



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DEUTZ FAHR 68
 Component
Front Diesel Engine
 Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (9 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05647349	TR05441595	TR03334626
Sample Date		Client Info		23 Jul 2022	05 Jul 2021	18 May 2013
Machine Age	hrs	Client Info		6762	6610	5385
Oil Age	hrs	Client Info		152	154	174
Filter Age	hrs	Client Info		152	154	174
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	>150	9	10	17
Chromium	ppm	ASTM D5185m	>20	1	<1	3
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	6	6
Lead	ppm	ASTM D5185m	>40	2	<1	<1
Copper	ppm	ASTM D5185m	>30	6	10	2
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

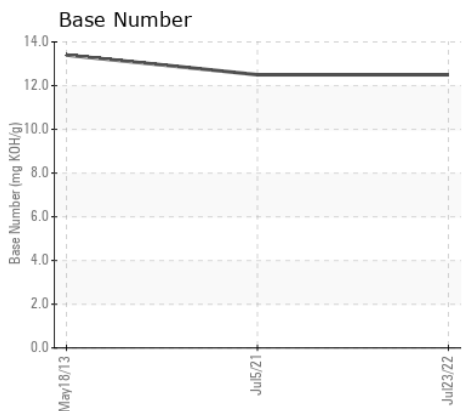
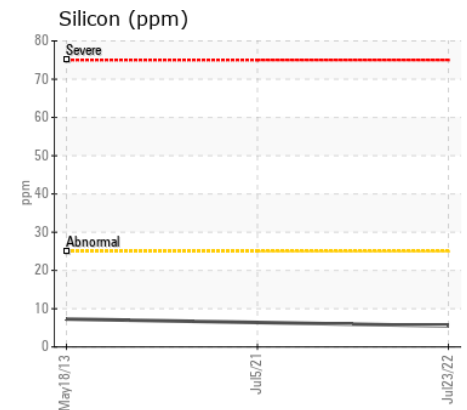
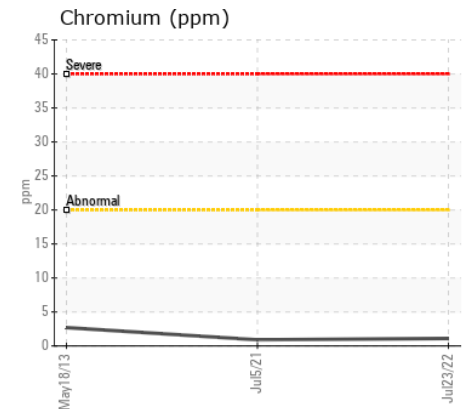
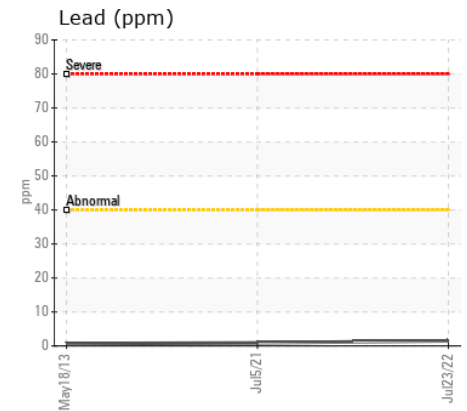
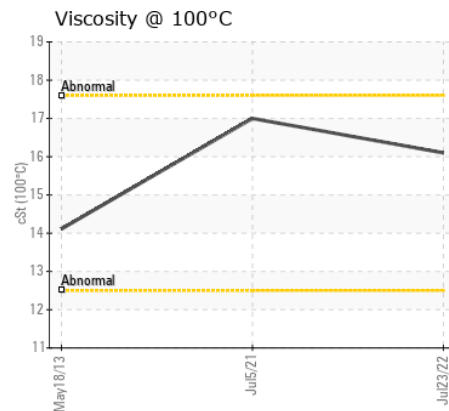
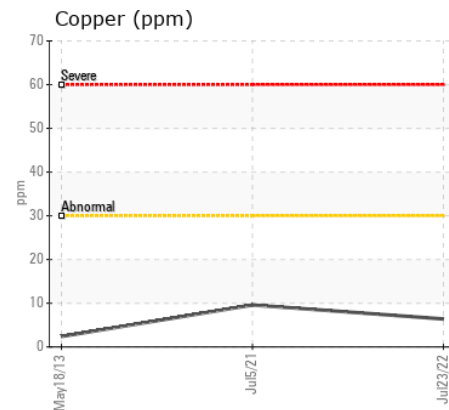
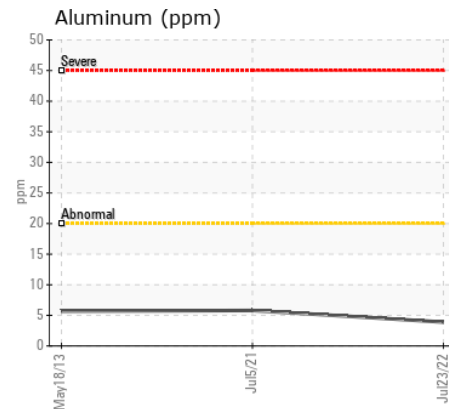
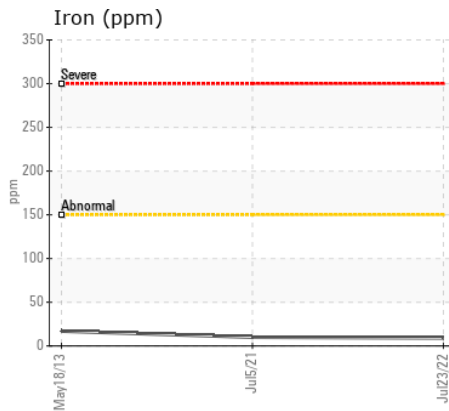
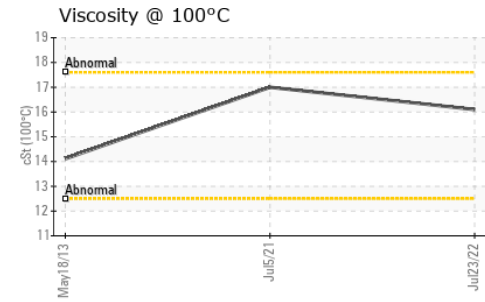
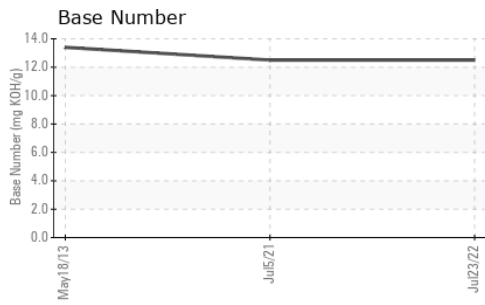
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	7
Potassium	ppm	ASTM D5185m	>20	1	2	<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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.6	11.2	7.
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.8	20.8	18.
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		3	8	11
Boron	ppm	ASTM D5185m		<1	<1	187
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		143	146	188
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		32	105	378
Calcium	ppm	ASTM D5185m		4541	4185	4540
Phosphorus	ppm	ASTM D5185m		805	875	877
Zinc	ppm	ASTM D5185m		1025	1003	1034
Sulfur	ppm	ASTM D5185m		4692	3299	3100
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	14.8	9.
Base Number (BN)	mg KOH/g	ASTM D2896		12.5	12.5	13.4
Visc @ 100°C	cSt	ASTM D445		16.1	17.0	14.11



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05647349
Lab Number : 05647349
Unique Number : 10141888
Test Package : MOB 2
Received : 21 Sep 2022
Tested : 23 Sep 2022
Diagnosed : 23 Sep 2022 - Jonathan Hester

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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