

OIL ANALYSIS REPORT





OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL 69.01 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL] Component Hydraulic System Fluid MOBIL MOBILTRANS AST 30 (--- GAL)

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0935302	WC0778275	WC0670192
Sample Date		Client Info		12 May 2024	28 Feb 2023	07 Mar 2022
Machine Age	hrs	Client Info		23761	22907	23000
Oil Age	hrs	Client Info		660	19359	494
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	ABNORMAL	ATTENTION
campic claide						
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>26	8	11	15
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	2	3	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	2	4	4
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>31	2	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	maa	ASTM D5185m		80	65	53
Barium	mag	ASTM D5185m		0	0	0
Molvbdenum	mag	ASTM D5185m		<1	<1	<1
Manganese	mag	ASTM D5185m		<1	<1	<1
Magnesium	maa	ASTM D5185m		30	14	19
Calcium	mag	ASTM D5185m		3313	3324	3323
Phosphorus	mag	ASTM D5185m		1080	1048	1070
Zinc	mag	ASTM D5185m		1328	1278	1288
Sulfur	ppm	ASTM D5185m		5323	3782	4069
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	maa	ASTM D5185m	>21	15	28	17
Sodium	ppm	ASTM D5185m		2	0	3
Potassium	ppm	no nin Borooni				0
	ppm	ASTM D5185m	>20	0	3	0
FLUID <u>CLEANLIN</u>	ppm ESS	ASTM D5185m	>20 limit/base	0 current	3 history1	0 his <u>tory</u> 2
FLUID CLEANLIN	ppm IESS	ASTM D5185m method	>20 limit/base	0 current 27903	3 history1	0 history2 84382
FLUID CLEANLIN Particles >4µm Particles >6µm	ppm IESS	ASTM D5185m method ASTM D7647	>20 limit/base	0 current 27903 2701	3 history1 52996 2668	0 history2 84382 3797
FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm IESS	ASTM D5185m method ASTM D7647 ASTM D7647	>20 limit/base >2500 >640	0 current 27903 2701 8	3 history1 52996 2668 23	0 history2 84382 3797 35
FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm IESS	ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >2500 >640 >160	0 current 27903 2701 8 2	3 history1 52996 2668 23 5	0 history2 84382 3797 35 11
FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >29µm	ppm ESS	ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >2500 >640 >160 >40	0 current 27903 2701 8 2 0	3 history1 52996 2668 23 5 4	0 history2 84382 3797 35 11
FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >38µm	ppm IESS	ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >2500 >640 >160 >40 >10	0 current 27903 2701 8 2 0	3 history1 52996 2668 23 5 4 3	0 history2 84382 3797 35 11 0

ISO 4406 (c) >--/18/16 **22/19/10**

Oil Cleanliness

24/19/12

23/19/12



un22/15

2 00

ber (mg KOH/g) 50 1.00

Pg 0.50 0.00

100

90

70

60 B 50

40

un22/15 Jov15/16 ct5/1 v5/18

cSt (40°C) 80 Dct5/17 ov5/18

> Vov5/18 01/10

0ct5/1

Acid Number

ov15/16

Viscosity @ 40°C

OIL ANALYSIS REPORT

Pa 120k T	rticle	rend						
100k -	4j.	um um	1					
3 80k -		μm		1			A	
60k -		1	11	1	~		1	
40k -		1	V	Y	~		/	1
20k -		10	V			V		
_{0k}		1	<u></u>		and the second		-	
122/15	v15/16)ct5/1	ov5/18	1/13u	ec9/19	ep2/2(lar]/2	y12/24
Ju	No	0	Z	Ju		0	2	Ma
🛑 Pa	rticle 1	Frend						
120k	4/	/m						
-100k			1	Α				
80k		1	11	1				innin.
60k -		1	11	1/			11	
							- E	
40k -		1	V		-		1	1

Acid Number (AN)	mg KOH/g	ASTM D8045		1.19	1.16	1.23
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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	75.6	68.0	82.4
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Color

Bottom

/lay12/24

en2/20 /ar7/22

Sep2/20 Mar7/22

Jec9/19

Jec9/19



GRAPHS Ferrous Alloys Particle Count 20 491,5 122,880 E 10 30,720 ISO 4406:1999 Cle -20 7.680 CICIVE 0ct5/1 per 1 1,920 18 480 Non-ferrous Metals 120 30 12 0 May12/24 Aar7/22 Vov15/1 0ct5/1 Vov5/1 Viscosity @ 40°C Acid Number (B/HOX 2.00 120 cSt (40°C) per (mg 00.1 Acid Nu 40 0.00 Mar7/22 -May12/24 ep2/20 Mar7/22 May12/24 sep2/20 Jun22/15 Jov15/16 lct5/17 un21/19 er9/19

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SHERWOOD CONSTRUCTION CO INC Sample No. : WC0935302 Received : 20 May 2024 3219 WEST MAY ST Lab Number : 06184905 Tested : 22 May 2024 WICHITA, KS Unique Number : 11036231 Diagnosed : 22 May 2024 - Don Baldridge US 67213 Test Package : CONST Contact: DOUG KING Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doug.king@sherwood.net T: (316)617-3161 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. F: x:

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

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Submitted By: GARRETT ADAMS

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