



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
RSI ICE UNIT V-343 E1
 Component
Auxiliary Propane Engine
 Fluid
VALVOLINIE BLUE HEAVY DUTY DIESEL 15W40 (16 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06218433	---	---
Sample Date		Client Info		03 Jun 2024	---	---
Machine Age	hrs	Client Info		3555	---	---
Oil Age	hrs	Client Info		400	---	---
Filter Age	hrs	Client Info		400	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	40	---	---
Chromium	ppm	ASTM D5185m	>25	3	---	---
Nickel	ppm	ASTM D5185m	>5	4	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>20	4	---	---
Lead	ppm	ASTM D5185m	>25	6	---	---
Copper	ppm	ASTM D5185m	>35	1	---	---
Tin	ppm	ASTM D5185m	>8	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

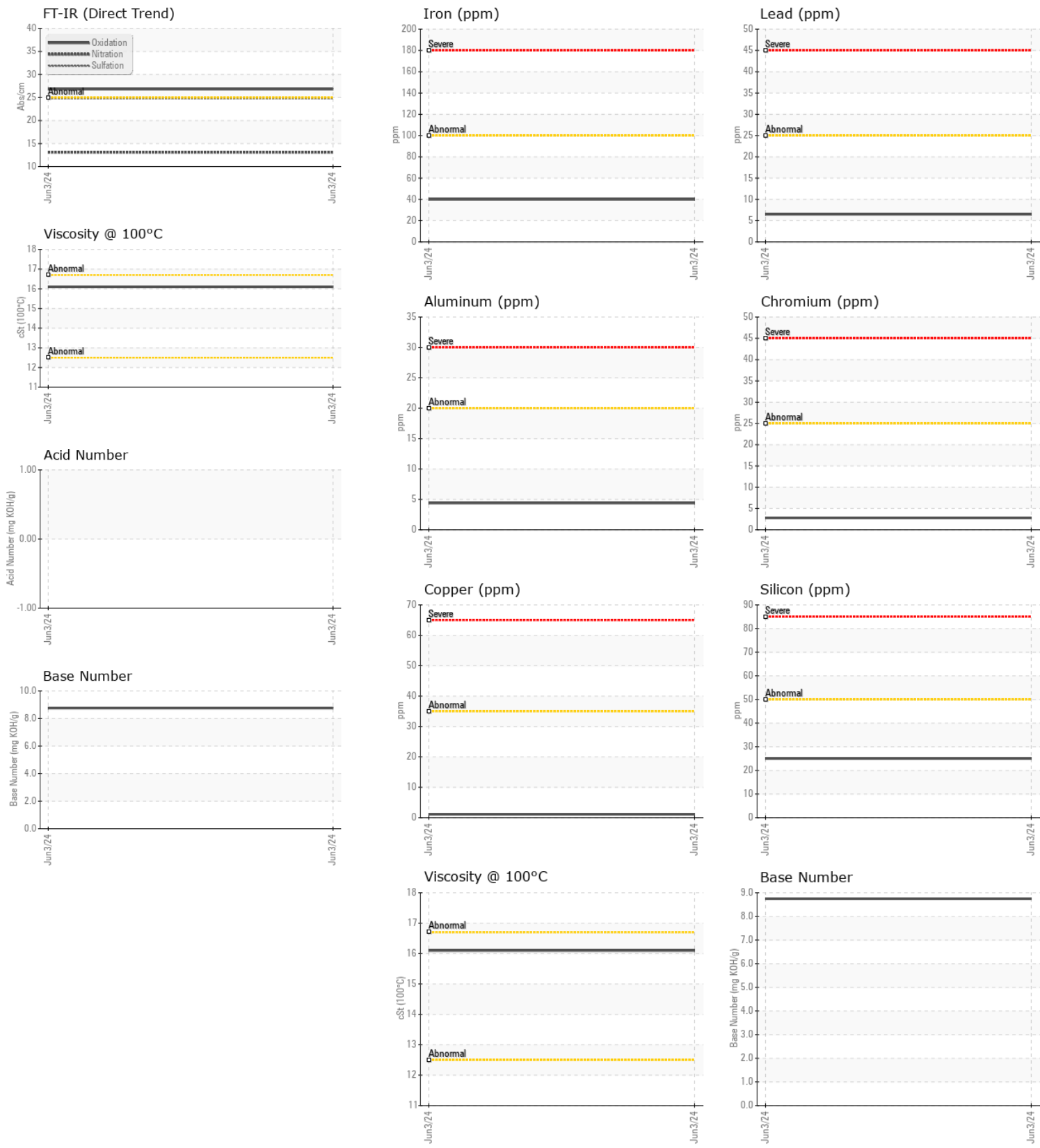
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	25	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	13.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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		11	---	---
Boron	ppm	ASTM D5185m		22	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		66	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		1006	---	---
Calcium	ppm	ASTM D5185m		1713	---	---
Phosphorus	ppm	ASTM D5185m		930	---	---
Zinc	ppm	ASTM D5185m		1162	---	---
Sulfur	ppm	ASTM D5185m		3209	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.75	---	---
Visc @ 100°C	cSt	ASTM D445		16.1	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06218433
Lab Number : 06218433
Unique Number : 11096630
Test Package : MOB 2 (Additional Tests: PQ)

RSI - REMEDIATION SERVICES INTERNATIONAL
 614 N 1ST ST
 LA PORTE, TX
 US 77571
 Contact: SCOTT LEHMAN

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: