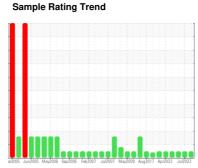


OIL ANALYSIS REPORT

Area [1796698] SW06 (S/N 1678 606)

Gearbox

SHELL OMALA 220 (2 GAL)





Recommendation

Resample at the next service interval to monitor. Particle count performed inadvertently. (Customer Sample Comment: Monthly oil change and sample with Shell Omala oil)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

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

		ar2005 Jun200	May2006 Sep2006 Feb200	7 Jul2007 May2009 Aug2017 Apr2	023 Jul2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0807614	WC0834254	WC0807606
Sample Date		Client Info		18 Aug 2023	20 Jul 2023	27 Jun 2023
Machine Age	hrs	Client Info		3787	3173	2643
Oil Age	hrs	Client Info		2074	530	934
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	58	53	42
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	1	<1	2
Tin	ppm	ASTM D5185m	>25	<1	<1	<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	4.4	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	<1	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	<1	4	<1
Calcium	ppm	ASTM D5185m	0	3	2	1
Phosphorus	ppm	ASTM D5185m	215	214	211	155
Zinc	ppm	ASTM D5185m	0	2	7	4
Sulfur	ppm	ASTM D5185m	7039	11101	13850	16406
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	0	4	1
Sodium	ppm	ASTM D5185m		<1	1	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	2559		
Particles >6µm		ASTM D7647	>5000	667		
Particles >14μm		ASTM D7647	>640	70		
Particles >21μm		ASTM D7647	>160	20		
Particles >38μm		ASTM D7647	>40	1		
Particles >71μm		ASTM D7647	>10	0		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/13		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
	140111	40714 00045				

0.58

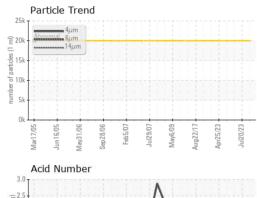
Acid Number (AN) mg KOH/g ASTM D8045

0.49

0.36



OIL ANALYSIS REPORT



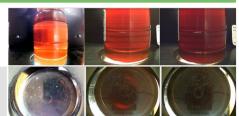
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

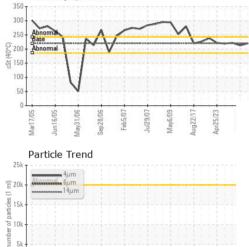
2.5-	۸				1			
2.5+ 2.0+ 1.5+ 1.5+ 0.5+	/\		~	1	1			
	1	\ /	1/	M	V	1		
2 1.0+		11	V:	W		1		
0.5		V	٧	V		1	_	_

FLUID PROPERT	IEO	method			riistory i	History
Visc @ 40°C	cSt	ASTM D445	220	220	213	222

Color **Bottom**

SAMPLE IMAGES





Viscosity @ 40°C



GRAPHS		
Ferrous Alloys	Particle Count	
iron	491,520 Severe	
- ************************************	122,880	
A	30,720 Abnormal	
5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	F F 7,680	-
Mar17,05 Jun16,05 May31,06 Sep28,06 Feb5,07 Jul29,07 May6,09 Aug22/17	Juli2023 Juli2023 Juli2023 Juli2023 120	
Non-ferrous Metals	18 480 480	
copper	120	-
*********** lead	IIIIIIII g	
7 // /	30	1
	8-	
	2	
Mar17/05 Jun16/05 May31/06 Sep28/06 Feb5/07 Jul29/07 May6/09 Aug22/17	7 Jul20/23	
Viscosity @ 40°C	⁴ μ 6μ 14μ 21μ 38μ Acid Number	71
	\$3.0 T	
Abromal	920 \ \	
Abriormal \		
V	0.1 Number (ing KOH/0)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33- 24- 34- 34- 34- 34- 34- 34- 34- 34- 34- 3	_
Aar17/05 lun16/05 lay31/06 sep28/06 Feb5/07 Jul29/07 May6/09	Aut20723 Ant17/05 Ant17/05 Ant17/06 Ant17/06 Ant17/06 Ant17/06 Ant17/06 Ant17/06 Ant17/06	





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10629437

: WC0807614 : 05938825

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 30 Aug 2023 Diagnosed : 31 Aug 2023 Diagnostician : Doug Bogart

Test Package : IND 2 (Additional Tests: PrtCount)

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

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