

OIL ANALYSIS REPORT

Sample Rating Trend



se/023



EASG101596

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

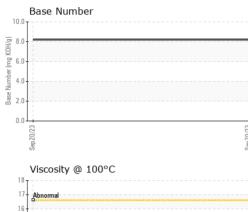
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0847146		
Sample Date		Client Info		20 Sep 2023		
Machine Age	hrs	Client Info		3428		
Oil Age	hrs	Client Info		1500		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel	N	WC Method	>5	<1.0		
Glycol		WC Method	20	NEG		
-		WO MELIOU		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	6		
Chromium	ppm	ASTM D5185m	>20	0		
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	4		
Tin	ppm	ASTM D5185m	>15	0		
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 335	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	335		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	335 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	335 0 115		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	335 0 115 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	335 0 115 <1 561		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	335 0 115 <1 561 1389	 	
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	335 0 115 <1 561 1389 715		
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	limit/base	335 0 115 <1 561 1389 715 890	 	
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	limit/base	335 0 115 <1 561 1389 715 890 2842		
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 method	limit/base	335 0 115 <1 561 1389 715 890 2842 current	 history1	 history2
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	limit/base	335 0 115 <1 561 1389 715 890 2842 current 4	 history1	 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	limit/base >25 >50	335 0 115 <1 561 1389 715 890 2842 <u>current</u> 4 1	 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	ASTM D5185m ASTM D5185m	limit/base >25 >50 >20	335 0 115 <1 561 1389 715 890 2842 current 4 1 <1 <1	 history1 	 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 ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >50 >20 limit/base	335 0 115 <1 561 1389 715 890 2842 <u>current</u> 4 1 <1 <1 <u>current</u>	 history1 history1	 history2 history2
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	limit/base >25 >50 >20 limit/base >3	335 0 115 <1 561 1389 715 890 2842 current 4 1 <1 <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	335 0 115 <1 561 1389 715 890 2842 current 4 1 <1 <1 current 0.1 6.3	 history1 history1 	 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 D7844 *ASTM D7844 *ASTM D7844	limit/base >25 >50 >20 limit/base >3 >20 >30 limit/base	335 0 115 <1 561 1389 715 890 2842 current 4 1 <1 <1 current 0.1 6.3 22.5 current	history1 history1 history1 history1 history1	 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	limit/base >25 >50 >20 limit/base >3 >20 >30	335 0 115 <1 561 1389 715 890 2842 current 4 1 <1 <1 <1 0.1 6.3 22.5	 history1 history1 history1	 history2 history2 history2



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OIL ANALYSIS REPORT



	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
23		scalar	*Visual	NORML	NORML		
San 201/73	Odor	scalar		NORML	NORML		
	Emulsified Water						
°C	Free Water	scalar	*Visual	>0.2	NEG		
		scalar	*Visual	11 11 11	NEG		
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	14.4	12.8		
	GRAPHS						
	Ferrous Alloys						
	10iron						
	s. chromium						
	o T						
	6-						
	E d						
	4						
	2-						
	0						
	Sep 20/23			Sep20/23			
	Sep			Sep			
	Non-ferrous Meta	als					
	10 copper 1						
	8 -						
	sessesses tin						
	6 -						
	Ш d						
	4						
	2						
	2						
	0		******				
	sep20/23			tep 20/23			
	Sep2			Sept			
	Viscosity @ 100°	С			Base Numbe		
	¹⁸ T			9.0			
	17- Abnormal			8.0			
	16			.			
				(B7.0 DHOX 6.0 Bu 5.0			
	(2-015 Base tg 14			Ĕ 5.0			
	tg 14-				-		
	13 - Abnormal			2 3.0 ase			
	12						
	11			1.0			
	3/23)/23		/23 -
	Sep 20/23			Sep 20/23	Sep 20/23		Sep 20/23
	w/				~/		0
		501 Madis	}	DOLE FRESH FRUIT			
Laboratory	: WearCheck USA -						
Sample No.	: WC0847146	Received		Sep 2023			PO BOX 1689
Sample No. Lab Number	: WC0847146 : <mark>05964464</mark>	Received Diagnos	ed : 29 S	Sep 2023		G	ULFPORT, MS
Sample No. Lab Number Unique Numbe	: WC0847146 : <mark>05964464</mark> er : 10671015	Received	ed : 29 S				ULFPORT, MS US 39502
Certificate 12367 Sample No. Lab Number Unique Number Test Package	: WC0847146 : 05964464 er : 10671015 e : FLEET	Received Diagnose Diagnost	ed : 29 s tician : Wes	Sep 2023 s Davis		Contact: JORDA	ULFPORT, MS US 39502 N JOHNSTON
Certificate 12367 To discuss this sample report	: WC0847146 : 05964464 er : 10671015 e : FLEET t, contact Customer Ser	Received Diagnose Diagnost vice at 1-8	ed : 29 \$ tician : Wes 800-237-1369	Sep 2023 s Davis 9.		Contact: JORDA	ULFPORT, MS US 39502 N JOHNSTON ston@dole.com
Certificate 12367 Sample No. Lab Number Unique Number Test Package	: WC0847146 : 05964464 er : 10671015 e : FLEET t, contact Customer Ser t are outside of the ISO	Received Diagnose Diagnose vice at 1-8 17025 sco	ed : 29 \$ iician : Wes 800-237-1369 ope of accred	Sep 2023 s Davis 9. litation.	ICCM 100-001	Contact: JORDA jordan.johns	ULFPORT, MS US 39502 N JOHNSTON

Contact/Location: JORDAN JOHNSTON - DOLGUL