

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id SZLG232591 Component Diesel Engine Fluid CHEVRON 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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		WC0933815			
Sample Date		Client Info		09 May 2024			
Machine Age	hrs	Client Info		3063			
Oil Age	hrs	Client Info		0			
Oil Changed		Client Info		Changed			
Sample Status				NORMAL			
CONTAMINATION	J	method	limit/base	current	history1	history2	
Fuel	<u> </u>	WC Method	>5	<1.0			
Water		WC Method	>0.2	NEG			
Glycol		WC Method	20.2	NEG			
-				-			
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	8			
Chromium	ppm	ASTM D5185m	>20	<1			
Nickel	ppm	ASTM D5185m	>4	0			
Titanium	ppm	ASTM D5185m		<1			
Silver	ppm	ASTM D5185m	>3	0			
Aluminum	ppm	ASTM D5185m	>20	4			
Lead	ppm	ASTM D5185m	>40	0			
Copper	ppm	ASTM D5185m	>330	2			
Tin	ppm	ASTM D5185m	>15	<1			
Vanadium	ppm	ASTM D5185m		0			
Cadmium	ppm	ASTM D5185m		0			
ADDITIVES		method	limit/base	current	history1	history2	
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 363	history1	history2	
			limit/base				
Boron	ppm	ASTM D5185m	limit/base	363			
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	363 1			
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136			
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136 <1			
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136 <1 691			
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136 <1 691 1618	 	 	
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	limit/base	363 1 136 <1 691 1618 787			
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136 <1 691 1618 787 928	 		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		363 1 136 <1 691 1618 787 928 2768			
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	363 1 136 <1 691 1618 787 928 2768 2768			
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >25 >50	363 1 136 <1 691 1618 787 928 2768 2768 current 6	 history1 	 history2	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm of the second secon	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >50	363 1 136 <1 691 1618 787 928 2768 2768 current 6 11	 history1	 history2	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm of the second secon	ASTM D5185m ASTM D5185m	limit/base >25 >50 >20	363 1 136 <1 691 1618 787 928 2768 current 6 11 3	 history1 	 history2 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >50 >20 limit/base	363 1 136 <1 691 1618 787 928 2768 current 6 11 3 current	 history1 history1	 history2 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i	ASTM D5185m ASTM D5185m	limit/base >25 >50 >20 limit/base >3	363 1 136 <1 691 1618 787 928 2768 current 6 11 3 current 0.1	 history1 history1 	 history2 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	limit/base >25 >50 >20 limit/base >3 >20	363 1 136 <1 691 1618 787 928 2768 current 6 11 3 current 0.1 8.0	 history1 history1 history1	history2 history2 history2 history2 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	Imit/base >25 >50 >20 Imit/base >3 >20 >30	363 1 136 <1 691 1618 787 928 2768 current 6 11 3 current 0.1 8.0 22.1	 history1 history1 history1	history2 history2 history2	



35

30

10.0

(B/HOX Bu),

0.5 Base Number (r

0.0 May9/24

18 17 Abno 16 cSt (100°C) Bas

13 Abnormal

12 11 May9/24

OIL ANALYSIS REPORT

FT-IR (Direct Trend)	VISUAL		method	limit/base	current	history1	history2
0xidation		acal					
10 - WILLIAM NITATION	White Metal	scalar	*Visual	NONE	NONE		
5	Yellow Metal	scalar	*Visual	NONE	NONE		
0	Precipitate	scalar	*Visual	NONE	NONE		
5	Silt	scalar	*Visual	NONE	NONE		
0	Debris	scalar	*Visual	NONE	NONE		
5	Sand/Dirt	scalar	*Visual	NONE	NONE		
May9,24 May9,24	Appearance	scalar	*Visual	NORML	NORML		
e 2	Odor	scalar	*Visual	NORML	NORML		
Base Number	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water		*Visual		NEG		
0	FLUID PROPER		method	limit/base	current	history1	history2
0	Visc @ 100°C	cSt	ASTM D445	14.4	13.1		
0	GRAPHS						
	Ferrous Alloys						
May9/24	iron 8						
Ma	assesses nickel						
Viscosity @ 100°C	6						
8	4						
77 - Abnormal 6 -	2						
5 - Base	-	*****		*****			
4	2 ⁴ +10	******		24			
3 - Abnormal	May9/24			May9/24			
2	– Non-ferrous Meta	ls		_			
May9/24	¹⁰ T						
Ma	8 - copper						
	tin						
	6						
	4						
	2						
	0 1 + 12/6/e	******		ay9/24			
	May			May9			
	Viscosity @ 100°C	2			Base Numbe	r	
	18	9.0					
	17 Abnormal			8.	i i i i i i i i i i i i i i i i i i i		
	16- O.r			(6) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	0		
	(), 15 Base 3; 14			ш. ш. 5.	0 -		
	ن ې 14-			quinn quinn	0		
	13 - Abnormal			a 3. Ben 2.	0		
	12 -			1.			
	114			.0			24 +
	May9/2-			May9/24	May9/24		May9/24
	t, contact Customer Serv t are outside of the ISO 1	Recei Teste Diagn vice at 1-8	ved : 10 d : 11 losed : 11 00-237-1369 pe of accrea) Jun 2024 Jun 2024 Jun 2024 - W 9. <i>litation.</i>		Gl Contact: JORDA jordan.johns	FRESH FRUIT PO BOX 1689 JLFPORT, MS US 39502 N JOHNSTON ton@dole.com T: (228)867-2970

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