



# OIL REPORT

LAB NUMBER:  
 REPORT DATE: 3/13/2018  
 CODE: 20/685

UNIT ID:  
 CLIENT ID:  
 PAYMENT:

UNIT	EQUIP. MAKE/MODEL: Subaru 2.0L (FA20) Turbo	OIL TYPE & GRADE: Motul X-cess 5W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 3,076 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

**COMMENTS** We're thinking the copper from last sample was just lingering break-in material, because it's fine now next to averages. In fact, all wear metals have decreased in this latest sample, and this was a longer run, so we're seeing no issues at oil-sharing parts. The viscosity measured a bit thin for 5W/40, but we're not too worried about it. The TBN was strong at 7.1, showing plenty of active additive left in this oil. We consider 1.0 too low. No harmful contamination like water, fuel, or coolant was found. Try up to 5,000 miles on the current fill and check back. Nice report!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	3,076	UNIT / LOCATION AVERAGES	2,685					UNIVERSAL AVERAGES
	MI/HR on Unit	15,402		11,528					
	Sample Date	2/28/2018		11/12/2017					
	Make Up Oil Added	0 qts		0 qts					
ALUMINIUM	2	4	5					3	
CHROMIUM	0	0	0					0	
IRON	13	14	15					14	
COPPER	25	96	166					16	
LEAD	0	0	0					0	
TIN	0	0	0					0	
MOLYBDENUM	9	45	80					109	
NICKEL	0	0	0					0	
MANGANESE	0	1	1					1	
SILVER	0	0	0					0	
TITANIUM	1	2	2					1	
POTASSIUM	1	1	1					2	
BORON	67	79	91					71	
SILICON	24	27	30					31	
SODIUM	3	5	7					20	
CALCIUM	2461	2408	2355					1951	
MAGNESIUM	12	13	13					125	
PHOSPHORUS	887	816	744					721	
ZINC	997	942	887					844	
BARIUM	0	0	0					0	

Values Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	63.1	65-78	55.0				
	cSt Viscosity @ 100°C	11.08	11.6-15.3	8.77				
	Flashpoint in °F	385	>375	385				
	Fuel %	<0.5	<2.0	TR				
	Antifreeze %	0.0	0.0	0.0				
	Water %	0.0	<0.1	0.0				
	Insolubles %	0.1	<0.6	0.1				
	TBN	7.1	>1.0					
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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