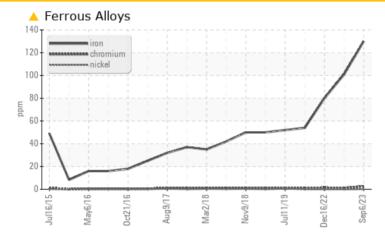


# AUTOCAR 1199E

Component Diesel Engine Fluid PURUS SYNTHETIC BLEND 15W40 (--- GAL)

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	ABNORMAL	ATTENTION	
Iron	ppm	ASTM D5185m	>90	<u> </u>	<b>1</b> 01	80	

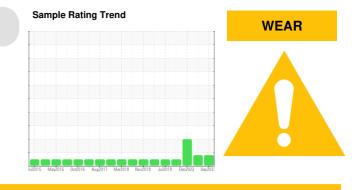
Customer Id: RUIRUI Sample No.: KL0013226 Lab Number: 05966136 Test Package: FLEET



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Don Baldridge +1 <u>don.b505@comcast.net</u>

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



## **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

## **HISTORICAL DIAGNOSIS**

## 04 May 2023 Diag: Doug Bogart



No corrective action is recommended at this time. Resample at the next service interval to monitor.Cylinder, crank, or cam shaft wear is indicated. 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.

### 16 Dec 2022 Diag: Don Baldridge



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present 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.

28 Feb 2020 Diag: Wes Davis



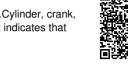
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



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view report





Report Id: RUIRUI [WUSCAR] 05966136 (Generated: 10/03/2023 13:37:15) Rev: 1



## **OIL ANALYSIS REPORT**

## Sample Rating Trend

WEAR

# AUTOCAR 1199E

Component Diesel Engine

Fluid PURUS SYNTHETIC BLEND 15W40 (--- GAL)

## DIAGNOSIS

## A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## 🔺 Wear

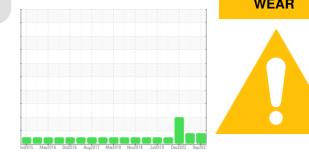
Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

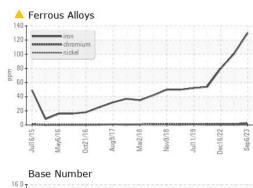
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

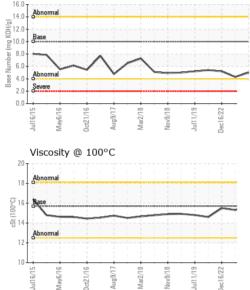


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0013226	KL0011470	KL0007994
Sample Date		Client Info		06 Sep 2023	04 May 2023	16 Dec 2022
Machine Age	mls	Client Info		114654	112070	107897
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>1</b> 30	<b>1</b> 01	80
Chromium	ppm	ASTM D5185m	>4	3	1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	3	5	2
Lead	ppm	ASTM D5185m	>50	34	23	17
Copper	ppm	ASTM D5185m	>55	18	14	13
Tin	ppm	ASTM D5185m	>4	4	2	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
				•	U	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base		-	
	ppm ppm		limit/base	current 52 0	history1	history2
Boron		ASTM D5185m	limit/base	current 52 0 79	history1 37 0 65	history2 34 0 63
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3	history1 37 0 65 <1	history2 34 0 63 1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3     866	history1 37 0 65 <1 630	history2 34 0 63 1 575
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3     866     1907	history1 37 0 65 <1 630 1763	history2 34 0 63 1 575 1737
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3     866     1907     1321	history1 37 0 65 <1 630 1763 1116	history2 34 0 63 1 575 1737 1019
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3     866     1907     1321     1632	history1 37 0 65 <1 630 1763 1116 1394	history2 34 0 63 1 575 1737 1019 1187
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current     52     0     79     3     866     1907     1321	history1 37 0 65 <1 630 1763 1116 1394 3751	history2 34 0 63 1 575 1737 1019 1187 3577
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current     52     0     79     3     866     1907     1321     1632     3771     current	history1 37 0 65 <1 630 1763 1116 1394	history2 34 0 63 1 575 1737 1019 1187
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	current     52     0     79     3     866     1907     1321     1632     3771     current     9	history1     37     0     65     <1     630     1763     1116     1394     3751     history1     6	history2     34     0     63     1     575     1737     1019     1187     3577     history2     6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12	history1     37     0     65     <1     630     1763     1116     1394     3751     history1     6     8	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >15	current     52     0     79     3     866     1907     1321     1632     3771     current     9	history1     37     0     65     <1     630     1763     1116     1394     3751     history1     6	history2     34     0     63     1     575     1737     1019     1187     3577     history2     6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6     current	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7   0   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7	history2   34   0   63   1   575   1737   019   1187   3577   history2   6   7   0   history2   1   1.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >6 >20	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6     current     1.5     11.1	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7   12.3	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7   0   history2   1   1.5   12.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >6	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6     current     1.5	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7	history2   34   0   63   1   575   1737   019   1187   3577   history2   6   7   0   history2   1   1.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >6 >20	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6     current     1.5     11.1	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7   12.3	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7   0   history2   1.5   1.2.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >6 >20 >20 >30	current     52     0     79     3     866     1907     1321     1632     3771     current     9     12     6     current     1.5     11.1     27.9	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7   12.3   31.6	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7   0   history2   1.5   12.4   30.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >15 >20 limit/base >6 >20 >30 limit/base	current   52   0   79   3   866   1907   1321   1632   3771   current   9   12   6   current   1.5   11.1   27.9   current	history1   37   0   65   <1   630   1763   1116   1394   3751   history1   6   8   2   history1   1.7   12.3   31.6   history1	history2   34   0   63   1   575   1737   1019   1187   3577   history2   6   7   0   history2   1.5   12.4   30.7   history2



## **OIL ANALYSIS REPORT**





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	15.7	15.3	15.5
GRAPHS						

Ferrous Alloys 140 120 100 80 60 40 20 η. Jul16/15 -Aug9/17 Sep6/23 /lav6/16 0ct21/16 Jec16/22 Mar2/18 Non-ferrous Metals Dec16/22 3! 30 lead 25 20 15 10 5 Jec16/22 ep6/23 V9/15 1/6Bny 0ct21/ Viscosity @ 100°C Base Number 20 16.0 19 14.0 18 (B/HOJ 12.0 8.1 6. 17 cSt (100°C) 16 14 Base Ab 4 ( Abr S 2.0 12 0.0 Sep6/23 -Sep6/23 -Jul16/15 Aug9/17 Mar2/18 91/11/Jul Aug9/17 Mav6/16 0ct21/16 Mar2/18 Inv9/18 Dec16/22 0ct21/16 Dec16/22 /lav6/16 lov9/18 VILLAGE OF RUIDOSO Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : KL0013226 Received : 02 Oct 2023 313 CREE MEADOWS DR Lab Number : 05966136 Diagnosed : 03 Oct 2023 RUIDOSO, NM Unique Number : 10672687 Diagnostician : Don Baldridge US 88355 Test Package : FLEET Contact: JERRY PARSONS

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)

Certificate L2367

Contact/Location: JERRY PARSONS - RUIRUI

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T: (575)257-1702