TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
2006 INTERNATIONAL 25
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC III SYNTHETIC15W40 (--- QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

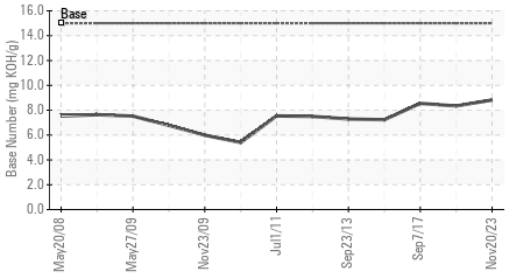
Sodium and/or potassium levels are high.

FLUID CONDITION

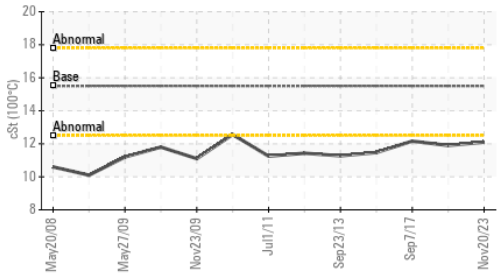
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06054169	TR04923979	TR04306594
Sample Date		Client Info		20 Nov 2023	13 Feb 2020	07 Sep 2017
Machine Age	mls	Client Info		153255	135071	112267
Oil Age	mls	Client Info		9088	8712	8695
Filter Age	mls	Client Info		9088	8712	8695
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	59	34	27
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	16	18	13
Lead	ppm	ASTM D5185m	>15	2	2	4
Copper	ppm	ASTM D5185m	>30	3	3	3
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	8	4	13
Potassium	ppm	ASTM D5185m	>20	▲ 105	31	0
Fuel	%	ASTM D3524	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.7	12.5	9.
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5	24.8	22.
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		▲ 390	110	6
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		502	725	613
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		91	738	836
Calcium	ppm	ASTM D5185m	4500	3437	1545	1518
Phosphorus	ppm	ASTM D5185m		759	859	1024
Zinc	ppm	ASTM D5185m	1400	883	1020	1208
Sulfur	ppm	ASTM D5185m		3974	3402	3882
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	18	15.
Base Number (BN)	mg KOH/g	ASTM D2896	15	8.82	8.34	8.55
Visc @ 100°C	cSt	ASTM D445	15.5	12.1	11.9	12.16

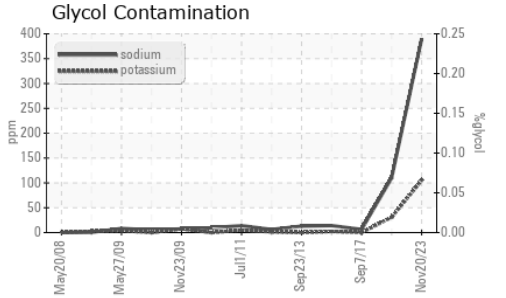
Base Number



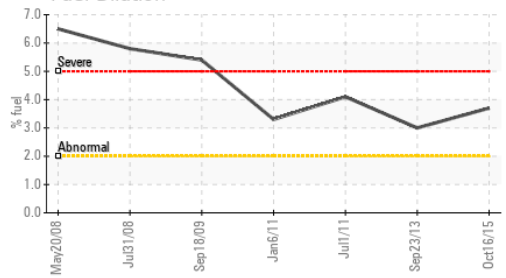
Viscosity @ 100°C



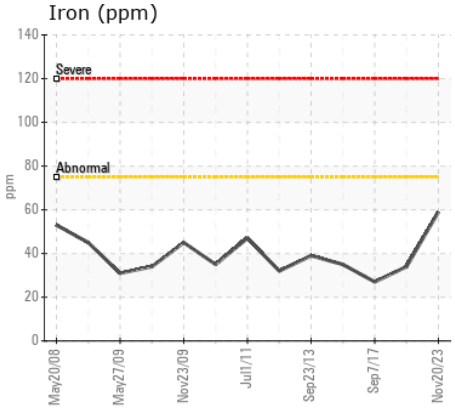
Glycol Contamination



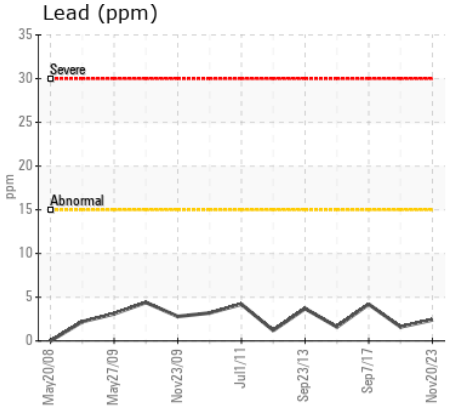
Fuel Dilution



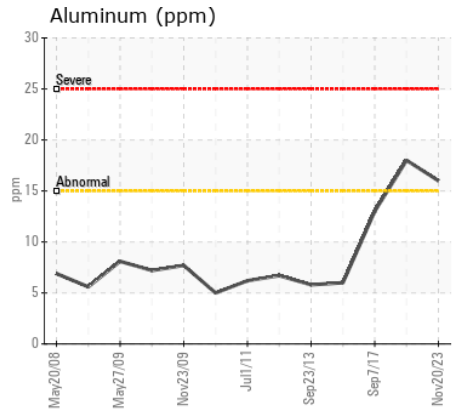
Iron (ppm)



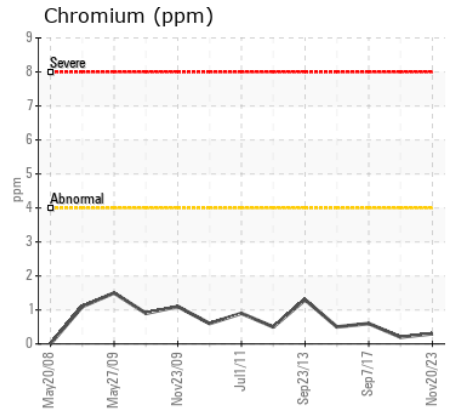
Lead (ppm)



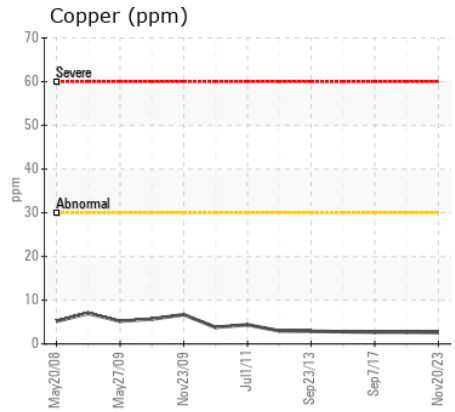
Aluminum (ppm)



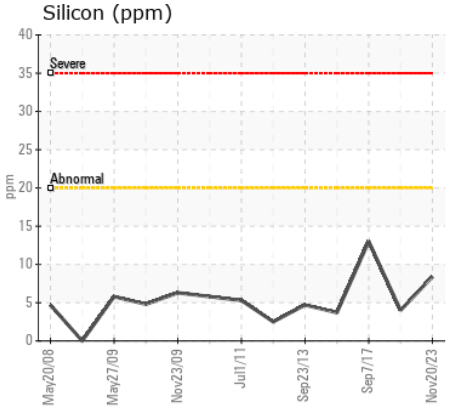
Chromium (ppm)



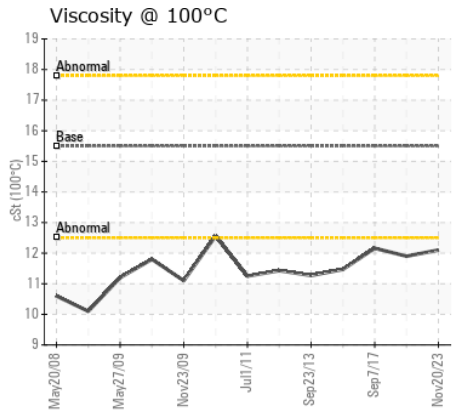
Copper (ppm)



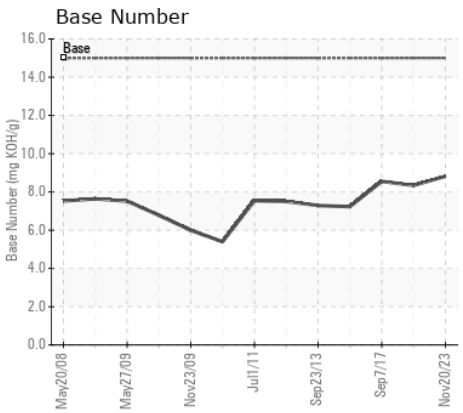
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06054169 **Recieved** : 08 Jan 2024
Lab Number : 06054169 **Diagnosed** : 11 Jan 2024
Unique Number : 10820118 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FuelDilution, Glycol)

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)

ALEXANDER SCHOOLS
6091 AYERS RD
ALBANY, OH
US 45710
Contact: DEAN WISE

T:
F: