

## **OIL ANALYSIS REPORT**

Sample Rating Trend

FUEL

### HYUNDAI RAFAY 2579 Component

**Gasoline Engine** Fluid NOT GIVEN (--- GAL)

#### DIAGNOSIS

#### A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

#### Fluid Condition

The condition of the oil is acceptable for the time in service.

				Aug2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0730757		
Sample Date		Client Info		20 Aug 2023		
Machine Age	kms	Client Info		0		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				MARGINAL		
CONTAMINATION	J	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	10		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>5	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>40	7		
Lead	ppm	ASTM D5185(m)	>50	0		
Copper	ppm	ASTM D5185(m)	>155	1		
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)		97		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		134		
Manganese	ppm	ASTM D5185(m)		3		
Magnesium	ppm	ASTM D5185(m)		495		
Calcium	ppm	ASTM D5185(m)		1093		
Phosphorus	ppm	ASTM D5185(m)		705		
Zinc	ppm	ASTM D5185(m)		757		
Sulfur				151		
ounui		ASTM D5185(m)		2068		
Lithium	ppm ppm	ASTM D5185(m)		2068 <1		
	ppm	ASTM D5185(m)	limit/base	<1		
CONTAMINANTS	ppm	ASTM D5185(m)	limit/base	<1 current	history1	 history2
CONTAMINANTS Silicon	ppm ppm	ASTM D5185(m) method ASTM D5185(m)	>30	<1 current 9	history1	 history2 
CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	>30 >400	<1 current 9 2	history1 	 history2 
Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>30 >400 >20	<1 current 9 2 <1	history1  	 history2  
CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7593*	>30 >400 >20 >4.0	<1 <u>current</u> 9 2 <1 2.2	history1  	 history2   
CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm %	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7593* method	>30 >400 >20	<1 <u>current</u> 9 2 <1 ▲ 2.2 <u>current</u>	history1  	 history2  
CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm %	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D7593* method ASTM D7844*	>30 >400 >20 >4.0 limit/base	<1 current 9 2 <1 ▲ 2.2 current 0	history1  	 history2   
CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm % % % Abs/cm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D7593* method ASTM D7844* ASTM D7824*	>30 >400 >20 >4.0	<1 current 9 2 <1 ▲ 2.2 current 0 8.0	history1    history1	history2     history2
CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm %	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D7593* method ASTM D7844*	>30 >400 >20 >4.0 limit/base	<1 current 9 2 <1 ▲ 2.2 current 0	history1    history1 	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm % vo Abs/.1mm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D7593* method ASTM D7844* ASTM D7824*	>30 >400 >20 >4.0 limit/base	<1 current 9 2 <1 ▲ 2.2 current 0 8.0	history1 history1	history2 history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm % vo Abs/.1mm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D7593* method ASTM D7844* ASTM D7844* ASTM D7624* ASTM D7415*	>30 >400 >20 >4.0 limit/base >20 >20 >30	<1 current 9 2 <1 ▲ 2.2 current 0 8.0 18.5	history1    history1  	history2 history2 history2



# **OIL ANALYSIS REPORT**

