MOB II

TULCO OILS 005 - Arlington Division

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
LONGVIEW
Machine Id
FORD E41509
Component
Diesel Engine
Fluid
TULCO LUBSOIL CK-4 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

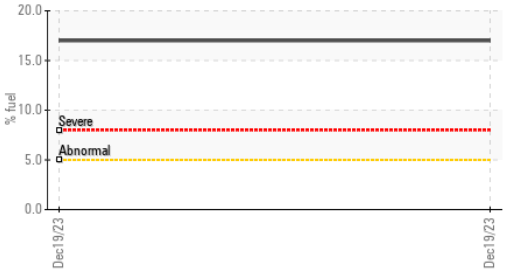
There is a high amount of fuel present in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

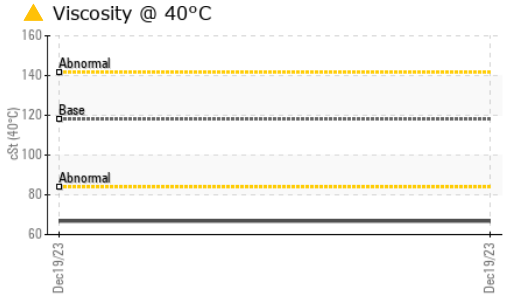
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO50000832	---	---
Sample Date		Client Info		19 Dec 2023	---	---
Machine Age	hrs	Client Info		2717	---	---
Oil Age	hrs	Client Info		1336	---	---
Filter Age	hrs	Client Info		1336	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	58	---	---
Chromium	ppm	ASTM D5185m	>20	4	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	3	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	8	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel	%	ASTM D3524	>5	⬢ 17.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624	>20	14.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m		31	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m	65	63	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m	1060	25	---	---
Calcium	ppm	ASTM D5185m	1140	1768	---	---
Phosphorus	ppm	ASTM D5185m	1170	821	---	---
Zinc	ppm	ASTM D5185m	1230	1005	---	---
Sulfur	ppm	ASTM D5185m	3130	4065	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	35.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.8	6.17	---	---
Visc @ 40°C	cSt	ASTM D445	118	▲ 66.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.9	▲ 10.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270	143	152	---	---

Fuel Dilution

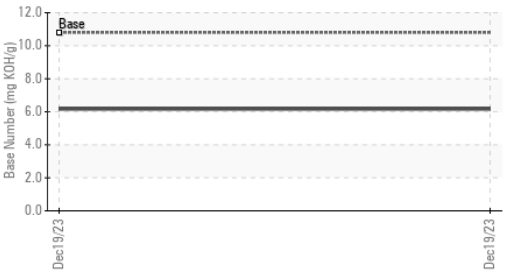


Viscosity @ 100°C

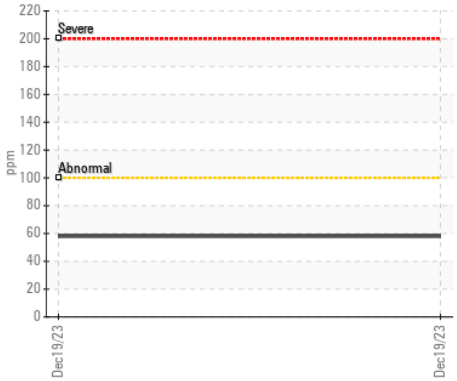
Viscosity @ 40°C



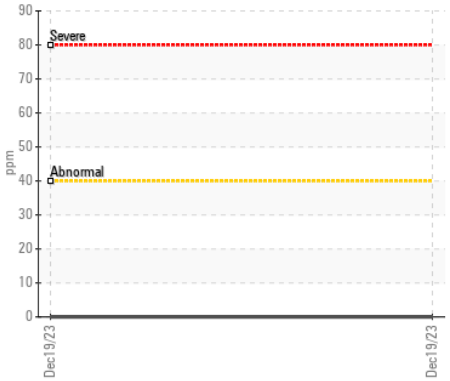
Base Number



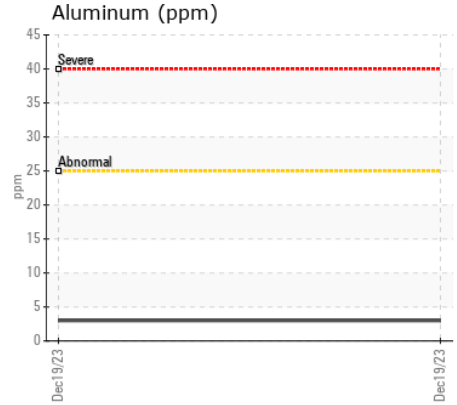
Iron (ppm)



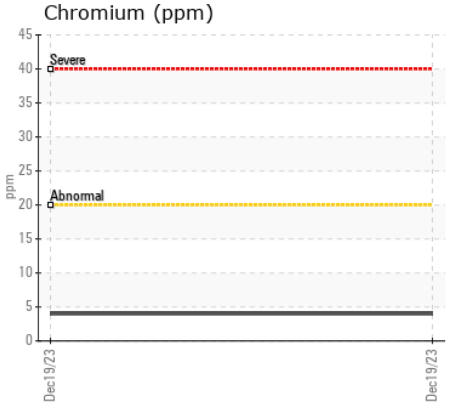
Lead (ppm)



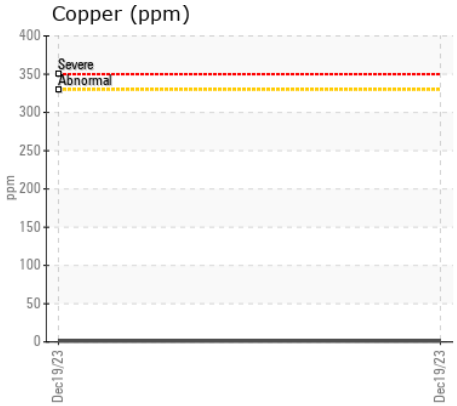
Aluminum (ppm)



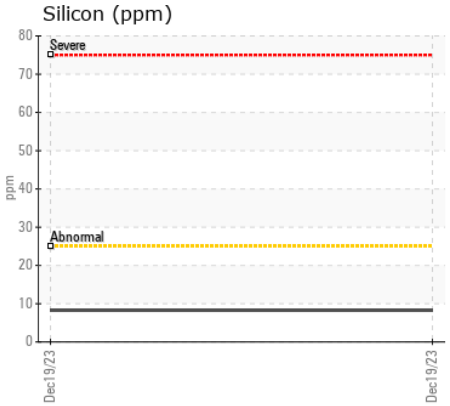
Chromium (ppm)



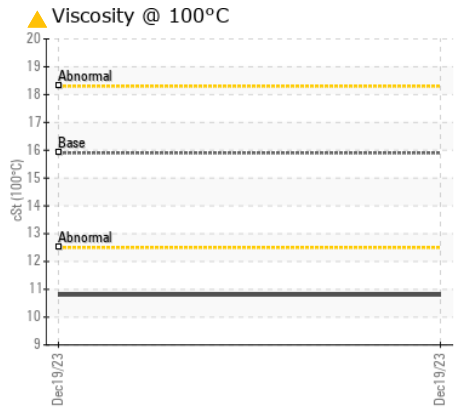
Copper (ppm)



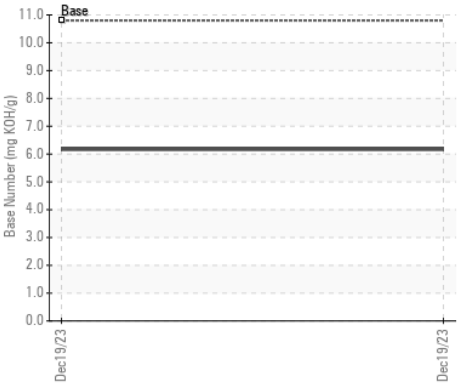
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000832 **Recieved** : 21 Dec 2023
Lab Number : 06042284 **Diagnosed** : 28 Dec 2023
Unique Number : 10802892 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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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