

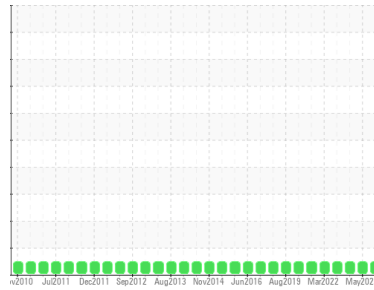


OIL ANALYSIS REPORT



Area
AMR-Sedalia
 Machine Id
17421 VOLVO L90E 67474
 Component
Diesel Engine
 Fluid
CHEVRON 15W40 (6 GAL)

Sample Rating Trend



NORMAL



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		DJJ0012339	DJJ0016935	DJJ023777
Sample Date	Client Info		11 Apr 2024	02 May 2023	10 Feb 2023
Machine Age	hrs	Client Info	17251	16887	16638
Oil Age	hrs	Client Info	500	250	250
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<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 >100	8	10	10
Chromium	ppm	ASTM D5185m >10	0	0	<1
Nickel	ppm	ASTM D5185m >10	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	3	<1	2
Lead	ppm	ASTM D5185m >20	<1	0	1
Copper	ppm	ASTM D5185m >15	<1	<1	0
Tin	ppm	ASTM D5185m >10	<1	0	<1
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	268	272	77
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	80	108	46
Manganese	ppm	ASTM D5185m	<1	<1	1
Magnesium	ppm	ASTM D5185m	611	576	523
Calcium	ppm	ASTM D5185m	1447	1465	1754
Phosphorus	ppm	ASTM D5185m	752	690	876
Zinc	ppm	ASTM D5185m	858	845	1134
Sulfur	ppm	ASTM D5185m	2996	2566	3144

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	8	7	8
Sodium	ppm	ASTM D5185m >50	3	1	1
Potassium	ppm	ASTM D5185m >20	3	<1	2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	7.2	7.4	7.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.4	22.5	22.2

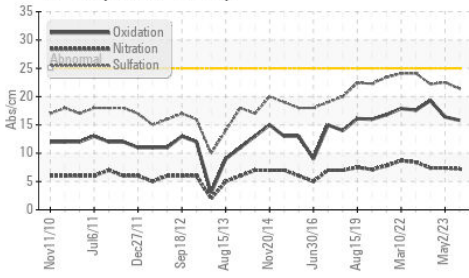
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.8	16.4	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.7	8.8	10.2

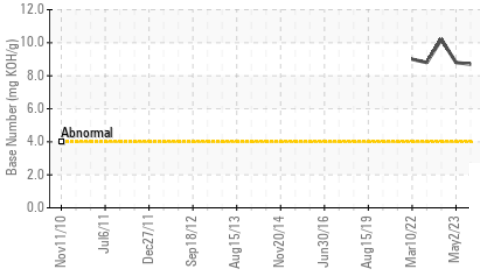


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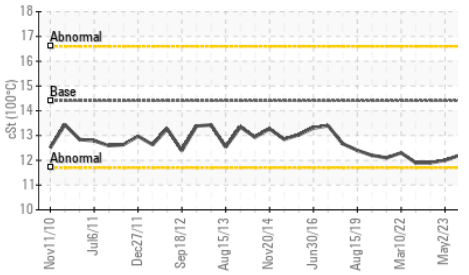
FT-IR (Direct Trend)



Base Number



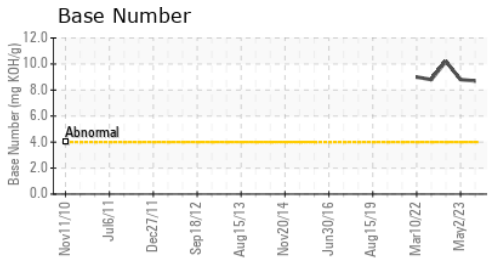
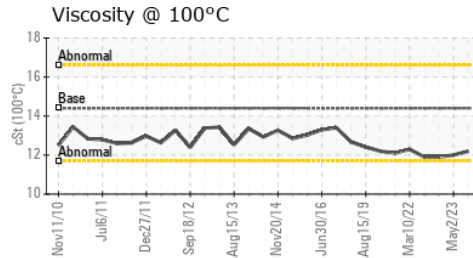
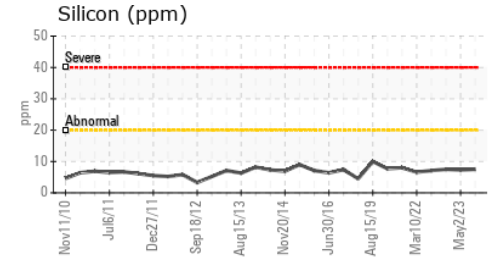
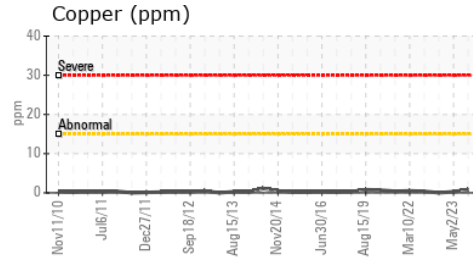
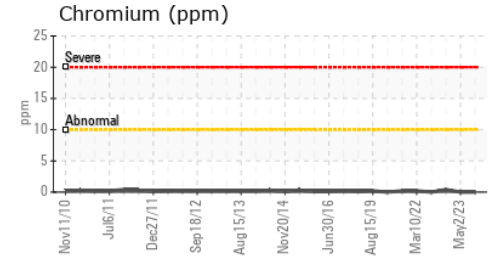
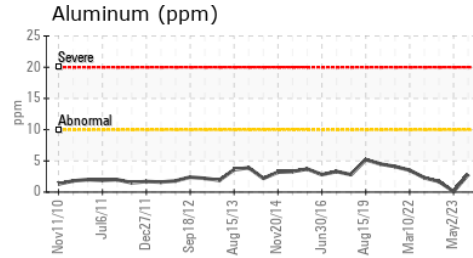
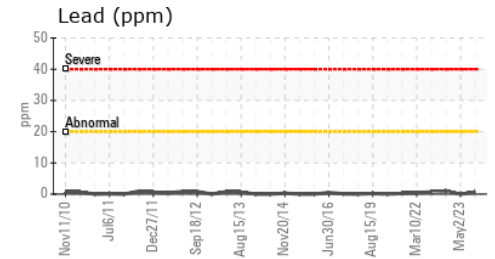
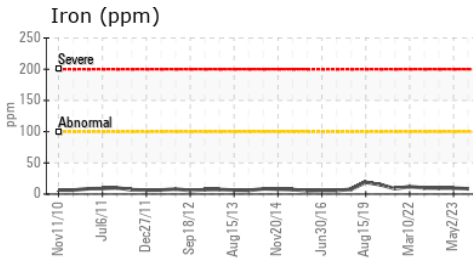
Viscosity @ 100°C



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	14.4	12.2	12.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0012339
Lab Number : 06153689
Unique Number : 10983767
Test Package : MOBCE (Additional Tests: TBN)

ADVANTAGE METALS RECYCLING - SEDALIA
 300 N IRON AVE
 SEDALIA, MO
 US 65301

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

Contact: GREGORY LAND
 gregory.land@advantagerecycling.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (660)827-1873

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (660)827-5304