

OIL ANALYSIS REPORT

OKLAHOMA/102/EG - OTHER SERVICE 87.40 [OKLAHOMA^102^EG - OTHER SERVICE]

Diesel Engine

Fluid MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

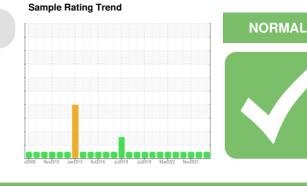
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

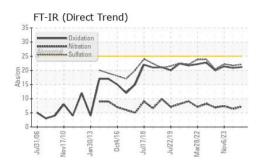
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

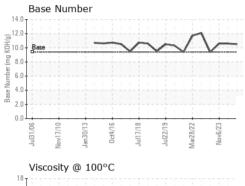


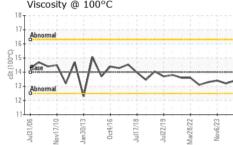
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0908852	WC0821736	WC0857273
Sample Date		Client Info		10 Apr 2024	05 Mar 2024	06 Nov 2023
Machine Age	hrs	Client Info		6405	6245	6135
Oil Age	hrs	Client Info		160	110	135
Oil Changed		Client Info		Changed	Changed	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
Iron	ppm	ASTM D5185m	>100	8	4	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	<1	2
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	biotom	biotory 0
188111120		method	iiiiii/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	61	65	60
	ppm ppm		0			
Boron		ASTM D5185m	0	61	65	60
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	61 0	65 0	60 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	61 0 45	65 0 44	60 0 44
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 45 <1	65 0 44 0	60 0 44 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 45 <1 563	65 0 44 0 495	60 0 44 <1 564
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	61 0 45 <1 563 1695	65 0 44 0 495 1669	60 0 44 <1 564 1774
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	61 0 45 <1 563 1695 834	65 0 44 0 495 1669 705	60 0 44 <1 564 1774 828
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	61 0 45 <1 563 1695 834 982	65 0 44 0 495 1669 705 888	60 0 44 <1 564 1774 828 1015
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	0 0 0 0 limit/base	61 0 45 <1 563 1695 834 982 2893	65 0 44 0 495 1669 705 888 2445	60 0 44 <1 564 1774 828 1015 2721
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	0 0 0 0 limit/base	61 0 45 <1 563 1695 834 982 2893 current	65 0 44 0 495 1669 705 888 2445 history1	60 0 44 <1 564 1774 828 1015 2721 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm 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 imit/base >25	61 0 45 <1 563 1695 834 982 2893 current 7	65 0 44 0 495 1669 705 888 2445 <u>history1</u> 8	60 0 44 <1 564 1774 828 1015 2721 history2 8
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 ASTM D5185m	0 0 0 0 imit/base >25	61 0 45 <1 563 1695 834 982 2893 current 7 <1	65 0 44 0 495 1669 705 888 2445 bistory1 8 <	60 0 44 <1 564 1774 828 1015 2721 history2 8 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 <u>limit/base</u> >25 >20	61 0 45 <1 563 1695 834 982 2893 current 7 <1 2	65 0 44 0 495 1669 705 888 2445 history1 8 8 <1 1	60 0 44 <1 564 1774 828 1015 2721 history2 8 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 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	61 0 45 <1 563 1695 834 982 2893 current 7 <1 2 2	65 0 44 0 495 1669 705 888 2445 <u>history1</u> 8 < 1 1 <u>history1</u>	60 0 44 <1 564 1774 828 1015 2721 history2 8 2 0 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	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	61 0 45 <1 563 1695 834 982 2893 current 7 <1 2 2 current 0.1	65 0 44 0 495 1669 705 888 2445 <u>history1</u> 8 <1 1 <u>history1</u> 0.1	60 0 44 <1 564 1774 828 1015 2721 history2 8 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 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	61 0 45 <1 563 1695 834 982 2893 current 7 <1 2 current 0.1 7.2	65 0 44 0 495 1669 705 888 2445 history1 8 3 <1 1 history1 0.1 6.4	60 0 44 <1 564 1774 828 1015 2721 history2 8 2 0 history2 0.1 7.4
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 D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 0 45 <1 563 1695 834 982 2893 <u>current</u> 7 <1 2 2 <u>current</u> 0.1 7.2 22.1	65 0 44 0 495 1669 705 888 2445 history1 8 < 1 1 history1 0.1 6.4 21.7	60 0 44 <1 564 1774 828 1015 2721 history2 8 2 0 history2 0.1 7.4 22.2
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 D7844	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 0 45 <1 563 1695 834 982 2893 current 7 <1 2 vurrent 0.1 7.2 22.1	65 0 44 0 495 1669 705 888 2445 history1 8 8 <1 1 1 history1 0.1 6.4 21.7 history1	60 0 44 <1 564 1774 828 1015 2721 history2 8 2 0 history2 0.1 7.4 22.2 history2



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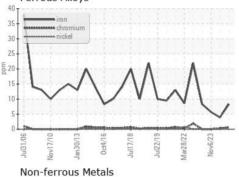


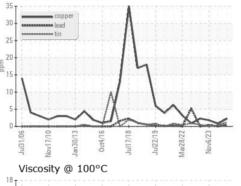


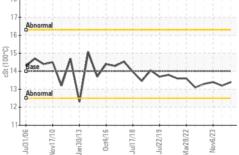


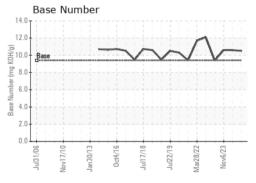
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.4	13.2	13.4
CDADUS						

Ferrous Alloys









Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SHERWOOD CONSTRUCTION CO INC Sample No. : WC0908852 Received : 22 Apr 2024 3219 WEST MAY ST Lab Number : 06156661 Tested : 23 Apr 2024 WICHITA, KS Unique Number : 10992084 Diagnosed : 23 Apr 2024 - Wes Davis US 67213 Test Package : CONST (Additional Tests: TBN) Contact: DOUG KING Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doug.king@sherwood.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (316)617-3161 F: x:

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

Report Id: SHEWIC [WUSCAR] 06156661 (Generated: 04/23/2024 18:08:58) Rev: 1

Submitted By: BOBBY JONES

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