

# **OIL ANALYSIS REPORT**



Machine Id

#### 2427 Component Diesel Engine Fluid CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

#### DIAGNOSIS

## Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

# Wear

Metal levels are typical for a new component breaking in.

# Contamination

Fuel content negligible. No other contaminants were detected in the oil.

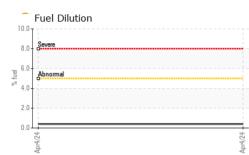
## Fluid Condition

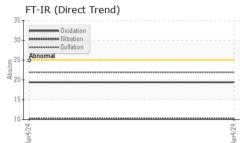
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0829096		
Sample Date		Client Info		04 Apr 2024		
Machine Age	mls	Client Info		34773		
Oil Age	mls	Client Info		34773		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	51		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	39		
Lead	ppm	ASTM D5185m	>40	4		
Copper	ppm	ASTM D5185m	>330	35		
Tin	ppm	ASTM D5185m	>15	3		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		40		
Barium	ppm	ASTM D5185m		7		
Molybdenum	ppm	ASTM D5185m		19		
Manganese	ppm	ASTM D5185m		5		
Magnesium	ppm	ASTM D5185m		657		
Calcium	ppm	ASTM D5185m		1378		
Phosphorus	ppm	ASTM D5185m	760	780		
Zinc	ppm	ASTM D5185m	800	856		
Sulfur	ppm	ASTM D5185m	3000	2843		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	43		
Sodium	ppm	ASTM D5185m		4		
Potassium	ppm	ASTM D5185m	>20	137		
Fuel	%	ASTM D3524	>5	0.4		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	10.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.4		
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.8		

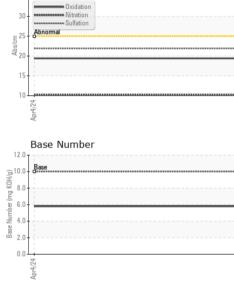


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	VISUAL		method	limit/base	e curi	rent history1	history
	White Metal	scalar	*Visual	NONE	NON		
	Yellow Metal	scalar	*Visual *Visual	NONE NONE	NONE		
	Precipitate Silt	scalar scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
/24	Appearance	scalar	*Visual	NORML	NORI		
Apr4/24	Odor	scalar	*Visual	NORML	NORI		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	TIES	method	limit/base	e curi	rent history1	history
-	Visc @ 100°C	cSt	ASTM D445	14.6	11.3		
	GRAPHS						
	Ferrous Alloys						
	60 iron 1						
Apr4/24	50 - ***********************************						
4	40-						
	툴.30 -						
	20 -						
	10						
	0						
	Apr4/24			Apr4/24			
	AF			Aŗ			
<	Non-ferrous Meta	ls					
C 11-11	35 copper						
	30 - management lead						
	25						
	20- 15-						
	<sup>-</sup> 15 -						
	10-						
	5						
	0						
	Apr4/24			Apr4/24			
VC		_		4			
VGIVTY	Viscosity @ 100°C			1	Base N	umber	
	17- Abnormal				Pres		
	16				0.0 - Base		*****
	ç <sup>15</sup> Base			Base Number (mg KOH/g)	8.0-		
	015 Base			er (m	6.0 -		
	경 <sub>13</sub> Abnormal			Numb	4.0		
	12 -			Base			
	11-				2.0		
	10			**	0.0		
				Apr4/24	Apr4/24		
	kpr4/2			<1	4		
	Apr4/24						
itory	: WearCheck USA - 50	)1 Madisc	on Ave., Cary		3	Ergon Trucki	ng Inc SAL
e No.	: WearCheck USA - 50 : WC0829096	Rece	ived :10	y, NC 27513 ) May 2024			Production D
atory e No. umber Number	: WearCheck USA - 50 : WC0829096 : <mark>06176611</mark>	Rece Teste	ived :10 ed :15	, NC 27513			<b>ng Inc SAL</b> Production D Sulphur, US 70



Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel ) Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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