

OIL ANALYSIS REPORT

Sample Rating Trend







OKLAHOMA/3 Machine Id 39.63 [OKLAHOMA^3]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- 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

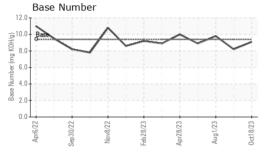
Fluid Condition

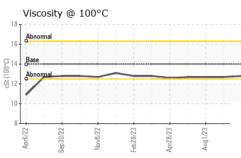
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Apr2022	7072022	Feb 2023 Apr 2023 Aug 2023	Oct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0857291	WC0833962	WC0834151
Sample Date		Client Info		18 Oct 2023	24 Aug 2023	01 Aug 2023
Machine Age	hrs	Client Info		4226	3833	3613
Oil Age	hrs	Client Info		348	3299	3299
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	17	29	22
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	1	3	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	1	6	7
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base	current 26	history1	history2
	ppm ppm		0			
Boron		ASTM D5185m	0	26	19	43
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	26 0	19 0	43 2
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	26 0 39	19 0 42	43 2 65
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	26 0 39 <1	19 0 42 <1	43 2 65 <1 718 2540
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	26 0 39 <1 501	19 0 42 <1 527	43 2 65 <1 718
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	26 0 39 <1 501 1678	19 0 42 <1 527 1794	43 2 65 <1 718 2540
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	0 0 0	26 0 39 <1 501 1678 667	19 0 42 <1 527 1794 771	43 2 65 <1 718 2540 1125
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	26 0 39 <1 501 1678 667 908	19 0 42 <1 527 1794 771 945	43 2 65 <1 718 2540 1125 1324
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0	26 0 39 <1 501 1678 667 908 2455 current	19 0 42 <1 527 1794 771 945 2923 history1	43 2 65 <1 718 2540 1125 1324 4047 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base	26 0 39 <1 501 1678 667 908 2455	19 0 42 <1 527 1794 771 945 2923 history1 5	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base	26 0 39 <1 501 1678 667 908 2455 current	19 0 42 <1 527 1794 771 945 2923 history1	43 2 65 <1 718 2540 1125 1324 4047 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25	26 0 39 <1 501 1678 667 908 2455 current 5 3	19 0 42 <1 527 1794 771 945 2923 history1 5	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25 >20	26 0 39 <1 501 1678 667 908 2455 current 5 3	19 0 42 <1 527 1794 771 945 2923 history1 5 0	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3	26 0 39 <1 501 1678 667 908 2455 current 5 3 0	19 0 42 <1 527 1794 771 945 2923 history1 5 0 history1	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0 1 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 D7844	0 0 0 0 0 limit/base >25 >20 limit/base >3	26 0 39 <1 501 1678 667 908 2455 current 5 3 0 current 0.3	19 0 42 <1 527 1794 771 945 2923 history1 5 0 history1 0.4	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0 1 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 method *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	26 0 39 <1 501 1678 667 908 2455 current 5 3 0 current 0.3 9.0	19 0 42 <1 527 1794 771 945 2923 history1 5 0 history1 0.4 9.8	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0 1 history2 0.3 8.3
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	26 0 39 <1 501 1678 667 908 2455 current 5 3 0 current 0.3 9.0 22.5	19 0 42 <1 527 1794 771 945 2923 history1 5 0 history1 0.4 9.8 22.6	43 2 65 <1 718 2540 1125 1324 4047 history2 6 0 1 history2 0.3 8.3 22.7



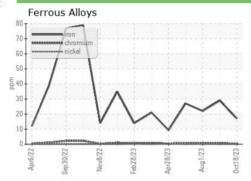
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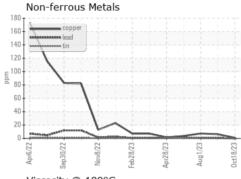


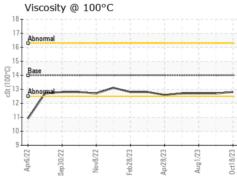


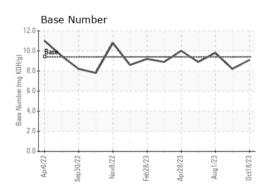
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPEF	RTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	14	12.8	12.7	12.7













Laboratory Sample No. Lab Number Unique Number : 10729759

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0857291 : 06001399

Received Diagnosed

: 08 Nov 2023 : 09 Nov 2023 Diagnostician : Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS US 67213

Contact: SHAWN SOUTH

shawn.south@sherwood.net T: x:

F: x:

Certificate L2367

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)

Report Id: SHEWIC [WUSCAR] 06001399 (Generated: 11/17/2023 13:22:25) Rev: 1

Submitted By: GARRETT ADAMS