Client: 9

ATTN:

Unit #: 2018 Mazda CX-9 AWD

Unit Location:

Component: ENGINE

Location: Serial #:

Make: MAZDA

Model: 2018 CX-9

OAS #: 4 CYL, 2.5 L TURBO GDI

Laboratories



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

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





Oil brand & grade: Castrol Edge Advanced 5W30 Full Syn (2020)

Client Ref #:

Date analyzed: 09/22/21

Work order: 21C170354

LEGEND -         LC         -Lower Critical         LR         -Lower Reportable         UR         -Upper Reportable         UC         -Upper C	ritical * Ital -Custom Limit
---	------------------------------

	UN	T DATA		SPECTROGRAPHIC ANALYSIS (PPM)																		
Sample#	Date	Component	Oil Oil	Al	Cr	Cu	Fe	Sn	Pb	Si	Мо	Ni	Ag	K	Na	В	Ва	Ca	Mg	Mn	Р	Zn
·	Sampled	Service	Service Changed	Aluminum	1 Chromium	n Copper	Iron	Tin	Lead	Silicon	Molybdenur	n Nickel	Silver	Potassium	Sodium	Boron	Barium	Calcium	Magnesium I	Manganese	Phospho	rus Zinc
New Oil				0	0	0	0	0	0	8	93	0	0	0	0	74	0	887	1407	0	809	1039
281881	08/24/21		N	2	0	0	6	0	1	15	85	0	0	83 UC	9	36 LR	1	985	806 LR	0	767	1020
292501	05/11/21		N	3	0	1	12	0	0	26	78	0	0	122 UC	13	21 LC	1	720	1300	0	641	892
			N	3	0	1	12	0	0	-		0	•		13		1					-

PHYSICAL PROPERTIES								ISO CLEANLINESS						OIL DEGRADATION							
Sample#	Glycol		% Fuel	Visco 40°C		% Solids	KF	°C Flash Point		licron si		ISO Code	% SOOT	OXD	NOX		s/cm-1 SO4	ZDDP	TAN	TBN	Min. RPVOT
New Oil				60.2	10.2														2.47	10.9	
281881	N	Ν	2.5	52.0	9.4								0.0	6	15	18	6	0		7.3	
292501	N	Ν		51.7	9.0								0.0	14	27 UC	31 UC	5	0		8.7	

			WEAR CONT	ROL CHART			COMMENTS
Sample#	0 	30 I	60 I	90 I	120 I	150 I	Comments:
281881 292501	9	16					The Spectrographic analysis and viscosity results were confirmed by a duplicate. REFER TO REVERSE FOR QUALITY CONTROL REPORT, EXPLANATION OF VARIANCE AND POSSIBLE CAUSES.
							Should you wish to provide feedback to AGAT Laboratories, please access our Customer review form at www.agatlabs.com/review.htm. This input is extremely important to us because your well being and satisfaction is our number one priority.

Client: 9

Unit No.: 2018 Mazda CX-9 AWD

Unit Location:

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Serial No.:

Make: MAZDA

Model: 2018 CX-9

Work order: 21C170354 OAS No.: 4 CYL, 2.5 L TURBO GDI

Oil brand & grade: Castrol Edge Advanced 5W30 Full Syn (2020)

Client Ref #:

Date analyzed: 09/22/21



Flagged Result	Possible Causes	Significance of Result / Recommended Action
B - Boron	Boron is a common anti-wear (AW) and extreme pressure (EP) additive in engine and gear oils.	Lower than expected boron levels may indicate additive depletion/precipitation or dilution. Identify and evaluate the cause. Verify the identity of the oil in use.
K - Potassium	Potassium may be used in coolant additives. High levels of potassium and sodium suggest the presence of a coolant leak.	Higher than expected potassium levels may indicate contamination. Identify and evaluate source. Check for coolant leaks, seal failures, cracked heads or liners and resample to monitor.
Mg - Magnesium	Magnesium may be found in alkaline additives. It may also be found in hard water and road salt.	Lower than expected magnesium levels may indicate additive depletion/precipitation or dilution. Identify and evaluate the cause. Verify the identity of the oil in use.

Client: 9999800 MICHAEL AMIGO

3, SEWA CRESCENT
WINNIPEG. MB R2R 0K1

ATTN: MICHAEL AMIGO

Unit #: 2018 Mazda CX-9 AWD

Unit Location:
Component: ENGINE
Location:

Serial #:

Make: MAZDA Model: 2018 CX-9 Oil brand & grade: Castrol Edge Advanced 5W30 Full Syn (2020)

Sample #: **C-939312**Date Sampled: 09/22/21
Date Analyzed: 09/22/21
Work order: 21C170354

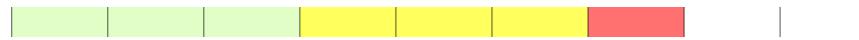
Client Ref #:



Sample Status and Trending

Sample Score: Your Sample 7
Score:

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



Normal Reportable Critical

## **Trend Graphs**

