

OIL ANALYSIS REPORT

35.105L [OKLAHOMA^102]

OKLAHOMA/102

Sample Rating Trend



Diesel Engine Fluic MOBIL DELVAC 1300 SUPER15W40 (5 GAL)

Component

50FER 15W40 (J GAL)	Mar2021 Juni	2021 Jul2021 Oct2021 Feb20	022 May2022 Jul2022 Aug2022 Apr	2023 Sep2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0821862	WC0800758	WC0702108
Sample Date		Client Info		06 Sep 2023	04 Apr 2023	30 Aug 202
Machine Age	hrs	Client Info		3087	2811	2461
Oil Age	hrs	Client Info		276	421	71
Oil Changed		Client Info		Not Changd	Changed	Not Change
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION		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	14	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	6	4	1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	1	0
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	53	45	60
Barium	ppm	ASTM D5185m	0	0	2	<1
Molybdenum	ppm	ASTM D5185m	0	43	39	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	496	490	483
Calcium	ppm	ASTM D5185m		1738	1568	1657
Phosphorus	ppm	ASTM D5185m		772	722	731
Zinc	ppm	ASTM D5185m		966	900	905
Sulfur	ppm	ASTM D5185m		2932	2519	2543
CONTAMINANT	S	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	4	3
Sodium	ppm	ASTM D5185m		<1	2	<1
Potassium	ppm	ASTM D5185m	>20	2	0	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.4	7.0	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	20.4	23.7
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	19.5	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.2	8.4	11.2

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.

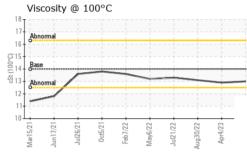
Fluid Condition

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



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Base Number 12.0 10.0



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	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.0	12.9	13.1
CDADUS						

Ferrous Alloys 25 20 15 Ο lun17/21 Jul26/21 Apr4/23 Mar15/21 0ct5/21 Feb7/22 ua30/22 /ave/ Non-ferrous Metals 10 14 lead 12 10 ppm 0 Mar15/21 Jun17/21 Drt5/0 eb7/22 14/75 SVB/D Viscosity @ 100°C Base Number 18 12.0 17 10. 16 (mg KOH/g) 8 (6.0 ber Base Nun 4.0 12 2 (10 0.0 Sep6/23 -Jun17/21. Jun17/21 Jul26/21 Feb7/22 Jul21/22 Apr4/23 Jul26/21 Feb7/22 Jul21/22 Apr4/23 Sep6/23 0ct5/21 Mar15/21 0ct5/21 Mav6/22 Aug30/22 Mar15/21 May6/22 ug30/22 SHERWOOD CONSTRUCTION CO INC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0821862 Received : 25 Sep 2023 3219 WEST MAY ST : 05959455 Lab Number Diagnosed : 25 Sep 2023 WICHITA, KS Unique Number : 10660668 Diagnostician : Don Baldridge US 67213 Test Package : CONST (Additional Tests: TBN) Contact: DOUG KING Doug.King@sherwood.net

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

Certificate L2367

Т:

F:

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.