

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id G30 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

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.

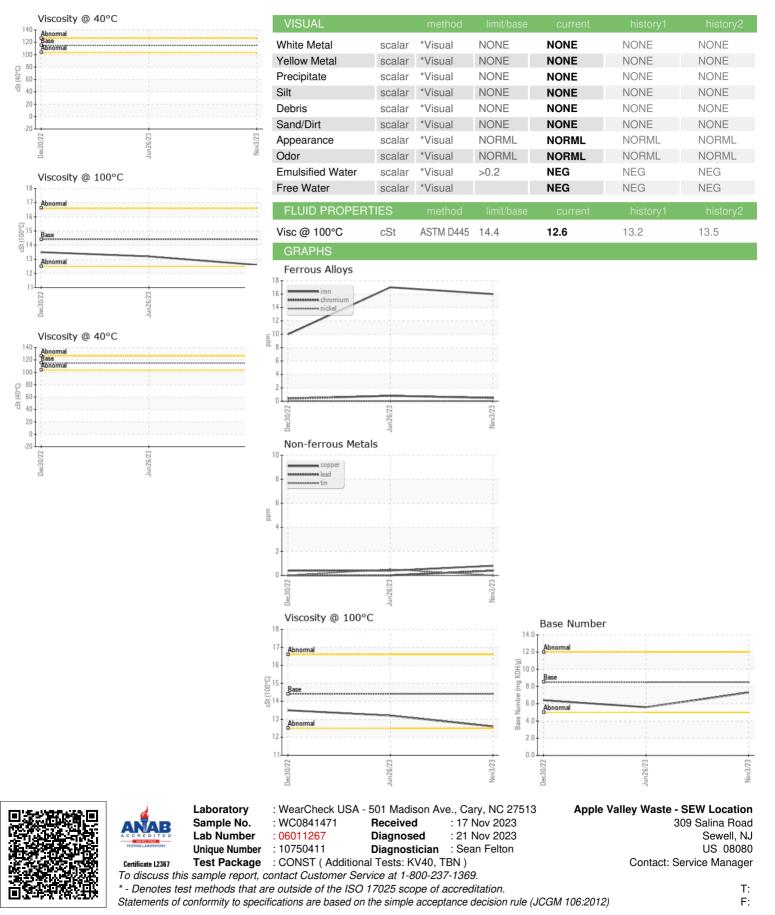
Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0841471	WC0758969	WC0758951
Sample Date		Client Info		03 Nov 2023	26 Jun 2023	30 Dec 2022
Machine Age	hrs	Client Info		15022	14441	13415
Oil Age	hrs	Client Info		581	581	347
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	۷	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
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	>110	16	17	10
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	2
Lead	ppm	ASTM D5185m	>45	<1	0	0
Copper	ppm	ASTM D5185m	>85	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 250	current 12	history1 38	history2 58
	ppm ppm					
Boron		ASTM D5185m	250	12	38	58
Boron Barium	ppm	ASTM D5185m ASTM D5185m	250 10	12 <1	38 0	58 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	12 <1 65	38 0 78	58 2 92
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	12 <1 65 0	38 0 78 <1	58 2 92 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	12 <1 65 0 650	38 0 78 <1 85	58 2 92 <1 58
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	12 <1 65 0 650 1370	38 0 78 <1 85 2338	58 2 92 <1 58 2145 1010 1153
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	250 10 100 450 3000 1150	12 <1 65 0 650 1370 956	38 0 78 <1 85 2338 1036	58 2 92 <1 58 2145 1010
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	250 10 100 450 3000 1150 1350	12 <1 65 0 650 1370 956 1179	38 0 78 <1 85 2338 1036 1251	58 2 92 <1 58 2145 1010 1153
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	250 10 100 450 3000 1150 1350 4250	12 <1 65 0 650 1370 956 1179 3377	38 0 78 <1 85 2338 1036 1251 4540	58 2 92 <1 58 2145 1010 1153 3485
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	250 10 100 450 3000 1150 1350 4250	12 <1 65 0 650 1370 956 1179 3377 current	38 0 78 <1 85 2338 1036 1251 4540 history1	58 2 92 <1 58 2145 1010 1153 3485 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	250 10 100 450 3000 1150 1350 4250 limit/base >30	12 <1 65 0 650 1370 956 1179 3377 current 6	38 0 78 <1 85 2338 1036 1251 4540 history1 6	58 2 92 <1 58 2145 1010 1153 3485 history2 5
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	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158	12 <1 65 0 650 1370 956 1179 3377 Current 6 3	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2
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	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158 >20	12 <1 65 0 650 1370 956 1179 3377 Current 6 3 4	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 2	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158 >20	12 <1 65 0 650 1370 956 1179 3377 current 6 3 4 4	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 2 history1	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158 >20 limit/base	12 <1 65 0 650 1370 956 1179 3377 current 6 3 4 current 0.7	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 4 2 <u>history1</u> 1	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3 history2 0.5
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	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158 >20 limit/base >3 >20	12 <1 65 0 650 1370 956 1179 3377 current 6 3 3 4 current 0.7 9.7	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 4 2 history1 1 1 1 1 1.4	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3 3 history2 0.5 9.8
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	250 10 100 450 3000 1150 1350 4250 imit/base >30 >158 >20 imit/base >3 >20	12 <1 65 0 650 1370 956 1179 3377 current 6 3 4 current 0.7 9.7 21.2	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 2 <u>history1</u> 1 1 11.4 22.6	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3 history2 0.5 9.8 19.4
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 D7844 *ASTM D7844	250 10 100 450 3000 1150 1350 4250 limit/base >30 >158 >20 limit/base >3 >20 >30 >30	12 <1 65 0 650 1370 956 1179 3377 Current 6 3 3 4 Current 0.7 9.7 21.2 Current	38 0 78 <1 85 2338 1036 1251 4540 history1 6 4 4 2 history1 1 11.4 22.6 history1	58 2 92 <1 58 2145 1010 1153 3485 history2 5 2 3 history2 0.5 9.8 19.4 history2



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Contact/Location: Service Manager - AVWSEW