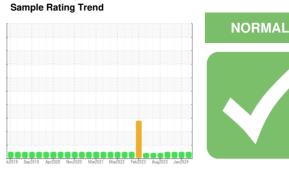


OIL ANALYSIS REPORT

Area OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL 69.11 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL] Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

SAMPLE INFORMATION me





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.

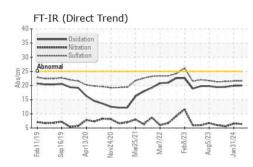
Fluid Condition

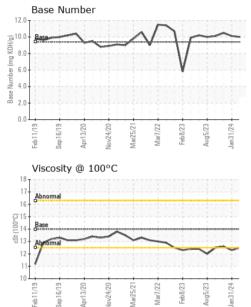
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		method	limit/base	current	history i	nistory2
Sample Number		Client Info		WC0914525	WC0874012	WC0873928
Sample Date		Client Info		27 Mar 2024	31 Jan 2024	17 Nov 2023
Machine Age	hrs	Client Info		10727	10325	9940
Oil Age	hrs	Client Info		402	9940	9670
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
	_					
CONTAMINATION	N	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
		ASTM D5185m	>100		2	<1
Iron	ppm			5		
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m		2	1	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m		3	3	<1
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 53	history1 53	history2 57
	ppm ppm	ASTM D5185m			· · · · ·	
Boron		ASTM D5185m	0	53	53	57
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	53 0	53 0	57 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	53 0 41	53 0 38	57 0 38
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	53 0 41 <1	53 0 38 <1	57 0 38 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	53 0 41 <1 491	53 0 38 <1 493	57 0 38 0 506
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	53 0 41 <1 491 1644	53 0 38 <1 493 1621	57 0 38 0 506 1720
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	0 0 0	53 0 41 <1 491 1644 744	53 0 38 <1 493 1621 760	57 0 38 0 506 1720 809
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	0 0 0	53 0 41 <1 491 1644 744 905	53 0 38 <1 493 1621 760 883	57 0 38 0 506 1720 809 981
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	0 0 0 0 limit/base	53 0 41 <1 491 1644 744 905 2550 current	53 0 38 <1 493 1621 760 883 2474 history1	57 0 38 0 506 1720 809 981 2629 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 0 0 limit/base	53 0 41 <1 491 1644 744 905 2550 current 5	53 0 38 <1 493 1621 760 883 2474 history1 4	57 0 38 0 506 1720 809 981 2629 history2 3
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 ASTM D5185m	0 0 0 0 limit/base >25	53 0 41 <1 491 1644 744 905 2550 current	53 0 38 <1 493 1621 760 883 2474 history1 4 3	57 0 38 0 506 1720 809 981 2629 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 limit/base >25 >20	53 0 41 <1 491 1644 744 905 2550 current 5 2 2 5 2 2 2 2	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1	57 0 38 0 506 1720 809 981 2629 history2 3 2 2 0
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	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	53 0 41 <1 491 1644 744 905 2550 current 5 2 2 2 2 2	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 history1	57 0 38 0 506 1720 809 981 2629 history2 3 2 2 0 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	0 0 0 0 limit/base >25 >20 limit/base >3	53 0 41 <1 491 1644 744 905 2550 <u>current</u> 5 2 2 2 2 2 <u>current</u> 0.2	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 4 3 <1 history1 0.1	57 0 38 0 506 1720 809 981 2629 history2 3 2 0 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 ASTM D5185m	0 0 0 0 imit/base >25 >20 imit/base >3 >20	53 0 41 <1 491 1644 744 905 2550 <i>current</i> 5 2 2 2 2 <i>current</i> 0.2 6.4	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 4 3 <1 history1 0.1 6.5	57 0 38 0 506 1720 809 981 2629 history2 3 2 2 0 history2 0 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	0 0 0 0 limit/base >25 >20 limit/base >3	53 0 41 <1 491 1644 744 905 2550 <u>current</u> 5 2 2 2 2 2 <u>current</u> 0.2	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 4 3 <1 history1 0.1	57 0 38 0 506 1720 809 981 2629 history2 3 2 0 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 ASTM D5185m	0 0 0 0 imit/base >25 >20 imit/base >3 >20	53 0 41 <1 491 1644 744 905 2550 <i>current</i> 5 2 2 2 2 <i>current</i> 0.2 6.4	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 4 3 <1 history1 0.1 6.5	57 0 38 0 506 1720 809 981 2629 history2 3 2 2 0 history2 0.1 5.6
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	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	53 0 41 <1 491 1644 744 905 2550 <u>current</u> 5 2 2 2 2 2 <u>current</u> 0.2 6.4 21.6	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 4 3 <1 0.1 6.5 21.6	57 0 38 0 506 1720 809 981 2629 history2 3 2 0 history2 0.1 5.6 21.4
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	0 0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1	53 0 41 <1 491 1644 744 905 2550 Current 5 2 2 2 2 2 Current 0.2 6.4 21.6 Current	53 0 38 <1 493 1621 760 883 2474 history1 4 3 <1 history1 0.1 6.5 21.6 history1	57 0 38 0 506 1720 809 981 2629 history2 3 2 2 0 history2 0.1 5.6 21.4 history2

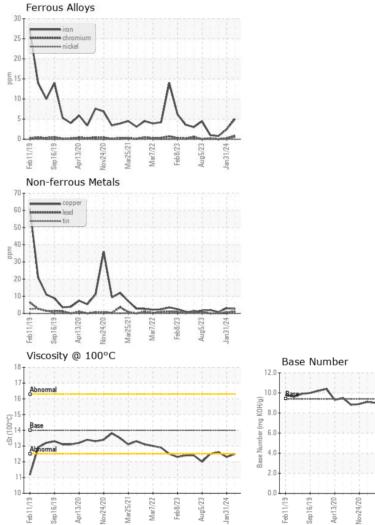


OIL ANALYSIS REPORT





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	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.5	12.3	12.6
GRAPHS						



Feb8/23 an31/24 Jg5/23 Feb11/19 Apr13/20 Sep 16/19 00/12/00 /ar25/21 **Mar**7/22 : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS : 05 Apr 2024 - Wes Davis US 67213 Contact: DOUG KING

Unique Number : 10964307 Diagnosed Test Package : CONST (Additional Tests: TBN) Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WC0914525

* - 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)

Received

Tested

: 05 Apr 2024

: 05 Apr 2024

Report Id: SHEWIC [WUSCAR] 06139499 (Generated: 04/06/2024 01:47:33) Rev: 1

Laboratory

Sample No.

Lab Number : 06139499

Submitted By: GARRETT ADAMS

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F: x: