

OIL ANALYSIS REPORT

SZLG232950

Component

Diesel Engine

CHEVRON 15W40 (--- QTS)

Sample Rating Trend VISCOSITY Feb 2024

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

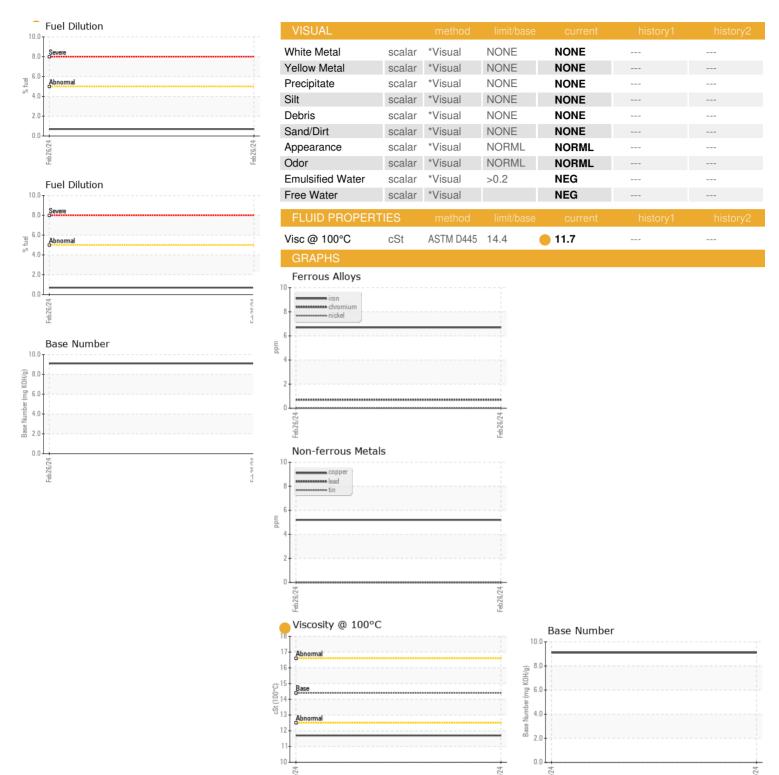
Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

				Feb 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0880961		
Sample Date		Client Info		26 Feb 2024		
Machine Age	hrs	Client Info		907		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	7		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	5		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		mothod	limit/base	current	history1	history2
ADDITIVES		method	IIIIII/Dase	ourront	HISTOLAL	HISTOLYZ
Boron	ppm	ASTM D5185m	IIIIII/Dase	128		
	ppm		IIIII/Dase			
Boron		ASTM D5185m	IIIIII/Dase	128		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	IIIIII/Dase	128 1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		128 1 65		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		128 1 65 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IIIIII/ Dase	128 1 65 <1 438		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		128 1 65 <1 438 1844		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IIIIII/ Dase	128 1 65 <1 438 1844 1014		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	128 1 65 <1 438 1844 1014		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		128 1 65 <1 438 1844 1014 1225 4060		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	128 1 65 <1 438 1844 1014 1225 4060 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25	128 1 65 <1 438 1844 1014 1225 4060 current	 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >50 >20	128 1 65 <1 438 1844 1014 1225 4060 current 4	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >50 >20	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >50 >20 >5	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1 0.7		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >50 >20 >5 limit/base	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1 0.7 current		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m	limit/base >25 >50 >20 >5 limit/base >3	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1 0.7 current 0.1	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >25 >50 >20 >5 limit/base >3 >20	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1 0.7 current 0.1 6.2	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >50 >20 >5 limit/base >3 >20 >30	128 1 65 <1 438 1844 1014 1225 4060 current 4 4 <1 0.7 current 0.1 6.2 19.5	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >25 >50 >20 >5 limit/base >3 >20 >30 limit/base	128 1 65 <1 438 1844 1014 1225 4060 current 4 <1 0.7 current 0.1 6.2 19.5 current	history1 history1 history1	history2 history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06122929 Unique Number: 10937080

: WC0880961

Tested

: 22 Mar 2024 Diagnosed

: 22 Mar 2024 - Jonathan Hester

: 19 Mar 2024

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received

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

GULFPORT, MS US 39502 Contact: JORDAN JOHNSTON

> jordan.johnston@dole.com T:

> > F: (228)867-2970