

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

GENERAC WATERFORD - 3003086295

Diesel Engine

NAPA Motor Oil 15W40 (3 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

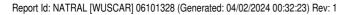
Contamination

There is no indication of any contamination in the oil.

Fluid Condition

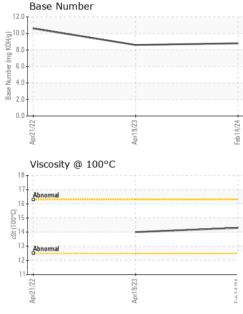
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

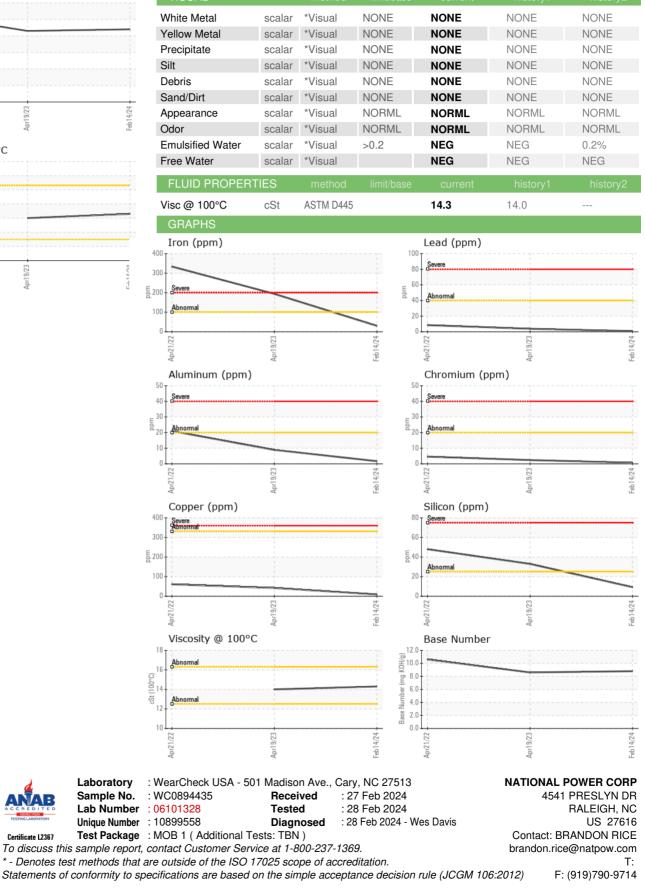
		Ap	2022	Apr2023 Feb20	124	
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0894435	WC0771573	WC0663145
Sample Date		Client Info		14 Feb 2024	19 Apr 2023	21 Apr 2022
Machine Age	hrs	Client Info		277	209	164
Oil Age	hrs	Client Info		15	37	115
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
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	>100	30	194	▲ 334
Chromium	ppm	ASTM D5185m	>20	<1	2	5
Nickel	ppm	ASTM D5185m	>4	0	0	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	9	21
Lead	ppm	ASTM D5185m	>40	<1	4	8
Copper	ppm	ASTM D5185m	>330	9	42	61
Tin	ppm	ASTM D5185m	>15	0	<1	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ABBHINE B		method		Carronne	motory	,
Boron	ppm	ASTM D5185m		35	33	26
	ppm ppm					
Boron		ASTM D5185m		35	33	26
Boron Barium	ppm	ASTM D5185m ASTM D5185m		35 0	33 0	26 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		35 0 34	33 0 51	26 0 61
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		35 0 34 9	33 0 51 51	26 0 61 78
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		35 0 34 9 511	33 0 51 51 483	26 0 61 78 500
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		35 0 34 9 511 1665	33 0 51 51 483 1636	26 0 61 78 500 1948
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		35 0 34 9 511 1665 975	33 0 51 51 483 1636 983	26 0 61 78 500 1948 1086
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	35 0 34 9 511 1665 975 1147	33 0 51 51 483 1636 983 1187	26 0 61 78 500 1948 1086 1348
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		35 0 34 9 511 1665 975 1147 3217	33 0 51 51 483 1636 983 1187 3376	26 0 61 78 500 1948 1086 1348 2959
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	limit/base	35 0 34 9 511 1665 975 1147 3217 current	33 0 51 483 1636 983 1187 3376 history1	26 0 61 78 500 1948 1086 1348 2959 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	limit/base	35 0 34 9 511 1665 975 1147 3217 current 9	33 0 51 51 483 1636 983 1187 3376 history1 33	26 0 61 78 500 1948 1086 1348 2959 history2 48
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	limit/base	35 0 34 9 511 1665 975 1147 3217 current 9 3	33 0 51 51 483 1636 983 1187 3376 history1 33 3	26 0 61 78 500 1948 1086 1348 2959 history2 48 6
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 >25 >20	35 0 34 9 511 1665 975 1147 3217 current 9 3 1	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2
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	limit/base >25 >20 limit/base >3	35 0 34 9 511 1665 975 1147 3217 current 9 3 1 1	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3 3 3	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2 2 history2
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 >25 >20 limit/base >3 >20	35 0 34 9 511 1665 975 1147 3217 current 9 3 1 1 current 0.2	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3 3	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2 2 history2 0.3
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 >25 >20 limit/base >3 >20	35 0 34 9 511 1665 975 1147 3217 current 9 3 1 2 0.2 7.4	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3 3 history1 0.2 8.0	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2 2 history2 0.3 10
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 >25 >20 limit/base >3 >20 >3 >20	35 0 34 9 511 1665 975 1147 3217 <u>current</u> 9 3 1 1 <u>current</u> 0.2 7.4 18.8	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3 3 0 0.2 8.0 20.4	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2 2 history2 0.3 10 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 D7624 *ASTM D7415	limit/base >25 >20 limit/base >3 >20 >30 >30	35 0 34 9 511 1665 975 1147 3217 Current 9 3 1 Current 0.2 7.4 18.8 Current	33 0 51 51 483 1636 983 1187 3376 history1 33 3 3 3 3 0.2 8.0 20.4 history1	26 0 61 78 500 1948 1086 1348 2959 history2 48 6 2 2 history2 0.3 10 19.4 history2





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Certificate L2367

Contact/Location: BRANDON RICE - NATRAL