

# **OIL ANALYSIS REPORT**



Machine Id

### 1181 Component Diesel Engine Fluid CHEVRON DELO 400 XLE 10W30 (35 LTR)

#### 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.

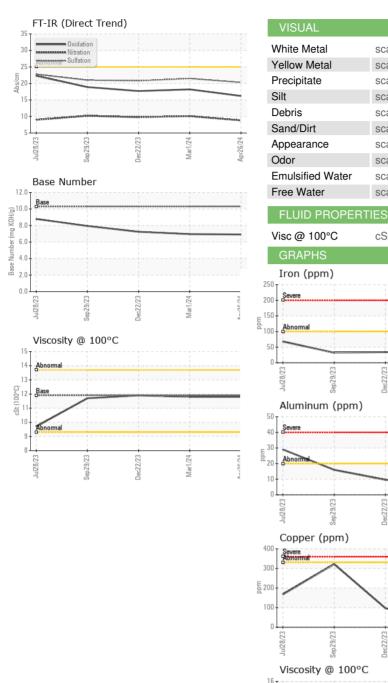
## Fluid Condition

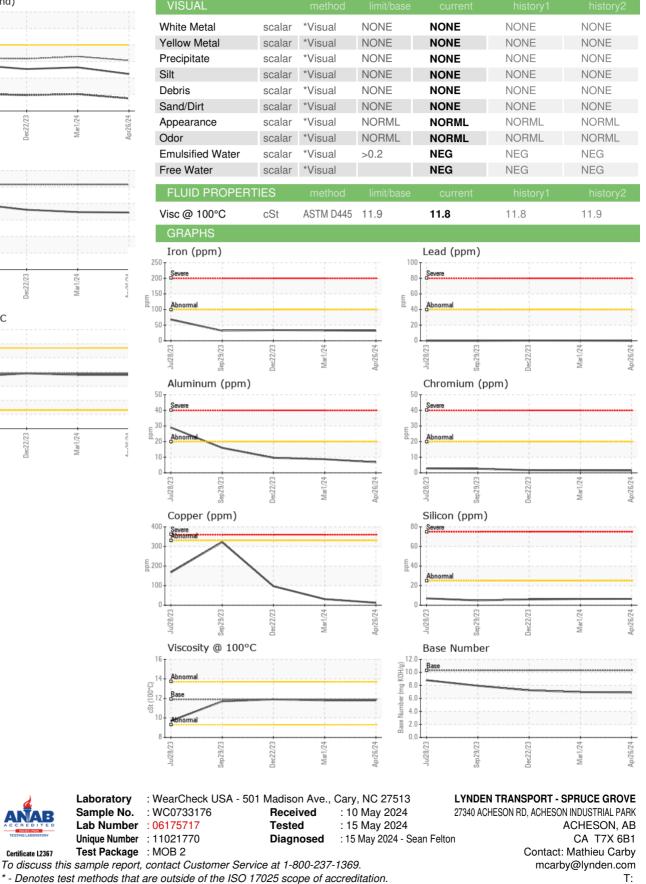
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0733176	WC0851832	WC0851821
Sample Date		Client Info		26 Apr 2024	01 Mar 2024	22 Dec 2023
Machine Age	kms	Client Info		277177	217653	158329
Oil Age	kms	Client Info		65000	65000	65000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32	33	34
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	7	9	10
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	13	31	97
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	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 40	history1 33	history2 34
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	40	33	34
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	40 0	33 0	34 <1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	40 0 1	33 0 0	34 <1 2
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		40 0 1 <1	33 0 0 1	34 <1 2 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		40 0 1 <1 759	33 0 0 1 752	34 <1 2 <1 760
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2900	40 0 1 <1 759 1483	33 0 0 1 752 1311	34 <1 2 <1 760 1335
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	2900 1100	40 0 1 <1 759 1483 712	33 0 0 1 752 1311 662	34 <1 2 <1 760 1335 754
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	2900 1100 1200	40 0 1 <1 759 1483 712 853	33 0 0 1 752 1311 662 800	34 <1 2 <1 760 1335 754 837
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 <b>method</b>	2900 1100 1200 4000	40 0 1 <1 759 1483 712 853 3126 current 6	33 0 0 1 752 1311 662 800 2921 history1 6	34 <1 2 <1 760 1335 754 837 2615 history2 6
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	2900 1100 1200 4000 limit/base	40 0 1 <1 759 1483 712 853 3126 current	33 0 0 1 752 1311 662 800 2921 history1	34 <1 2 <1 760 1335 754 837 2615 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 <b>method</b>	2900 1100 1200 4000 limit/base >25	40 0 1 <1 759 1483 712 853 3126 current 6	33 0 0 1 752 1311 662 800 2921 history1 6	34 <1 2 <1 760 1335 754 837 2615 history2 6
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 <b>method</b> ASTM D5185m	2900 1100 1200 4000 limit/base >25	40 0 1 <1 759 1483 712 853 3126 current 6 4	33 0 0 1 752 1311 662 800 2921 history1 6 3	34 <1 2 <1 760 1335 754 837 2615 <b>history2</b> 6 0
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	2900 1100 1200 4000 limit/base >25 >20	40 0 1 <1 759 1483 712 853 3126 current 6 4 15	33 0 0 1 752 1311 662 800 2921 history1 6 3 19	34 <1 2 <1 760 1335 754 837 2615 history2 6 0 33
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	2900 1100 1200 4000 limit/base >25 >20 limit/base >3	40 0 1 <1 759 1483 712 853 3126 current 6 4 15 current	33 0 0 1 752 1311 662 800 2921 history1 6 3 19 history1	34 <1 2 <1 760 1335 754 837 2615 <b>history2</b> 6 0 33 33
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	2900 1100 1200 4000 limit/base >25 >20 limit/base >3	40 0 1 <1 759 1483 712 853 3126 current 6 4 15 current 0.5	33 0 0 1 752 1311 662 800 2921 history1 6 3 19 history1 0.6	34 <1 2 <1 760 1335 754 837 2615 history2 6 0 33 history2 0.4
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	2900 1100 1200 4000 limit/base >25 >20 limit/base >3 >20	40 0 1 <1 759 1483 712 853 3126 current 6 4 15 current 0.5 8.8	33 0 0 1 752 1311 662 800 2921 history1 6 3 19 history1 0.6 10.1	34 <1 2 <1 760 1335 754 837 2615 history2 6 0 33 history2 0.4 9.8
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	2900 1100 1200 4000 <b>Imit/base</b> >25 >20 <b>Imit/base</b> >3 >20 >30	40 0 1 <1 759 1483 712 853 3126 Current 6 4 15 Current 0.5 8.8 20.3	33 0 0 1 752 1311 662 800 2921 history1 6 3 19 history1 0.6 10.1 21.5	34 <1 2 <1 760 1335 754 837 2615 <b>history2</b> 6 0 33 <b>history2</b> 0.4 9.8 20.8



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

Report Id: LYNSPR [WUSCAR] 06175717 (Generated: 05/15/2024 19:20:22) Rev: 1

Certificate 12367

-St (100°C)

Laboratory

Sample No.

Lab Number : 06175717

Unique Number : 11021770

Test Package : MOB 2

8

: WC0733176

en29/73

Contact/Location: Mathieu Carby - LYNSPR

F: