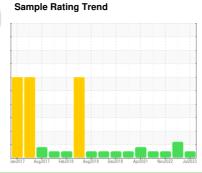


# **OIL ANALYSIS REPORT**

# CONSTRUCTORS, INC **CHEVROLET GASOLINE 04-0638**

**Gasoline Engine** 

MOBIL CLEAN 5W30 5000 (--- GAL)





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

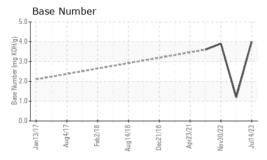
### **Fluid Condition**

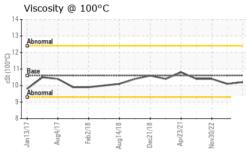
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	NOITAN	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0004540	SBP0003757	SBP0002117
Sample Date		Client Info		14 Jul 2023	28 Apr 2023	30 Nov 2022
Machine Age	hrs	Client Info		10634	10351	10009
Oil Age	hrs	Client Info		283	342	353
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	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	25	50	21
Chromium	ppm	ASTM D5185m	>20	2	3	2
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	2	5	3
Lead	ppm	ASTM D5185m	>50	0	0	<1
Copper	ppm	ASTM D5185m	>155	13	19	14
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 30	history1 27	history2 18
	ppm		limit/base			
Boron		ASTM D5185m	limit/base	30	27	18
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	30 1	27 0	18
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 1 70	27 0 72	18 0 71
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 1 70 <1	27 0 72 <1	18 0 71 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 1 70 <1 534 1274 688	27 0 72 <1 541 1260 652	18 0 71 <1 514
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 ASTM D5185m	limit/base	30 1 70 <1 534 1274	27 0 72 <1 541 1260 652 785	18 0 71 <1 514 1241 687 821
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 1 70 <1 534 1274 688	27 0 72 <1 541 1260 652	18 0 71 <1 514 1241 687
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	30 1 70 <1 534 1274 688 847	27 0 72 <1 541 1260 652 785	18 0 71 <1 514 1241 687 821
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 1 70 <1 534 1274 688 847 3379	27 0 72 <1 541 1260 652 785 3099	18 0 71 <1 514 1241 687 821 3242
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	30 1 70 <1 534 1274 688 847 3379	27 0 72 <1 541 1260 652 785 3099 history1	18 0 71 <1 514 1241 687 821 3242 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >30	30 1 70 <1 534 1274 688 847 3379 current	27 0 72 <1 541 1260 652 785 3099 history1	18 0 71 <1 514 1241 687 821 3242 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >30 >400	30 1 70 <1 534 1274 688 847 3379 current 10	27 0 72 <1 541 1260 652 785 3099 history1	18 0 71 <1 514 1241 687 821 3242 history2 6 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >30 >400 >20	30 1 70 <1 534 1274 688 847 3379 current 10 2	27 0 72 <1 541 1260 652 785 3099 history1 12 2	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0
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	ASTM D5185m	limit/base >30 >400 >20 limit/base	30 1 70 <1 534 1274 688 847 3379 current 10 2 4 current	27 0 72 <1 541 1260 652 785 3099 history1 12 2 4	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0
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  method  *ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	limit/base >30 >400 >20 limit/base	30 1 70 <1 534 1274 688 847 3379 current 10 2 4 current	27 0 72 <1 541 1260 652 785 3099 history1 12 2 4 history1 0.1	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0 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  method  *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base >20	30 1 70 <1 534 1274 688 847 3379 current 10 2 4 current 0 10.6	27 0 72 <1 541 1260 652 785 3099 history1 12 2 4 history1 0.1 10.7	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0 history2 0.1 11.9
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  Method  *ASTM D5185m ASTM D7844  *ASTM D7624  *ASTM D7415	limit/base >30 >400 >20 limit/base >20 >30	30 1 70 <1 534 1274 688 847 3379 current 10 2 4 current 0 10.6 22.5	27 0 72 <1 541 1260 652 785 3099 history1 12 2 4 history1 0.1 10.7 22.6	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0 history2 0.1 11.9 25.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D5185m  Method  *ASTM D7624 *ASTM D7624 *ASTM D7615  Method	limit/base >30 >400 >20 limit/base >20 >30 limit/base	30 1 70 <1 534 1274 688 847 3379 current 10 2 4 current 0 10.6 22.5 current	27 0 72 <1 541 1260 652 785 3099 history1 12 2 4 history1 0.1 10.7 22.6 history1	18 0 71 <1 514 1241 687 821 3242 history2 6 2 0 history2 0.1 11.9 25.4 history2



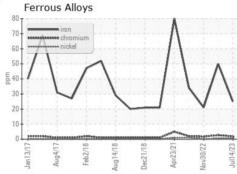
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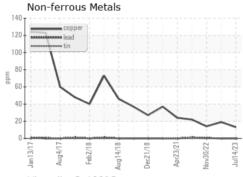


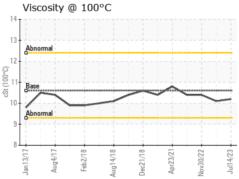


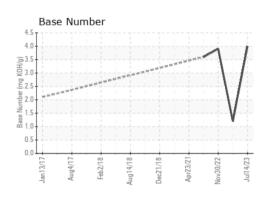
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	10.6	10.2	10.1	10.4













Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : SBP0004540 : 05900671

: 10562027

Received Diagnosed

: 17 Jul 2023 : 19 Jul 2023

Diagnostician : Doug Bogart

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

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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