TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT PETERBILT
Component
Diesel Engine
Fluid
TRC PRO-SPEC IV SYNTHETIC BLEND 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

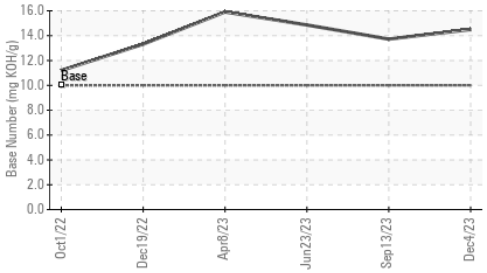
There is no indication of any contamination in the oil.

FLUID CONDITION

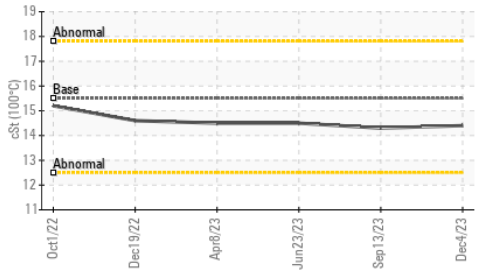
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06031833	TR05957170	TR05887536
Sample Date		Client Info		04 Dec 2023	13 Sep 2023	23 Jun 2023
Machine Age	mls	Client Info		0	15000	10000
Oil Age	mls	Client Info		10000	10000	5000
Filter Age	mls	Client Info		10000	10000	5000
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>110	29	31	22
Chromium	ppm	ASTM D5185m	>4	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	12	8	6
Lead	ppm	ASTM D5185m	>45	3	6	3
Copper	ppm	ASTM D5185m	>85	6	6	5
Tin	ppm	ASTM D5185m	>4	3	4	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	9	8	6
Potassium	ppm	ASTM D5185m	>20	<1	3	2
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	>3	0.2	0	0.3
Nitration	Abs/cm	*ASTM D7624	>20	12.6	11.3	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	24.0	20.4
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
Sodium	ppm	ASTM D5185m		<1	4	3
Boron	ppm	ASTM D5185m		5	3	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		114	117	108
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		27	31	30
Calcium	ppm	ASTM D5185m	2300	4255	4633	4460
Phosphorus	ppm	ASTM D5185m		911	946	934
Zinc	ppm	ASTM D5185m	1200	1099	1148	1133
Sulfur	ppm	ASTM D5185m		4158	4931	5303
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	15.5	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	14.50	13.72	14.86
Visc @ 100°C	cSt	ASTM D445	15.5	14.4	14.3	14.5

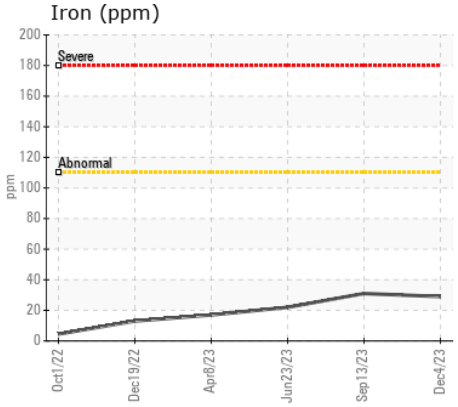
Base Number



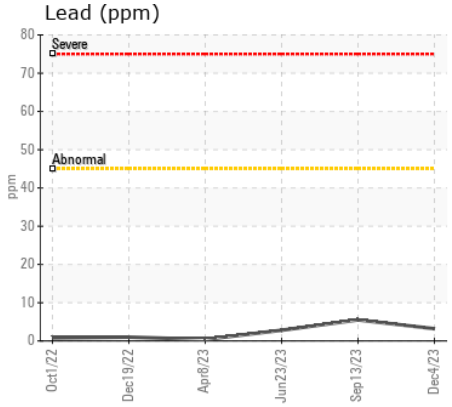
Viscosity @ 100°C



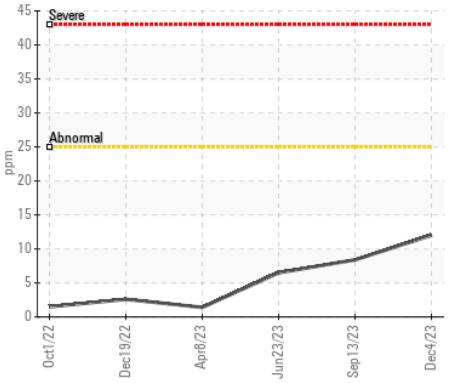
Iron (ppm)



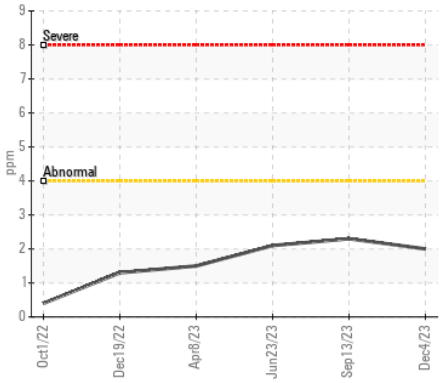
Lead (ppm)



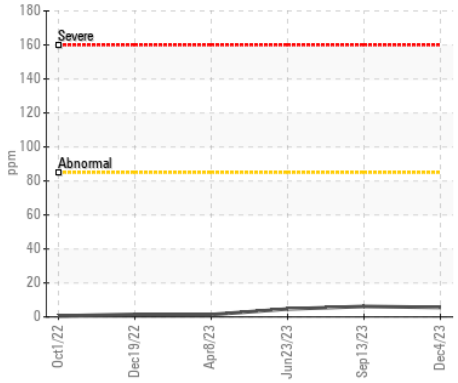
Aluminum (ppm)



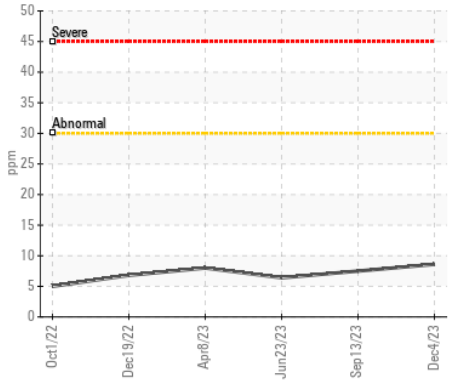
Chromium (ppm)



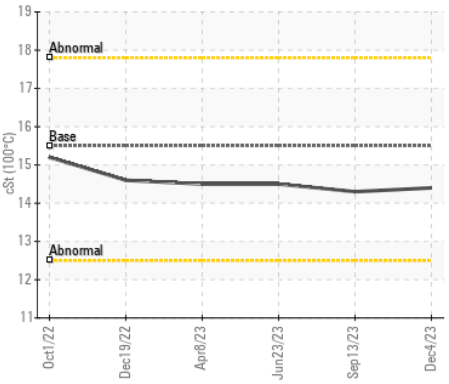
Copper (ppm)



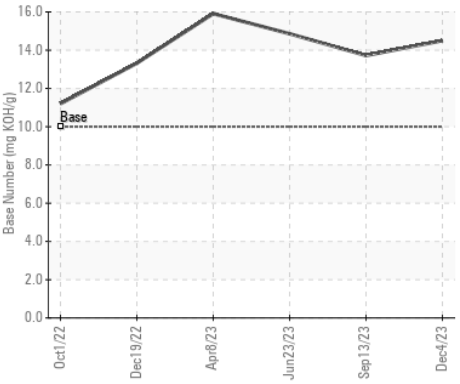
Silicon (ppm)



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06031833
Lab Number : 06031833
Unique Number : 10781624
Test Package : MOB 2

Received : 11 Dec 2023
Tested : 15 Dec 2023
Diagnosed : 15 Dec 2023 - Jonathan Hester

SPRAGUE RANCH
6907 ROUTE 14
BROOKFIELD, VT
US 05036
Contact: SCOTT BURRELL

T:
F:

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)