

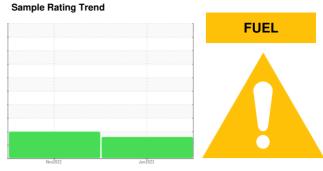
OIL ANALYSIS REPORT

Machine Id

ACURA 2023 ACURA INTEGRA

Front Gasoline Engine

HONDA 0W20 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

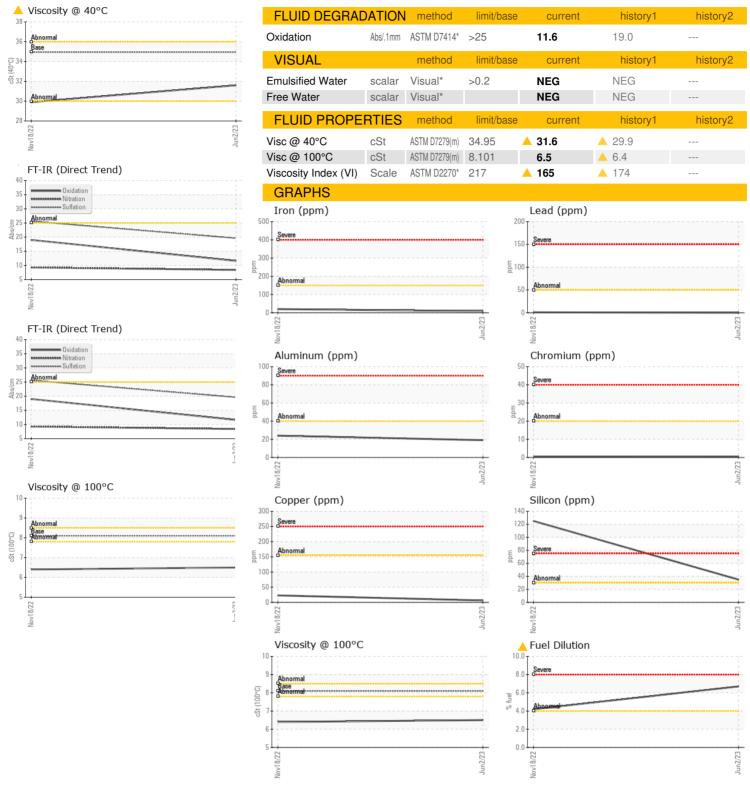
Fluid Condition

Viscosity of sample indicates oil is within SAE 5W20 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

| Sample Number Client Info PC0010928 PC0011519 | | | | | | | |
|--|---------------|----------|---------------|-------------|-------------|--------------|----------|
| Client Info 13995 8152 | SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Machine Age kms | Sample Number | | Client Info | | PC0010928 | PC0011519 | |
| Dil Age | Sample Date | | Client Info | | 02 Jun 2023 | 18 Nov 2022 | |
| Client Info | Machine Age | kms | Client Info | | 13995 | 8152 | |
| CONTAMINATION method limit/base current history1 history1 history1 history1 method limit/base current history1 histo | Oil Age | kms | Client Info | | 5843 | 8152 | |
| CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG | Oil Changed | | Client Info | | Changed | Changed | |
| Water WC Method NEG NEG NEG Glycol WC Method NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185(m) >150 8 20 Chromium ppm ASTM D5185(m) >20 <1 <1 Nickel ppm ASTM D5185(m) >5 0 0 Silver ppm ASTM D5185(m) >2 0 0 Aluminum ppm ASTM D5185(m) >40 19 24 Lead ppm ASTM D5185(m) >50 0 <1 Copper ppm ASTM D5185(m) >10 0 <1 Capper ppm ASTM D5185(m) >10 0 <1 Aluminum ppm ASTM D5185(m) >10 0 <1 | Sample Status | | | | ABNORMAL | ABNORMAL | |
| WEAR METALS | CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185(m) >150 8 20 | Water | | WC Method | >0.2 | NEG | NEG | |
| Concording Con | Glycol | | WC Method | | NEG | NEG | |
| Chromium | WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Nickel | Iron | ppm | ASTM D5185(m) | >150 | 8 | 20 | |
| Titanium | Chromium | ppm | ASTM D5185(m) | >20 | <1 | <1 | |
| Silver | Nickel | ppm | ASTM D5185(m) | >5 | 0 | 0 | |
| Aluminum | Titanium | ppm | ASTM D5185(m) | | <1 | <1 | |
| Lead ppm ASTM D5185(m) >50 0 <1 Copper ppm ASTM D5185(m) >155 6 23 Tin ppm ASTM D5185(m) >10 0 <1 Antimony ppm ASTM D5185(m) <1 0 Vanadium ppm ASTM D5185(m) <1 <1 Beryllium ppm ASTM D5185(m) 0 0 Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history1 | Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | |
| Lead ppm ASTM D5185(m) >50 0 <1 | Aluminum | ppm | ASTM D5185(m) | >40 | 19 | 24 | |
| Copper ppm ASTM D5185(m) >155 6 23 Tin ppm ASTM D5185(m) >10 0 <1 | Lead | | ASTM D5185(m) | >50 | 0 | <1 | |
| Tin ppm ASTM D5185(m) >10 0 <1 Antimony ppm ASTM D5185(m) <1 0 Antimony ppm ASTM D5185(m) <1 0 Vanadium ppm ASTM D5185(m) <1 <1 Beryllium ppm ASTM D5185(m) 0 0 0 Cadmium ppm ASTM D5185(m) 0 0 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185(m) 0 2 Barium ppm ASTM D5185(m) 0 2 Molybdenum ppm ASTM D5185(m) 128 141 Manganese ppm ASTM D5185(m) 134 514 Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Calcium ppm ASTM D5185(m) 710 644 Sulfur ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 <1 <1 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185(m) >20 4 8 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D5185(m) >20 4 8 INFRA-RED method limit/base current history1 history | Copper | | . , | >155 | 6 | 23 | |
| Antimony | | | (/ | | | | |
| Vanadium ppm ASTM D5185(m) <1 | Antimonv | | . , | | <1 | | |
| Beryllium | • | | . , | | | <1 | |
| Cadmium ppm ASTM D5185(m) 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185(m) 128 141 Barium ppm ASTM D5185(m) 0 2 Molybdenum ppm ASTM D5185(m) 134 514 Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) >30 35 125 Sodium ppm ASTM D5185(m) >40 | | | . , | | | | |
| ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185(m) 128 141 Barium ppm ASTM D5185(m) 0 2 Molybdenum ppm ASTM D5185(m) 134 514 Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | • | | (/ | | | | |
| Boron ppm ASTM D5185(m) 128 141 | | ρρ | | limit/base | | | hietory? |
| Barium ppm ASTM D5185(m) 0 2 Molybdenum ppm ASTM D5185(m) 134 514 Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | | | | IIIIIIVDase | | | HISTOTYZ |
| Molybdenum ppm ASTM D5185(m) 134 514 Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | | | . , | | - | | |
| Manganese ppm ASTM D5185(m) 2 6 Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | | | , | | - | | |
| Magnesium ppm ASTM D5185(m) 440 74 Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | • | ppm | . , | | _ | | |
| Calcium ppm ASTM D5185(m) 1319 1625 Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | - | ppm | . , | | | | |
| Phosphorus ppm ASTM D5185(m) 710 644 Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | | ppm | | | - | | |
| Zinc ppm ASTM D5185(m) 721 661 Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 | Calcium | ppm | ASTM D5185(m) | | 1319 | 1625 | |
| Sulfur ppm ASTM D5185(m) 2370 2048 Lithium ppm ASTM D5185(m) <1 <1 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) >30 35 125 Sodium ppm ASTM D5185(m) >400 3 12 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 4.2 INFRA-RED method limit/base current history1 history1 Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Phosphorus | ppm | ASTM D5185(m) | | 710 | 644 | |
| CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) >30 35 125 Sodium ppm ASTM D5185(m) >400 3 12 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 ▲ 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Zinc | ppm | ASTM D5185(m) | | 721 | 661 | |
| CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) >30 35 125 Sodium ppm ASTM D5185(m) >400 3 12 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Sulfur | ppm | ASTM D5185(m) | | 2370 | 2048 | |
| Silicon ppm ASTM D5185(m) >30 35 125 Sodium ppm ASTM D5185(m) >400 3 12 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Lithium | ppm | ASTM D5185(m) | | <1 | <1 | |
| Sodium ppm ASTM D5185(m) >400 3 12 Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | CONTAMINAN | ITS | method | limit/base | current | history1 | history2 |
| Potassium ppm ASTM D5185(m) >20 4 8 Fuel % ASTM D7593* >4.0 6.7 ▲ 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Silicon | ppm | ASTM D5185(m) | >30 | | | |
| Fuel % ASTM D7593* >4.0 ▲ 6.7 ▲ 4.2 INFRA-RED method limit/base current history1 history Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Sodium | ppm | ASTM D5185(m) | >400 | 3 | 12 | |
| INFRA-RED method limit/base current history1 history1 Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Potassium | ppm | ASTM D5185(m) | >20 | 4 | 8 | |
| Soot % % ASTM D7844* 0 0 Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | Fuel | % | ASTM D7593* | >4.0 | <u></u> 6.7 | ▲ 4.2 | |
| Nitration Abs/cm ASTM D7624* >20 8.4 9.3 | INFRA-RED | | method | limit/base | current | history1 | history2 |
| | Soot % | % | ASTM D7844* | | 0 | 0 | |
| Sulfation Abs/.1mm ASTM D7415* >30 19.6 25.6 | Nitration | Abs/cm | ASTM D7624* | >20 | 8.4 | 9.3 | |
| | Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.6 | 25.6 | |



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Unique Number : 5592861

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0010928 Lab Number : 02563820

Received **Tested** Diagnosed

: 13 Jun 2023 : 14 Jun 2023

: 14 Jun 2023 - Kevin Marson Test Package: MOB 1 (Additional Tests: KV40, PercentFuel, VI)

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

BRIAN WHITE 4 CARLINA COURT HALIFAX, NS **CA B3S 1N4** Contact: Brian White carlina8250@gmail.com

F: Contact/Location: Brian White - BRIHAL

T: