



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

16

Component

Diesel Engine

Fluid

TRC MOLY XL PROSPEC III 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR0000741	TR0000606	TR0000515
Sample Date		Client Info		10 Apr 2023	10 Aug 2022	17 Mar 2022
Machine Age	hrs	Client Info		9915115	9915	8930
Oil Age	hrs	Client Info		1	8930	1
Filter Age	hrs	Client Info		1	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	38	12	39
Chromium	ppm	ASTM D5185m	>5	1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	8	4	5
Lead	ppm	ASTM D5185m	>150	5	4	12
Copper	ppm	ASTM D5185m	>90	6	3	10
Tin	ppm	ASTM D5185m	>5	<1	2	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

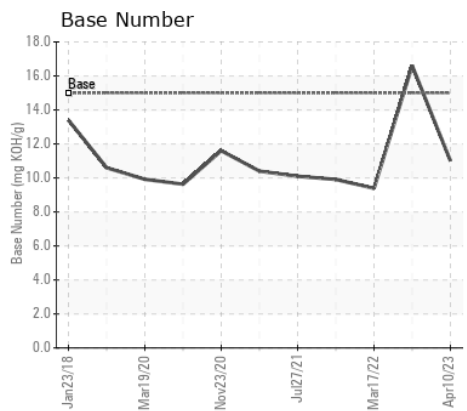
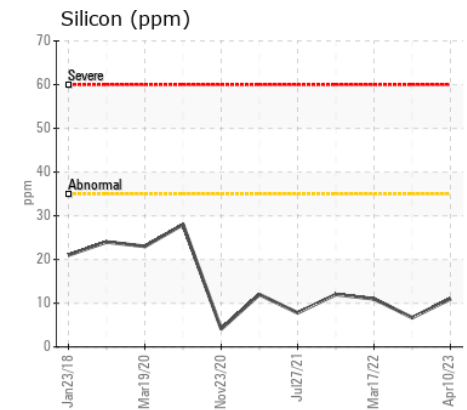
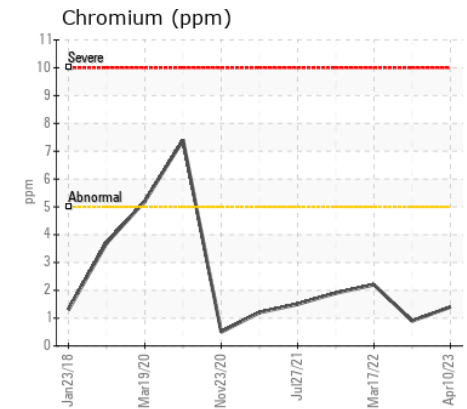
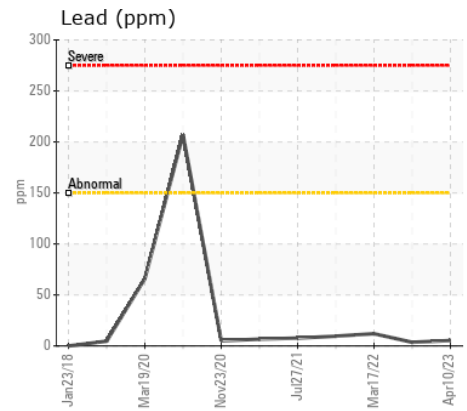
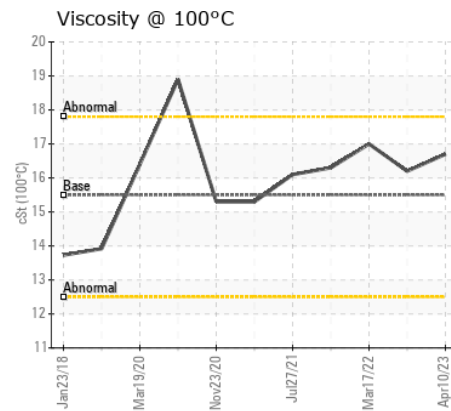
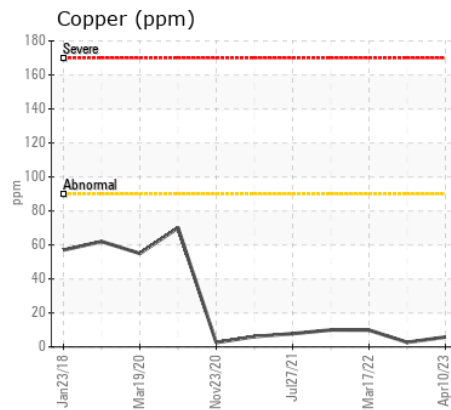
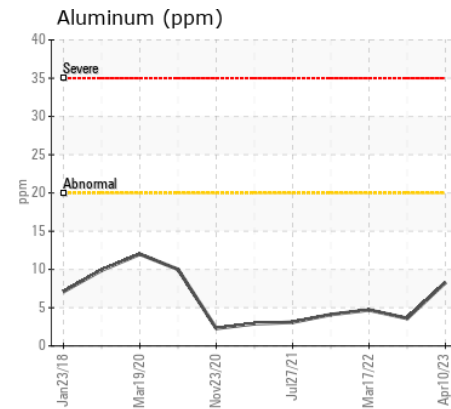
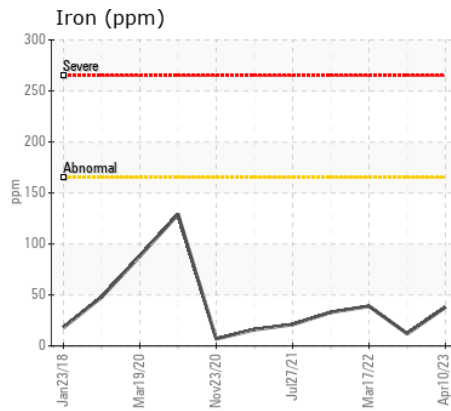
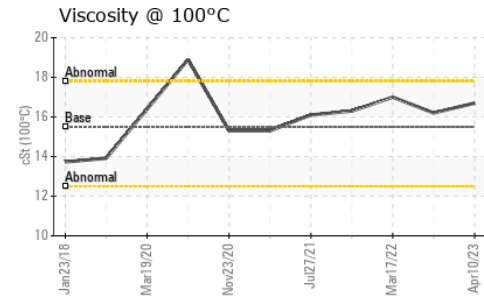
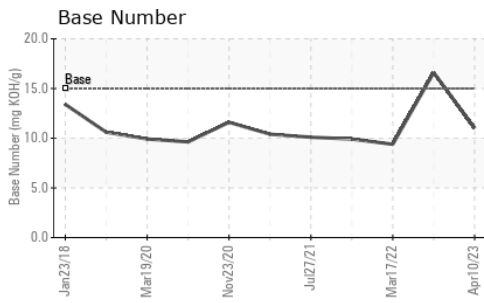
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	11	7	11
Potassium	ppm	ASTM D5185m	>20	22	2	3
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	>7.5	1.2	0.5	1.5
Nitration	Abs/cm	*ASTM D7624	>20	15.0	10.8	18.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.7	21.2	35.2
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		7	3	12
Boron	ppm	ASTM D5185m		0	3	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		120	116	132
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		26	16	30
Calcium	ppm	ASTM D5185m	4500	4732	4220	4807
Phosphorus	ppm	ASTM D5185m		935	872	994
Zinc	ppm	ASTM D5185m	1400	1166	1064	1048
Sulfur	ppm	ASTM D5185m		4764	4116	3698
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.3	13.1	27.7
Base Number (BN)	mg KOH/g	ASTM D2896	15	11.01	16.6	9.39
Visc @ 100°C	cSt	ASTM D445	15.5	16.7	16.2	17.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TR0000741

Lab Number : 05818332

Unique Number : 10426415

Test Package : MOB 2

Received : 12 Apr 2023

Tested : 14 Apr 2023

Diagnosed : 15 Apr 2023 - Don Baldrige

S S CONCRETE MATERIALS LLC

P.O. BOX 23283

BULLHEAD CITY, AZ

US 86439

Contact: MARK OPHEIM

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: (928)754-1991