



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
857-4895
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 SAE 10W30 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0014148	RPL0010419	RPL0005554
Sample Date		Client Info		24 Jan 2024	11 May 2023	20 Jan 2023
Machine Age	hrs	Client Info		1973	19081	14045
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 115	63	41
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>4	1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	121	76	52
Lead	ppm	ASTM D5185m	>40	1	0	<1
Copper	ppm	ASTM D5185m	>330	10	12	10
Tin	ppm	ASTM D5185m	>15	2	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

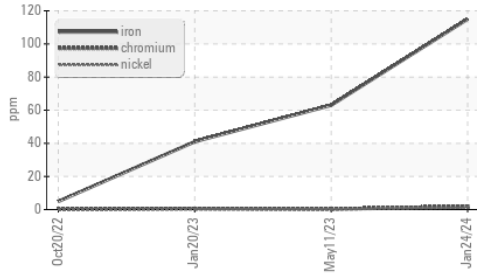
Silicon	ppm	ASTM D5185m	>25	23	19	12
Potassium	ppm	ASTM D5185m	>20	276	274	147
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	11.0	10.1	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	22.6	19.8
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

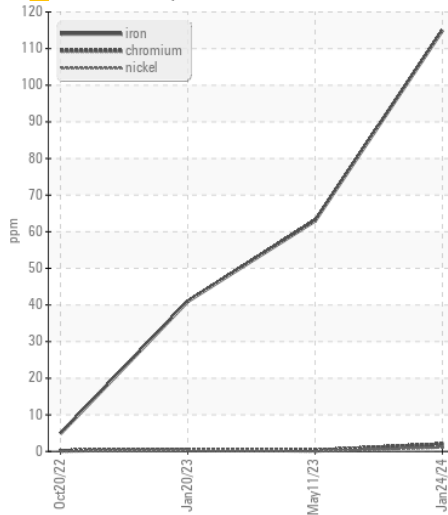
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	6	2
Boron	ppm	ASTM D5185m		38	38	47
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		16	6	4
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m		1147	653	685
Calcium	ppm	ASTM D5185m		2310	1322	1288
Phosphorus	ppm	ASTM D5185m	1260	1178	636	649
Zinc	ppm	ASTM D5185m	1400	1485	737	753
Sulfur	ppm	ASTM D5185m		4786	3105	3400
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	17.2	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	5.0	5.7	6.4
Visc @ 100°C	cSt	ASTM D445	11.1	11.9	11.7	11.5

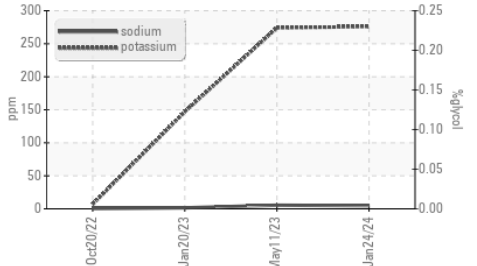
▲ Ferrous Alloys



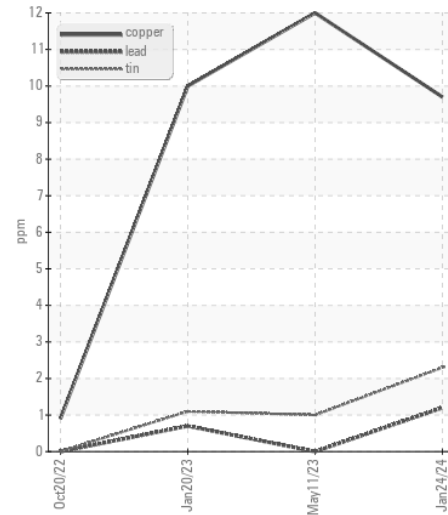
▲ Ferrous Alloys



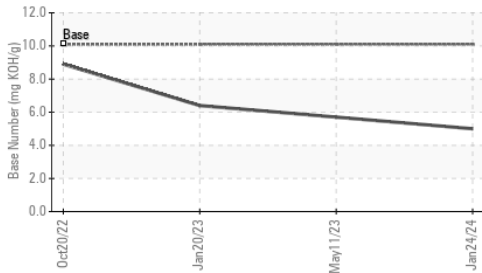
Glycol Contamination



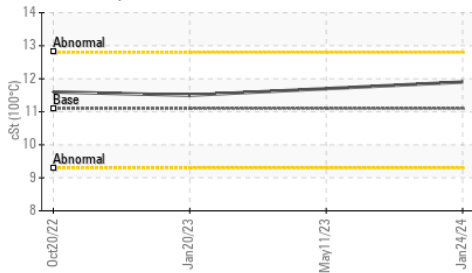
Non-ferrous Metals



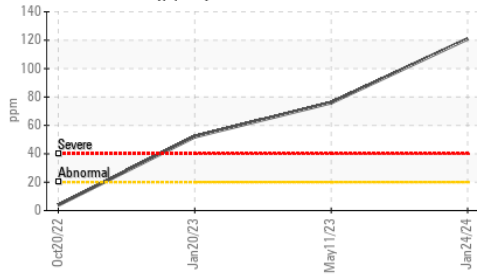
Base Number



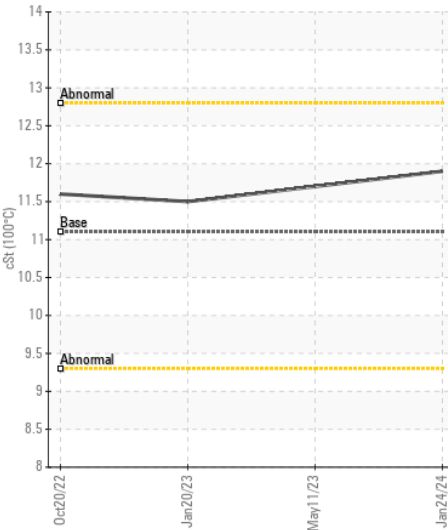
Viscosity @ 100°C



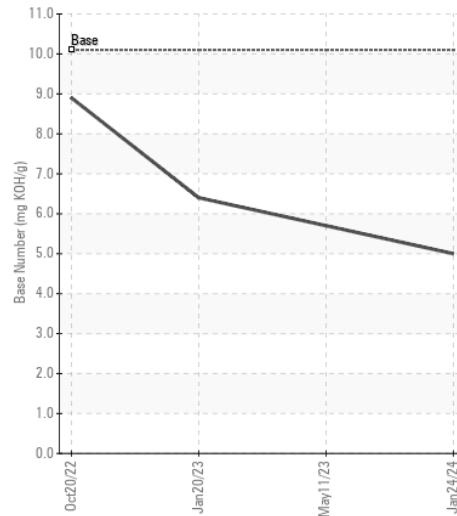
Aluminum (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : RPL0014148
 Lab Number : 06085307
 Unique Number : 10872752
 Test Package : FLEET

RTL PACLEASE - 7001 - Houston
 6300 N. Loop East
 Houston, TX
 US 77026
 Contact: RODNEY BRIGGS
 briggs@rushenterprises.com

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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