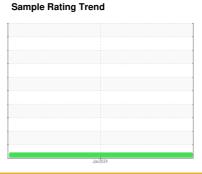


OIL ANALYSIS REPORT





SZLG232979

Component

Diesel Engine

CHEVRON 15W40 (--- QTS)

Recommendation

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

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

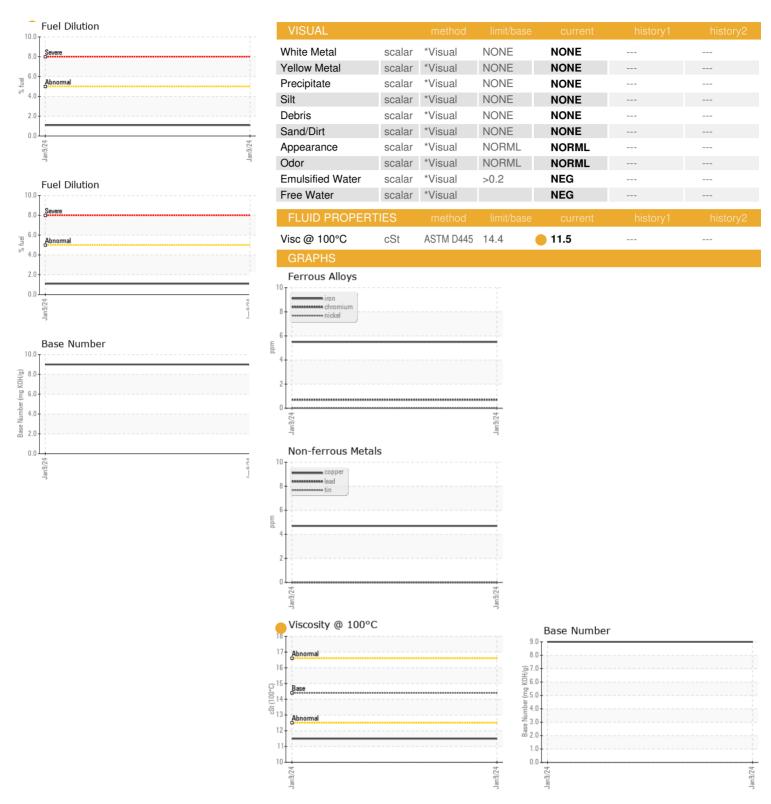
Fluid Condition

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

		,	,	Jan 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0880966		
Sample Date		Client Info		09 Jan 2024		
Machine Age	hrs	Client Info		543		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method	7 0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	nnm	ASTM D5185m	>100	6		
Chromium	ppm	ASTM D5185m		<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m	Z-T	<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m		4		
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	• •		limit/hase	-	history1	history2
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	limit/base	current		
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 132		
Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 132 1 63		
Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 132 1 63 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 132 1 63 <1 404		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 132 1 63 <1 404 1777		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 132 1 63 <1 404 1777 1026		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 132 1 63 <1 404 1777 1026 1198		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m		current 132 1 63 <1 404 1777 1026 1198 4033		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 132 1 63 <1 404 1777 1026 1198 4033 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25	current 132 1 63 <1 404 1777 1026 1198 4033 current 4	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >50	current 132 1 63 <1 404 1777 1026 1198 4033 current 4		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >50 >20	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >50	current 132 1 63 <1 404 1777 1026 1198 4033 current 4		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >50 >20	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >50 >20 >5	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1 1.1	history1	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	method ASTM D5185m	limit/base >25 >50 >20 >5 limit/base	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1 1.1 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844	limit/base >25 >50 >20 >5 limit/base >3	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1 1.1 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 ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >25 >50 >20 >5 limit/base >3 >20	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1 1.1 current 0.1 5.4	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >50 >20 >5 limit/base >3 >20 >3	current 132 1 63 <1 404 1777 1026 1198 4033 current 4 6 <1 1.1 current 0.1 5.4 18.9	history1 history1	history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No.

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

: WC0880966 Lab Number : 06122918 Unique Number: 10937069

Tested Diagnosed

: 22 Mar 2024 : 22 Mar 2024 - Jonathan Hester

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

Received

: 19 Mar 2024

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

DOLE FRESH FRUIT PO BOX 1689

GULFPORT, MS US 39502

F: (228)867-2970

Contact: JORDAN JOHNSTON jordan.johnston@dole.com

T:

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