

# **OIL ANALYSIS REPORT**

## Area CONSTRUCTORS, INC Machine Id CHEVROLET GASOLINE 040615

Component Gasoline Engine Fluid MOBIL SUPER 5W30 (--- GAL)

#### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

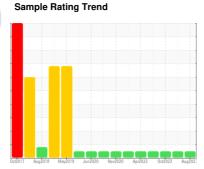
All component wear rates are normal.

#### 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 suitable for further service.



 $\checkmark$ 

NORMAL

SAMPLE INFORM		method	limit/base	current	history1	history2
			IIIIII/Dase			
Sample Number		Client Info		SBP0004642	SBP0001297	SBP0002083
Sample Date	la va	Client Info		23 Aug 2023	23 Feb 2023	26 Oct 2022
Machine Age	hrs	Client Info Client Info		6894	6595 217	6378 324
Oil Age Oil Changed	hrs	Client Info		299 Changed	Changed	
Sample Status		Client Inio		Changed NORMAL	NORMAL	Changed NORMAL
· ·						
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	60	48	32
Chromium	ppm	ASTM D5185m	>20	3	3	2
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	6	5	5
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>155	23	18	21
Tin	ppm		>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 34	history1 61	history2 21
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	34	61	21
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	limit/base	34 0	61 0	21 <1 69 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553	61 0 72 <1 495	21 <1 69 <1 467
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317	61 0 72 <1 495 1209	21 <1 69 <1 467 1181
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317 712	61 0 72 <1 495 1209 658	21 <1 69 <1 467 1181 613
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317 712 837	61 0 72 <1 495 1209 658 783	21 <1 69 <1 467 1181 613 731
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317 712	61 0 72 <1 495 1209 658	21 <1 69 <1 467 1181 613
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317 712 837	61 0 72 <1 495 1209 658 783	21 <1 69 <1 467 1181 613 731
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	34 0 77 1 553 1317 712 837 3398	61 0 72 <1 495 1209 658 783 3154	21 <1 69 <1 467 1181 613 731 2644
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	limit/base	34 0 77 1 553 1317 712 837 3398 current	61 0 72 <1 495 1209 658 783 3154 history1	21 <1 69 <1 467 1181 613 731 2644 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	limit/base	34 0 77 1 553 1317 712 837 3398 current 17	61 0 72 <1 495 1209 658 783 3154 history1 11	21 <1 69 <1 467 1181 613 731 2644 history2 12
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >30 >400	34 0 77 1 553 1317 712 837 3398 <u>current</u> 17 4	61 0 72 <1 495 1209 658 783 3154 history1 11 3	21 <1 69 <1 467 1181 613 731 2644 history2 12 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20	34 0 77 1 553 1317 712 837 3398 current 17 4 4 <1	61 0 72 <1 495 1209 658 783 3154 history1 11 3 <1	21 <1 69 <1 467 1181 613 731 2644 history2 12 12 1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base	34 0 77 1 553 1317 712 837 3398 current 17 4 <1 current	61 0 72 <1 495 1209 658 783 3154 history1 11 3 <1 history1	21 <1 69 <1 467 1181 613 731 2644 history2 12 1 2 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   ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base	34 0 77 1 553 1317 712 837 3398 current 17 4 <1 <1 current 0.1	61 0 72 <1 495 1209 658 783 3154 history1 11 3 <1 history1 0.1	21 <1 69 <1 467 1181 613 731 2644 history2 12 1 2 history2 0.1
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	limit/base >30 >400 >20 limit/base >20	34 0 77 1 553 1317 712 837 3398 <u>current</u> 17 4 <1 17 4 <1 0.1 11.9	61 0 72 <1 495 1209 658 783 3154 history1 11 3 <1 history1 0.1 10.9	21 <1 69 <1 467 1181 613 731 2644 history2 12 12 1 2 history2 0.1 12.4
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	Iimit/base >30 >400 >20 Iimit/base >20 ≥20 >30	34 0 77 1 553 1317 712 837 3398 <u>current</u> 17 4 <1 <1 current 0.1 11.9 24.0	61 0 72 <1 495 1209 658 783 3154 history1 11 3 <1 history1 0.1 10.9 21.6	21 <1 69 <1 467 1181 613 731 2644 history2 12 1 2 history2 0.1 12.4 25.4



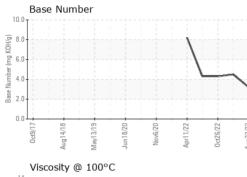
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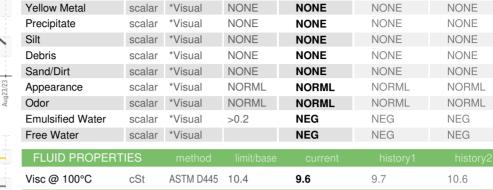
White Metal

GRAPHS

100

Ferrous Alloys





NONE

\*Visual

scalar

NONE

NONE

NONE

