

OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

Machine Id KIA KIA SEDONA Component

Gasoline Engine Fluid KIRKLAND 5W30 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

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.

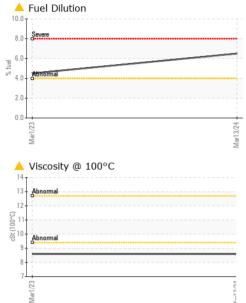
Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

			Mar2023	Mar2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0802539	WC0802538	
Sample Date		Client Info		13 Mar 2024	01 Mar 2023	
Machine Age	kms	Client Info		164731	140000	
Oil Age	kms	Client Info		0	6000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	4	4	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>5	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	0	<1	
Aluminum	ppm	ASTM D5185(m)	>40	4	3	
Lead	ppm	ASTM D5185(m)	>50	0	0	
Copper	ppm	ASTM D5185(m)	>155	1	<1	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Dia un all'a una		ACTM DE10E(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		v	0	
Cadmium	ppm	ASTM D5185(m) ASTM D5185(m)		0	0	
,			limit/base			 history2
Cadmium		ASTM D5185(m)	limit/base	0	0	
Cadmium ADDITIVES	ppm	ASTM D5185(m)	limit/base	0 current	0 history1	history2
Cadmium ADDITIVES Boron	ppm ppm	ASTM D5185(m) method ASTM D5185(m)	limit/base	0 current 56	0 history1 126	history2
Cadmium ADDITIVES Boron Barium	ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0	0 history1 126 0	history2
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124	0 history1 126 0 68	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0	0 history1 126 0 68 0	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454	0 history1 126 0 68 0 484	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454 1114	0 history1 126 0 68 0 484 1256	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454 1114 580	0 history1 126 0 68 0 484 1256 705	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454 1114 580 681	0 history1 126 0 68 0 484 1256 705 707	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454 1114 580 681 1577	0 history1 126 0 68 0 484 1256 705 707 2446	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13	0 history1 126 0 68 0 484 1256 705 705 707 2446 <1 2446 <1 history1 6	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2	0 history1 126 0 68 0 484 1256 705 705 707 2446 <1 kistory1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >30	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2 <1	0 history1 126 0 68 0 484 1256 705 707 2446 <1 2446 <1 history1 6 2 2 <1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base >30 >400	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2	0 history1 126 0 68 0 484 1256 705 705 707 2446 <1 2446 <1 history1 6 2	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >30 >400 >20	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2 <1	0 history1 126 0 68 0 484 1256 705 707 2446 <1 2446 <1 history1 6 2 2 <1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >30 >400 >20 >4.0	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2 <1 ▲6.5	0 history1 126 0 68 0 484 1256 705 707 2446 <1 6 2 <1 history1 6 2 <1 ▲ 4.5	history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >30 >400 >20 >4.0 limit/base	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2 <1 ▲ 6.5 Current	0 history1 126 0 68 0 484 1256 705 707 2446 <1 6 2 48 1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >30 >400 >20 >4.0 limit/base	0 current 56 0 124 0 454 1114 580 681 1577 <1 current 13 2 <1 ▲ 6.5 current 0	0 history1 126 0 68 0 484 1256 705 707 2446 <1 6 2446 <1 history1 6 2 <1 ▲ 1256 1256 705 707 2446 <1 12566 12566 12566 12566 12566 12566 12566 12566 12	history2 history2 history2



OIL ANALYSIS REPORT





Validity of results and interpretation are based on the sample and information as supplied. Report Id: CHRCOO [WCAMIS] 02624105 (Generated: 03/26/2024 10:25:29) Rev: 1

CALA

ISO 17025:2017

Accredited

Laboratory

F: