



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
JEEP JEEP RUBICON
 Component
Front Gasoline Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

Taking the sample cold limits the accuracy of our diagnosis. We understand that corrective action has already been taken. We recommend an early resample to monitor this condition. Advise you send the oil filter for a more detailed analysis of the wear situation that is occurring in this component. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Light concentration of visible metal present. The wear metal levels do not reflect the reported failure.

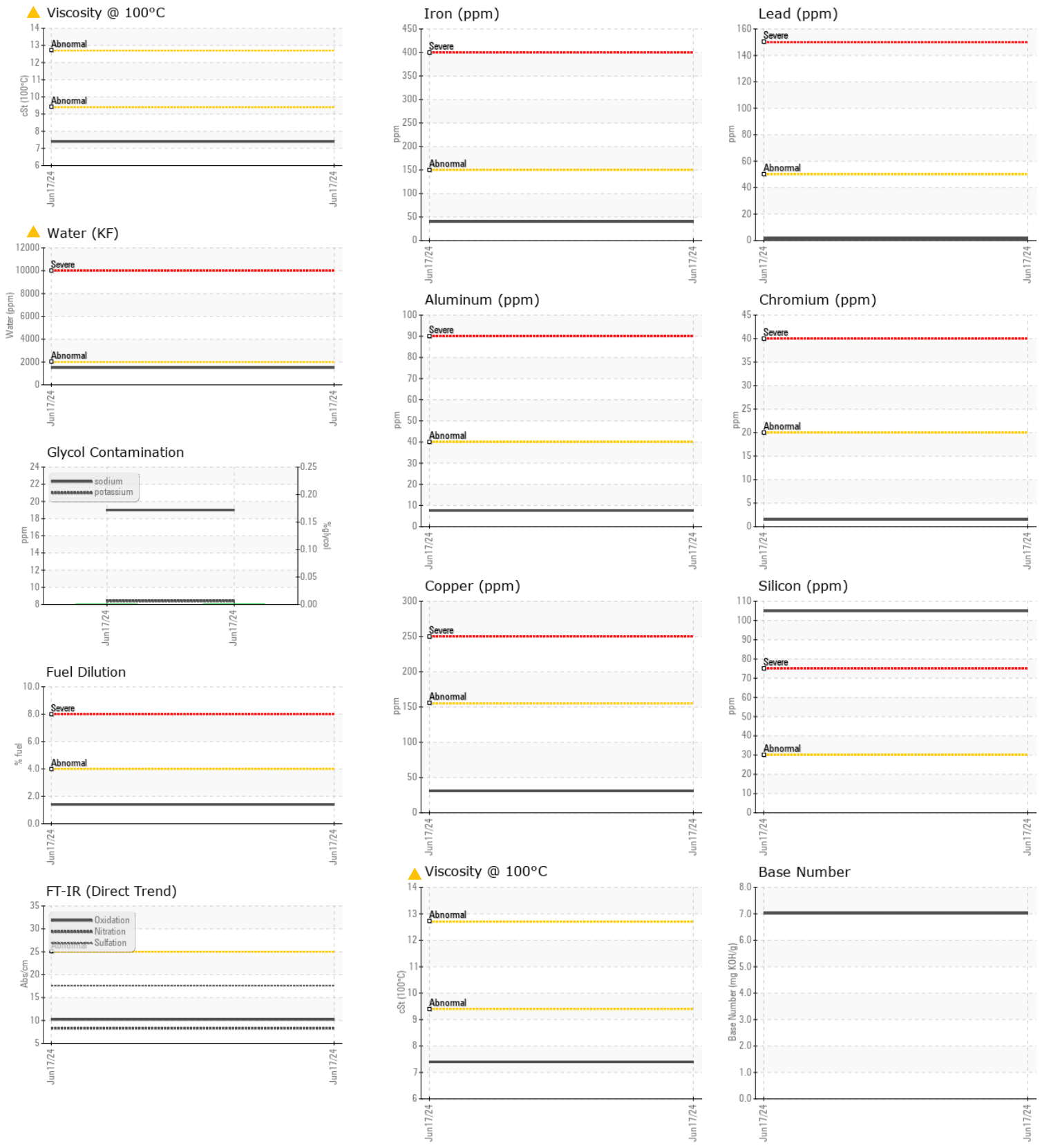
CONTAMINATION

Light fuel dilution occurring. There is a trace of moisture present in the oil. Test for glycol is negative. No other contaminants were detected in the oil.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0956306	---	---
Sample Date		Client Info		17 Jun 2024	---	---
Machine Age	kms	Client Info		3000	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>150	40	---	---
Chromium	ppm	ASTM D5185(m)	>20	2	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>40	8	---	---
Lead	ppm	ASTM D5185(m)	>50	1	---	---
Copper	ppm	ASTM D5185(m)	>155	31	---	---
Tin	ppm	ASTM D5185(m)	>10	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>30	105	---	---
Potassium	ppm	ASTM D5185(m)	>20	8	---	---
Fuel	%	ASTM D7593*	>4.0	1.4	---	---
Water	%	ASTM D6304*	>0.2	▲ 0.150	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 1507	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.6	---	---
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	▲ .2%	---	---
Sodium	ppm	ASTM D5185(m)	>400	19	---	---
Boron	ppm	ASTM D5185(m)		57	---	---
Barium	ppm	ASTM D5185(m)		1	---	---
Molybdenum	ppm	ASTM D5185(m)		154	---	---
Manganese	ppm	ASTM D5185(m)		24	---	---
Magnesium	ppm	ASTM D5185(m)		444	---	---
Calcium	ppm	ASTM D5185(m)		1263	---	---
Phosphorus	ppm	ASTM D5185(m)		624	---	---
Zinc	ppm	ASTM D5185(m)		737	---	---
Sulfur	ppm	ASTM D5185(m)		1580	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	10.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		7.02	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 7.4	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **WAWANESA MUTUAL INSURANCE COMPANY**
Sample No. : WC0956306 **Received** : 18 Jun 2024 4100-100 YONGE ST.
Lab Number : 02642569 **Tested** : 20 Jun 2024 TORONTO, ON
Unique Number : 5800108 **Diagnosed** : 20 Jun 2024 - Kevin Marson CA M2P 2B5
Test Package : MOB 2 (Additional Tests: BottomAnalysis, FILTERPATCH, FuelDilution, Glycol, KF, PercentFuel) Contact: Sue Collings
 To discuss this sample report, contact Customer Service at 1-800-268-2131. scollings@wawanesa.com
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (416)228-7820
 Validity of results and interpretation are based on the sample and information as supplied. F: (416)228-7828