



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



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

DIAGNOSIS

▲ 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.

SAMPLE INFORMATION

	method	limit/base	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	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
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	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
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	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

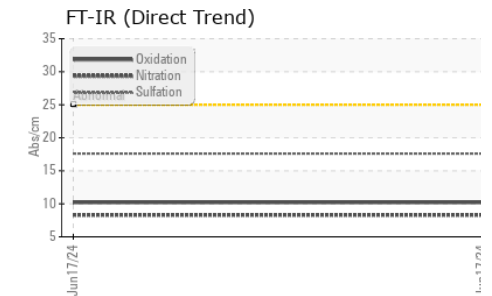
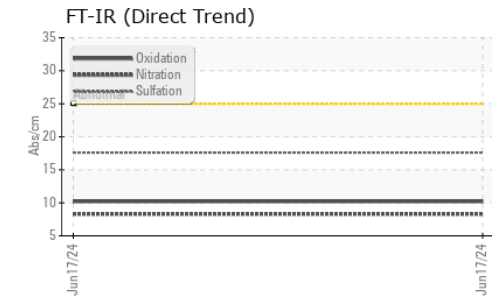
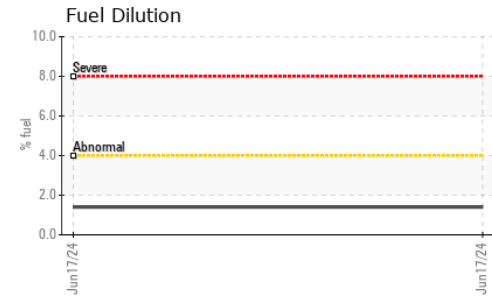
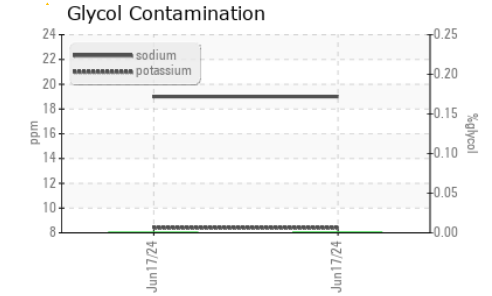
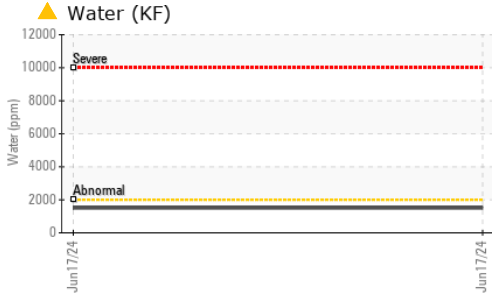
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >30	105	---	---
Sodium	ppm	ASTM D5185(m) >400	19	---	---
Potassium	ppm	ASTM D5185(m) >20	8	---	---
Fuel	%	ASTM D7593* >4.0	1.4	---	---
Water	%	ASTM D6304* >0.2	▲ 0.150	---	---
ppm Water	ppm	ASTM D6304* >2000	▲ 1507	---	---
Glycol	%	ASTM D7922*	0.0	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.3	---	---
Sulfation	Abs.1mm	ASTM D7415* >30	17.6	---	---



OIL ANALYSIS REPORT

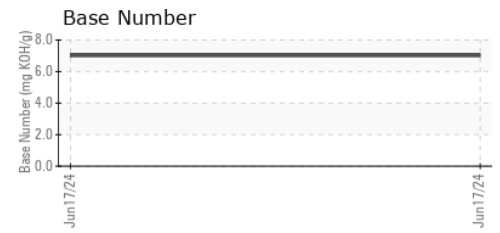
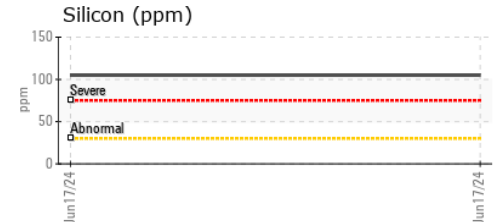
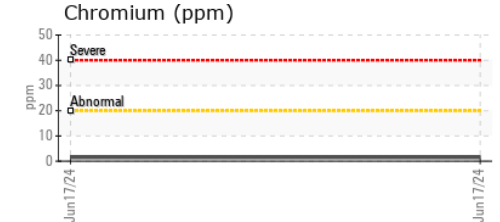
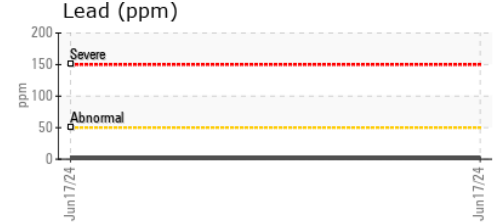
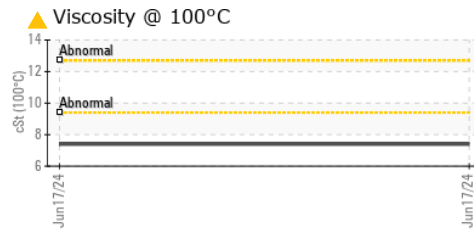
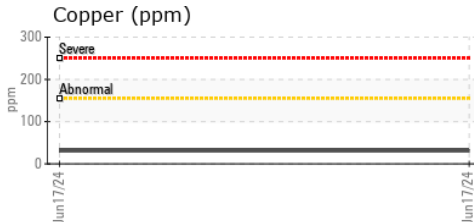
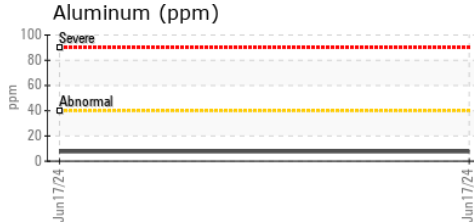
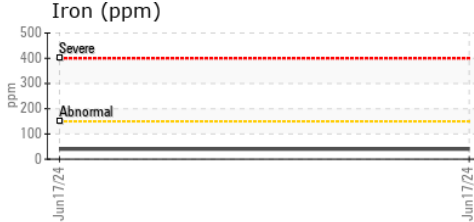


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	10.2	---
Base Number (BN)	mg KOH/g	ASTM D2896*		7.02	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
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	0.2%	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	7.4	---	---

GRAPHS



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
 scollings@wawanesa.com

To discuss this sample report, contact Customer Service at 1-800-268-2131. T: (416)228-7820
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (416)228-7828
 Validity of results and interpretation are based on the sample and information as supplied.