



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

2H28

Machine Id

FORD F-250 PTK9884

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ARI0007669	ARI0007584	ARI0007587
Sample Date		Client Info		30 May 2024	12 Mar 2024	27 Nov 2023
Machine Age	mls	Client Info		202558	14783	186487
Oil Age	mls	Client Info		8361	14783	0
Filter Age	mls	Client Info		8361	14783	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	12	12
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	3
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	12	14	14
Tin	ppm	ASTM D5185m	>15	2	<1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

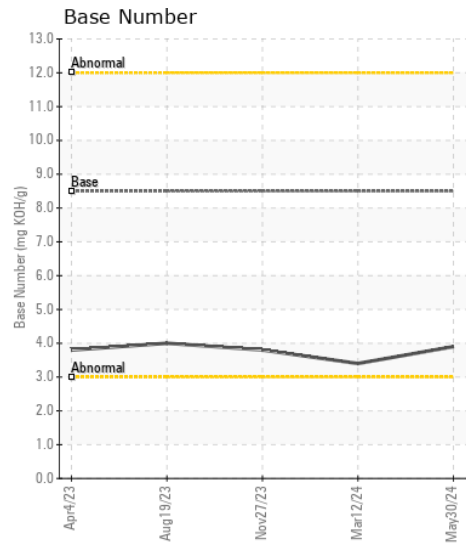
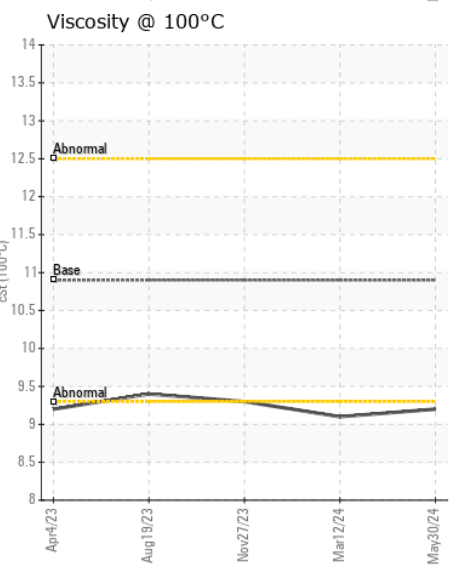
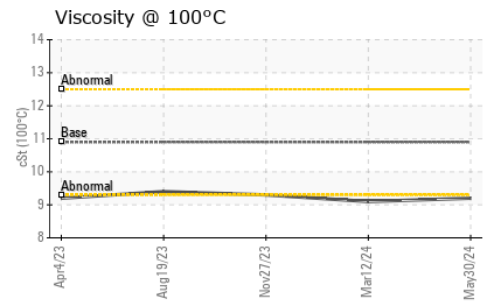
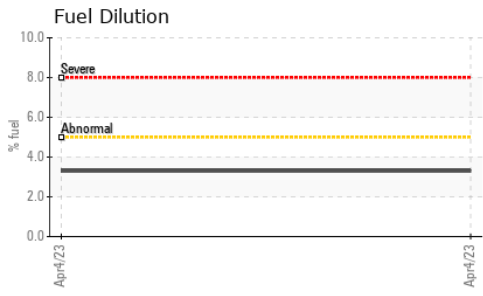
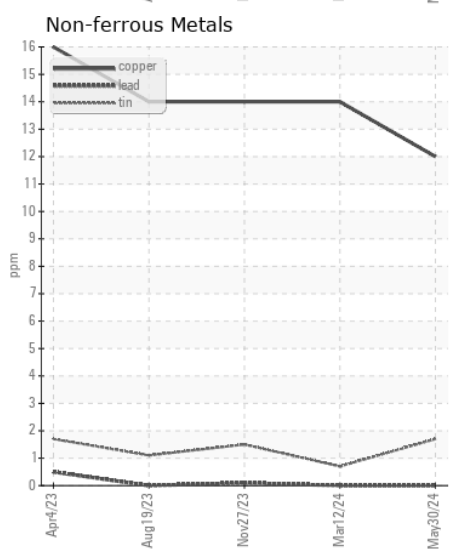
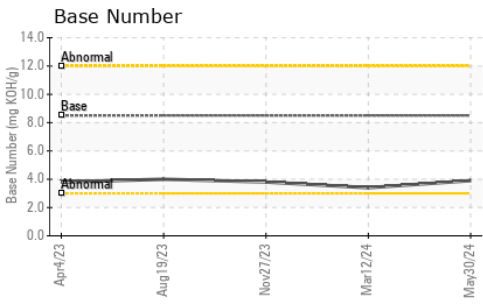
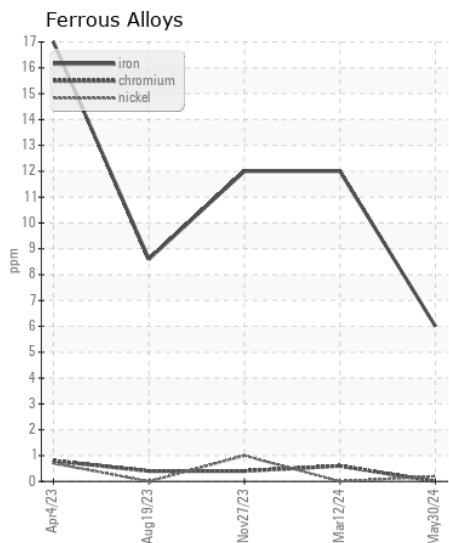
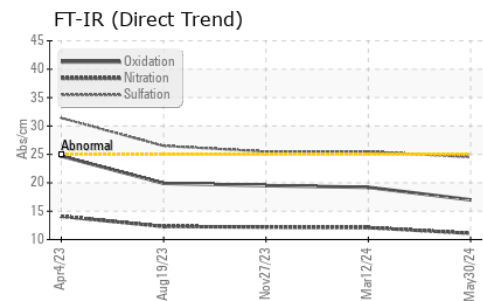
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	12	13	11
Potassium	ppm	ASTM D5185m	>20	4	0	<1
Fuel	%	ASTM D3524	>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	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.1	12.1	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5	25.5	25.5
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		4	3	6
Boron	ppm	ASTM D5185m	250	24	16	12
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	72	122	45
Manganese	ppm	ASTM D5185m		1	1	2
Magnesium	ppm	ASTM D5185m	450	521	425	374
Calcium	ppm	ASTM D5185m	3000	940	1142	1060
Phosphorus	ppm	ASTM D5185m	1150	687	592	574
Zinc	ppm	ASTM D5185m	1350	745	694	681
Sulfur	ppm	ASTM D5185m	4250	3038	2349	2050
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	19.2	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.9	3.4	3.8
Visc @ 100°C	cSt	ASTM D445	10.9	9.2	9.1	9.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ARI0007669 **Received** : 18 Jun 2024
Lab Number : 06214113 **Tested** : 20 Jun 2024
Unique Number : 11086977 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, TBN)

INSITUFORM TECHNOLOGIES, INC
 12820 PENNRIDGE DRIVE
 BRIDGETON, MO
 US 63044
 Contact: RYAN MAINARD
 RMAINARD@INSITUFORM.COM
 T: (816)590-9477
 F:

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)