

# Engine Oil Condition Report



Customer Name  
Sample Date 11/11/2020  
Received Date 16/11/2020  
Reported Date  
Interpreted By Ian Burton

Vehicle Registration AUDI RS4  
Vehicle Make AUDI  
Vehicle Model RS4  
Component ENGINE - PETROL  
Fuel Type

Job Ref No  
Engineer WORKSHOP

Sample Detail	Units	Current Result	Target Results
Lab No	-	503241978	-
Service History	-	N	-
Mileage	-	0	-
Last Service	Date		-
Physical Tests	Units	Current Result	Target Results
Viscosity at 40 C	cSt	63.5	65.0
Oil Condition	Units	Current Result	Target Results
Nitration	-	10	12
Oxidation	-	18	34
Sulphation	-	20	34
Particles	Units	Current Result	Target Results
PQ Index	N/A	9	Less Than 15
Oil Contaminants	Units	Current Result	Target Results
IR Glycol Index	-	0.54	-
Potassium	ppm	0	Less Than 10
Silicon	ppm	4	Less Than 10
Sodium	ppm	1	Less Than 10
Water	Pos/Neg	N	Neg
Wear Metals	Units	Current Result	Target Results
Aluminium	ppm	6	Less Than 5
Chromium	ppm	0.1	Less Than 5
Copper	ppm	2	Less Than 15
Iron	ppm	16	Less Than 50
Lead	ppm	0	Less Than 3
Nickel	ppm	0.1	Less Than 3
Tin	ppm	1	Less Than 3
Additives	Units	Current Result	Target Results
Barium	ppm	0	1
Calcium	ppm	1760	2500
Magnesium	ppm	24	10
Molybdenum	ppm	2	60
Phosphorus	ppm	677	800
Zinc	ppm	777	850

## Diagnosis Summary:

THE READINGS GENERALLY GIVE US NO IMMEDIATE CAUSE FOR CONCERN. THE OIL IS FIT FOR CONTINUED USE UNTIL THE NEXT SCHEDULED SERVICE. NO UNDERLYING ISSUES ARE APPARENT.

## Next Steps:

If you're unsure about elements contained in this report or would like advice on what to do next, our team of experts are waiting to help with your query.

Call us 03332 021 844, Option 5\*

\*0333 numbers are mobile friendly, charged at national call rates and included in inclusive minute plans from landlines and mobiles. Calls may be monitored and/or recorded.

A	A - No Action
	B - Monitor
	C - Action
	X - Immediate Action

## Analysis Rating

For more information, or to view your results online, please visit [www.fluid-analysis.com](http://www.fluid-analysis.com)

Fluid and Condition Monitoring Services, Unit 3 Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU.

Tel: 0113 201 2065

Email: [info@fluid-analysis.com](mailto:info@fluid-analysis.com).

This information is supplied for your benefit only and should not be relied on by any third party whatsoever.

# Engine Oil Condition Report



## ANALYSIS GUIDE

**NOTE: THESE CHARTS ARE FOR GENERAL USE ONLY AND DO NOT INDICATE DEFINITE LIMITS OF WEAR METALS FOR ANY SPECIFIC MAKE OR MODEL. Wear patterns are best established after evaluation of three samples taken at the same oil change interval. Make, model, application, age, makeup oil added, time of use or recent repairs can cause the values to vary greatly from those shown.**

Primary Elements	Secondary Elements	Potential Wear	Problem Area & Causes
Silicon, Aluminium	Chromium	Pistons, Rings, Liners	Air Induction System Filters, Turbocharger Breathers, Contamination - Dirt Ingress
Iron		Liners, Pistons, Crankshafts, Valves, Gear Train	Contamination - Dirt, Abnormal temperatures, Lack of lubrication, Storage (Rust)
Chromium	Molybdenum	Piston Rings	Blow-by, Oil consumption
Aluminium	Chromium	Pistons & Rings	Blow-by
Aluminium or Copper	Lead, Tin	Bearings	Low or fluctuating oil pressure
Sodium	Silicon, Boron	Cooling System	Water Pump, Cylinder head, Liner seals, Oil
Iron	Chromium, Aluminium	Piston Rings, Liners	Abnormal operating temperature - dirt ingress, Restricted air induction system
Lead-Tin	Copper, Aluminium	Bearing	Dirt contamination, Lack of lubricant

### OIL ADDITIVES

Additives are dependent on the oil type in use. The additive target levels on the report are to be used as a guide. However, incorrect additive levels will be worded on the report.

### INFRA-RED ANALYSIS

We report Infra-Red to gain knowledge on the oil condition in the engine using the method of UFM - Un-subtracted FTIR Method.

Soot warning on levels exceeding 60  
Oxidation warning on levels exceeding 34  
Sulphation warning on levels exceeding 34  
Nitration warning on levels exceeding 12

### KINEMATIC VISCOSITY

Viscosity is the measure of a fluids resistance to flow. Absolute viscosity divided by the fluids density (weight/volume) provides the fluids kinematic viscosity. Kinematic viscosity provides important information about an oil's ability to maintain an adequate boundary of lubrication between moving parts.

For more information, or to view your results online, please visit [www.fluid-analysis.com](http://www.fluid-analysis.com)

Fluid and Condition Monitoring Services, Unit 3 Triangle Business Park, Oakwell Way, Birstall, Batley, West Yorkshire, WF17 9LU.

Tel: 0113 201 2065

Email: [info@fluid-analysis.com](mailto:info@fluid-analysis.com).

This information is supplied for your benefit only and should not be relied on by any third party whatsoever.