



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**CASE IH 600 QT 130789**  
 Component  
**Diesel Engine**  
 Fluid  
**TRC PRO-SPEC IV SYNTHETIC BLEND 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06228164	TR06045699	TR05776229
Sample Date		Client Info		05 Mar 2024	27 Feb 2023	11 Oct 2022
Machine Age	hrs	Client Info		4900	4688	4500
Oil Age	hrs	Client Info		220	315	0
Filter Age	hrs	Client Info		220	315	0
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	12	4	8
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	1
Copper	ppm	ASTM D5185m	>330	2	<1	2
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**

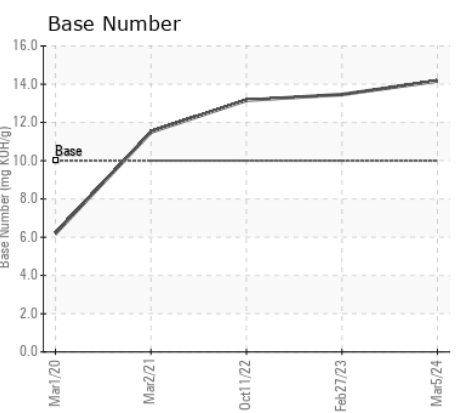
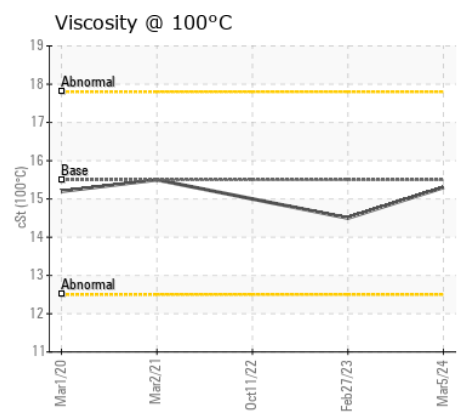
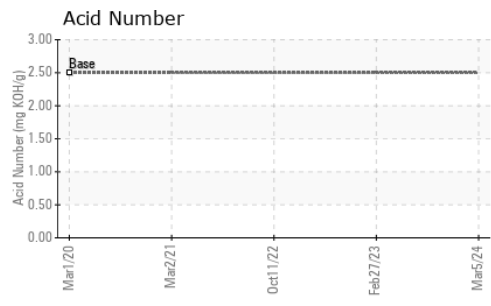
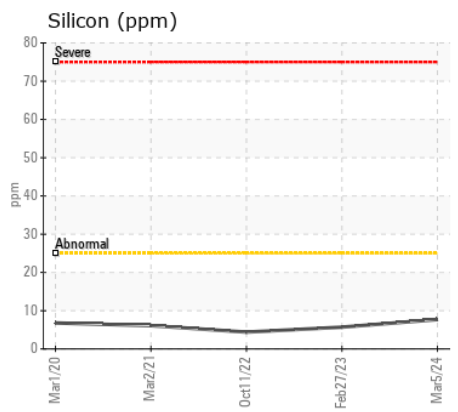
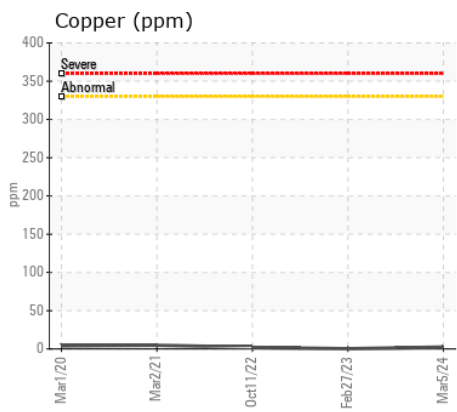
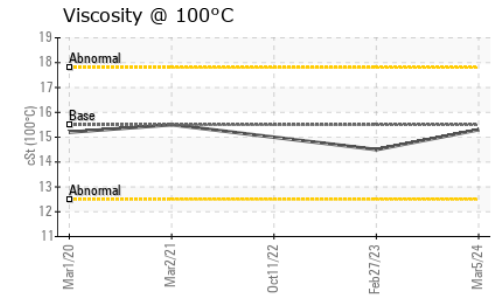
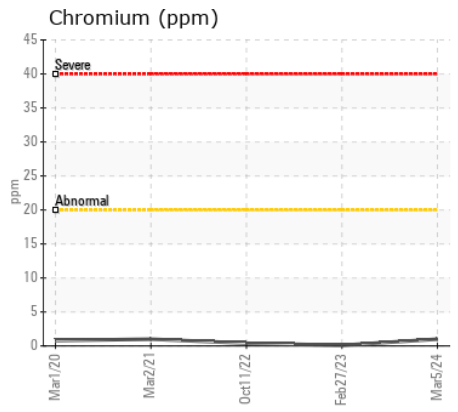
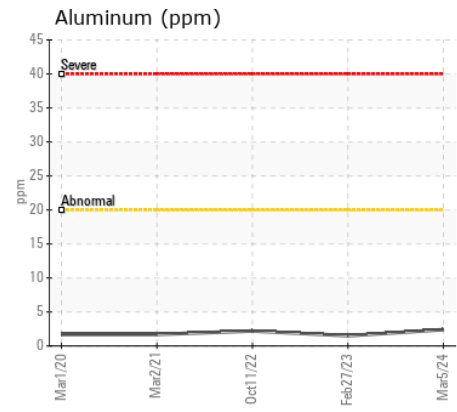
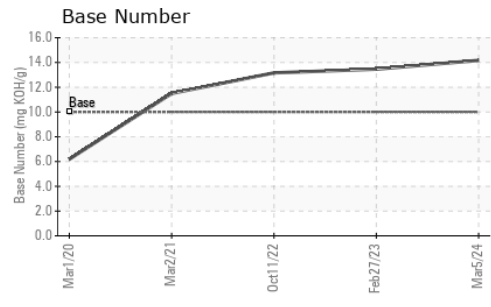
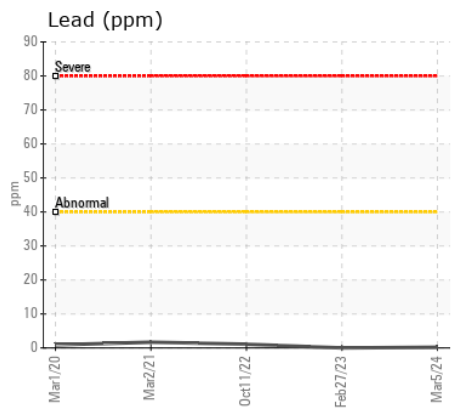
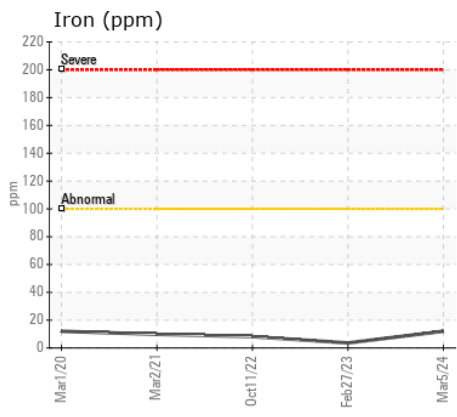
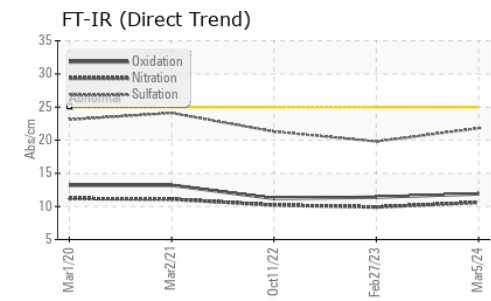
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	6	4
Potassium	ppm	ASTM D5185m	>20	3	0	<1
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	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	9.9	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	19.8	21.3
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	5
Boron	ppm	ASTM D5185m		<1	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	2	25
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		19	20	19
Calcium	ppm	ASTM D5185m	2300	5248	4296	4240
Phosphorus	ppm	ASTM D5185m		896	946	845
Zinc	ppm	ASTM D5185m	1200	1158	1037	1008
Sulfur	ppm	ASTM D5185m		4264	3940	4430
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.9	11.4	11.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	14.17	13.46	13.16
Visc @ 100°C	cSt	ASTM D445	15.5	15.3	14.5	15.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06228164  
**Lab Number** : 06228164  
**Unique Number** : 11111657  
**Test Package** : MOB 2 ( Additional Tests: TAN Man )  
**Received** : 03 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Angela Borella

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

Certificate L2367  
 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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