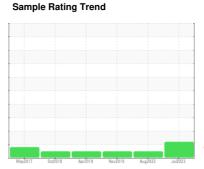


PROBLEM SUMMARY

CONSTRUCTORS, INC Machine Id CHEVROLET GASOLINE 04-0631

Gasoline Engine

MOBIL 1 5W30 (--- GAL)





COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS						
Sample Status				MARGINAL	NORMAL	NORMAL
Base Number (BN)	mg KOH/g	ASTM D2896		2.7	3.4	

Customer Id: CONLINNE Sample No.: SBP0004535 Lab Number: 05900664 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid			?	Oil and filter change at the time of sampling has been noted.
Change Filter			?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

17 Aug 2022 Diag: Jonathan Hester

NORMAL



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. 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.



08 Nov 2019 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

11 Apr 2019 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

CONSTRUCTORS, INC **CHEVROLET GASOLINE 04-0631**

Gasoline Engine

MOBIL 1 5W30 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

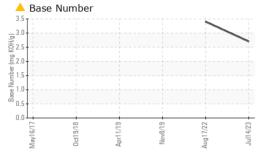
Fluid Condition

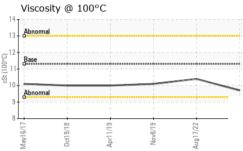
The BN level is low.

		May2017	Oct2018 Apr2019	Nov2019 Aug2022	Jul2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0004535	SBP0001223	SBP16243063
Sample Date		Client Info		14 Jul 2023	17 Aug 2022	08 Nov 2019
Machine Age	hrs	Client Info		10079	9773	8008
Oil Age	hrs	Client Info		306	282	313
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	0.0
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	60	46	34
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>5	1	<1	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	8	7	5
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>155	18	13	18
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						la la tarre o
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 31	history1 35	nistory2 24
	ppm ppm					
Boron		ASTM D5185m	94	31	35	24
Boron Barium	ppm	ASTM D5185m ASTM D5185m	94	31 1	35 0	24
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	94	31 1 78	35 0 89	24 0 63
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	94 0.0 0.0	31 1 78 1	35 0 89 <1	24 0 63
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	94 0.0 0.0 1388	31 1 78 1 528	35 0 89 <1 479	24 0 63 0 538
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	94 0.0 0.0 1388 820	31 1 78 1 528 1284	35 0 89 <1 479 1185	24 0 63 0 538 858
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 ASTM D5185m	94 0.0 0.0 1388 820 720	31 1 78 1 528 1284 655	35 0 89 <1 479 1185 572	24 0 63 0 538 858 579
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	94 0.0 0.0 1388 820 720 780	31 1 78 1 528 1284 655 799	35 0 89 <1 479 1185 572 688	24 0 63 0 538 858 579 615
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	94 0.0 0.0 1388 820 720 780 2240 limit/base	31 1 78 1 528 1284 655 799 3300	35 0 89 <1 479 1185 572 688 2459	24 0 63 0 538 858 579 615
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 ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base	31 1 78 1 528 1284 655 799 3300 current	35 0 89 <1 479 1185 572 688 2459	24 0 63 0 538 858 579 615
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base	31 1 78 1 528 1284 655 799 3300 current	35 0 89 <1 479 1185 572 688 2459 history1	24 0 63 0 538 858 579 615 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 Iimit/base >30 >400	31 1 78 1 528 1284 655 799 3300 current 14	35 0 89 <1 479 1185 572 688 2459 history1 11	24 0 63 0 538 858 579 615 history2 6 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 Iimit/base >30 >400	31 1 78 1 528 1284 655 799 3300 current 14 4	35 0 89 <1 479 1185 572 688 2459 history1 11 4	24 0 63 0 538 858 579 615 history2 6 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20	31 1 78 1 528 1284 655 799 3300 current 14 4	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0	24 0 63 0 538 858 579 615 history2 6 2 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20	31 1 78 1 528 1284 655 799 3300 current 14 4 4 current	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0 history1	24 0 63 0 538 858 579 615 history2 6 2 3 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20 limit/base	31 1 78 1 528 1 1284 655 799 3300 current 14 4 current 0.1	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0 history1 0.1	24 0 63 0 538 858 579 615 history2 6 2 3 0 history2 0.14
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration	ppm	ASTM D5185m	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20 limit/base	31 1 78 1 528 1284 655 799 3300 current 14 4 4 current 0.1 12.6	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0 history1 0.1 13.9	24 0 63 0 538 858 579 615 history2 6 2 3 0 history2 0.14
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m METHOD ASTM D5185m METHOD *ASTM D7844 *ASTM D7844 *ASTM D7844	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20 limit/base	31 1 78 1 528 1 1284 655 799 3300 current 14 4 4 current 0.1 12.6 25.8 current	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0 history1 0.1 13.9 27.4 history1	24 0 63 0 538 858 579 615 history2 6 2 3 0 history2 0.14 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7624	94 0.0 0.0 1388 820 720 780 2240 limit/base >30 >400 >20 limit/base	31 1 78 1 528 1284 655 799 3300	35 0 89 <1 479 1185 572 688 2459 history1 11 4 0 history1 0.1 13.9 27.4	24 0 63 0 538 858 579 615 history2 6 2 3 0 history2 0.14



OIL ANALYSIS REPORT

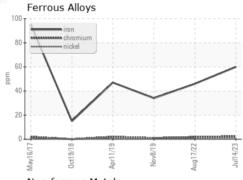


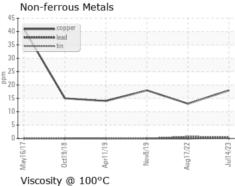


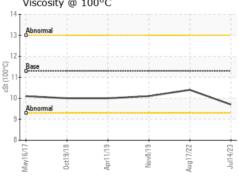
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

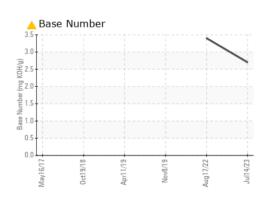
FLUID FNOFENTIES		memod	IIIIII/Dase	Current	HISTORY	HISTORYZ	
Visc @ 100°C	cSt	ASTM D445	11.3	9.7	10.4	10.1	

GRAPHS











Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10562020 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 05900664

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

: SBP0004535

Received : 17 Jul 2023 Diagnosed Diagnostician : Doug Bogart

: 19 Jul 2023

US 68508 Contact: Jack Linhart

jackl@constructorslincoln.com

T: (402)434-2157

Constructors Inc. - 603659

* - 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)

Report Id: CONLINNE [WUSCAR] 05900664 (Generated: 07/19/2023 12:13:45) Rev: 1

Submitted By: Jack Linhart

1815 Y Street

Lincoln, NE