

PROBLEM SUMMARY

Sample Rating Trend

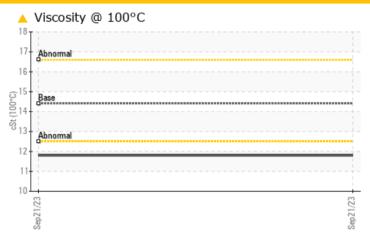
VISCOSITY

SZLG232707

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC T	EST RE	SULTS			
Sample Status				ATTENTION	
Visc @ 100°C	cSt	ASTM D445	14.4	11.8	

Customer Id: DOLGUL Sample No.: WC0847152 Lab Number: 05964470 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDE	O ACTIONS			
Action	Status	Date	Done By	Description
Change Fluid			?	Oil and filter change at the time of sampling has been noted.
Change Filter			?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id SZLG232707

Component

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- QTS)

DIAGNOSIS

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.

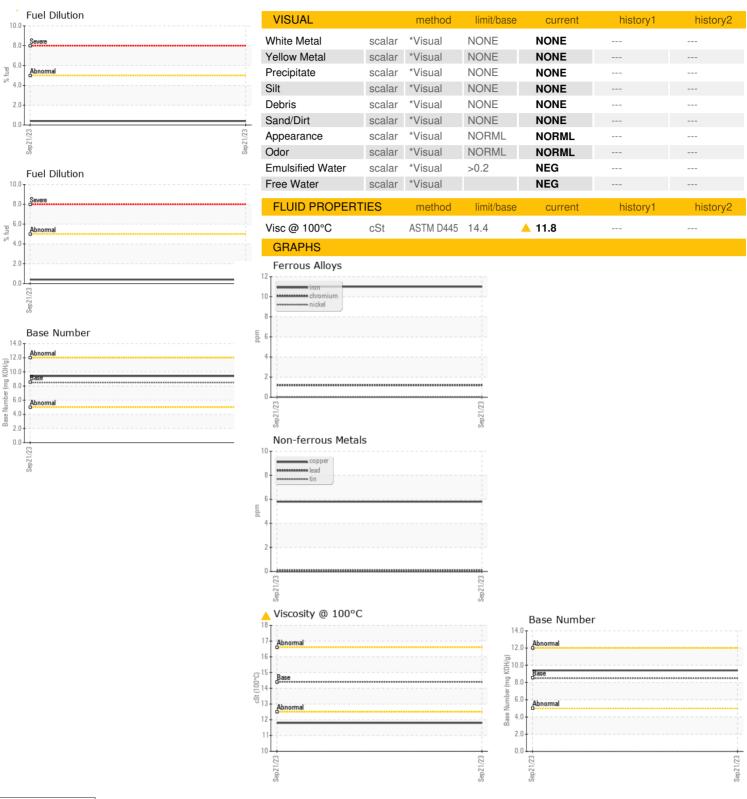
Fluid Condition

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

				Sep2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0847152		
Sample Date		Client Info		21 Sep 2023		
Machine Age	hrs	Client Info		1192		
Oil Age	hrs	Client Info		1192		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
lron	ppm	ASTM D5185m	>100	11		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	6		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	6		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
• anadiani	P P			U		
	ppm	ASTM D5185m		0		
			limit/base	-	history1	history2
Cadmium ADDITIVES	ppm	ASTM D5185m	limit/base	0		
Cadmium ADDITIVES Boron	ppm	ASTM D5185m method ASTM D5185m		current	history1	history2
Cadmium ADDITIVES Boron Barium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	250 10	0 current 92 0	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	250	0 current 92 0 60	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	0 current 92 0 60 <1	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	0 current 92 0 60 <1 356	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m	250 10 100 450 3000	0 current 92 0 60 <1 356 1868	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150	0 current 92 0 60 <1 356 1868 970	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350	0 current 92 0 60 <1 356 1868 970 1176	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150	0 current 92 0 60 <1 356 1868 970	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350	0 current 92 0 60 <1 356 1868 970 1176	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm	Method ASTM D5185m Method ASTM D5185m	250 10 100 450 3000 1150 1350 4250	0 current 92 0 60 <1 356 1868 970 1176 3416	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m Method ASTM D5185m Method	250 10 100 450 3000 1150 1350 4250 limit/base	0 current 92 0 60 <1 356 1868 970 1176 3416 current	history1 history1	history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5	history1 history1	history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	MSTM D5185m method ASTM D5185m MSTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5	history1 history1	history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	MSTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8	history1 history1	history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm	MSTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8 2 0.4 current	history1 history1	history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m method ASTM D5185m Method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3	0	history1 history1 history1 history1	history2 history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm	MSTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8 2 0.4 current	history1 history1 history1	history2 history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8 2 0.4 current 0.1 6.9 19.7	history1 history1 history1 history1	history2 history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m method ASTM D5185m Method ASTM D5185m ASTM D7624 *ASTM D7624 *ASTM D7415 method	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30 limit/base	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8 2 0.4 current 0.1 6.9 19.7 current	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30	0 current 92 0 60 <1 356 1868 970 1176 3416 current 5 8 2 0.4 current 0.1 6.9 19.7	history1 history1 history1 history1	history2 history2 history2 history2



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: 05964470 : 10671021

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0847152 Received : 29 Sep 2023 : 03 Oct 2023 Diagnosed Diagnostician : Jonathan Hester

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) 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) **DOLE FRESH FRUIT**

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