

Machine Id CARRIER 45922 - CARRIER Component Diesel Engine

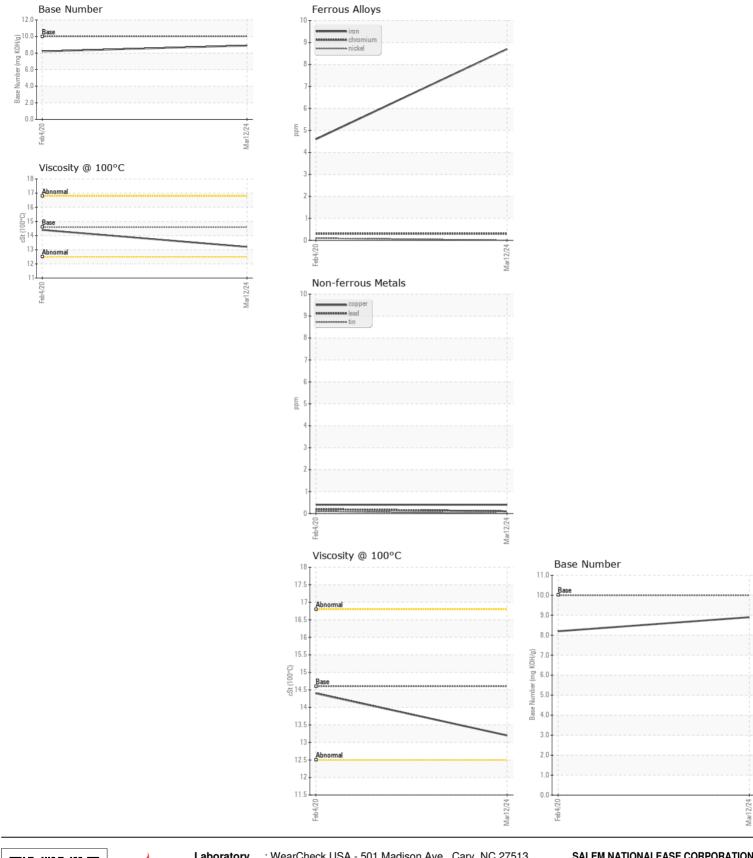
CHEVRON DELO 400 SDE SAE 15W40 (--- QTS)

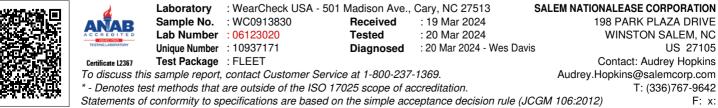
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0913830	WC0345066	
	Sample Date		Client Info		12 Mar 2024	04 Feb 2020	
	Machine Age	hrs	Client Info		8650	2648	
	Oil Age	hrs	Client Info		403	0	
	Filter Age	hrs	Client Info		403	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	9	5	
	Chromium	ppm	ASTM D5185m	>10	<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>5	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>5	0	0	
	Aluminum	ppm	ASTM D5185m	>20	4	1	
	Lead	ppm	ASTM D5185m	>40	<1	<1	
	Copper	ppm	ASTM D5185m	>300	<1	<1	
	Tin	ppm	ASTM D5185m	>10	0	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	6	2	
	Potassium	ppm	ASTM D5185m		0	1	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.6	0.5	
	Nitration	Abs/cm	*ASTM D7624	>20	6.6	6.4	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	18	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	1	
	Boron	ppm	ASTM D5185m		294	51	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		<1	0	
	Molybdenum	ppm	ASTM D5185m		123	20	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		736	135	
	Calcium	ppm	ASTM D5185m		1695	2167	
	Phosphorus	ppm	ASTM D5185m	760	863	933	
	Zinc	ppm	ASTM D5185m		1046	1006	
	Sulfur	ppm	ASTM D5185m	3000	3464	3671	
	Oxidation	Abs/.1mm	*ASTM D7414		15.3	12	
	Base Number (BN)		ASTM D2896		8.9	8.2	
	Vier C 10000	- C/		110	10.0	44.4	

Visc @ 100°C cSt ASTM D445 14.6

14.4

13.2





Contact/Location: Audrey Hopkins - SALWIN