

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



OKLAHOMA/102/EG - ROLLER/COMPACTOR 64.14L [OKLAHOMA^102^EG - ROLLER/COMPACTOR]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

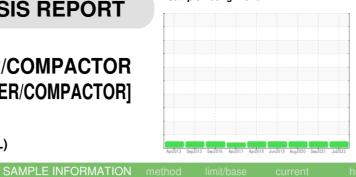
All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

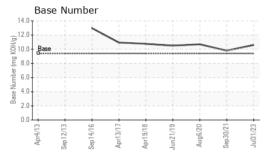
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

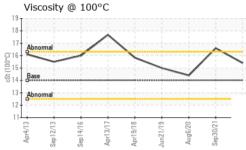


Sample Number		Client Info		WC0808075	WC0627896	WC0481895
Sample Date		Client Info		31 Jul 2023	30 Sep 2021	06 Aug 2020
Machine Age	hrs	Client Info		1685	1452	1241
Oil Age	hrs	Client Info		233	212	40
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	1	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	>150	21	16	10
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	3	4	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>30	6	9	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
A D D ITI) (F 0						
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	limit/base	current 62	history1 64	history2 57
	ppm					· ·
Boron		ASTM D5185m	0	62	64	57
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	62 2	64 0	57 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	62 2 51	64 0 29	57 0 43
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	62 2 51 <1	64 0 29 <1	57 0 43 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	62 2 51 <1 616	64 0 29 <1 526	57 0 43 <1 553
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	62 2 51 <1 616 2206	64 0 29 <1 526 2114	57 0 43 <1 553 1746
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	62 2 51 <1 616 2206 880	64 0 29 <1 526 2114 876	57 0 43 <1 553 1746 700
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	0 0 0	62 2 51 <1 616 2206 880 1112	64 0 29 <1 526 2114 876 1057	57 0 43 <1 553 1746 700 865
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	0 0 0 0	62 2 51 <1 616 2206 880 1112 3053	64 0 29 <1 526 2114 876 1057 2639	57 0 43 <1 553 1746 700 865 1940
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	62 2 51 <1 616 2206 880 1112 3053	64 0 29 <1 526 2114 876 1057 2639 history1	57 0 43 <1 553 1746 700 865 1940 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	62 2 51 <1 616 2206 880 1112 3053 current	64 0 29 <1 526 2114 876 1057 2639 history1	57 0 43 <1 553 1746 700 865 1940 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 	62 2 51 <1 616 2206 880 1112 3053 current 8	64 0 29 <1 526 2114 876 1057 2639 history1 7	57 0 43 <1 553 1746 700 865 1940 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25 >20	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4	57 0 43 <1 553 1746 700 865 1940 history2 13 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	ASTM D5185m	0 0 0 0 limit/base >25 >20	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4 history1	57 0 43 <1 553 1746 700 865 1940 history2 13 4 10
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	0 0 0 0 limit/base >25 >20 limit/base >3	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2 current 0.2	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4 history1 0.3	57 0 43 <1 553 1746 700 865 1940 history2 13 4 10 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	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2 current 0.2 9.1	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4 history1 0.3 9.5	57 0 43 <1 553 1746 700 865 1940 history2 13 4 10 history2 0.1 8.4
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 Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2 current 0.2 9.1 23.0 current	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4 history1 0.3 9.5 21.6	57 0 43 <1 553 1746 700 865 1940 history2 13 4 10 history2 0.1 8.4 23.4 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m METHOD ASTM D5185m METHOD *ASTM D7844 *ASTM D7624 *ASTM D7615 METHOD	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30 limit/base	62 2 51 <1 616 2206 880 1112 3053 current 8 0 2 current 0.2 9.1 23.0	64 0 29 <1 526 2114 876 1057 2639 history1 7 6 4 history1 0.3 9.5 21.6 history1	57 0 43 <1 553 1746 700 865 1940 history2 13 4 10 history2 0.1 8.4 23.4



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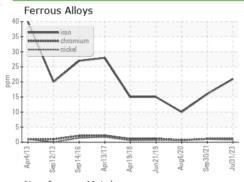


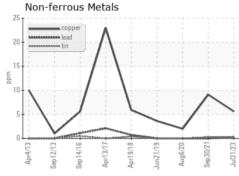


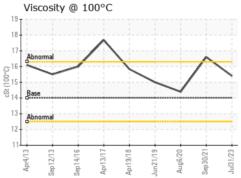
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

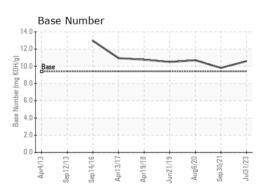
FLUID PROPERI	IES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	14	15.4	16.6	14.4

GRAPHS













Laboratory Sample No. Lab Number

Unique Number : 10603117

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0808075 : 05923170

Received Diagnosed

: 14 Aug 2023 Diagnostician : Wes Davis

: 14 Aug 2023

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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Submitted By: BRENDAN JACKSON