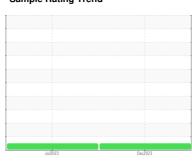


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **6320229**

Component

Diesel Engine

VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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.

			Jul2023	Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL0034243	IL05911766	
Sample Date		Client Info		21 Dec 2023	19 Jul 2023	
Machine Age	mls	Client Info		44285	12552	
Oil Age	mls	Client Info		0	12552	
Oil Changed		Client Info		Changed	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		mathad	limit/base	OLIKKO OT	historyd	hiotom/2
WEAR METALS		method		current	history1	history2
Iron	ppm	ASTM D5185m	>100	23	57	
Chromium	ppm	ASTM D5185m	>20	<1	2	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m		0	4	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	7	17	
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m		1	50	
Tin	ppm	ASTM D5185m	>15	0	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 152	history1	history2
	ppm					
Boron		ASTM D5185m	39	152	11	
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	39	152 0	11	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616	152 0 78	11 3 52 6 578	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1	152 0 78 0	11 3 52 6	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899	152 0 78 0 635 1283 842	11 3 52 6 578 1401 863	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069	152 0 78 0 635 1283 842 1054	11 3 52 6 578 1401 863 1117	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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	152 0 78 0 635 1283 842	11 3 52 6 578 1401 863	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	39 1 49 1 616 1554 899 1069	152 0 78 0 635 1283 842 1054	11 3 52 6 578 1401 863 1117	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	152 0 78 0 635 1283 842 1054 2792	11 3 52 6 578 1401 863 1117 2766	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base	152 0 78 0 635 1283 842 1054 2792 current	11 3 52 6 578 1401 863 1117 2766 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base	152 0 78 0 635 1283 842 1054 2792 current	11 3 52 6 578 1401 863 1117 2766 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25	152 0 78 0 635 1283 842 1054 2792 current 10 2	11 3 52 6 578 1401 863 1117 2766 history1 24	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20	152 0 78 0 635 1283 842 1054 2792 current 10 2 13	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0	history2
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	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0 history1	history2 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	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8 current 0.3	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0 history1 0.4	history2 history2
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 D7844 *ASTM D7844	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5 limit/base	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8 current 0.3 9.2	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0 history1 0.4 9.9	history2 history2
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 D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5 limit/base >3 >20 >30	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8 current 0.3 9.2 21.3	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0 history1 0.4 9.9 21.4	history2 history2
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 D7844 *ASTM D7624 *ASTM D76145	39 1 49 1 616 1554 899 1069 2624 limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base	152 0 78 0 635 1283 842 1054 2792 current 10 2 13 1.8 current 0.3 9.2 21.3 current	11 3 52 6 578 1401 863 1117 2766 history1 24 5 42 <1.0 history1 0.4 9.9 21.4 history1	history2 history2 history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number**

: IL0034243 : 06057271 : 10823220

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 10 Jan 2024 Diagnosed : 12 Jan 2024

Diagnostician : Wes Davis **Test Package**: FLEET (Additional Tests: FuelDilution, PercentFuel)

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) **TAMPA IDEALEASE** 5951 ORIENT ROAD TAMPA, FL

US 33610-9565 Contact: Russ Cook russcook@idealease.com

> T: (813)626-9285 F: (844)270-1356