

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 7954 Component

Gasoline Engine

GASOLINE ENGINE OIL SAE 5W20 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	JATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0002906		
Sample Date		Client Info		11 Oct 2023		
Machine Age	mls	Client Info		52618		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	0		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm		>5	0		
Titanium	ppm	ASTM D5185m	-	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>40	1		
Lead	ppm		>50	0		
Copper	ppm	ASTM D5185m	>155	2		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 75	current 152	history1	history2
	ppm ppm				, in the second s	
Boron		ASTM D5185m	75	152		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	75 5	152 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	75 5	152 <1 75		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100	152 <1 75 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650	152 <1 75 0 514 898 620		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850	152 <1 75 0 514 898 620 722	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650	152 <1 75 0 514 898 620		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base	152 <1 75 0 514 898 620 722 2601 current	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30	152 <1 75 0 514 898 620 722 2601 current 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	75 5 100 12 2100 650 850 2500 Limit/base >30 >50	152 <1 75 0 514 898 620 722 2601 2601 current 2 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 Limit/base >30 >50	152 <1 75 0 514 898 620 722 2601 current 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	75 5 100 12 2100 650 850 2500 Limit/base >30 >50	152 <1 75 0 514 898 620 722 2601 2601 current 2 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30 >50 >20	152 <1 75 0 514 898 620 722 2601 <i>current</i> 2 2 2 0 <i>current</i> 0	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30 >50 >20	152 <1 75 0 514 898 620 722 2601 current 2 2 2 0 0	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30 >50 >20	152 <1 75 0 514 898 620 722 2601 <i>current</i> 2 2 2 0 <i>current</i> 0	 history1 history1 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30 >50 >20	152 <1 75 0 514 898 620 722 2601 <i>current</i> 2 2 2 0 <i>current</i> 0 <i>current</i>	 history1 history1 	history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	75 5 100 12 2100 650 850 2500 limit/base >30 >50 >20 limit/base	152 <1 75 0 514 898 620 722 2601 2601 2 2 2 0 2 0 0 current 0 6.5 14.5	 history1 history1 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	75 5 100 12 2100 650 850 2500 2500 250 30 >20 imit/base >20 >30 >20 30 20	152 <1 75 0 514 898 620 722 2601 current 2 2 2 0 current 0 6.5 14.5	 history1 history1 history1	 history2 history2 history2 history2



OIL ANALYSIS REPORT

Non-ferrous Metals

lead

Viscosity @ 100°C

ppm

Oct11,

Ab

0ct11/23 -

: PE0002906

: 05982226

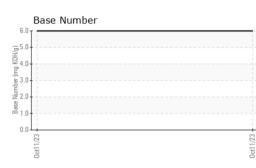
To discuss this sample report, contact Customer Service at 1-800-237-1369.

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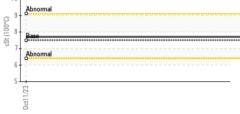
cSt (100°C)

Laboratory Sample No.

Lab Number



Viscosity @ 100°C 10



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
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	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	7.5	7.7		
GRAPHS						
Ferrous Alloys						
Ferrous Alloys						
Ferrous Alloys						
Ferrous Alloys						
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Ferrous Alloys			0ct11/23			

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: 18 Oct 2023

: 19 Oct 2023

Diagnostician : Don Baldridge

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Test Package : FLEET (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN)

Diagnosed

6.0

5 K0H/g 4.0

Вш

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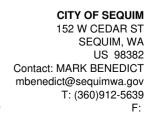
0.0

0ct11/23

Base Number



Unique Number : 10699521



Certificate L2367

1/23 Oct1