

OIL ANALYSIS REPORT

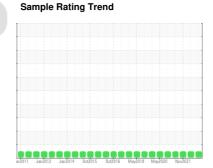


OKLAHOMA/102/EG - ROLLER/COMPACTOR 64.12L [OKLAHOMA^102^EG - ROLLER/COMPACTOR]

Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





NORMAL

DIAGNOSIS

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

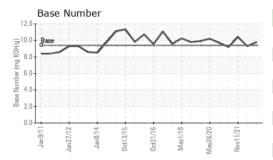
Fluid Condition

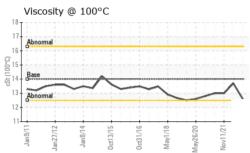
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0833970	WC0634194	WC0634160
Sample Date		Client Info		15 Aug 2023	01 Dec 2021	11 Nov 2021
Machine Age	hrs	Client Info		6263	5999	5985
Oil Age	hrs	Client Info		413	15	228
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٧	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	20	4	8
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	5	1	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	4	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		•	0	0
Oddiniani	ppiii	ASTIVI DOTOSIII		0	0	U
ADDITIVES	ррш	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method	0	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 47	history1	history2 46
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 47 0	history1 60 0	history2 46 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 47 0 42	history1 60 0 33	history2 46 0 36
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 47 0 42 <1	history1 60 0 33 <1	history2 46 0 36 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 47 0 42 <1 541 1787 769	history1 60 0 33 <1 556 1722 788	history2 46 0 36 <1 531 1773 787
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 47 0 42 <1 541 1787 769 927	history1 60 0 33 <1 556 1722	history2 46 0 36 <1 531 1773 787 866
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 47 0 42 <1 541 1787 769	history1 60 0 33 <1 556 1722 788	history2 46 0 36 <1 531 1773 787 866 2236
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 47 0 42 <1 541 1787 769 927 2998 current	history1 60 0 33 <1 556 1722 788 893 2406 history1	history2 46 0 36 <1 531 1773 787 866 2236 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 47 0 42 <1 541 1787 769 927 2998 current	history1 60 0 33 <1 556 1722 788 893 2406 history1 5	history2 46 0 36 <1 531 1773 787 866 2236 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 	current 47 0 42 <1 541 1787 769 927 2998 current	history1 60 0 33 <1 556 1722 788 893 2406 history1 5	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 limit/base >25 >20	current 47 0 42 <1 541 1787 769 927 2998 current	history1 60 0 33 <1 556 1722 788 893 2406 history1 5	history2 46 0 36 <1 531 1773 787 866 2236 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1
ADDITIVES 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	method ASTM D5185m method ASTM D5185m	0 0 0 0 limit/base >25 >20	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current 0.3	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1 0.2	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1 history2 0.3
ADDITIVES 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	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current 0.3 7.5	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1 0.2 10.8	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1 history2 0 3 7.1
ADDITIVES 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	method ASTM D5185m method ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current 0.3	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1 0.2	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1 history2 0.3
ADDITIVES 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	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current 0.3 7.5	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1 0.2 10.8	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1 history2 0 3 7.1
ADDITIVES 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	method ASTM D5185m method *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	current 47 0 42 <1 541 1787 769 927 2998 current 10 4 1 current 0.3 7.5 22.5	history1 60 0 33 <1 556 1722 788 893 2406 history1 5 2 history1 0.2 10.8 23.1	history2 46 0 36 <1 531 1773 787 866 2236 history2 4 0 <1 history2 0.3 7.1 22.4



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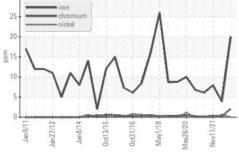


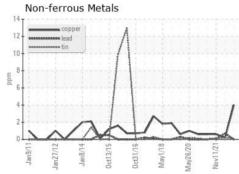


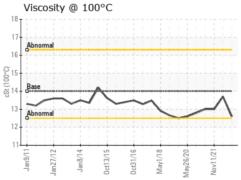
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

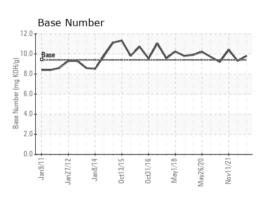
FLUID PROPER	TIES	method				history2
Visc @ 100°C	cSt	ASTM D445	14	12.6	13.7	13.0

Ferrous Alloys













Laboratory Sample No. Lab Number Unique Number : 10622398

: WC0833970 : 05937127

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Aug 2023

Diagnosed : 29 Aug 2023 Diagnostician : Wes Davis

Test Package : CONST (Additional Tests: TBN) 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)

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