



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CASE IH JJF1050844

Component
Diesel Engine

Fluid
TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (18 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06219940	TR06219942	TR06132261
Sample Date		Client Info		11 May 2024	31 Mar 2024	26 Jan 2024
Machine Age	hrs	Client Info		6468	6055	5639
Oil Age	hrs	Client Info		413	416	409
Filter Age	hrs	Client Info		413	416	409
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	>90	18	25	24
Chromium	ppm	ASTM D5185m	>20	1	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	4	4
Lead	ppm	ASTM D5185m	>40	0	0	1
Copper	ppm	ASTM D5185m	>330	<1	2	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

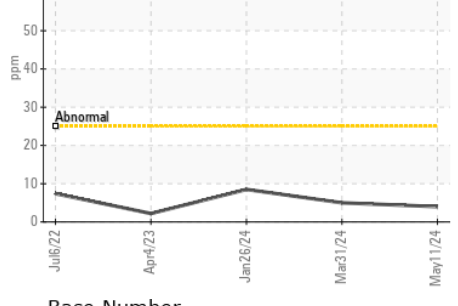
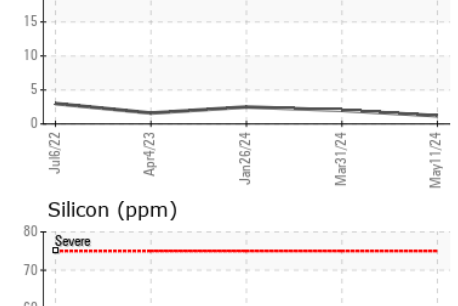
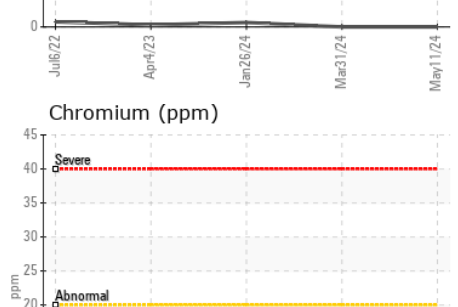
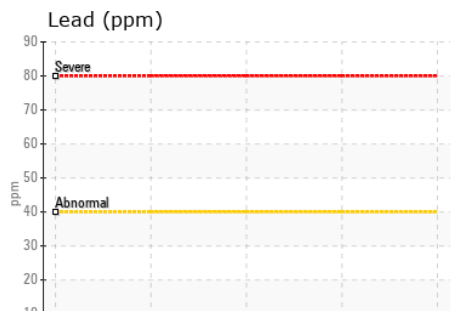
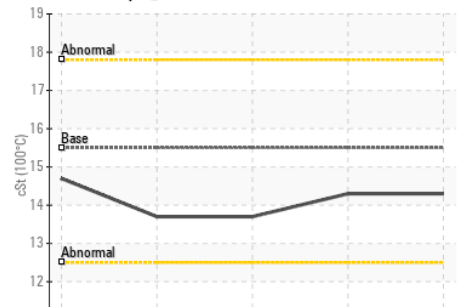
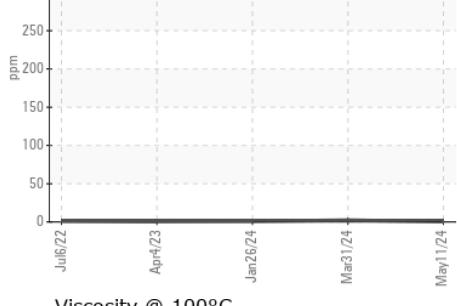
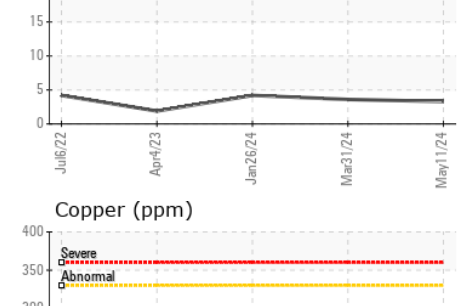
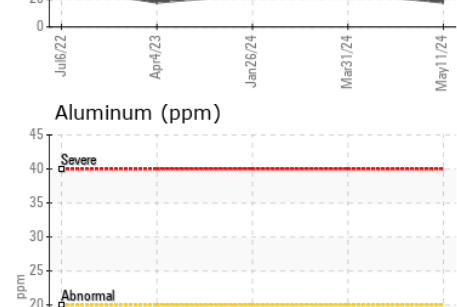
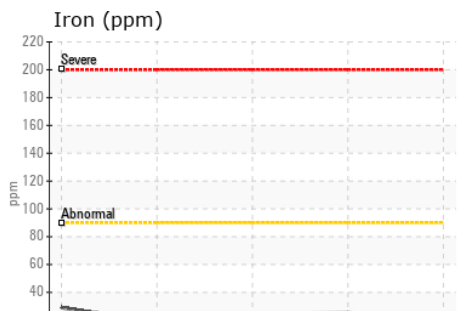
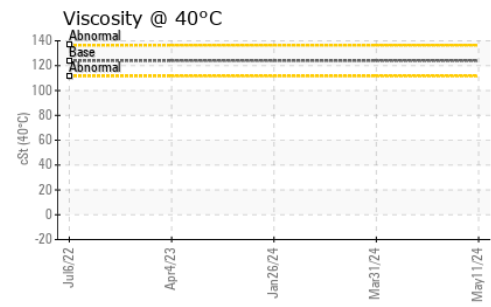
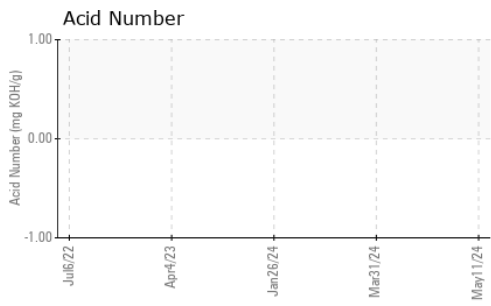
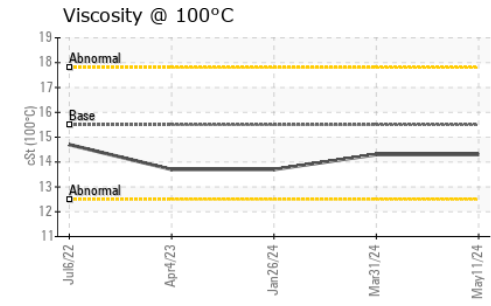
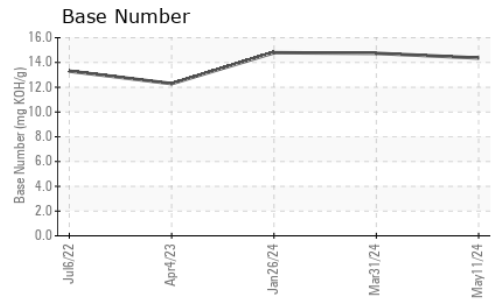
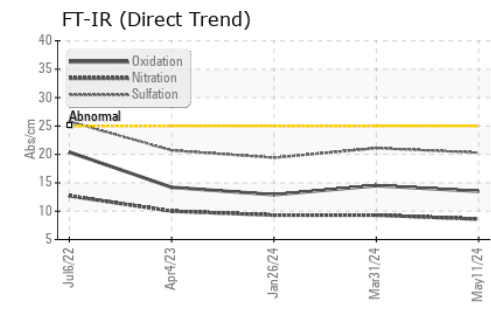
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	5	8
Potassium	ppm	ASTM D5185m	>20	2	2	3
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	0.9	1.1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.3	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	21.1	19.4
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	5	6
Boron	ppm	ASTM D5185m		<1	1	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		23	25	23
Calcium	ppm	ASTM D5185m		5397	6019	6351
Phosphorus	ppm	ASTM D5185m		1064	1181	1290
Zinc	ppm	ASTM D5185m		1241	1400	1461
Sulfur	ppm	ASTM D5185m		5088	5722	6006
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.5	14.5	12.9
Base Number (BN)	mg KOH/g	ASTM D2896		14.36	14.74	14.79
Visc @ 100°C	cSt	ASTM D445	15.5	14.3	14.3	13.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06219940 **Received** : 25 Jun 2024
Lab Number : 06219940 **Tested** : 26 Jun 2024
Unique Number : 11098137 **Diagnosed** : 26 Jun 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: KV40, TAN Man)

DOUBLE S DAIRIES
 HARTLEY, TX
 US 79044
 Contact: MIKE LEWIS

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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