



OIL REPORT

LAB NUMBER: M85978 UNIT ID: 95 CHEROKEE
 REPORT DATE: 11/20/2020 CLIENT ID: 95673
 CODE: 20/68 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Jeep 4.0L Inline 6 cyl	OIL TYPE & GRADE: Shell Rotella T4 10W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,000 Miles
	ADDITIONAL INFO: XJ	

CLIENT	JOSHUA DOWNS	PHONE: (940) 452-1721
	1990 COUNTY RD 1032	FAX:
	GREENVILLE, TX 75401	ALT PHONE:
		EMAIL: joshua.d.downs@gmail.com, jeepinbanditriders@gmail.com

COMMENTS
 JOSH: Potassium and sodium at new lows, and these levels are low enough to rule out coolant contamination. Nice improvement! There's no sign of contamination from excess dirt, fuel, or moisture in this sample, either. Lead is still a touch on the high side of averages, but it doesn't show any more bearing wear than usual. If it stays around this level, it isn't much of a concern. The rest of the wear metals look just fine, the oil's viscosity is in the proper range for 10W/30, and insolubles at 0.2% show that the oil filter is working well. All in all, a good report.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,000	UNIT / LOCATION AVERAGES	4,900	5,100	5,200	5,000	3,000	UNIVERSAL AVERAGES
	MI/HR on Unit	222,345		217,300	212,437	207,293	197,447	190,752	
	Sample Date	10/29/2020		8/1/2020	3/30/2020	1/31/2020	8/27/2019	4/12/2019	
	Make Up Oil Added	1 qt		1.5 qts	1.75 qts	2 qts	1.75 qts	0.25 qts	
ALUMINUM	4	4	4	3	3	3	4	4	
CHROMIUM	1	1	1	1	1	1	1	1	
IRON	18	18	25	16	14	12	15	24	
COPPER	5	5	3	3	2	4	4	4	
LEAD	5	5	6	5	4	5	7	2	
TIN	1	1	0	0	2	3	1	1	
MOLYBDENUM	11	11	54	7	14	60	60	70	
NICKEL	0	0	0	0	0	0	0	1	
MANGANESE	0	0	1	0	0	1	1	1	
SILVER	0	0	0	0	0	0	0	0	
TITANIUM	0	0	0	0	0	0	0	1	
POTASSIUM	11	11	30	45	47	27	39	4	
BORON	3	3	4	9	21	10	5	50	
SILICON	15	15	11	10	10	15	24	14	
SODIUM	24	24	53	67	62	33	37	47	
CALCIUM	2128	2128	1896	2439	2187	1790	1682	1859	
MAGNESIUM	68	68	345	31	36	438	393	220	
PHOSPHORUS	912	912	957	949	930	911	898	736	
ZINC	1047	1047	1187	1157	1109	1165	1082	864	
BARIUM	0	0	0	0	0	0	0	0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	61.4	58-65	73.7	64.9	68.8	70.4	72.2
	cSt Viscosity @ 100°C	10.60	9.7-11.9	13.92	11.58	12.63	13.05	13.54
	Flashpoint in °F	400	>385	400	390	390	395	400
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	0.0	0.0	0.11	0.13	0.12	POS	POS
	Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.6	0.2	0.3	0.2	0.3	0.1
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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