

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **142964** Component **Diesel Engine** Fluid VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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

Fuel content negligible. 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.

		May2022 A	ugzuzz Novzuzz Janzu	23 May2023 May2023 Aug202	3 Nov2023	
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL0033231	IL05934650	IL05853016
Sample Date		Client Info		07 Nov 2023	08 Aug 2023	08 May 2023
Machine Age	mls	Client Info		300429	293734	232464
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
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	29	22	4
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	4	3
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	<1	0
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	limit/base 39	current 30	history1 204	history2 358
	ppm ppm		39			
Boron		ASTM D5185m	39	30	204	358
Boron Barium	ppm	ASTM D5185m ASTM D5185m	39 1 49	30 0	204 0	358 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49	30 0 82	204 0 84	358 0 78
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1	30 0 82 <1	204 0 84 <1	358 0 78 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616	30 0 82 <1 724	204 0 84 <1 539	358 0 78 <1 540
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616 1554	30 0 82 <1 724 1400	204 0 84 <1 539 1488	358 0 78 <1 540 1349
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	39 1 49 1 616 1554 899	30 0 82 <1 724 1400 840	204 0 84 <1 539 1488 996	358 0 78 <1 540 1349 987
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	39 1 49 1 616 1554 899 1069	30 0 82 <1 724 1400 840 1044	204 0 84 <1 539 1488 996 1223	358 0 78 <1 540 1349 987 1242
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 ASTM D5185m	39 1 49 1 616 1554 899 1069 2624	30 0 82 <1 724 1400 840 1044 2512	204 0 84 <1 539 1488 996 1223 3661	358 0 78 <1 540 1349 987 1242 3893
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	39 1 49 1 616 1554 899 1069 2624 Iimit/base	30 0 82 <1 724 1400 840 1044 2512 current	204 0 84 <1 539 1488 996 1223 3661 history1	358 0 78 <1 540 1349 987 1242 3893 history2
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	39 1 49 1 616 1554 899 1069 2624 Iimit/base	30 0 82 <1 724 1400 840 1044 2512 current 6	204 0 84 <1 539 1488 996 1223 3661 history1 5	358 0 78 <1 540 1349 987 1242 3893 history2 7
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 method ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 <i>limit/base</i> >25	30 0 82 <1 724 1400 840 1044 2512 <u>current</u> 6 3	204 0 84 <1 539 1488 996 1223 3661 history1 5 8	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25	30 0 82 <1 724 1400 840 1044 2512 <u>current</u> 6 3 10	204 0 84 <1 539 1488 996 1223 3661 history1 5 8 8 5 7	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5	30 0 82 <1 724 1400 840 1044 2512 current 6 3 10 0.4	204 0 84 <1 539 1488 996 1223 3661 history1 5 8 8 57 <1.0	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 2624 2624 >25 >20 >20 >5	30 0 82 <1 724 1400 840 1044 2512 current 6 3 10 0.4 current	204 0 84 <1 539 1488 996 1223 3661 history1 5 8 8 57 <1.0 history1	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 2624 2624 20 >25 >20 >5 20 >5	30 0 82 <1 724 1400 840 1044 2512 <i>current</i> 6 3 10 0.4 <i>current</i>	204 0 84 <1 539 1488 996 1223 3661 history1 5 8 8 57 <1.0 history1 0.6	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0 history2 0.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	39 1 49 1 616 1554 899 1069 2624 ////////////////////////////////////	30 0 82 <1 724 1400 840 1044 2512 <i>current</i> 6 3 10 0.4 <i>current</i> 0.5 9.3	204 0 84 <1 539 1488 996 1223 3661 history1 5 8 8 57 <1.0 history1 0.6 8.5	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0 history2 0.1 5.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25 limit/base >3 >20 >3 >20 >3	30 0 82 <1 724 1400 840 1044 2512 current 6 3 10 0.4 current 0.5 9.3 20.3	204 0 84 <1 539 1488 996 1223 3661 bistory1 5 8 ↓ 57 <1.0 bistory1 0.6 8.5 21.3	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0 history2 0.1 5.2 20.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 imit/base >25 imit/base >3 >20 >30 imit/base	30 0 82 <1 724 1400 840 1044 2512 Current 6 3 10 0.4 0.4 0.5 9.3 20.3	204 0 84 539 1488 996 1223 3661 history1 5 8 8 57 <1.0 history1 0.6 8.5 21.3	358 0 78 <1 540 1349 987 1242 3893 history2 7 <1 3 3 <1.0 history2 0.1 5.2 20.3 history2



OIL ANALYSIS REPORT

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

12.3

Base Number

10.

8

6 | 4

0.0

: 20 Nov 2023

: 22 Nov 2023

Mav16/22

Ba

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

13.0

NONE

NONE

NONE

NONE

NONE

NONE

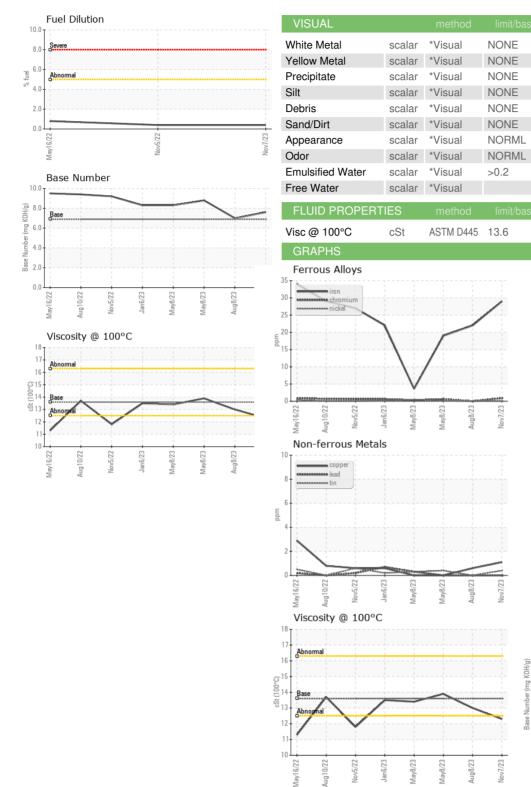
NORML

NORML

NEG

NEG

13.9



Aug8/23 . Nov5/22 Vov7/23 May8/23 Aug10/22 an6/23 May8/23 TAMPA IDEALEASE 5951 ORIENT ROAD TAMPA, FL US 33610-9565 Contact: Russ Cook russcook@idealease.com T: (813)626-9285 F: (844)270-1356



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

: IL0033231

:06011915

: 10751059

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.

Laboratory

Sample No.

Lab Number

Unique Number

an6/73

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Diagnostician : Wes Davis

Received

Diagnosed

Certificate L2367

Page 2 of 2