



OIL REPORT

LAB NUMBER:

REPORT DATE: 11/25/2019

CODE:

UNIT ID:

CLIENT ID:

PAYMENT: CC: Visa

UNIT	MAKE/MODEL:	Toyota 4.0L V-6 (1GR-FE)	OIL TYPE & GRADE:	Amsoil Signature Series 0W/20
	FUEL TYPE:	Gasoline (Unleaded)	OIL USE INTERVAL:	6,587 Miles
	ADDITIONAL INFO:	4Runner, supercharged		

CLIENT	SCOTT	PHONE: (
	PA	FAX:
		ALT PHONE:
		EMAIL:

COMMENTS	SCOTT: Thanks for your note about the Magnuson supercharger. Copper and silicon have continued their downward trends, reflecting wear-in material continuing to wash out. Copper is decreasing more slowly, and this can be normal -- it is often the last lingering wear-in metal. If it stops decreasing at a certain point but is still on the high side, it may point to excess brass/bronze wear, but we'll cross that bridge if/when we have to. A trace of fuel was detected, which is harmless. The 4.2 TBN shows lots of active additive left. Try 7,000-7,500 miles on the oil.
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	6,587	UNIT / LOCATION AVERAGES	5,093				
	MI/HR on Unit	19,207		12,620				
	Sample Date	11/16/2019		6/29/2019				
	Make Up Oil Added	0 qts		0 qts				
	ALUMINUM	7	7	7				4
	CHROMIUM	1	1	0				0
	IRON	10	11	12				11
	COPPER	22	27	31				3
	LEAD	0	0	0				0
	TIN	1	1	0				0
	MOLYBDENUM	195	209	223				78
	NICKEL	0	0	0				0
	MANGANESE	0	0	0				0
	SILVER	0	0	0				0
	TITANIUM	0	0	0				2
	POTASSIUM	1	2	2				3
	BORON	62	90	118				37
	SILICON	20	24	28				15
	SODIUM	10	10	10				49
	CALCIUM	1100	1182	1263				1732
	MAGNESIUM	853	923	993				338
	PHOSPHORUS	653	692	730				672
	ZINC	714	768	822				769
	BARIUM	0	0	0				0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	54.6	46-57	54.9				
	cSt Viscosity @ 100°C	8.66	6.0-9.7	8.73				
	Flashpoint in °F	380	>385	420				
	Fuel %	TR	<2.0	<0.5				
	Antifreeze %	0.0	0.0	0.0				
	Water %	0.0	<0.1	0.0				
	Insolubles %	0.2	<0.6	0.2				
	TBN	4.2	>1.0	4.1				
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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