TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
FORD 1FTFW1EG8GKD68154
Component
Gasoline Engine
Fluid
TRC PRO-SPEC MULTI VISC 5W30 (6 LTR)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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

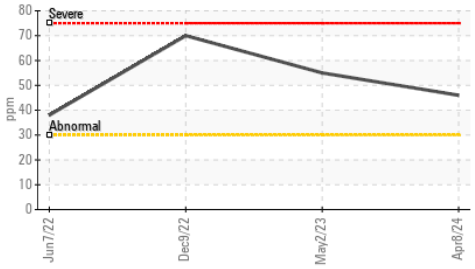
There is a moderate concentration of dirt present in the oil.

FLUID CONDITION

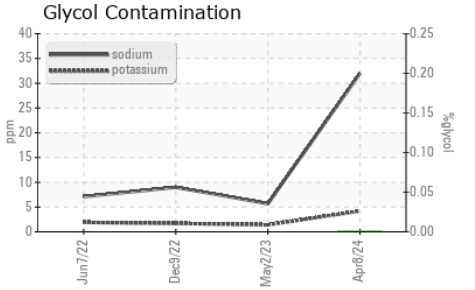
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**TR02629203**	TR02562192	TR02532538
Sample Date		Client Info		**08 Apr 2024**	02 May 2023	09 Dec 2022
Machine Age	hrs	Client Info		**8103**	7236	6925
Oil Age	hrs	Client Info		**300**	310	369
Filter Age	hrs	Client Info		**300**	310	369
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>150	**121**	27	34
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	**3**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>40	**4**	4	5
Lead	ppm	ASTM D5185(m)	>50	**<1**	0	<1
Copper	ppm	ASTM D5185(m)	>155	**11**	2	3
Tin	ppm	ASTM D5185(m)	>10	**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	<1	<1
Silicon	ppm	ASTM D5185(m)	>30	▲ **46**	▲ 55	▲ 70
Potassium	ppm	ASTM D5185(m)	>20	**4**	1	2
Fuel		WC Method	>4.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol	%	ASTM D7922*		**0.0**	NEG	NEG
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**13.4**	13.4	15.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**27.7**	26.0	30.5
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>400	**32**	6	9
Boron	ppm	ASTM D5185(m)		**26**	39	25
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**63**	64	65
Manganese	ppm	ASTM D5185(m)		**2**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**467**	451	458
Calcium	ppm	ASTM D5185(m)	4200	**1144**	1146	1183
Phosphorus	ppm	ASTM D5185(m)	800	**613**	640	634
Zinc	ppm	ASTM D5185(m)	800	**677**	638	673
Sulfur	ppm	ASTM D5185(m)		**2674**	2175	2149
Oxidation	Abs/.1mm	ASTM D7414*	>25	**21.9**	22.8	28.6
Base Number (BN)	mg KOH/g	ASTM D2896*	15	**3.76**	3.10	2.03
Visc @ 100°C	cSt	ASTM D7279(m)	9.98	**9.5**	8.8	8.9

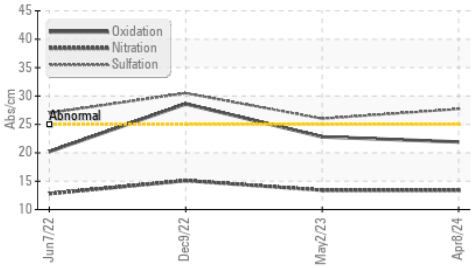
Silicon (ppm)



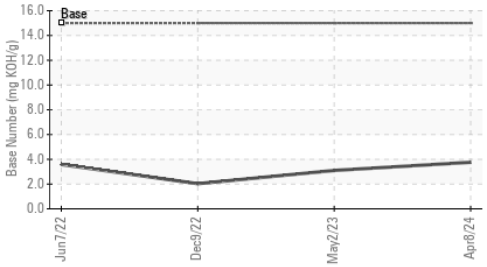
Glycol Contamination



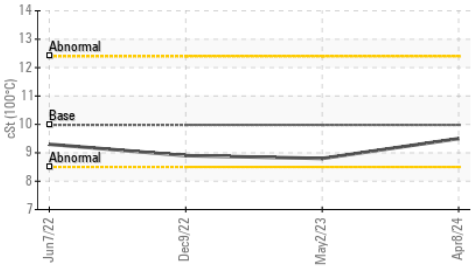
FT-IR (Direct Trend)



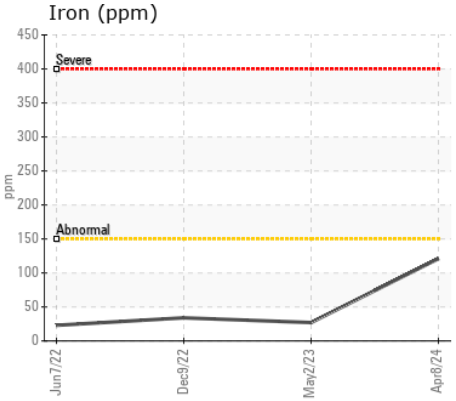
Base Number



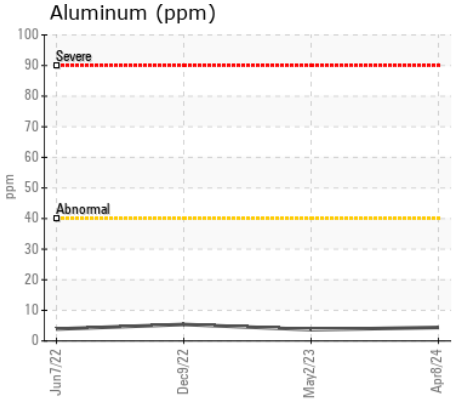
Viscosity @ 100°C



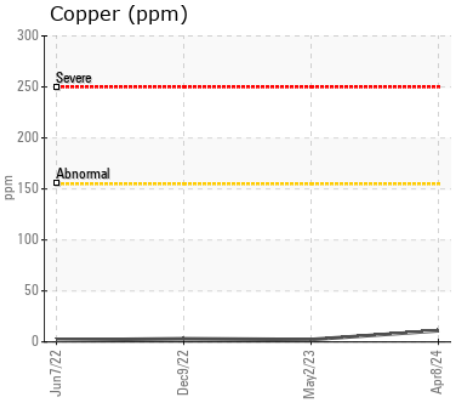
Iron (ppm)



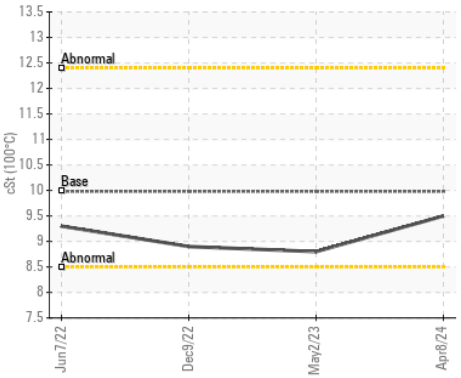
Aluminum (ppm)



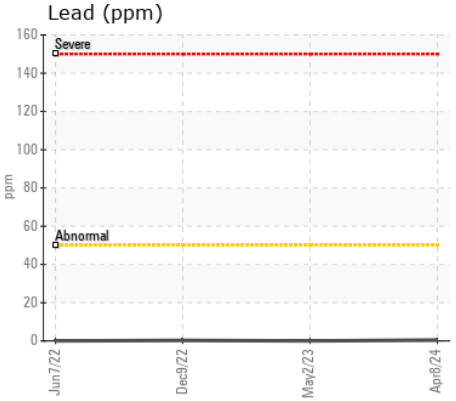
Copper (ppm)



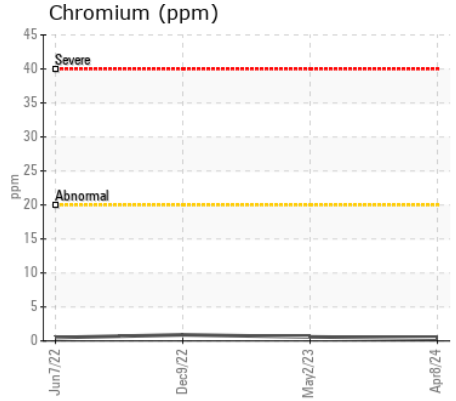
Viscosity @ 100°C



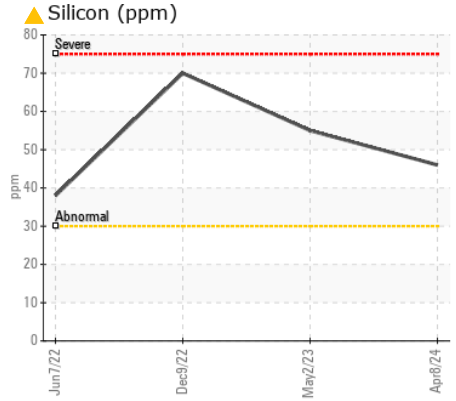
Lead (ppm)



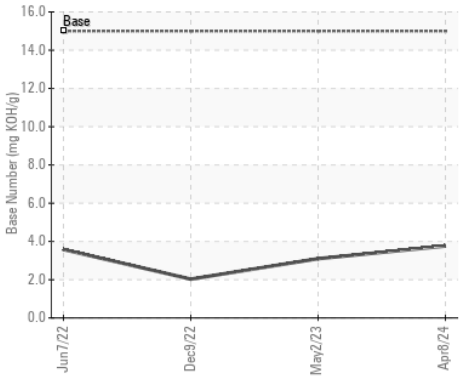
Chromium (ppm)



Silicon (ppm)



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02629203 **Received** : 16 Apr 2024
Lab Number : 02629203 **Tested** : 18 Apr 2024
Unique Number : 5762335 **Diagnosed** : 18 Apr 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol)

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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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