BLACKSTONE LABORATORIES

OIL REPORT

LAB NUMBER:
REPORT DATE: 10/15/2018
CODE: 20/32

UNIT ID: 13 EQUINOX
CLIENT ID:
PAYMENT: CC: MC

UNIT

MAKE/MODEL: GM 2.4L 4-cyl EcoTec
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO:

OIL TYPE & GRADE: Mobil 1 5W/30
OIL USE INTERVAL: 4,169 Miles

CLIENT

COMMENTS

No water was found this time, but there is still a lot of fuel dilution in the oil. And you collected the sample after more than 100 miles on continuous driving, which is more than enough to cook off any fuel from start-up or idling. There is still evidence of a fuel system problem in this engine, and fuel has thinned the viscosity below a 0W/20 grade. Wear metals are the lowest of any report so far, so that's good, but the fuel is still a concern. An overfull oil level and poor fuel economy are two symptoms you might notice from excess fuel building up in the oil.

ELEMENTS IN PARTS PER MILLION		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
MI/HR on Oil	4,169		3,391	3,999	5,552	3,120		
MI/HR on Unit	29,827		25,658	22,267	18,268	12,454		
Sample Date	10/1/2018		3/17/2018	8/19/2017	3/16/2017	4/13/2016		
Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts		
ALUMINUM	6	17	13	11	58	19		4
CHROMIUM	1	2	1	2	3	2		1
IRON	42	73	60	62	231	63		20
COPPER	1	2	2	3	6	3		2
LEAD	0	0	0	0	0	0		0
TIN	0	0	0	1	0	1		0
MOLYBDENUM	62	64	66	69	51	49		68
NICKEL	0	1	0	1	2	1		0
MANGANESE	1	2	1	2	4	3		1
SILVER	0	0	0	0	0	0		0
TITANIUM	0	0	0	0	0	0		2
POTASSIUM	1	2	2	2	1	4		2
BORON	37	43	48	52	43	36		47
SILICON	5	7	6	6	11	13		8
SODIUM	6	6	6	7	6	4		48
CALCIUM	810	958	840	1048	1404	750		1763
MAGNESIUM	564	540	570	610	114	532		213
PHOSPHORUS	586	604	645	665	557	506		664
ZINC	629	685	661	767	713	610		763
BARIUM	0	0	0	0	0	0		0

PROPERTIES		Values Should Be*					
SUS Viscosity @ 210°	44.6	55-63	51.3	51.4	43.5	45.7	
cSt Viscosity @ 100°C	5.61	8.8-11.3	7.68	7.69	5.27	5.94	
Flashpoint in °F	285	>375	275	300	270	245	
Fuel %	4.5	<2.0	4.5	4.3	5.8	7.0	
Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0	
Water %	0.0	0.0	POS	0.0	0.0	0.0	
Insolubles %	0.2	<0.6	0.3	0.2	0.4	0.4	
TBN							
TAN							
ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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