

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ATTENTION

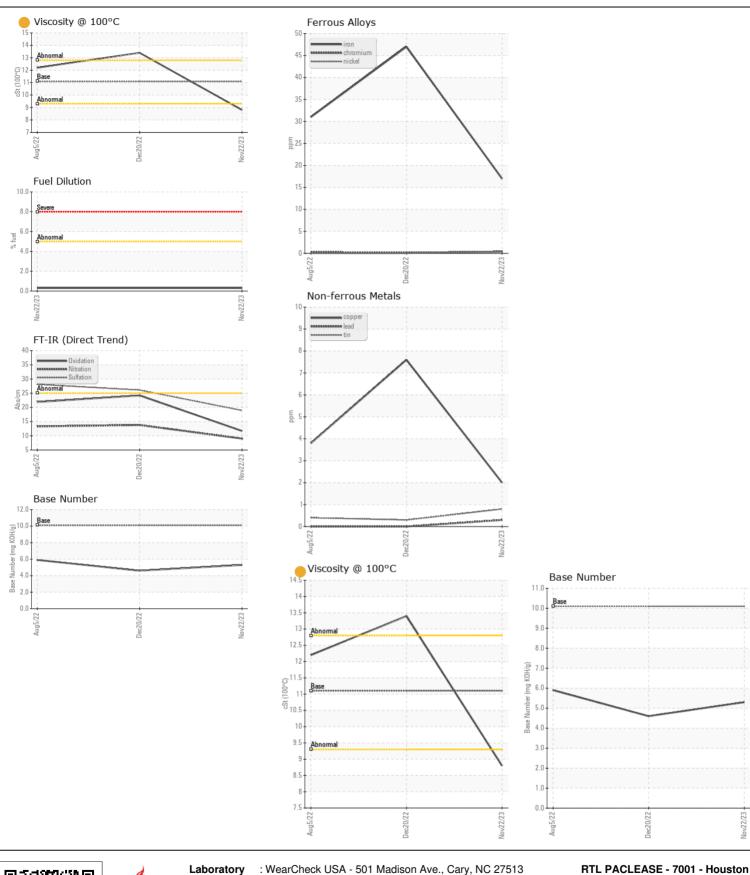
Machine Id

857-4750

Component
Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		RPL0014548	RPL0005235	RPL000522
	Sample Date		Client Info		22 Nov 2023	20 Dec 2022	05 Aug 202
	Machine Age	mls	Client Info		199231	129062	96784
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ATTENTION	NORMAL	NORMAL
VEAR	Iron	ppm	ASTM D5185m	>100	17	47	31
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>4	<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	5	12	11
	Lead	ppm	ASTM D5185m	>40	<1	0	0
	Copper	ppm	ASTM D5185m	>330	2	8	4
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	10	7	7
CONTAMINATION	Potassium	ppm	ASTM D5185m		10	41	43
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3	<1.0	<1.0
	Water	,,,	WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.6	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	9.0	13.8	13.3
	Sulfation	Abs/.1mm	*ASTM D7415		18.9	26.1	28.1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	nnm	ASTM D5185m		a	2	2
LOID CONDITION	Boron	ppm	ASTM D5185m		<1 20	26	12
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		2	0	0
	Molybdenum	ppm	ASTM D5185m		204	36	10
	Manganese		ASTM D5185m		<1	1	<1
	Magnesium	ppm	ASTM D5185m		491	711	707
	Calcium	ppm	ASTM D5185m		1310	1441	1367
	Phosphorus	ppm	ASTM D5185m	1260	664	660	731
	Zinc	ppm	ASTM D5185m		781	815	810
	Sulfur	ppm	ASTM D5185m	1700	2306	2559	3439
	Oxidation	Abs/.1mm	*ASTM D3163111	>25	11.7	24.2	21.9
	Base Number (BN)				5.3	4.6	5.9
							0.0





Certificate L2367

Report Id: PAC7001 [WUSCAR] 06149796 (Generated: 04/22/2024 11:32:13) Rev: 1

Laboratory Sample No.

: RPL0014548 Lab Number : 06149796

Unique Number : 10979874

Received : 16 Apr 2024 **Tested** Diagnosed

: 22 Apr 2024

: 22 Apr 2024 - Jonathan Hester Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

Houston, TX US 77026 Contact: RODNEY BRIGGS briggsr@rushenterprises.com T:

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)

Contact/Location: RODNEY BRIGGS - PAC7001

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