppm         ASTM D5185m         >25         8         12         8           Sodium         ppm         ASTM D5185m         >20         14         29         33           Glycol         %         *ASTM D2982         NEG         NEG         NEG	2 story2
Magnesium       ppm       ASTM D5185m       688       705       715         Calcium       ppm       ASTM D5185m       1550       1659       1632         Phosphorus       ppm       ASTM D5185m       840       782       777         Zinc       ppm       ASTM D5185m       1017       913       882         Sulfur       ppm       ASTM D5185m       3679       3286       2842         CONTAMINANTS       method       limit/base       current       history1       hist         Silicon       ppm       ASTM D5185m       >25       8       12       8         Sodium       ppm       ASTM D5185m       >20       14       29       33         Glycol       %       *ASTM D2982       NEG       NEG       NEG         INFRA-RED       method       limit/base       current       history1       history1	2 story2
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         hist           Silicon         ppm         ASTM D5185m         >25         8         12         8           Sodium         ppm         ASTM D5185m         >20         14         29         33           Glycol         %         *ASTM D2982         NEG         NEG         NEG         NEG	2 story2 à
Magnesium         ppm         ASTM D5185m         688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         hist           Silicon         ppm         ASTM D5185m         >25         8         12         8           Sodium         ppm         ASTM D5185m         >50         99         ▲ 455         ▲ 431           Potassium         ppm         ASTM D5185m         >20         14         29         ▲ 33           Glycol         %         *ASTM D7844         >6         0.2         0.3         0.3           Nitration         Abs/cm         *ASTM D745         >30         21.1         25.3         24.4	2 story2 à
Magnesium         ppm         ASTM D5185m         6688         705         715           Calcium         ppm         ASTM D5185m         1550         1659         1632           Phosphorus         ppm         ASTM D5185m         840         782         777           Zinc         ppm         ASTM D5185m         1017         913         882           Sulfur         ppm         ASTM D5185m         3679         3286         2842           CONTAMINANTS         method         limit/base         current         history1         hist           Silicon         ppm         ASTM D5185m         >25         8         12         8           Sodium         ppm         ASTM D5185m         >20         14         29         33           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         hist           Soot %         %         *ASTM D7844         >6         0.2         0.3         0.3           Nitration         Abs/cm         *ASTM D7415         >30         21.1         25.3         24.4	2 story2 story2 story2

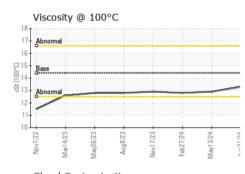


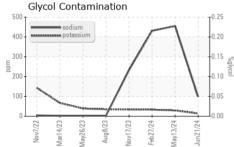
# **OIL ANALYSIS REPORT**





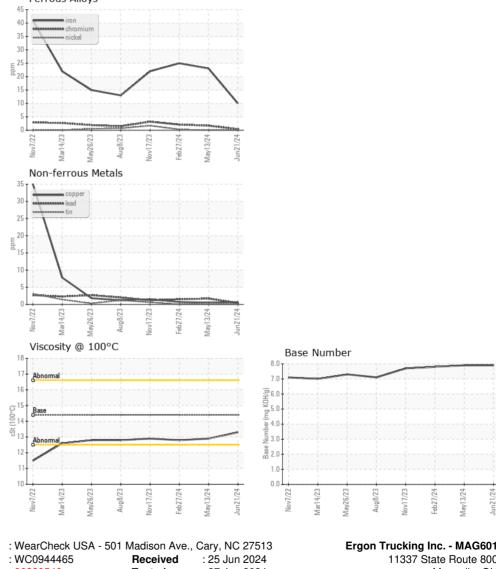






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	12.9	12.8

GRAPHS Ferrous Alloys



Laboratory Ergon Trucking Inc. - MAG601 Sample No. 11337 State Route 800 Lab Number : 06220546 Tested : 27 Jun 2024 Magnolia, OH US 44643 Unique Number : 11098743 Diagnosed : 27 Jun 2024 - Jonathan Hester Test Package : FLEET ( Additional Tests: Glycol ) Contact: Eddy Smith Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. eddy.smith@ergon.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: ERGMAG601 [WUSCAR] 06220546 (Generated: 06/27/2024 16:32:49) Rev: 1

Submitted By: Eddy Smith

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