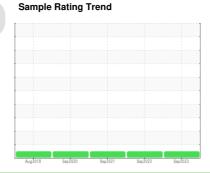


OIL ANALYSIS REPORT

Area 17477] **GENERAC 3001154184 - FRANKLIN CO 911**

Diesel Engine

RED STAR 10W30 (2 GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

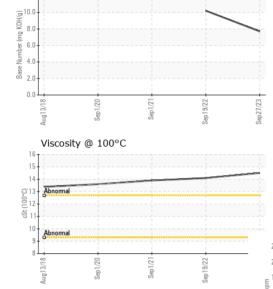
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0663253	WC0663238	WC0519281
Sample Date		Client Info		27 Sep 2023	19 Sep 2022	01 Sep 2021
Machine Age	hrs	Client Info		0	234	204
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2	3	3
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	<1	1
Lead	ppm	ASTM D5185m	>40	<1	1	1
Copper	ppm	ASTM D5185m	>330	1	2	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base			history2
			limit/base	current	history1	· ·
Boron	ppm	ASTM D5185m	limit/base	current 90	history1 86	70
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	current 90 0	history1 86 0	70 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 90 0 75	history1 86 0 14	70 0 21
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 90 0 75 0	history1 86 0 14 <1	70 0 21 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 90 0 75 0 162	history1 86 0 14 <1 725	70 0 21 <1 739
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 90 0 75 0 162 2008	history1 86 0 14 <1 725 1302	70 0 21 <1 739 1307
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	limit/base	current 90 0 75 0 162 2008 1061	history1 86 0 14 <1 725 1302 979	70 0 21 <1 739 1307 1000
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 90 0 75 0 162 2008 1061 1236	history1 86 0 14 <1 725 1302 979 1138	70 0 21 <1 739 1307 1000
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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		current 90 0 75 0 162 2008 1061 1236 4336	history1 86 0 14 <1 725 1302 979 1138 4452	70 0 21 <1 739 1307 1000 1142 3466
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	current 90 0 75 0 162 2008 1061 1236 4336 current	history1 86 0 14 <1 725 1302 979 1138 4452 history1	70 0 21 <1 739 1307 1000 1142 3466 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	current 90 0 75 0 162 2008 1061 1236 4336 current 7	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4	70 0 21 <1 739 1307 1000 1142 3466 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	current 90 0 75 0 162 2008 1061 1236 4336 current 7	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20	current 90 0 75 0 162 2008 1061 1236 4336 current 7 2 3	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20 limit/base	current 90 0 75 0 162 2008 1061 1236 4336 current 7 2 3	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4 2 4	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2 4 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 Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	current 90 0 75 0 162 2008 1061 1236 4336 current 7 2 3 current 0.1	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4 2 4 history1 0.1	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2 4 history2 0.1
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 method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	current 90 0 75 0 162 2008 1061 1236 4336 current 7 2 3 current 0.1 7.2	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4 2 4 history1 0.1 6.8	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2 4 history2 0.1 6.1
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 Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >20 limit/base >3 >20 >30	current 90 0 75 0 162 2008 1061 1236 4336 current 7 2 3 current 0.1 7.2 17.4	history1 86 0 14 <1 725 1302 979 1138 4452 history1 4 2 4 history1 0.1 6.8 19.9	70 0 21 <1 739 1307 1000 1142 3466 history2 5 2 4 history2 0.1 6.1 16.9



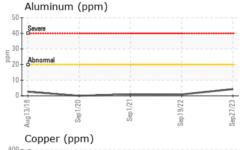
Base Number

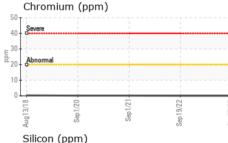
OIL ANALYSIS REPORT

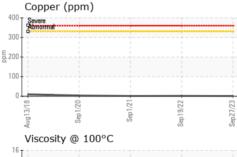


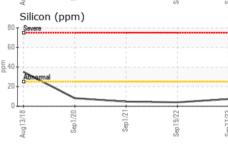
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2

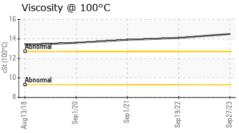
	FLUID PROPE	ERTIES	method				history2	
١	/isc @ 100°C	cSt	ASTM D445		14.5	14.1	13.9	
	GRAPHS							
250	Iron (ppm)		Lead (ppm)					
200	Severe		!	100	Severe	1		
150				E 60				
100	Abnormal		····	E 40	Abnormal			
				20				

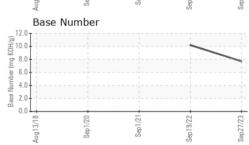














Laboratory Sample No. Lab Number **Unique Number**

: 10673903

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0663253 : 05967352

Received Diagnosed

: 03 Oct 2023 : 05 Oct 2023

Diagnostician : Jonathan Hester

Test Package : MOB 1 (Additional Tests: TBN)

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 27616 Contact: BRANDON RICE brandon.rice@natpow.com T:

NATIONAL POWER CORP

4541 PRESLYN DR

RALEIGH, NC

F: (919)790-9714

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

Contact/Location: BRANDON RICE - NATRAL