



OIL REPORT

LAB NUMBER: M51899
 REPORT DATE: 8/12/2020
 CODE: 20/68

UNIT ID: 95 CHEROKEE
 CLIENT ID: 95673
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Jeep 4.0L Inline 6 cyl	OIL TYPE & GRADE: Super Tech 15W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 4,900 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

COMMENTS JOSH: We're hopeful the water pump change will be what this Cherokee needs to help resolve the coolant issue. Potassium and sodium are still high enough to show coolant is in the oil, but the good news is it about the same amount as the last sample, and lead and the rest of wear metals are largely steady as well. Until potassium and sodium start to improve though, we still suggest sticking to these 4,000-mile oil change intervals (or less) to limit coolant accumulation and wear. Check back at the next oil change for an update on coolant.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	4,900	UNIT / LOCATION AVERAGES	5,100	5,200	5,000	3,000	5,000	UNIVERSAL AVERAGES
	MI/HR on Unit	217,300		212,437	207,293	197,447	190,752	187,600	
	Sample Date	8/1/2020		3/30/2020	1/31/2020	8/27/2019	4/12/2019	2/27/2019	
	Make Up Oil Added	1.5 qts		1.75 qts	2 qts	1.75 qts	0.25 qts	1.25 qts	
ALUMINUM	4	3	3	3	4	7	4		
CHROMIUM	1	1	1	1	1	2	1		
IRON	25	16	14	12	15	37	25		
COPPER	3	3	2	4	4	7	4		
LEAD	6	5	4	5	7	15	2		
TIN	0	0	2	3	1	4	1		
MOLYBDENUM	54	7	14	60	60	48	71		
NICKEL	0	0	0	0	0	1	1		
MANGANESE	1	0	0	1	1	2	1		
SILVER	0	0	0	0	0	0	0		
TITANIUM	0	0	0	0	0	0	1		
POTASSIUM	30	45	47	27	39	154	4		
BORON	4	9	21	10	5	18	50		
SILICON	11	10	10	15	24	95	14		
SODIUM	53	67	62	33	37	111	48		
CALCIUM	1896	2439	2187	1790	1682	1610	1877		
MAGNESIUM	345	31	36	438	393	439	208		
PHOSPHORUS	957	949	930	911	898	659	737		
ZINC	1187	1157	1109	1165	1082	889	866		
BARIUM	0	0	0	0	0	0	0		

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	73.7	70-81	64.9	68.8	70.4	72.2	71.4
	cSt Viscosity @ 100°C	13.92	12.9-16.0	11.58	12.63	13.05	13.54	13.32
	Flashpoint in °F	400	>390	390	390	395	400	400
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	0.11	0	0.13	0.12	POS	POS	0.22
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.8	0.3	0.2	0.3	0.1	0.3
	TBN							4.4
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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