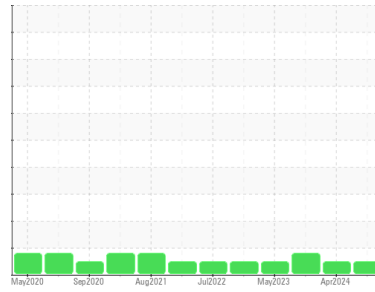




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TORO 30609/4000-D 115625 (S/N 403411038)
 Component
Diesel Engine
 Fluid
TRC PRO-SPEC IV XP SYN BLEND SAE 10W30 (6 QTS)

DIAGNOSIS

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TR06239330	TR06159332	TR05940334
Sample Date	Client Info		16 Jul 2024	23 Apr 2024	29 Aug 2023
Machine Age	hrs	Client Info	3121	2878	2630
Oil Age	hrs	Client Info	2295	2053	1278
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>80	52	26	▲ 127
Chromium	ppm	ASTM D5185m	>6	1	1	3
Nickel	ppm	ASTM D5185m	>2	1	1	3
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	8
Lead	ppm	ASTM D5185m	>95	2	1	7
Copper	ppm	ASTM D5185m	>85	9	7	48
Tin	ppm	ASTM D5185m	>9	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	2	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		4	2	3
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		40	18	25
Calcium	ppm	ASTM D5185m		4792	4570	5859
Phosphorus	ppm	ASTM D5185m		934	1098	1251
Zinc	ppm	ASTM D5185m		1235	1249	1556
Sulfur	ppm	ASTM D5185m		4109	4854	5618

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	11	10	11
Sodium	ppm	ASTM D5185m		3	6	11
Potassium	ppm	ASTM D5185m	>20	6	3	6

INFRA-RED

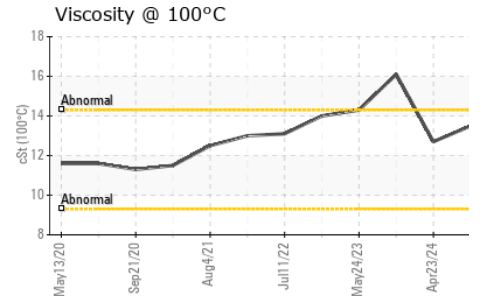
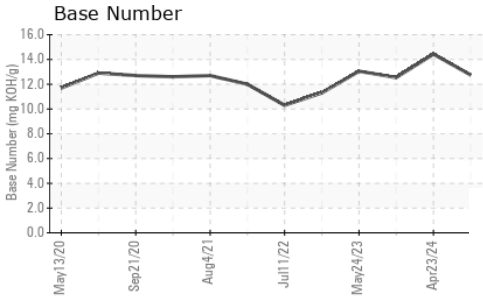
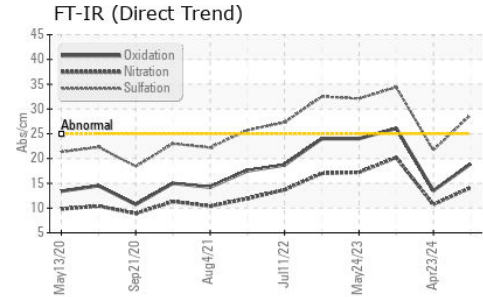
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		1.9	1	3.1
Nitration	Abs/cm	*ASTM D7624	>20	14.1	10.7	20.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.8	21.7	34.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	13.5	26.1
Base Number (BN)	mg KOH/g	ASTM D2896		12.75	14.43	12.54



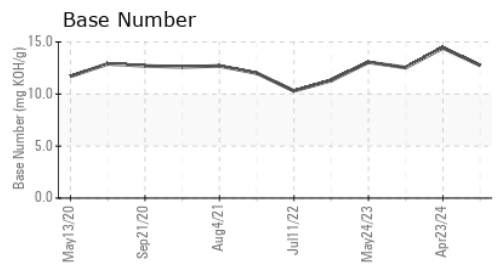
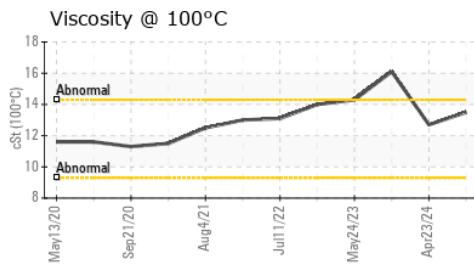
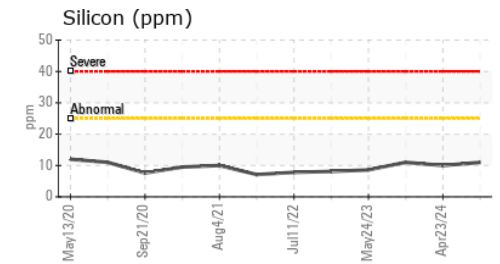
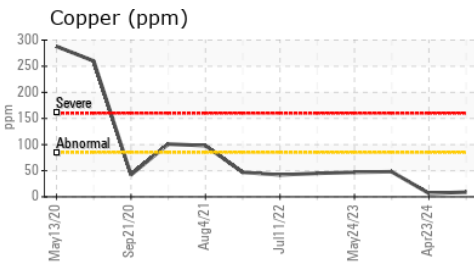
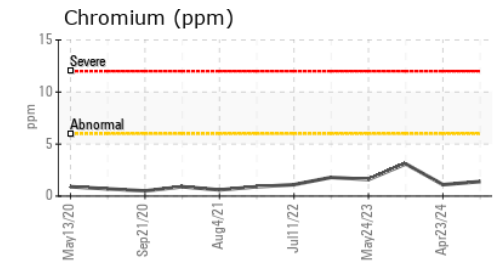
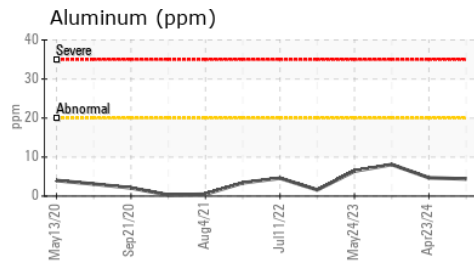
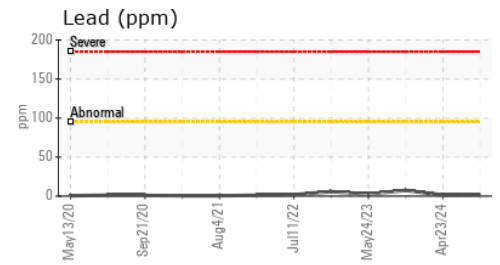
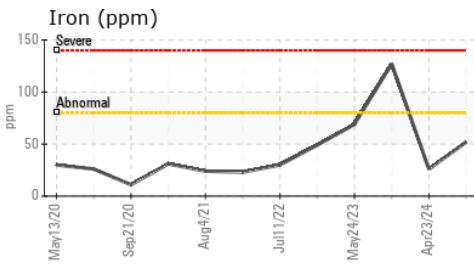
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.5	12.7	16.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06239330 **Received** : 17 Jul 2024
Lab Number : 06239330 **Tested** : 18 Jul 2024
Unique Number : 11128164 **Diagnosed** : 18 Jul 2024 - Wes Davis
Test Package : MOB 2

OVERLAND PARK GC CCD
 1801 S HURON ST
 DENVER, CO
 US 80223
 Contact: JAMES WEST

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)