



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

T13

Component

1 Diesel Engine

Fluid

TRC MOLY XL PRO-SPEC SYN BLEND 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR0001368	TR0001252	TR0000800
Sample Date		Client Info		09 Jan 2024	03 Oct 2023	10 Apr 2023
Machine Age	hrs	Client Info		5342	5045	4268
Oil Age	hrs	Client Info		5342	5045	4268
Filter Age	hrs	Client Info		5342	5045	4268
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	13	7	24
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	6
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	0	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

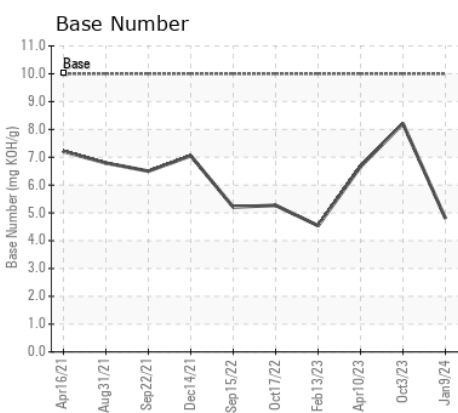
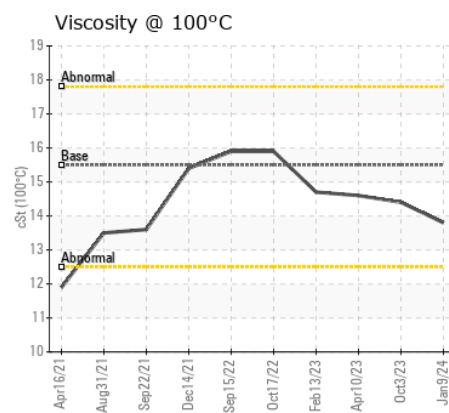
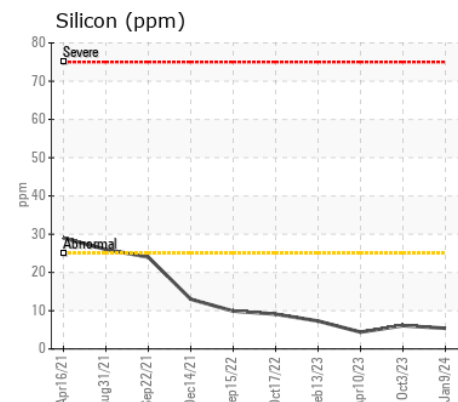
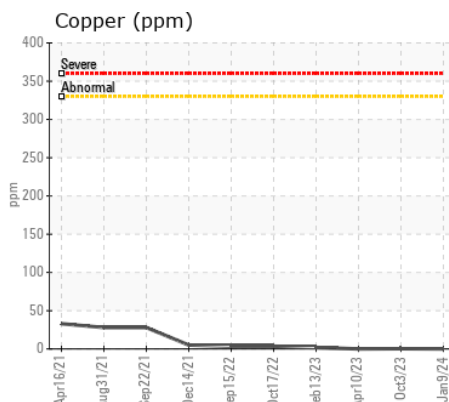
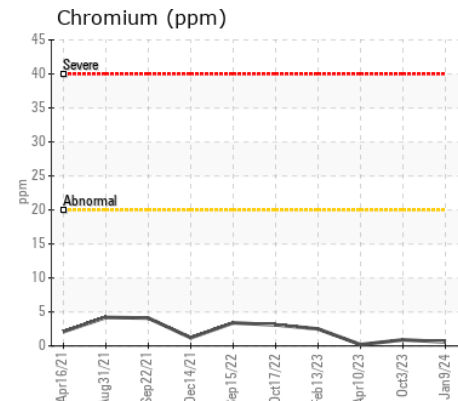
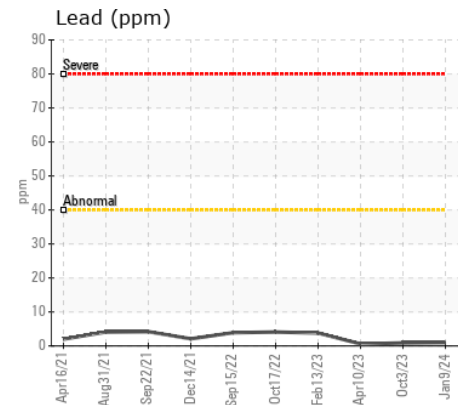
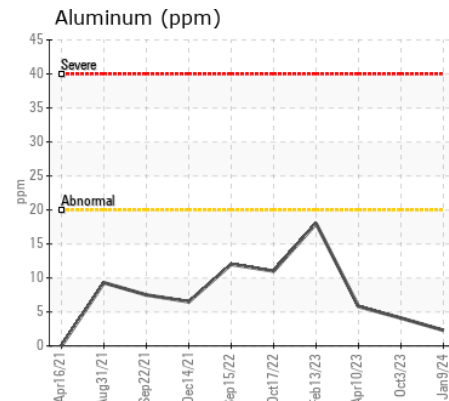
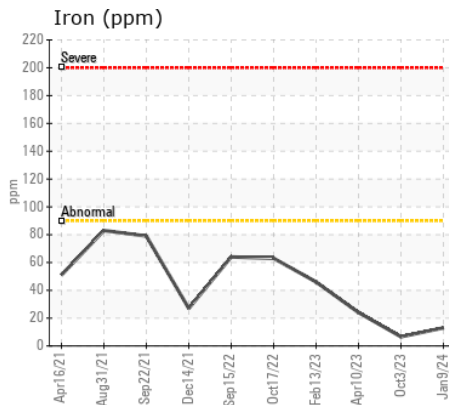
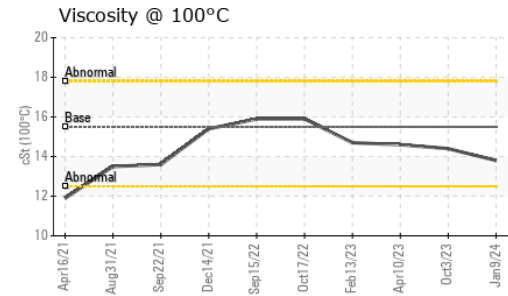
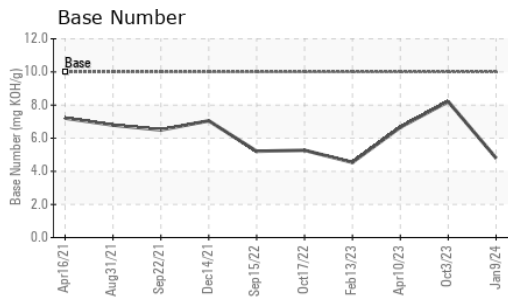
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	4
Potassium	ppm	ASTM D5185m	>20	4	6	14
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	0.3	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.6	5.7	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	15.4	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 suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	1
Boron	ppm	ASTM D5185m		<1	3	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	5	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		14	21	22
Calcium	ppm	ASTM D5185m	2300	2104	3052	2383
Phosphorus	ppm	ASTM D5185m		837	1326	845
Zinc	ppm	ASTM D5185m	1200	986	1739	1103
Sulfur	ppm	ASTM D5185m		3130	8226	3572
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	8.3	11.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	4.80	8.21	6.66
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	14.4	14.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR0001368 **Received** : 12 Jan 2024
Lab Number : 06060436 **Diagnosed** : 16 Jan 2024
Unique Number : 10831818 **Diagnostician** : Don Baldrige
Test Package : MOB 2

S S CONCRETE MATERIALS LLC
P.O. BOX 23283
BULLHEAD CITY, AZ
US 86439
Contact: SERVICE MANAGER
snsmaterials1@gmail.com
T:
F: (928)754-1991

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)