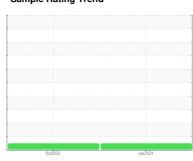


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **G55** Component

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

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. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

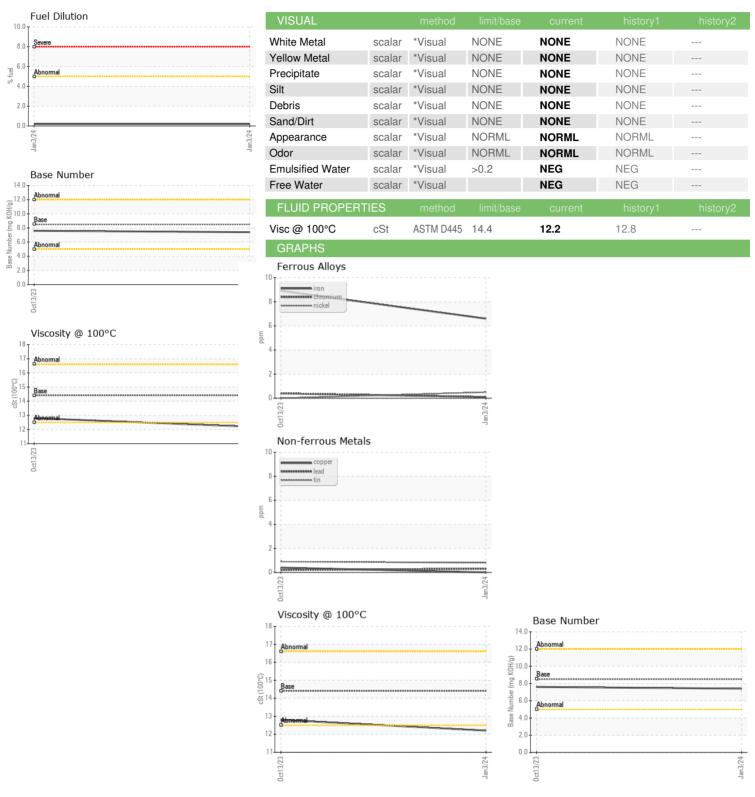
Fluid Condition

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

			0ct2023	Jan2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0841405	WC0841468	
Sample Date		Client Info		03 Jan 2024	13 Oct 2023	
Machine Age	hrs	Client Info		15710	15127	
Oil Age	hrs	Client Info		583	555	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	7	9	
Chromium	ppm	ASTM D5185m	>20	, <1	<1	
Nickel	ppm	ASTM D5185m	>4	<1	0	
Titanium	ppm	ASTM D5185m	27	0	0	
Silver	ppm	ASTM D5185m	>3	<1	<1	
Aluminum	ppm	ASTM D5185m	>20	2	1	
Lead	ppm	ASTM D5185m	>40	- <1	<1	
Copper	ppm	ASTM D5185m	>330	0	<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m	710	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	• •					
ADDITIVES		method			history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 250	current 11	history1	history2
	ppm					history2
Boron	ppm ppm	ASTM D5185m	250	11	9	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	250 10	11 0	9	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	11 0 70	9 0 64	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	11 0 70 <1	9 0 64 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	11 0 70 <1 839	9 0 64 <1 857	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	11 0 70 <1 839 1081	9 0 64 <1 857 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 ASTM D5185m	250 10 100 450 3000 1150 1350	11 0 70 <1 839 1081 967	9 0 64 <1 857 1349 1038	
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 ASTM D5185m	250 10 100 450 3000 1150 1350	11 0 70 <1 839 1081 967 1185	9 0 64 <1 857 1349 1038 1359	
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	250 10 100 450 3000 1150 1350 4250 limit/base	11 0 70 <1 839 1081 967 1185 2830	9 0 64 <1 857 1349 1038 1359 3274	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	11 0 70 <1 839 1081 967 1185 2830 current	9 0 64 <1 857 1349 1038 1359 3274 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25	11 0 70 <1 839 1081 967 1185 2830 current	9 0 64 <1 857 1349 1038 1359 3274 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	11 0 70 <1 839 1081 967 1185 2830 current 4	9 0 64 <1 857 1349 1038 1359 3274 history1	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	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2	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	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 2 <1.0 history1	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	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2 current 0.4	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 2 <1.0 history1 0.5	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 ASTM D7844 *ASTM D7844	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 2 <1.0 history1	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	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2 current 0.4 7.7	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 2 <1.0 history1 0.5 8.0	history2 history2
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 D7844 *ASTM D7844 *ASTM D7624 *ASTM D7844	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30 limit/base	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2 current 0.4 7.7 19.1 current	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 <1.0 history1 0.5 8.0 20.1 history1	history2 history2 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 D7624	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30	11 0 70 <1 839 1081 967 1185 2830 current 4 2 <1 0.2 current 0.4 7.7 19.1	9 0 64 <1 857 1349 1038 1359 3274 history1 5 2 2 <1.0 history1 0.5 8.0 20.1	history2 history2



OIL ANALYSIS REPORT







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

: WC0841405 : 06073671 : 10850348

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 30 Jan 2024 Diagnosed

: 31 Jan 2024 Diagnostician : Wes Davis

Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Certificate L2367 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)

Apple Valley Waste - SEW Location

309 Salina Road Sewell, NJ US 08080

Contact: Service Manager

T:

F: