

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **1675**

Component Diesel Engine

Fluid

CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

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.

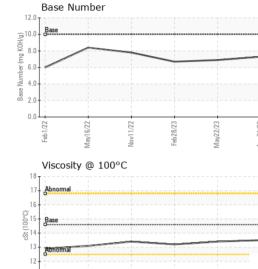
àAL)		Feb2022	May2022 Nov2022	Feb2023 May2023	Aug2023	
SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0085452	PCA0085437	PCA0085425
Sample Date		Client Info		21 Aug 2023	22 May 2023	28 Feb 2023
Machine Age	mls	Client Info		367818	343757	318535
Oil Age	mls	Client Info		343757	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	9	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	3	5
Lead	ppm	ASTM D5185m		<1	0	<1
Copper	ppm	ASTM D5185m		2	3	2
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m	210	0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		150	158	155
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		119	124	116
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		584	673	637
Calcium	ppm	ASTM D5185m		1427	1544	1448
Phosphorus		ASTM D5185m	760	631	651	650
Zinc	ppm	ASTM D5185m	800	772	815	777
Sulfur	ppm ppm	ASTM D5185m	3000	2372	2679	2863
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	15	20	6
Sodium	ppm	ASTM D5185m		1	3	2
Potassium	ppm	ASTM D5185m	>20	2	2	1
		method	limit/base	current	history1	history2
INFRA-RED	0/	*ASTM D7844	>3	0.3	0.3	0.3
INFRA-RED	%		- 0			
Soot %	% Ahs/cm	*ASTM D7624	>20	93	10.6	9/
Soot % Nitration	% Abs/cm Abs/.1mm	*ASTM D7624 *ASTM D7415	>20 >30	9.3 23.7	10.6 23.4	9.7 23.9
Soot % Nitration Sulfation	Abs/cm Abs/.1mm				23.4	23.9
INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation	Abs/cm Abs/.1mm	*ASTM D7415	>30	23.7		



Feb1/22

May16/22

OIL ANALYSIS REPORT



		VISUAL		method	limit/base	current	history1	history2	
		White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
		Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
		Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Feb28/23	May22/23 Aug21/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Fet	Mar		scalar	*Visual	NORML	NORML	NORML	NORML	
		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
		Free Water	scalar	*Visual		NEG	NEG	NEG	
		FLUID PROP		method	limit/base	current	history1	history2	
		Visc @ 100°C	cSt	ASTM D445	14.6	13.5	13.4	13.2	
		GRAPHS							
		Ferrous Alloys							
	23	iron							
Feb28/23	May22/23	15 - nickel							
	2								
		la 10							
		5-							
		2 2	23						
		Feb 1/22 May16/22	Nov11/22 Feb28/23	May22/23	Aug21/23				
		W		W	A				
		Non-ferrous Met	ais						
		copper							
		8 - tin							
		6-		1					
		шdd							
		4							
		2							
		WEDDER MERINAND THE REAL PROPERTY AND INC.	And and and and and and						
		5 5	22	3	53				
		Feb1/22 ay16/22	Nov11/22 Feb28/23	lay22/23	ug21/23				
		−	2 1	Ma	Au				
		¹⁸			12.0	Base Number			
		17- Abnormal			10.0	Base			
		16-			B/HOX 8.0				
		0 15 Base	I I 4	 	je station in the state of the				
		().015 Base ().001) t; 14		1 1 1	0.8 Mumber (mg KOH/g)				
		12			N 4.0				
		Abnormal			2.0				
		11			0.0				
		Feb 1/22	1/22	2/23 -			1/22 -	2/23 -	
		Feb 1/22 May 1 6/22	Nov11/22 Feb28/23	May22/23	Aug21/23	Feb 1/22 May 16/22	Nov11/22 Feb28/23	May22/23	
	Laboratory	: WearCheck USA - : PCA0085452	501 Madia Received		ry, NC 27513 Aug 2023	E E	rgon Trucking		
4				11337 S	State Route 80 Magnolia, O				
NAB	Sample No.		Diagnos	3					
	Sample No. Lab Number	: 05938742							
THE LEGAT	Sample No. Lab Number Unique Number	: <mark>05938742</mark> · : 10629354					Conta	US 4464	
discuss th	Sample No. Lab Number Unique Number Test Package is sample report,	: <mark>05938742</mark> · : 10629354	Diagnost	t ician : We	s Davis 9.			US 4464 act: Eddy Smi ith@ergon.co	