WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

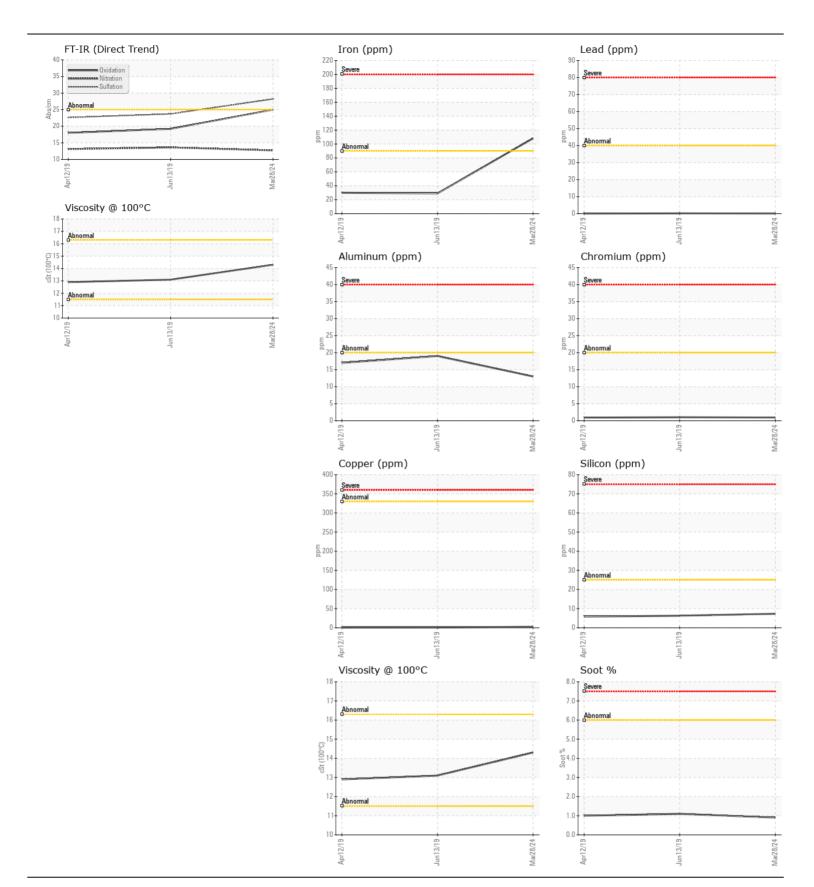
DODGE AM98154

Component

Diesel Engine

Fluid

Sample Number Cilent Info WC085599 WC113493 WC113	SAE 5W40 (12 LTR)							
Sample Date Client Info 1881 1802 13 Jun 2019 12 Agr 2014 18 Jun 2019 12 Agr 2014 18 Jun 2019 12 Agr 2014 18 Jun 2019	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info Machine Age kms Client Info 1810 0 0 0 0 0 0 0 0 0	Resample at the next service interval to monitor.	Sample Number		Client Info		WC0855599	WC113493	WC113491
Cil Age kms Cilent Info 18000 5400 5636 Filter Age kms Cilent Info 18000 5400 5636 5636 5636 5600 5636		Sample Date		Client Info		28 Mar 2024	13 Jun 2019	12 Apr 2019
Filter Age		Machine Age	kms	Client Info		118118	208800	0
Not Changed Cilient Info Changed Not		Oil Age	kms	Client Info		18000	5400	5636
Filter Changed Sample Status		Filter Age	kms	Client Info		18000	5400	5636
		Oil Changed		Client Info		Changed	Not Changd	Changed
Iron		Filter Changed		Client Info		N/A	Not Changd	Changed
Chromium ppm ASTM DSIGN >2		Sample Status				NORMAL	NORMAL	NORMAL
Chromium ppm ASTM DSIGN >2	WEAR	Iron	ppm	ASTM D5185(m)	>90	108	29	30
Nickel ppm ASTM D5185(m) >2 <1 <1 <1 <1 <1 <1 <1 <	Metal levels are typical for a new component breaking in.	Chromium		ASTM D5185(m)	>20	<1	1	<1
Silver		Nickel		ASTM D5185(m)	>2	<1	<1	<1
Aluminum ppm ASTM D5185m >20 13 19 17		Titanium	ppm	ASTM D5185(m)	>2	<1	<1	0
Lead		Silver	ppm	ASTM D5185(m)	>2	0	0	0
Copper		Aluminum	ppm	ASTM D5185(m)	>20	13	19	17
Tin		Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Vanadium ppm ASTM D5185 m 0 0 0 0		Copper	ppm	ASTM D5185(m)	>330	2	<1	<1
Silicon ppm ASTM 05185(m) >25 7 6 6		Tin	ppm	ASTM D5185(m)	>15	0	0	0
Potassium ppm ASTM D5185(m) >20 26 28 25		Vanadium	ppm	ASTM D5185(m)		0	0	0
Potassium ppm ASTM D5185(m) >20 26 28 25	CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	7	6	6
FLUID CONDITION Sodium ppm ASTM D5185(m)	Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium		, ,		26		25
NEG NEG		Fuel		, ,			<1.0	<1.0
Glycol WC Method NEG 0.0 0.0		Water		WC Method	>0.2		NEG	
Soot %		Glycol				NEG	0.0	
Sulfation Abs/.1mm ASTM D7415* >30 28.2 23.7 22.6		Soot %	%	ASTM D7844*	>6	0.9	1.1	1
Emulsified Water scalar Visual* >0.2 NEG NEG NEG		Nitration	Abs/cm	ASTM D7624*	>20	12.7	13.6	13.1
Sodium ppm ASTM D5185(m) 3 3 3 3 3 3 3 3 3		Sulfation	Abs/.1mm	ASTM D7415*	>30	28.2	23.7	22.6
Boron ppm ASTM D5185(m) 54 49 61		Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Boron ppm ASTM D5185(m) 54 49 61	FLUID CONDITION	Sodium	maa	ASTM D5185(m)		3	3	3
Barium ppm ASTM D5185(m) Q	The condition of the oil is acceptable for the time in service.							
Molybdenum ppm ASTM D5185(m) <1 67 70 Manganese ppm ASTM D5185(m) 0 <1 <1 Magnesium ppm ASTM D5185(m) 73 90 14 Calcium ppm ASTM D5185(m) 1843 1868 2042 Phosphorus ppm ASTM D5185(m) 712 917 951 Zinc ppm ASTM D5185(m) 851 1082 1113 Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0								
Manganese ppm ASTM D5185(m) 0 <1 <1 Magnesium ppm ASTM D5185(m) 73 90 14 Calcium ppm ASTM D5185(m) 1843 1868 2042 Phosphorus ppm ASTM D5185(m) 712 917 951 Zinc ppm ASTM D5185(m) 851 1082 1113 Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0		Molybdenum						
Magnesium ppm ASTM D5185(m) 73 90 14 Calcium ppm ASTM D5185(m) 1843 1868 2042 Phosphorus ppm ASTM D5185(m) 712 917 951 Zinc ppm ASTM D5185(m) 851 1082 1113 Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0		•					<1	
Calcium ppm ASTM D5185(m) 1843 1868 2042 Phosphorus ppm ASTM D5185(m) 712 917 951 Zinc ppm ASTM D5185(m) 851 1082 1113 Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0							90	
Zinc ppm ASTM D5185(m) 851 1082 1113 Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0		_	ppm				1868	
Sulfur ppm ASTM D5185(m) 2392 3832 4100 Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0		Phosphorus	ppm	ASTM D5185(m)		712	917	951
Oxidation Abs/.1mm ASTM D7414* >25 25.0 19.2 18.0		Zinc	ppm	ASTM D5185(m)		851	1082	1113
		Sulfur	ppm	ASTM D5185(m)		2392	3832	4100
Visc @ 100°C cSt ASTM D7279(m) 14.3 13.1 12.9		Oxidation	Abs/.1mm	ASTM D7414*	>25	25.0	19.2	18.0
		Visc @ 100°C	cSt	ASTM D7279(m)		14.3	13.1	12.9





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0855599 Lab Number : 02626532 Unique Number : 5759664 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received **Tested**

Diagnosed

: 04 Apr 2024 : 04 Apr 2024

: 04 Apr 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

LW DIESEL INC 238 CHURCH STREET NORTH ALLISTON, ON CA L9R 0G4 Contact: Larry White lwhite@lwdieselinc.com T: (705)984-3406