

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id 602204 - CHEVY 1500 PICKUP (S/N 1GCRDAEK9NZ588236) Component

Gasoline Engine

PETRO CANADA DURON ADVANCED 5W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

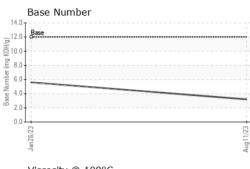
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

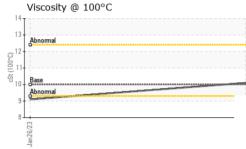
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0004744	SBP0002333	
Sample Date		Client Info		11 Aug 2023	26 Jan 2023	
Machine Age	hrs	Client Info		638	305	
Oil Age	hrs	Client Info		333	300	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	ABNORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	16	24	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>5	0	0	
Titanium	ppm	ASTM D5185m		۰ <1	<1	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>40	3	5	
Lead	ppm	ASTM D5185m	>40 >50	ہ <1	2	
Copper	ppm	ASTM D5185m	>155	7	22	
Tin		ASTM D5185m	>10	، <1	1	
Vanadium	ppm ppm	ASTM D5185m	>10	<1	<1	
Cadmium		ASTM D5185m		0	0	
Gaumum	ppm	ASTIVI DOTODITI		U	0	
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base 0	24	15	history2
Boron Barium	ppm ppm		0	24 0	15 6	
Boron Barium		ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43	24 0 83	15 6 152	
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	24 0	15 6 152 2	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43	24 0 83	15 6 152	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0	24 0 83 <1	15 6 152 2	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0 920	24 0 83 <1 585	15 6 152 2 470	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 43 0 920 1330	24 0 83 <1 585 1475	15 6 152 2 470 1367	
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	24 0 83 <1 585 1475 739	15 6 152 2 470 1367 620	
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	0 0 43 0 920 1330 790 880	24 0 83 <1 585 1475 739 928	15 6 152 2 470 1367 620 858	
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	24 0 83 <1 585 1475 739 928 3480	15 6 152 2 470 1367 620 858 2152	
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	0 0 43 0 920 1330 790 880 2200 limit/base >30	24 0 83 <1 585 1475 739 928 3480 current	15 6 152 2 470 1367 620 858 2152 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 43 0 920 1330 790 880 2200 limit/base >30	24 0 83 <1 585 1475 739 928 3480 current 42	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131	 history2
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 2200 Limit/base >30 >400	24 0 83 <1 585 1475 739 928 3480 current 42 3	15 6 152 2 470 1367 620 858 2152 2152 history1 ▲ 131 4	 history2
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 2200 limit/base >30 >400 >20	24 0 83 <1 585 1475 739 928 3480 current 42 3 2	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20 limit/base	24 0 83 <1 585 1475 739 928 3480 current 42 3 2 2	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3 3 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	ASTM D5185m ASTM D5185m	0 0 43 0 920 1330 790 880 2200 limit/base >30 >400 >20 limit/base	24 0 83 <1 585 1475 739 928 3480 <u>current</u> 42 3 2 2 <u>current</u> 0.1	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3 3 history1 0.1	 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	0 0 43 0 920 1330 790 880 2200 Imit/base >30 >400 >20 Imit/base	24 0 83 <1 585 1475 739 928 3480 current 42 3 2 current 0.1 11.9	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3 history1 0.1 12.0	 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	0 0 43 920 1330 790 880 2200 imit/base >30 >400 >20 imit/base	24 0 83 <1 585 1475 739 928 3480 <u>current</u> 42 3 2 2 <u>current</u> 0.1 11.9 26.1	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3 3 history1 0.1 12.0 21.5	 history2 history2 history2
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 ASTM D7844 *ASTM D7844 *ASTM D7844	0 0 43 920 1330 790 880 2200 imit/base >30 >400 >20 imit/base >20 imit/base	24 0 83 <1 585 1475 739 928 3480 current 42 3 2 2 current 0.1 11.9 26.1 current	15 6 152 2 470 1367 620 858 2152 history1 ▲ 131 4 3 history1 0.1 12.0 21.5 history1	 history2 history2 history2 history2



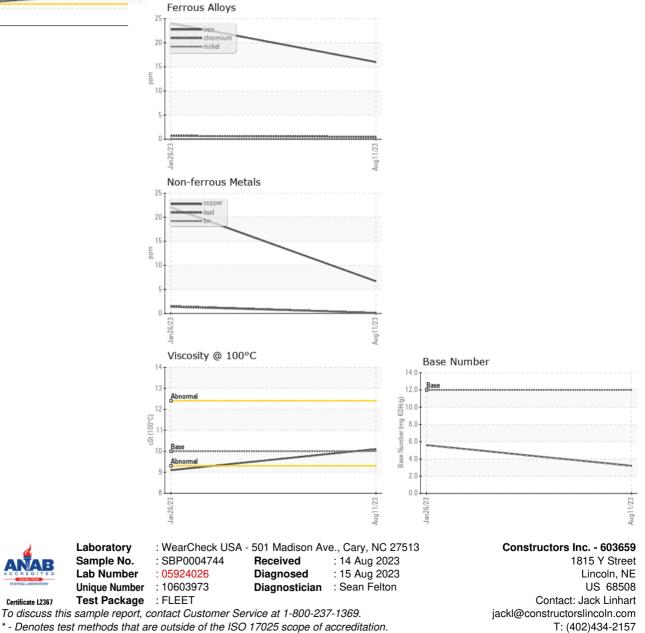


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.0	10.1	9.1	
GRAPHS						



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



Certificate L2367

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