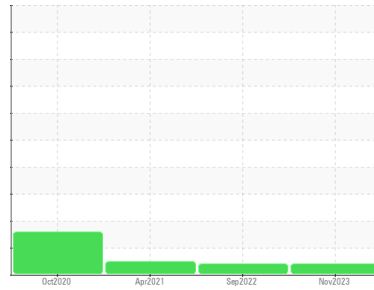




PROBLEM SUMMARY

Sample Rating Trend



VISCOSITY



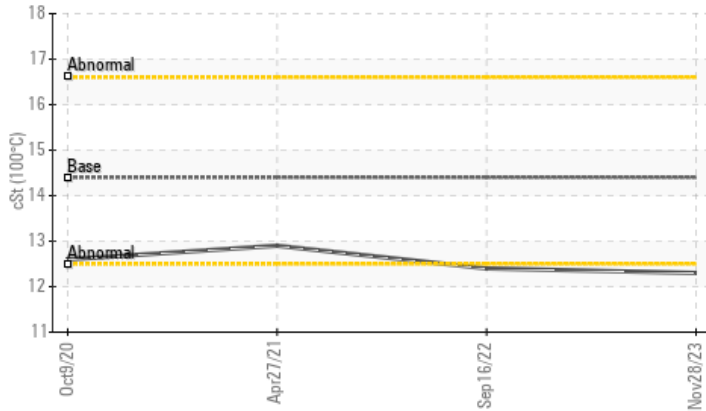
Machine Id
4529L

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	NORMAL
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.3	▲ 12.4	12.9

Customer Id: IDECHILL
 Sample No.: IL06026241
 Lab Number: 06026241
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 Sep 2022 Diag: Jonathan Hester

VISCOSITY



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report



27 Apr 2021 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



09 Oct 2020 Diag: Doug Bogart

DIRT



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

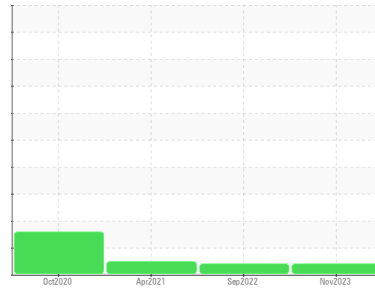
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
4529L

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		IL06026241	IL0022275	IL0017596
Sample Date	Client Info		28 Nov 2023	16 Sep 2022	27 Apr 2021
Machine Age	mls	Client Info	50987	39702	18476
Oil Age	mls	Client Info	11285	0	0
Oil Changed	Client Info		N/A	Changed	N/A
Sample Status			ATTENTION	ATTENTION	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	1.7	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	28	22	22
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	<1	0
Aluminum	ppm	ASTM D5185m >20	6	9	12
Lead	ppm	ASTM D5185m >40	0	<1	<1
Copper	ppm	ASTM D5185m >330	2	1	8
Tin	ppm	ASTM D5185m >15	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	5	30	48
Barium	ppm	ASTM D5185m 10	2	2	0
Molybdenum	ppm	ASTM D5185m 100	56	39	39
Manganese	ppm	ASTM D5185m	0	<1	1
Magnesium	ppm	ASTM D5185m 450	822	474	466
Calcium	ppm	ASTM D5185m 3000	1110	1532	1523
Phosphorus	ppm	ASTM D5185m 1150	777	704	715
Zinc	ppm	ASTM D5185m 1350	1066	870	864
Sulfur	ppm	ASTM D5185m 4250	3014	2611	2003

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	8	9
Sodium	ppm	ASTM D5185m >158	0	<1	4
Potassium	ppm	ASTM D5185m >20	6	9	28

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	0.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	11.4	11.5	9.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.5	24.7	25.4

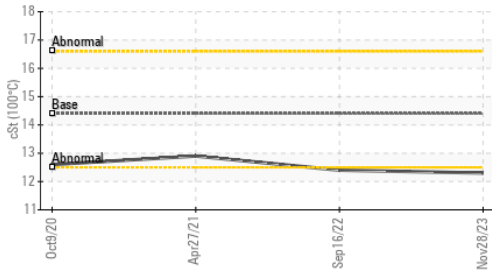
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	26.8	27.1	24.6
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	5.1	8.7	9.4

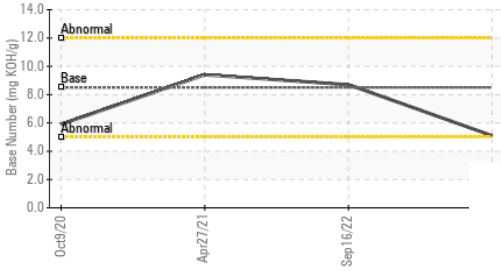


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



Base Number

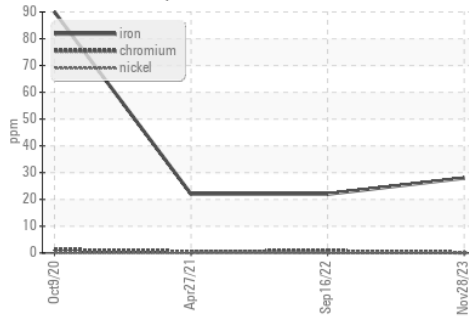


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

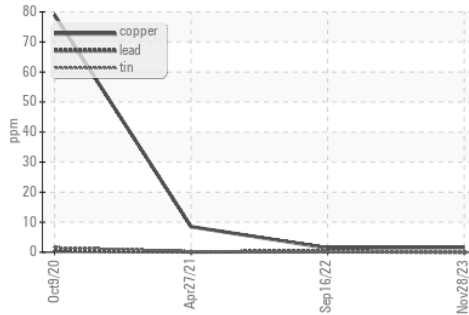
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 12.3	▲ 12.4	12.9

GRAPHS

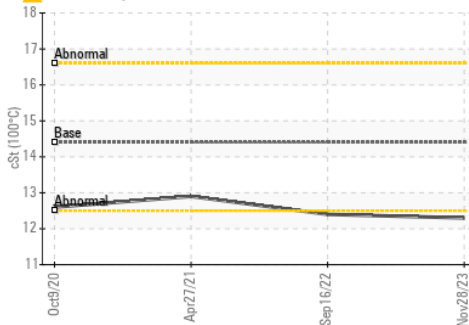
Ferrous Alloys



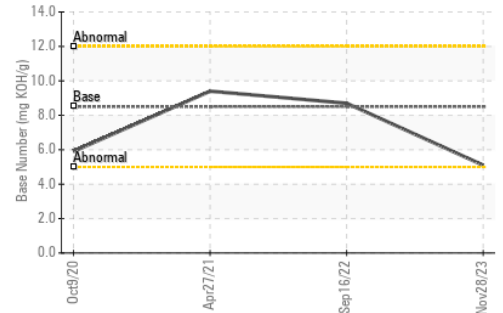
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06026241 **Received** : 06 Dec 2023
Lab Number : 06026241 **Diagnosed** : 07 Dec 2023
Unique Number : 10776032 **Diagnostician** : Don Baldrige
Test Package : FLEET

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 CHICAGO, IL
 US 60638

Contact: MIKE LINLEY
 linleym@rushtruckcenters.com

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 F: (708)496-8818

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)