



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CASE IH 550 QT 138818

Component
Diesel Engine

Fluid
TRC PRO-SPEC IV SYNTHETIC BLEND 15W40 (11 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06228140	TR06045689	TR05388999
Sample Date		Client Info		30 Jan 2024	16 Feb 2023	03 Mar 2021
Machine Age	hrs	Client Info		2800	2559	2057
Oil Age	hrs	Client Info		250	280	267
Filter Age	hrs	Client Info		250	280	267
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	10	11
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	2
Copper	ppm	ASTM D5185m	>330	4	4	6
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

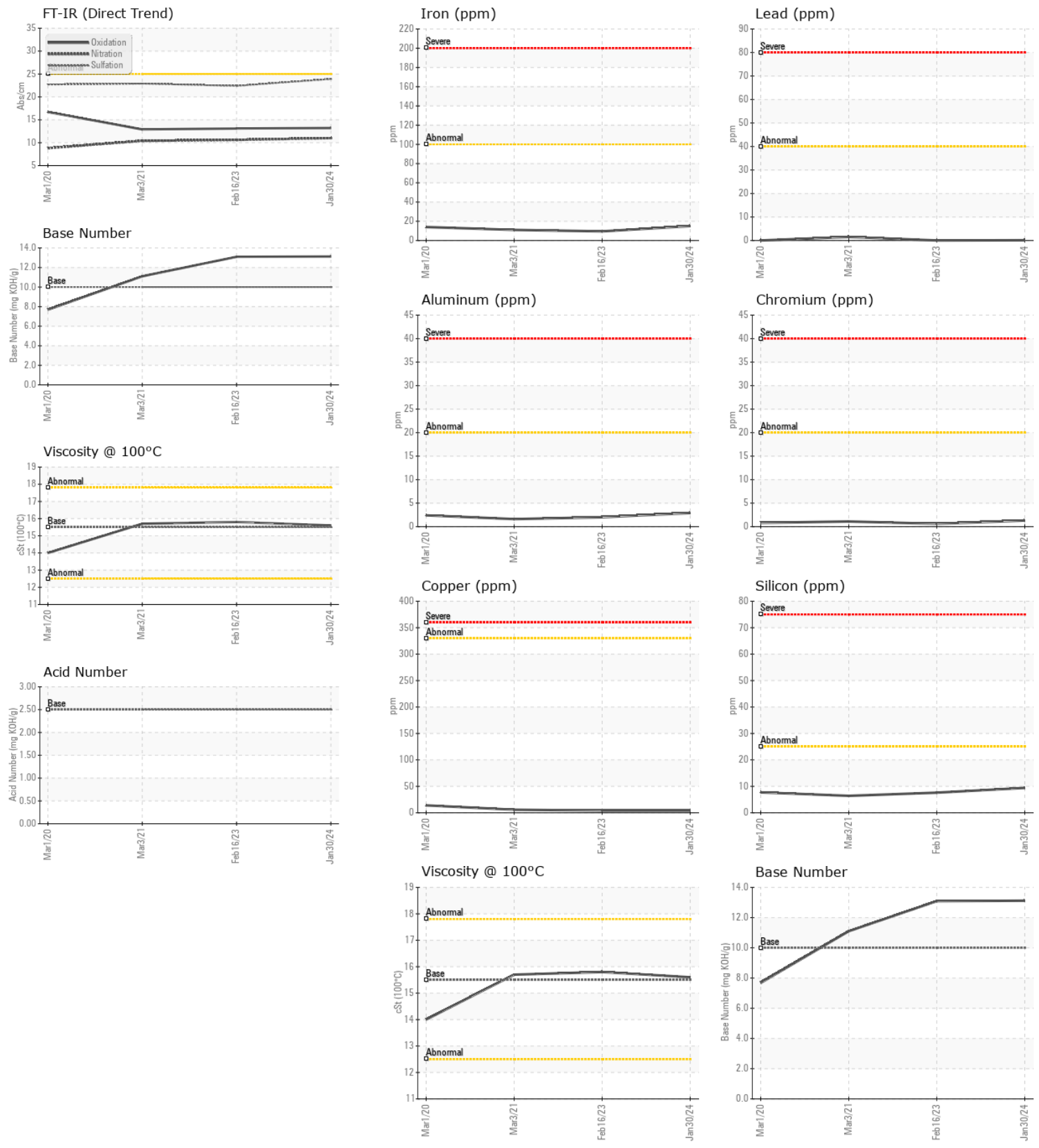
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	8	6
Potassium	ppm	ASTM D5185m	>20	3	0	2
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	0.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	11.0	10.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	22.4	22.9
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	3	4
Boron	ppm	ASTM D5185m		<1	2	27
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		4	21	13
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		22	23	70
Calcium	ppm	ASTM D5185m	2300	5531	4474	3916
Phosphorus	ppm	ASTM D5185m		1005	946	795
Zinc	ppm	ASTM D5185m	1200	1235	1093	1058
Sulfur	ppm	ASTM D5185m		4542	3839	2948
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	13.1	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	13.12	13.09	11.1
Visc @ 100°C	cSt	ASTM D445	15.5	15.6	15.8	15.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06228140 **Received** : 03 Jul 2024
Lab Number : 06228140 **Tested** : 08 Jul 2024
Unique Number : 11111633 **Diagnosed** : 08 Jul 2024 - Angela Borella
Test Package : MOB 2 (Additional Tests: TAN Man)

ZACHRY FARMS
 15231 COUNTY FARM RD
 CARLYLE, IL
 US 62231
 Contact: CHARLES FLATT

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)

T:
F: