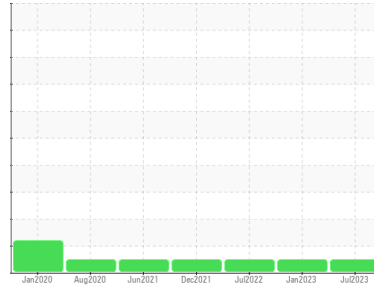




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
110028

Component
Diesel Engine

Fluid
SHELL ROTELLA T 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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			IL0027441	IL0027396	IL0027605
Sample Date	Client Info			11 Jul 2023	18 Jan 2023	26 Jul 2022
Machine Age	mls Client Info			205047	179392	154907
Oil Age	mls Client Info			25655	24485	30865
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	17	15	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	4
Lead	ppm	ASTM D5185m	>40	10	3	5
Copper	ppm	ASTM D5185m	>330	3	4	4
Tin	ppm	ASTM D5185m	>15	0	0	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	0	17	16
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	91	95	78
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	24	38	52	42
Calcium	ppm	ASTM D5185m	2292	2364	2360	2450
Phosphorus	ppm	ASTM D5185m	1064	947	997	964
Zinc	ppm	ASTM D5185m	1160	1189	1207	1218
Sulfur	ppm	ASTM D5185m	4996	4428	3817	4498

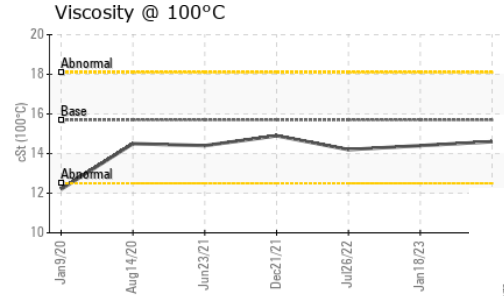
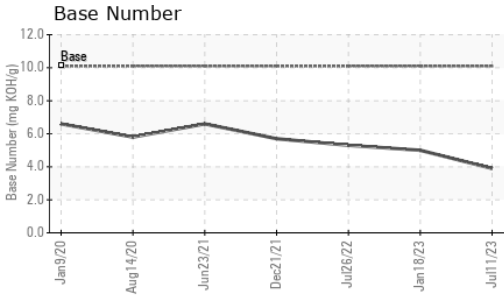
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	11	9
Sodium	ppm	ASTM D5185m		2	2	3
Potassium	ppm	ASTM D5185m	>20	3	5	5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1	0.8	1.3
Nitration	Abs/cm	*ASTM D7624	>20	12.0	11.3	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	24.1	29.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	18.9	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	3.9	5	5.3



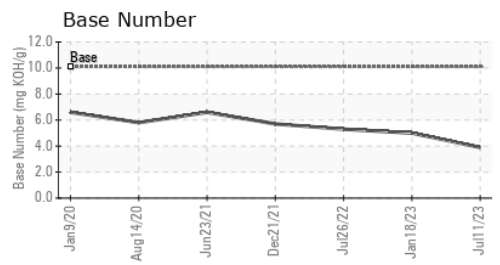
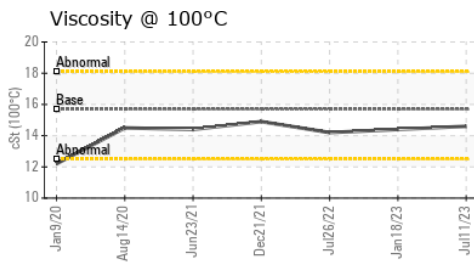
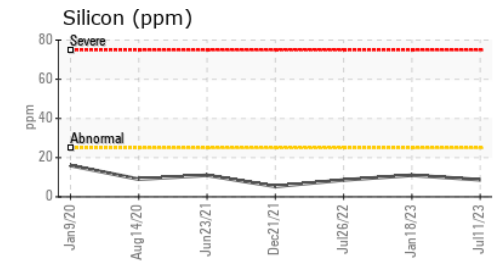
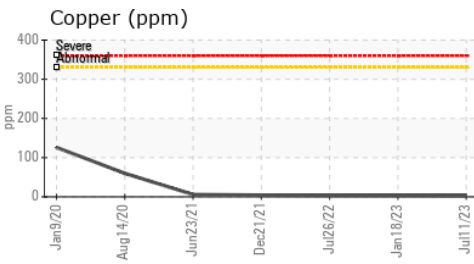
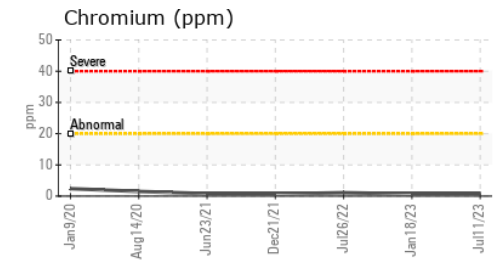
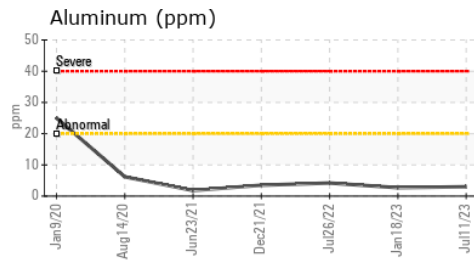
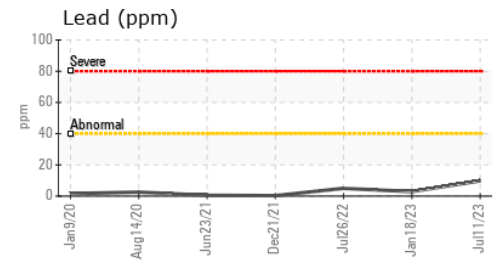
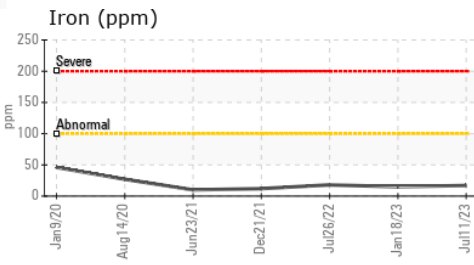
OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.7	14.6	14.4	14.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0027441 **Received** : 18 Jul 2023
Lab Number : 05901020 **Diagnosed** : 18 Jul 2023
Unique Number : 10562376 **Diagnostician** : Wes Davis
Test Package : MOB1+

IDEALISE OF NORTHWEST WI
 611 HANSEN ROAD
 GREEN BAY, WI
 US 54304
 Contact: GARY KOLTZ
 gkoltz@pcitrucks.com
 T: (920)499-6200
 F: (920)499-5332

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)