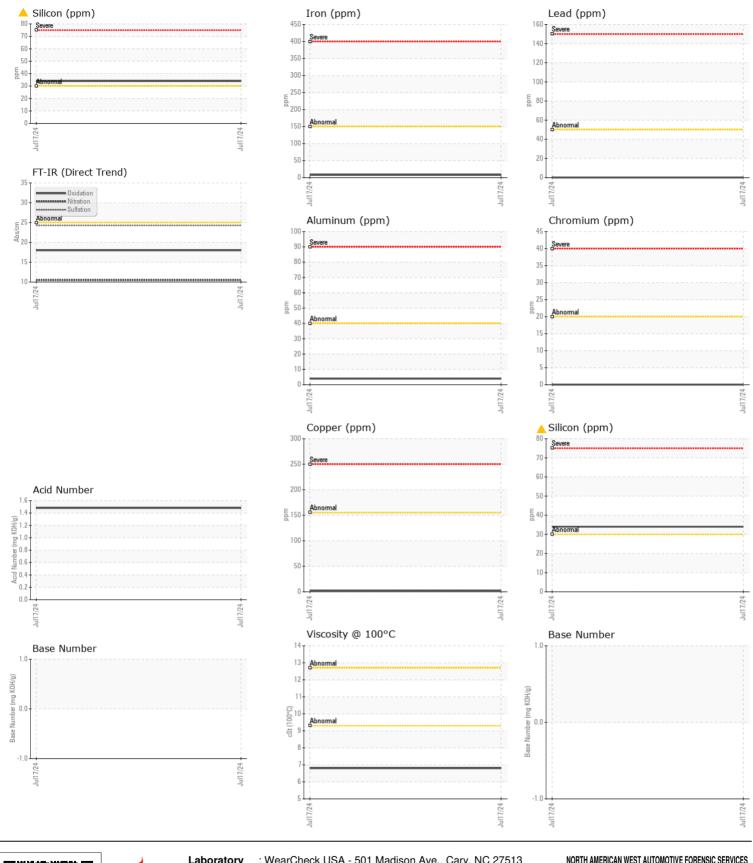


Machine Id **TOYOTA 27388-010**

Component Gasoline Engine

{not provided} (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time.	Sample Number		Client Info		WCM2278701		
	Sample Date		Client Info		17 Jul 2024		
	Machine Age	mls	Client Info		0		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>150	8		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	0		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m	210	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
		Scalai	visual				
CONTAMINATION	Silicon	ppm		>30	4 34		
Elemental level of silicon (Si) above normal indicating ingress of seal material.	Potassium	ppm	ASTM D5185m	>20	<1		
	Fuel	%	ASTM D3524	>4.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0		
	Nitration	Abs/cm	*ASTM D7624	>20	10.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m	>400	2		
The AN level is acceptable for this fluid.	Boron	ppm	ASTM D5185m		88		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		617		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		454		
	Calcium	ppm	ASTM D5185m		1422		
	Phosphorus	ppm	ASTM D5185m		713		
	Zinc	ppm	ASTM D5185m		810		
	Sulfur	ppm	ASTM D5185m		2817		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0		
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.48		
	Visc @ 100°C	cSt	ASTM D445		6.8		



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 NORTH AMERICAN WEST AUTOMOTIVE FORENSIC SERVICES Sample No. Received : WCM2278701 : 17 Jul 2024 PO BOX 2220 Ø Lab Number : 06239633 MISSION VIEJO, CA Tested : 18 Jul 2024 : 18 Jul 2024 - Jonathan Hester US 92690 Unique Number : 11128467 Diagnosed Test Package : MOB 2 (Additional Tests: FuelDilution, TBN) Contact: CHAD TREDWAY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. chad.nawest@gmail.com;northamericanwest@gmail.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (888)491-1080 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (949)271-2360

Contact/Location: CHAD TREDWAY - NORLAD Page 2 of 2