

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **710007** Component Natural Gas Engine Fluid CHEVRON DELO 400 NG (8 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

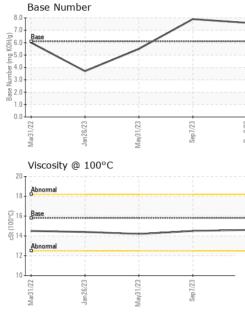
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0094229	GFL0089729	GFL0077353
Sample Date		Client Info		08 Dec 2023	07 Sep 2023	31 May 2023
Machine Age	hrs	Client Info		4021	3341	2695
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	4	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	2	2
Lead	ppm	ASTM D5185m	>30	<1	<1	0
Copper	ppm	ASTM D5185m	>35	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
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ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	26	nistory i 27	17
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	26	27	17
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	26 11	27 0	17 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		26 11 49	27 0 49	17 0 56
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		26 11 49 <1	27 0 49 1	17 0 56 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	11mi/base	26 11 49 <1 537	27 0 49 1 614	17 0 56 <1 550
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		26 11 49 <1 537 1460	27 0 49 1 614 1584	17 0 56 <1 550 1679
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	800	26 11 49 <1 537 1460 753	27 0 49 1 614 1584 803	17 0 56 <1 550 1679 705
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	800	26 11 49 <1 537 1460 753 910	27 0 49 1 614 1584 803 1023	17 0 56 <1 550 1679 705 950
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	800 880 limit/base	26 11 49 <1 537 1460 753 910 2780	27 0 49 1 614 1584 803 1023 3163	17 0 56 <1 550 1679 705 950 2926
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm 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	800 880 limit/base >+100	26 11 49 <1 537 1460 753 910 2780 current	27 0 49 1 614 1584 803 1023 3163 history1	17 0 56 <1 550 1679 705 950 2926 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	800 880 limit/base >+100	26 11 49 <1 537 1460 753 910 2780 current 3	27 0 49 1 614 1584 803 1023 3163 history1 3	17 0 56 <1 550 1679 705 950 2926 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	800 880 limit/base >+100	26 11 49 <1 537 1460 753 910 2780 Current 3 4	27 0 49 1 614 1584 803 1023 3163 history1 3 4	17 0 56 <1 550 1679 705 950 2926 history2 4 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	800 880 limit/base >+100 >20	26 11 49 <1 537 1460 753 910 2780 current 3 4 3	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3	17 0 56 <1 550 1679 705 950 2926 history2 4 4 4 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	800 880 limit/base >+100 >20 limit/base	26 11 49 <1 537 1460 753 910 2780 current 3 4 3 2 4 3	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3 4 3 3	17 0 56 <1 550 1679 705 950 2926 history2 4 4 0 bistory2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	800 880 limit/base >+100 >20 limit/base	26 11 49 <1 537 1460 753 910 2780 <u>current</u> 3 4 3 <u>current</u> 0	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3 4 3 1023 3163	17 0 56 <1 550 1679 705 950 2926 history2 4 4 4 0 bistory2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	800 880 880 >+100 >20 Iimit/base >20	26 11 49 <1 537 1460 753 910 2780 current 3 4 3 2 4 3 2 0 8.4	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3 4 3 history1 0.1 8.1	17 0 56 <1 550 1679 705 950 2926 history2 4 4 4 0 history2 0 10.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN 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	800 880 880 >+100 >20 Iimit/base >20 S20 >30	26 11 49 <1 537 1460 753 910 2780 current 3 4 3 <u>current</u> 0 8.4 18.5	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3 4 3 history1 0.1 8.1 18.2	17 0 56 <1 550 1679 705 950 2926 history2 4 4 4 0 bistory2 0 10.1 20.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN 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	800 880 880 >+100 >20 Iimit/base >20 >30 Iimit/base	26 11 49 <1 537 1460 753 910 2780 current 3 4 3 4 3 <i>current</i> 0 8.4 18.5	27 0 49 1 614 1584 803 1023 3163 history1 3 4 3 4 3 history1 0.1 8.1 18.2 history1	17 0 56 <1 550 1679 705 950 2926 history2 4 4 4 0 history2 0 10.1 20.8 history2



OIL ANALYSIS REPORT

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/		White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	Ξ
		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	-
		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	Ξ
		Silt	scalar	*Visual	NONE	NONE	NONE	NONE	-
		Debris	scalar	*Visual	NONE	NONE	NONE	NONE	-
		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	-
1/23	Sep 7/23 -	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM	ЛL
May31/23	Sep	Odor	scalar	*Visual	NORML	NORML	NORML	NORM	ЛL
		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG	
		Free Water	scalar	*Visual		NEG	NEG	NEG	
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		FLUID PROPE Visc @ 100°C	cSt	method ASTM D445	limit/base	current 14.6	history1 14.5	histo 14.2	ory∠
		GRAPHS	CSI	ASTIM D445	15.6	14.0	14.5	14.2	
		Ferrous Alloys							
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May31/23	Sep 7	14- mickel							
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		Mar31/22 Jan26/23	May31/23	Sep 7/23	Dec8/23	Mar3 1/22 Jan 26/23	May31/23	Sep 7/23	
	Laboratory Sample No.	: WearCheck USA - : GFL0094229			ry, NC 2751: Dec 2023	3 GFL Env	ironmental - 8	3 82 - Gaine 02 SW 41s	