

Machine Id 857-3857

Component Diesel Engine Fluid

CHEVRON DELO 400 SAE 10W30 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		RPL0019243	RPL0003569	
	Sample Date		Client Info		16 Apr 2024	14 Jul 2022	
	Machine Age	mls	Client Info		172856	85778	
	Oil Age	mls	Client Info		0	28893	
	Filter Age	mls	Client Info		0	28893	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	77	▲ 118	
WEAT	Chromium	ppm	ASTM D5185m		3	4	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	1	
	Titanium	ppm	ASTM D5185m	~7	<1	<1	
	Silver		ASTM D5185m	.2	0	<1	
	Aluminum	ppm	ASTM D5185m		19	208	
		ppm			-		
	Lead	ppm	ASTM D5185m ASTM D5185m		<1 2	<1 4	
	Copper Tin	ppm	ASTM D5185m			4	
	Vanadium	ppm	ASTM D5185m	>10	0		
	White Metal	ppm		NONE	-	<1	
		scalar	*Visual		NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	13	18	
	Potassium	ppm	ASTM D5185m	>20	28	493	
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	1	1.1	
	Nitration	Abs/cm	*ASTM D7624	>20	16.6	14.7	
	Sulfation	Abs/.1mm	*ASTM D7415		33.6	30.2	
	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		*Visual	>0.2	NEG	NEG	
		ooului				I LLCI	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4	8	
	Boron	ppm	ASTM D5185m		30	16	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		<1	0	
	Molybdenum	ppm	ASTM D5185m		7	18	
	Manganese	ppm	ASTM D5185m		2	2	
	Magnesium	ppm	ASTM D5185m		823	698	
	Calcium	ppm	ASTM D5185m		1637	1450	
	Phosphorus	ppm	ASTM D5185m	1260	822	708	
	Zinc	ppm	ASTM D5185m	1400	937	882	
	Sulfur	ppm	ASTM D5185m		3538	3277	
	Oxidation		*ASTM D7414	>25	35.7	25.7	
	D N (51)	1/01/1		10.1		0.0	

4.6

12.7

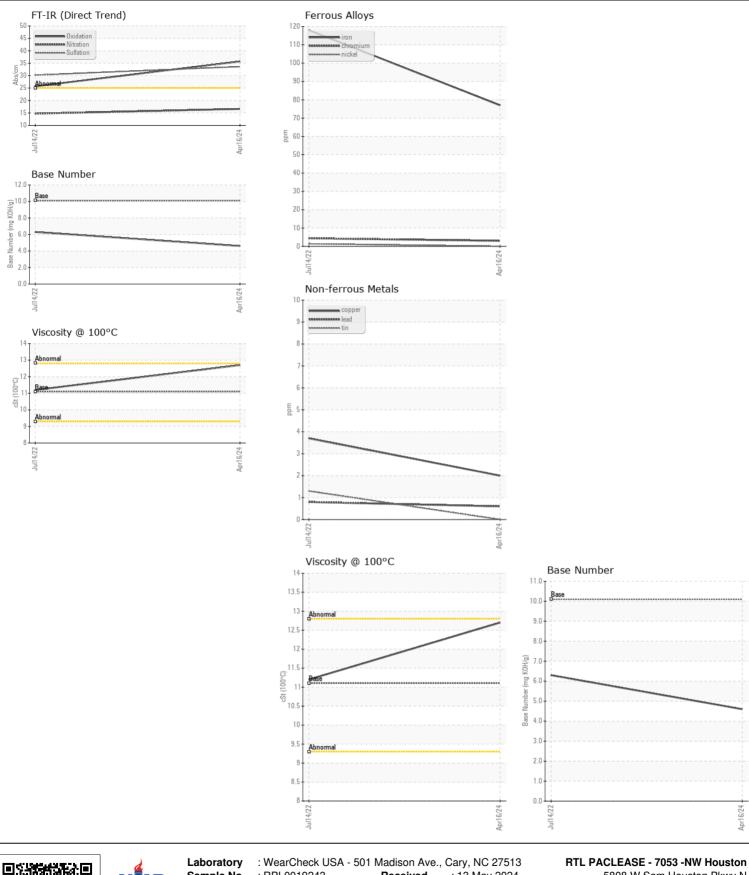
6.3

11.2

Base Number (BN) mg KOH/g ASTM D2896 10.1

ASTM D445 11.1

Visc @ 100°C cSt



Sample No. Received 5808 W Sam Houston Pkwy N : RPL0019243 : 13 May 2024 Lab Number : 06176950 Tested Houston, TX : 14 May 2024 : 14 May 2024 - Don Baldridge Unique Number : 11023003 Diagnosed US 77041 Test Package : FLEET Contact: Danial Bothmann Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. BothmannD@RushEnterprises.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (832)942-5804 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: [Joe Neeley] - Danial Bothmann - PAC7053 Page 2 of 2