

## **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Wear

oil.

Area

## KANSAS/44/EG - OTHER SERVICE 53.122L [KANSAS^44^EG - OTHER SERVICE] **Diesel Engine** Fluid

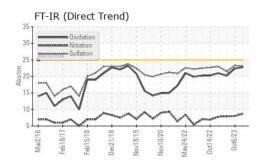
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

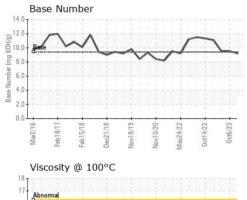
## DIAGNOSIS SAMPLE INFORMATION method Sample Number Recommendation Resample at the next service interval to monitor. Sa Ма All component wear rates are normal. Oil Oil Contamination Sar There is no indication of any contamination in the Fluid Condition Fue The BN result indicates that there is suitable Wa alkalinity remaining in the oil. The condition of the oil is suitable for further service. Gly Iror Chi Nic Tita Silv Alu Lea Co Tin Va Cad

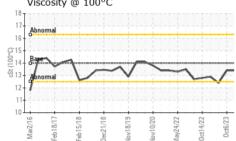
Sample Number		Client Info		WC0918168	WC0862558	WC0789744
Sample Date		Client Info		15 Apr 2024	06 Oct 2023	24 Apr 2023
Machine Age	hrs	Client Info		5352	5109	4887
Oil Age	hrs	Client Info		0	0	4474
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<b>A</b> 3.4
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	12	10	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	4	2	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method				history2
ABBIIIVEO		methou	iiiiii/base	current	history1	TIIStory2
Boron	ppm	ASTM D5185m	0	58	43	41
	ppm ppm					
Boron		ASTM D5185m	0	58	43	41
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	58 2	43 0 44 <1	41 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	58 2 41	43 0 44	41 0 36
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	58 2 41 2	43 0 44 <1 552 1774	41 0 36 1
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	58 2 41 2 542 1880 817	43 0 44 <1 552 1774 961	41 0 36 1 546 1831 826
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	58 2 41 2 542 1880	43 0 44 <1 552 1774 961 1208	41 0 36 1 546 1831 826 1006
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	58 2 41 2 542 1880 817	43 0 44 <1 552 1774 961	41 0 36 1 546 1831 826
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	58 2 41 2 542 1880 817 1005	43 0 44 <1 552 1774 961 1208	41 0 36 1 546 1831 826 1006
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 Imit/base	58 2 41 2 542 1880 817 1005 2877	43 0 44 <1 552 1774 961 1208 2850	41 0 36 1 546 1831 826 1006 3564
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 Imit/base	58 2 41 2 542 1880 817 1005 2877 current	43 0 44 <1 552 1774 961 1208 2850 history1	41 0 36 1 546 1831 826 1006 3564 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 <b>method</b> ASTM D5185m	0 0 0 0 Imit/base	58 2 41 2 542 1880 817 1005 2877 current 9	43 0 44 <1 552 1774 961 1208 2850 history1 10	41 0 36 1 546 1831 826 1006 3564 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 <b>method</b> ASTM D5185m	0 0 0 0 ! ! ! imit/base	58 2 41 2 542 1880 817 1005 2877 current 9 4	43 0 44 <1 552 1774 961 1208 2850 history1 10 4	41 0 36 1 546 1831 826 1006 3564 history2 3 3 3
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	58 2 41 2 542 1880 817 1005 2877 current 9 4 0	43 0 44 <1 552 1774 961 1208 2850 history1 10 4 2	41 0 36 1 546 1831 826 1006 3564 history2 3 3 3 <1
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 ASTM D5185m	0 0 0 0 imit/base >25 >20 limit/base	58 2 41 2 542 1880 817 1005 2877 current 9 4 0 0	43 0 44 552 1774 961 1208 2850 history1 10 4 2 2 history1	41 0 36 1 546 1831 826 1006 3564 history2 3 3 <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 ASTM D5185m	0 0 0 0 imit/base >25 >20 imit/base >3	58 2 41 2 542 1880 817 1005 2877 current 9 4 0 current 0.2	43 0 44 <1 552 1774 961 1208 2850 history1 10 4 2 2 history1 0.2	41 0 36 1 546 1831 826 1006 3564 history2 3 3 <1 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	58 2 41 2 542 1880 817 1005 2877 <i>current</i> 9 4 0 <i>current</i> 0.2 8.7	43 0 44 <1 552 1774 961 1208 2850 history1 10 4 2 2 history1 0.2 8.0	41 0 36 1 546 1831 826 1006 3564 history2 3 3 3 <1 history2 0.1 7.9
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	58 2 41 2 542 1880 817 1005 2877 current 9 4 0 0 current 0.2 8.7 23.1	43 0 44 <1 552 1774 961 1208 2850 history1 10 4 2 2 history1 0.2 8.0 23.3	41 0 36 1 546 1831 826 1006 3564 history2 3 3 3 <1 history2 0.1 7.9 21.5



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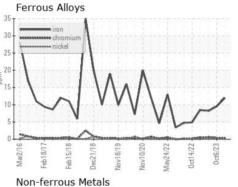


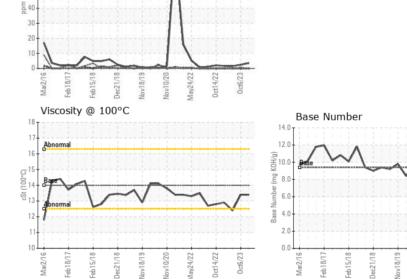
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	13.4	12.4

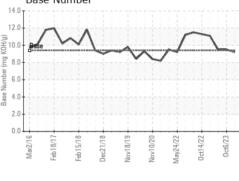
GRAPHS

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70 60 50







Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SHERWOOD CONSTRUCTION CO INC Sample No. : WC0918168 Received : 22 Apr 2024 3219 WEST MAY ST Lab Number : 06155637 Tested : 23 Apr 2024 WICHITA, KS Unique Number : 10991060 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 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Report Id: SHEWIC [WUSCAR] 06155637 (Generated: 04/23/2024 17:08:01) Rev: 1

Submitted By: JAMES MOORE

Page 2 of 2