

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id 127009-969

Component Diesel Engine Fluid

CHEVRON DELO 400 XLE 15W40 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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 Number Client Info GFL0084520 GFL0060786 GFL0053020 Sample Date Client Info 03 Aug 2023 06 Oct 2022 19 May 2022 Machine Age hrs Client Info 17944 17344 16735 Oil Age hrs Client Info 600 609 595 Oil Age hrs Client Info Changed <							
Sample Date Client Info 03 Aug 2023 06 Oct 2022 19 May 2022 Machine Age hrs Client Info 17944 17344 16735 Oil Age hrs Client Info 600 609 555 Oil Changed Client Info Changed Changed Changed Changed Sample Status Image Client Info NORMAL NORMAL NORMAL NORMAL CONTAMINATION method Imit/base current history history Fuel WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method >5 <1.0 <1.0 <1.0 Tion ppm ASTM D5185m >80 10 12 14 Chromium ppm ASTM D5185m >30 0 1 1 Silver	SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Machine Age hrs Client Info 17944 17344 16735 Oil Age hrs Client Info 600 609 595 Oil Changed Client Info Changed Changed Changed Sample Status Image Current NORMAL NORMAL NORMAL CONTAMINATION method Imit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method Imit/base current history1 history2 Iron ppm ASTM D5185m >80 10 12 14 Chromium ppm ASTM D5185m >5 <1 2 2 Iron ppm ASTM D5185m >30 0 1 1 Chromium ppm ASTM D5185m >30 0 1 1 Silver ppm<	Sample Number		Client Info		GFL0084520	GFL0060786	GFL0053020
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Barium ppm ASTM D5185m 0 <1		ppm	ASTM D5185m		160	232	310
Manganese ppm ASTM D5185m <1	Barium		ASTM D5185m		0	<1	0
Manganese ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m		74	112	101
Calcium ppm ASTM D5185m 1698 1460 1504 Phosphorus ppm ASTM D5185m 760 836 705 699 Zinc ppm ASTM D5185m 830 1017 826 799 Sulfur ppm ASTM D5185m 2770 4054 2592 2220			ASTM D5185m		<1	1	<1
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Zinc ppm ASTM D5185m 830 1017 826 799 Sulfur ppm ASTM D5185m 2770 4054 2592 2220	Calcium	ppm	ASTM D5185m		1698	1460	1504
Sulfur ppm ASTM D5185m 2770 4054 2592 2220	Phosphorus	ppm	ASTM D5185m	760	836	705	699
	Zinc	ppm	ASTM D5185m	830	1017	826	799
	Sulfur	ppm	ASTM D5185m	2770	4054	2592	2220
CONTAMINANTS method limit/base current history1 history2	CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m >20 6 8 7	Silicon	ppm	ASTM D5185m	>20	6	8	7
Sodium ppm ASTM D5185m 0 2 1	Sodium	ppm	ASTM D5185m		0	2	1
Potassium ppm ASTM D5185m >20 2 2 2	Potassium	ppm	ASTM D5185m	>20	2	2	2
INFRA-RED method limit/base current history1 history2	INFRA-RED		method	limit/base	current	history1	history2
Soot % % *ASTM D7844 >3 0.5 0.8 0.4	Soot %	%	*ASTM D7844	>3	0.5	0.8	0.4
Nitration Abs/cm *ASTM D7624 >20 8.6 8.2 8.3	Nitration	Abs/cm	*ASTM D7624	>20	8.6	8.2	8.3
Sulfation Abs/.1mm *ASTM D7415 >30 20.1 23.9 23.8	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	23.9	23.8
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			ASTM D2896	10.7		9.6	



() 10.00 15. 14. Base

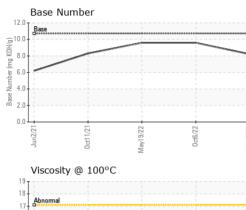
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OIL ANALYSIS REPORT

VISUAL



		VISUAL		methoa	limit/base	current	nistory i	nistoryz
		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
1		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
/22	122		scalar	*Visual	NORML	NORML	NORML	NORML
May 19/22	0ct6/22	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
2		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
		Free Water	scalar	*Visual	20.L	NEG	NEG	NEG
		FLUID PROPE		method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445	14.9	13.5	13.4	13.2
		GRAPHS						
		Ferrous Alloys						
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	1 ab*							0 N
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4	Sample No	· CEL 008/E20 I	Received	• • • • • • • • • • • • • • • • • • • •	בייחכי הווא			
NAB	Sample No.		Received Diagnose		Aug 2023 Aug 2023			3947 US 131 Kalkaska
	Sample No. Lab Number Unique Numbe	: 05918406	Received Diagnose Diagnosti	ed : 09 /	Aug 2023 Aug 2023 s Davis			Kalkaska, JS 49646-84

* - 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)