



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CASE IH STEIGER 535 29F117264

Component
Diesel Engine

Fluid
TRC PRO-SPEC IV SYNTHETIC BLEND 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05966534	TR05662440	TR05656908
Sample Date		Client Info		20 Sep 2023	01 Oct 2022	22 Sep 2022
Machine Age	hrs	Client Info		9942	89145	8817
Oil Age	hrs	Client Info		435	398	300
Filter Age	hrs	Client Info		435	398	300
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	53	50	34
Chromium	ppm	ASTM D5185m	>20	1	2	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	3	2
Lead	ppm	ASTM D5185m	>40	16	17	7
Copper	ppm	ASTM D5185m	>330	1	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

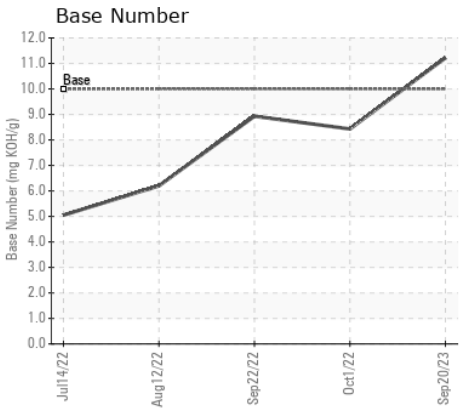
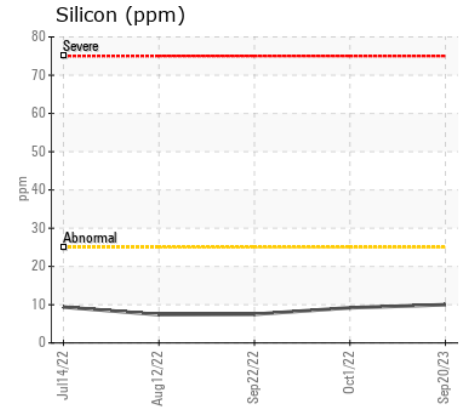
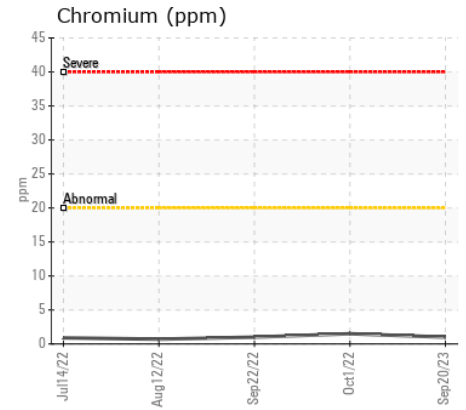
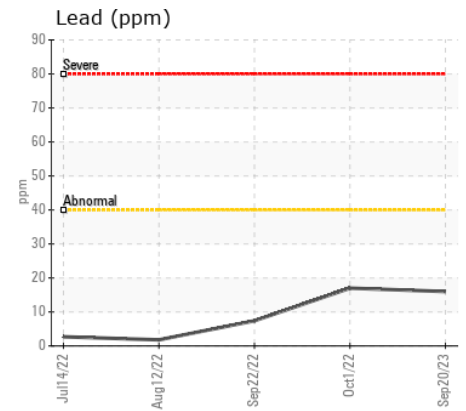
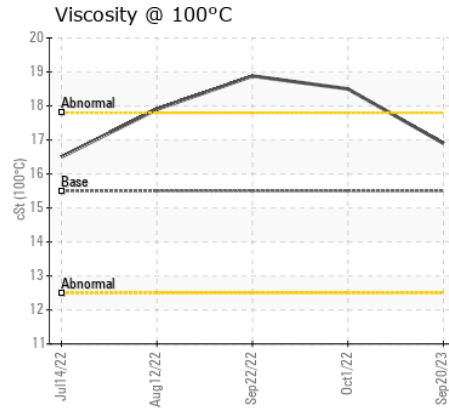
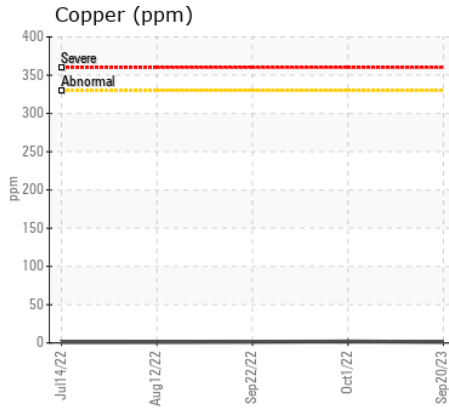
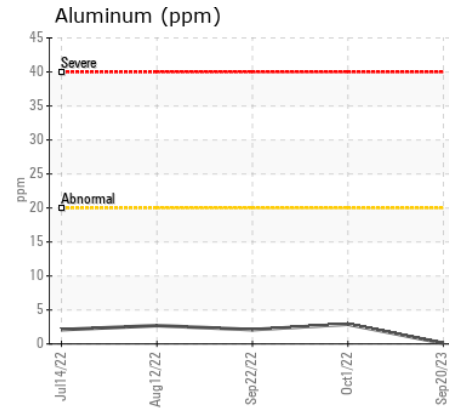
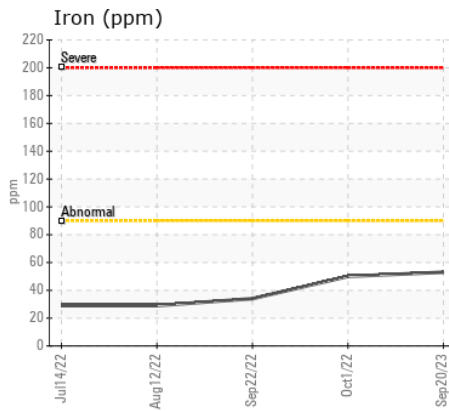
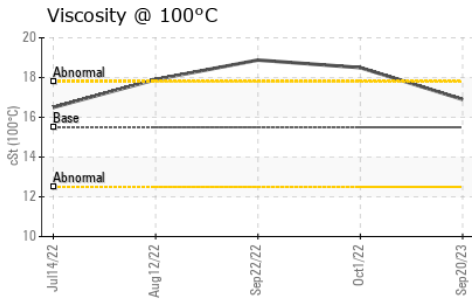
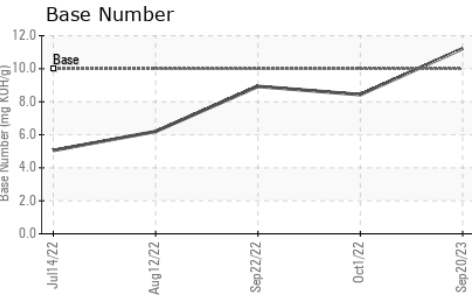
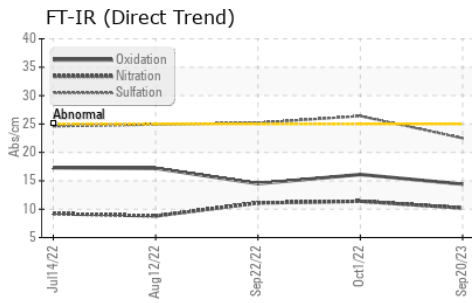
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	9	8
Potassium	ppm	ASTM D5185m	>20	1	2	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	1.3	1.8	1.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	11.4	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	26.4	25.2
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		<1	5	<1
Boron	ppm	ASTM D5185m		47	59	44
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	22	17
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		59	91	77
Calcium	ppm	ASTM D5185m	2300	3440	3489	3535
Phosphorus	ppm	ASTM D5185m		934	920	892
Zinc	ppm	ASTM D5185m	1200	1195	1115	1107
Sulfur	ppm	ASTM D5185m		3881	4133	4444
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	16.1	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	11.22	8.43	8.93
Visc @ 100°C	cSt	ASTM D445	15.5	16.9	▲ 18.5	▲ 18.88



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05966534
Lab Number : 05966534
Unique Number : 10673085
Test Package : MOB 2

Received : 02 Oct 2023
Tested : 03 Oct 2023
Diagnosed : 03 Oct 2023 - Sean Felton

LARRY SCHMIDT
 8703 HIGHWAY 61
 ALLIGATOR, MS
 US 38720-9700

Contact: LARRY SCHMIDT
 LARRYWSCHMIDT86@YAHOO.COM

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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F: