

# **PROBLEM SUMMARY**

53.158L [COLORADO^443]



## COMPONENT CONDITION SUMMARY

Component **Diesel Engine** 

Fluic



COLORADO/443

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

PROBLEMATIC TEST RESULTS								
Sample Status				MARGINAL	ABNORMAL	ABNORMAL		
Fuel	%	ASTM D3524	>5	<u> </u>	▲ 5.2	<b>6</b> .1		

Customer Id: SHEWIC Sample No.: WC0823197 Lab Number: 05904826 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

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

There are no recommended actions for this sample.

## **HISTORICAL DIAGNOSIS**

## 04 May 2023 Diag: Wes Davis



The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

### 25 Apr 2023 Diag: Wes Davis

16 Jan 2023 Diag: Jonathan Hester

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



view report

## view report



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.





# **OIL ANALYSIS REPORT**



## COLORADO/443 53.158L [COLORADO^443] Component

**Diesel Engine** Fluid

MOBIL DELVAC 1300 SUPER15W40 (2 GAL)



DIAGNOSIS	SAMPLE INFORMA	TION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		WC0823197	WC0799156	WC0799021
The oil change at the time of sampling has been	Sample Date		Client Info		14 Jul 2023	04 May 2023	25 Apr 2023
noted. Resample at the next service interval to	Machine Age h	nrs	Client Info		1709	1429	1412
nonitor. No other corrective action is recommended	Oil Age h	nrs	Client Info		0	0	1131
	Oil Changed		Client Info		Changed	Changed	Not Changd
vear Il component wear rates are normal	Sample Status				MARGINAL	ABNORMAL	ABNORMAL
Contamination	CONTAMINATION		method	limit/base	current	history1	history2
ight fuel dilution occurring. No other contaminants rere detected in the oil.	Glycol		WC Method		NEG	NEG	NEG
luid Condition	WEAR METALS		method	limit/base	current	history1	history2
he BN result indicates that there is suitable	lron p	opm	ASTM D5185m	>100	10	10	11
kalinity remaining in the oil. The condition of the	Chromium p	opm	ASTM D5185m	>20	<1	<1	<1
I is suitable for further service.	Nickel	opm	ASTM D5185m	>2	0	<1	0
	Titanium p	opm	ASTM D5185m	>2	0	0	<1
	Silver	opm	ASTM D5185m	>2	0	0	0
	Aluminum p	opm	ASTM D5185m	>25	1	<1	2
	Lead p	opm	ASTM D5185m	>40	0	<1	0
	Copper p	opm	ASTM D5185m	>330	1	2	2
	Tin p	opm	ASTM D5185m	>15	<1	1	0
	Vanadium p	opm	ASTM D5185m		0	<1	0
	Cadmium p	opm	ASTM D5185m		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron p	opm	ASTM D5185m	0	45	48	50
	Barium p	opm	ASTM D5185m	0	0	0	0
	Molybdenum p	opm	ASTM D5185m	0	43	43	40
	Manganese p	opm	ASTM D5185m		<1	<1	<1
	Magnesium	opm	ASTM D5185m	0	556	530	522
	Calcium p	opm	ASTM D5185m		1821	1686	1668
	Phosphorus p	opm	ASTM D5185m		760	747	717
	Zinc p	opm	ASTM D5185m		960	926	938
	Sulfur p	opm	ASTM D5185m		2815	2762	2485
	CONTAMINANTS		method	limit/base	current	history1	history2
	Silicon p	opm	ASTM D5185m	>25	4	5	5
	Sodium p	opm	ASTM D5185m		2	3	4
	Potassium p	opm	ASTM D5185m	>20	0	2	1
	Fuel %	%	ASTM D3524	>5	<b>4.1</b>	▲ 5.2	<b>6</b> .1
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
	Nitration A	Abs/cm	*ASTM D7624	>20	8.5	9.0	9.0
	Sulfation A	lbs/.1mm	*ASTM D7415	>30	23.0	23.4	21.5
	FLUID DEGRADAT	ION	method	limit/base	current	history1	history2
	Oxidation A	lbs/.1mm	*ASTM D7414	>25	22.7	23.7	22.8
				-		-	-

Base Number (BN) mg KOH/g ASTM D2896 9.4

7.4

9.1

9.0



8

Mar18/22 CUBCINEV Jun21/22

Oct12/27

# **OIL ANALYSIS REPORT**





Jan 16/23

vor25/23

Inv18/22

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	historv1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.6	12.4	▲ 12.1
GRAPHS						



\* - 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)

Certificate L2367

F: x:

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