**CALVIN LAMB BOX 846** 

ATTN:

MAIDSTONE, SK S0M1M0

**CALVIN LAMB** 

Client: 9999800 Unit #: 2018 F150

Unit Location:

Component: ENGINE

Location:

Serial #: IFTFWIEG5JFC34959

Make: FORD

Date analyzed: 08/22/18 Model: 3.5 ECOBOOST

OAS #: Work order: 18C140426

Oil brand & grade: MOTOMASTER FORMULA 1 SYN 5W30 (20.03.2012)

Client Ref #: INVOICE# 18508482T





## **Equipment Reliability and Lubricants Testing Services**

3650 21st Street N.E., Calgary, AB, T2E6V6 Phone:(403)299-2000 Fax:(403)299-2105





		LEGEN	D - LC -Lowe	r Critical	LR -Lowe	r Reportable	UI	R -Upper	Reportal	ble [	UC -Upper Criti	cal * <i>l</i> :	tal -Custom L	_imit								
UNIT DATA							SPECTROGRAPHIC ANALYSIS (PPM)															
Sample#	Date Sampled	Component Service	Oil O Service Char			Cu um Copper	Fe Iron	Sn Tin	Pb Lead	Si Silicon	Mo Molybdenum N	Ni lickel	Ag Silver Pot		Na dium	B Boron	Ba Barium	Ca Calcium M	Mg lagnesium l	Mn Manganese	P Phospho	Zn rus Zinc
New Oil				(	) 0	0	0	0	0	0	62	0	0	0	0	0	0	2520	12	0	853	1026
143976	08/11/18	8000 kms	4096 kms	Υ 3	3 1	19	16	1	0	24	145 UR	1	0	1	3	54 UC	0	1860	7	4	593	762
	PHYSICAL PROPERTIES					ISO CLEANLINESS				OIL DEGRADATION												
Sample#	Glyco	Glycol H2O % Fuel Viscosity						Micron size					% abs/cm-1 Min.									
Gampie#	Ciyco	JI 1120 /01	40°C	100°C	Solids	KF Flash		4	6	14	ISO Code		SOOT	OXD	NO				TAN	TBN	RPVOT	
New Oil			57.2	11.0															1.73	7.5		
143976	N	N 3.	46.6 LR	8.7 LR									0.0	3	9	9	0	0				
WEAR CONTROL CHART									COMMENTS													
Sample#	0 I	30 I	6 I		90 I	120 I		150 I		Cor	mments:											
											ne Spectrograph							un. REFER	TO REVER	RSE FOR Q	UALITY C	ONTROL
143976			41							Sh	eport, EXPLA mould you wish the www.agatlabs.com in priority.	o provio	de feedback	to AGAT La	aborat	ories, plea	ase acce				ction is oul	number

<sup>\*</sup> COMPONENT SERIAL NUMBER MUST BE GIVEN TO GENERATE HISTORY. Bold faced elements are included in Wear Control Chart. AGAT Laboratories Liability Shall Not Exceed The Cost Of Analysis. \*Results relate only to the items tested

Client: **9999800** 

CALVIN LAMB BOX 846

MAIDSTONE, SK S0M1M0 ATTN: CALVIN LAMB Unit No.: **2018 F150** 

Unit Location:

Component: ENGINE

Location:

Serial No.: IFTFWIEG5JFC34959

Make: FORD

Model: 3.5 ECOBOOST

Work order: **18C140426** OAS No.:

Oil brand & grade: MOTOMASTER FORMULA 1 SYN 5W30 (20.03.2012)

Client Ref #: INVOICE# 18508482T

Date analyzed: 08/22/18



Flagged Result	Possible Causes	Significance of Result / Recommended Action
B - Boron	Boron is most commonly a coolant additive (in the form of borate). It may also be found in water inhibitors, extreme pressure additives, or grease additives.	Higher than expected boron levels generally indicate contamination. If high sodium and/or potassium levels are also present this commonly points to a coolant leak. Check for coolant leaks, seal failures, cracked heads or liners to identify and evaluate the source. Re-sample to monitor to ensure the source of contamination has been fixed.
Fuel - Fuel Dilution	Fuel dilution may be due to excessive blow-by, excessive idling, cold weather starting, faulty injector, leaking fuel transfer pump seals or stop and go driving. Fuel dilution may be correlated with decreased oil viscosity.	Fuel dilution indicates contamination of the sample with fuel. Identify and evaluate the source. Consider changing the oil.
Mo - Molybdenum	Molybdenum may be found in steel alloys and as a coating for piston rings. It is also used as a friction-modifying additive.	Higher than expected molybdenum levels may indicate wear or contamination. Identify and evaluate the source. Consider filtering or changing the oil.
VISC100 - Viscosity at 100 C	Lower than expected viscosity may be due to contamination with lower grade oil, fuel or degradation due to shearing or extended drain intervals.	Lower than expected viscosity may indicate contamination or degradation of the oil. Verify the identity and grade of the oil in use. Identify and evaluate the cause. Consider changing the oil.
VISC40 - Viscosity at 40 C	Lower than expected viscosity may be due to contamination with lower grade oil, fuel or degradation due to shearing or extended drain intervals.	Lower than expected viscosity may indicate contamination or degradation of the oil. Verify the identity and grade of the oil in use. Identify and evaluate the cause. Consider changing the oil.

Client: 9999800 CALVIN LAMB

BOX 846

MAIDSTONE, SK S0M1M0

CALVIN LAMB

Unit #: 2018 F150

Unit Location:
Component: ENGINE
Location:

Serial #: IFTFWIEG5JFC34959

Make: FORD Model: 3.5 ECOBOOST Oil brand & grade: MOTOMASTER FORMULA 1 SYN 5W30

Sample #: (299486212)
Date Sampled: 08/22/18
Date Analyzed: 08/22/18

Work order: 18C140426
Client Ref #: INVOICE# 18508482T



Sample Status and Trending

Sample Score: Your Sample 10 Score:

Rankings: 0-3 Normal, 4-6 Reportable, 7-10 Critical



Normal Reportable Critical

## **Trend Graphs**















