



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
ICE UNIT V-327/E2

Component
Propane Engine

Fluid
VALVOLINE BLUE HEAVY DUTY 15W40 (10 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06146077	---	---
Sample Date		Client Info		06 Mar 2024	---	---
Machine Age	hrs	Client Info		2356	---	---
Oil Age	hrs	Client Info		419	---	---
Filter Age	hrs	Client Info		419	---	---
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	37	---	---
Chromium	ppm	ASTM D5185m	>25	2	---	---
Nickel	ppm	ASTM D5185m	>5	3	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>20	5	---	---
Lead	ppm	ASTM D5185m	>25	12	---	---
Copper	ppm	ASTM D5185m	>35	3	---	---
Tin	ppm	ASTM D5185m	>8	3	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

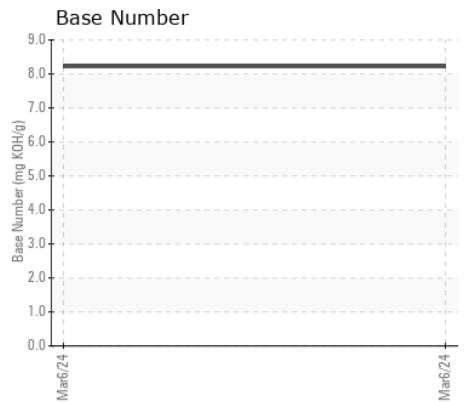
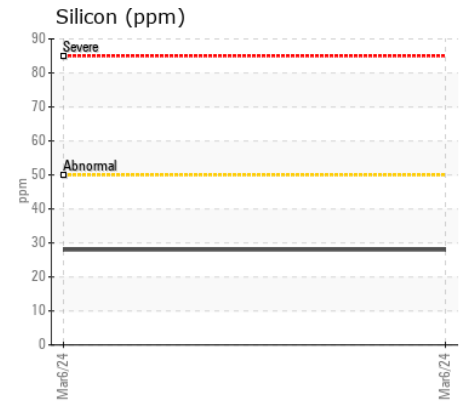
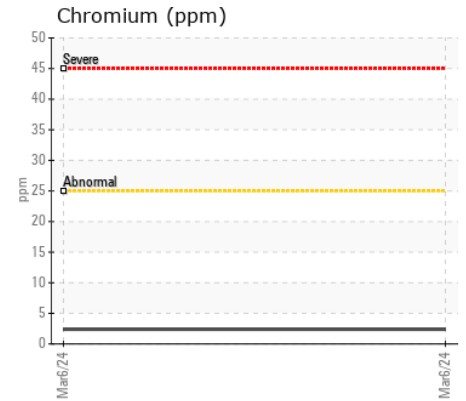
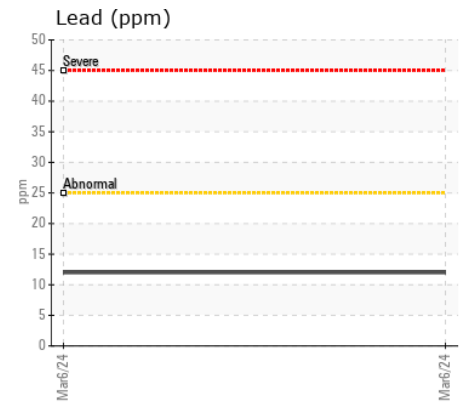
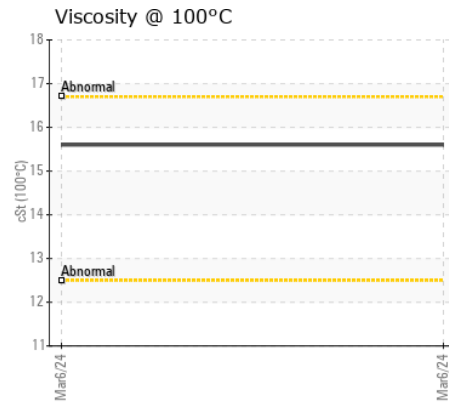
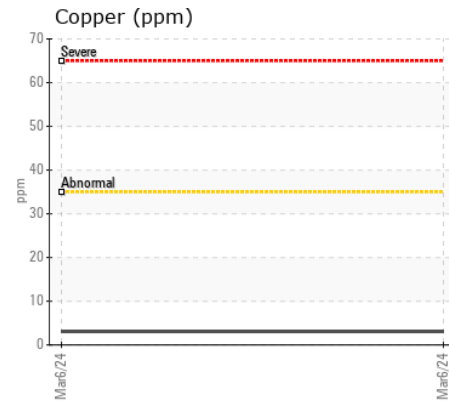
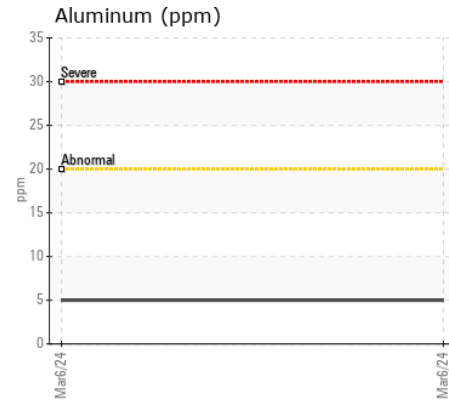
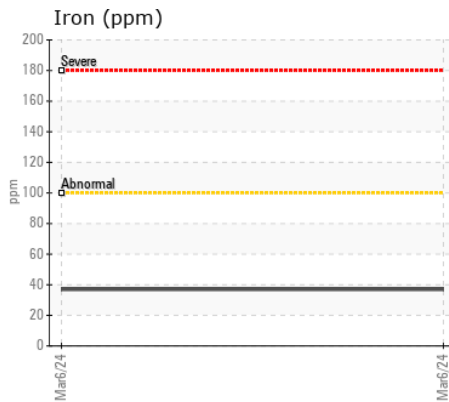
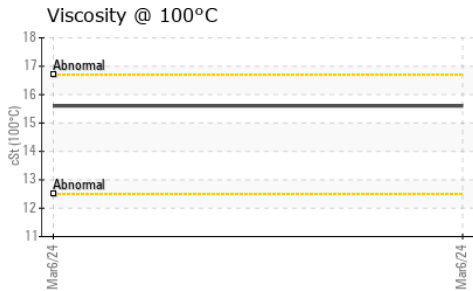
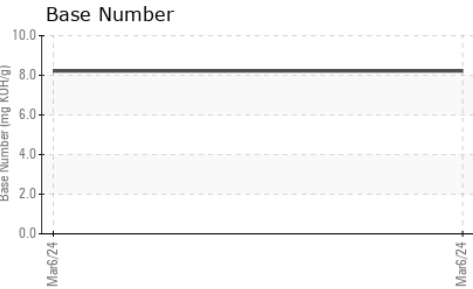
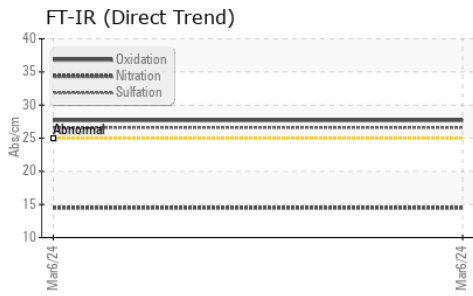
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	28	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	*ASTM D7844		0	---	---
Nitration	Abs/cm	*ASTM D7624	>20	14.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.6	---	---
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		9	---	---
Boron	ppm	ASTM D5185m		35	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		87	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		844	---	---
Calcium	ppm	ASTM D5185m		1961	---	---
Phosphorus	ppm	ASTM D5185m		932	---	---
Zinc	ppm	ASTM D5185m		1054	---	---
Sulfur	ppm	ASTM D5185m		2914	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.22	---	---
Visc @ 100°C	cSt	ASTM D445		15.6	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06146077
Lab Number : 06146077
Unique Number : 10976155
Test Package : MOB 2
Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 15 Apr 2024 - Don Baldrige

SHELTON SERVICES

614 N 1ST ST
LA PORTE, TX
US 77571

Contact: NORMAN MASSON

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: