

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id CHEVY 2500 602102 - 2021 CHEVY 2500 4X4 (S/N 1GC5YLE75MF254425) Component

Gasoline Engine

PETRO CANADA DURON ADVANCED 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.

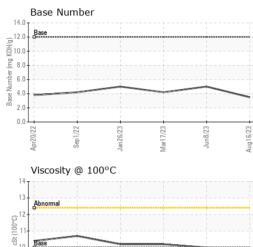
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0004667	SBP0004473	SBP0003796
Sample Date		Client Info		16 Aug 2023	08 Jun 2023	17 Mar 2023
Machine Age	hrs	Client Info		2549	2235	1933
Oil Age	hrs	Client Info		314	302	353
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	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	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	7	9	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	2	1	3
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>155	1	1	1
Tin	ppm		>100	2	2	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	le le		11	-	-	-
		method	limit/base		history1	history2
Boron	ppm	ASTM D5185m	0	23	37	54
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	23 0	37 2	54 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43	23 0 72	37 2 96	54 0 69
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0	23 0 72 <1	37 2 96 <1	54 0 69 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0 920	23 0 72 <1 486	37 2 96 <1 501	54 0 69 <1 478
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0 920 1330	23 0 72 <1 486 1215	37 2 96 <1 501 1246	54 0 69 <1 478 1219
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	0 0 43 0 920 1330 790	23 0 72 <1 486 1215 646	37 2 96 <1 501 1246 701	54 0 69 <1 478 1219 645
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	0 0 43 0 920 1330 790 880	23 0 72 <1 486 1215 646 791	37 2 96 <1 501 1246 701 843	54 0 69 <1 478 1219 645 780
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	0 0 43 0 920 1330 790 880 2200	23 0 72 <1 486 1215 646 791 2859	37 2 96 <1 501 1246 701 843 3128	54 0 69 <1 478 1219 645 780 2652
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	0 0 43 0 920 1330 790 880 2200	23 0 72 <1 486 1215 646 791 2859 current	37 2 96 <1 501 1246 701 843 3128 history1	54 0 69 <1 478 1219 645 780 2652 history2
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 method ASTM D5185m	0 0 43 920 1330 790 880 2200 Limit/base	23 0 72 <1 486 1215 646 791 2859 current 10	37 2 96 <1 501 1246 701 843 3128 history1 11	54 0 69 <1 478 1219 645 780 2652 history2 9
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	0 0 43 920 1330 790 880 2200 limit/base >30 >400	23 0 72 <1 486 1215 646 791 2859 <u>current</u> 10 1	37 2 96 <1 501 1246 701 843 3128 history1 11 1	54 0 69 <1 478 1219 645 780 2652 history2 9 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	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20	23 0 72 <1 486 1215 646 791 2859 current 10 1 1 <1	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 <1
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	0 0 43 920 1330 790 880 2200 limit/base >30 >400	23 0 72 <1 486 1215 646 791 2859 current 10 1 <1 <1	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 1 history1	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 <1 kistory2
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	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20 limit/base	23 0 72 <1 486 1215 646 791 2859 current 10 1 <1 <1 current 0	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 <1 kistory2 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	0 0 43 0 920 1330 790 880 2200 Iimit/base >30 >400 >20 Iimit/base	23 0 72 <1 486 1215 646 791 2859 <i>current</i> 10 1 1 <1 <1 <i>current</i> 0 9.7	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 1 1 1 1 1 1 1 0.1 10.4	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 <1 2 <1 history2 0.1 10.5
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	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20 limit/base	23 0 72 <1 486 1215 646 791 2859 current 10 1 <1 <1 current 0	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 <1 2 <1 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	0 0 43 0 920 1330 790 880 2200 Iimit/base >30 >400 >20 Iimit/base	23 0 72 <1 486 1215 646 791 2859 <u>current</u> 10 1 <1 <1 current 0 9.7 22.4	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 1 1 1 1 1 1 1 0.1 10.4	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 5 2 <1 history2 0.1 10.5
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	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20 limit/base >20 limit/base	23 0 72 <1 486 1215 646 791 2859 <u>current</u> 10 1 <1 <1 current 0 9.7 22.4	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 history1 0.1 10.4 22.4	54 0 69 <1 478 1219 645 780 2652 history2 9 2 2 5 2 <1 history2 0.1 10.5 23.0
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 *ASTM D7415	0 0 43 0 920 1330 790 880 2200 Iimit/base >30 >20 20 Iimit/base >20 >20 30 >30 >20	23 0 72 <1 486 1215 646 791 2859 <i>current</i> 10 1 1 <1 <i>current</i> 0 9.7 22.4 <i>current</i>	37 2 96 <1 501 1246 701 843 3128 history1 11 1 1 1 1 0.1 0.1 10.4 22.4 history1	54 0 69 <1 478 1219 645 780 2652 history2 9 2 <1 9 2 <1 history2 0.1 10.5 23.0 history2

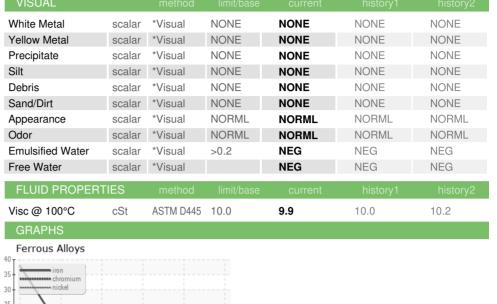


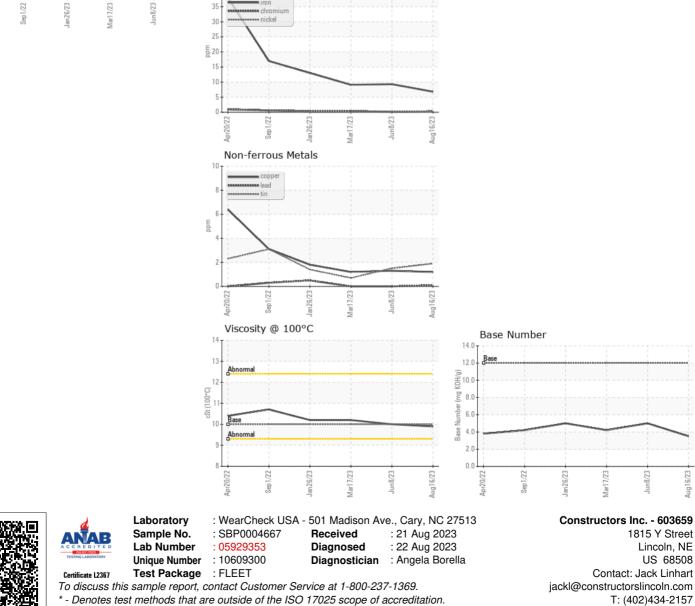
Base Abno

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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