

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

MOBIL SHC 630 - F0

Component New (Unused) Oil Fluid MOBIL SHC 630 (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Sample Status Client Info N/A N/A CONTAMINATION method Imit/base current history1 history2 Water WC Method NEG NEG WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM 05185m >5 0 <1 Nickel ppm ASTM 05185m >5 0 <1 Aluminum ppm ASTM 05185m >5 0 <1 Aluminum ppm ASTM 05185m >5 0 <1 Lead ppm ASTM 05185m >5 0 <1 Auminum ppm ASTM 05185m 0 0 Auminum ppm ASTM 05185	SAMPLE INFORM	ATION	method				history2
Sample Date Client Info 28 Mar 2024 23 Oct 2020 Machine Age hrs Client Info 0 0 Dil Age hrs Client Info 0 0 Sample Status Client Info N/A N/A CONTAMINATION method Imit/base current history1 history1 Water WC Method NEG NEG WEAR METALS method Imit/base current history1 history1 Nickel ppm ASTM 05185m >5 0 Nickel ppm ASTM 05185m >5 0 0 Bardum ppm ASTM 05185m >5 0 0 Silver ppm ASTM 05185m >5 0 0 Aluminum ppm ASTM 05185m >5 0 0 Vanadium </td <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>WC0919965</th> <td>WC0516506</td> <td></td>	Sample Number		Client Info		WC0919965	WC0516506	
Machine Age hrs Client Info 0 0 Oil Age irrs Client Info N/A N/A Sample Status Image NORMAL ATTENTION CONTAMINATION method Image current history1 History2 Water WC Method NEG NEG WEAR METALS method Imit/base current history1 history2 Vickel ppm ASTM D5185m >5 0 <1	Sample Date		Client Info		28 Mar 2024	23 Oct 2020	
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Nickel ppm ASTM D5185m >5 0 0 Titanium ppm ASTM D5185m >5 0 <1	Iron	ppm	ASTM D5185m	>5	0	<1	
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >5 0 <1	Chromium	ppm	ASTM D5185m	>5	0	0	
Silver ppm ASTM D5185m >5 0 <1 Aluminum ppm ASTM D5185m >5 0 <1	Nickel	ppm	ASTM D5185m	>5	0	0	
Aluminum ppm ASTM D5185m >5 0 <1 Lead ppm ASTM D5185m >5 0 0 Copper ppm ASTM D5185m >5 0 0 Tin ppm ASTM D5185m >5 <1	Titanium	ppm	ASTM D5185m		0	0	
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Copper ppm ASTM D5185m >5 0 0 Tin ppm ASTM D5185m >5 <1	Aluminum	ppm	ASTM D5185m	>5	0	<1	
Tin ppm ASTM D5185m >5 <1 0 Antimony ppm ASTM D5185m >5 <1	Lead	ppm	ASTM D5185m	>5	0	0	
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Manganese ppm ASTM D5185m <1 0 Magnesium ppm ASTM D5185m 0 <1	Barium	ppm	ASTM D5185m		0	0	
Magnesium ppm ASTM D5185m 0 <1 Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 0 451 689 Zinc ppm ASTM D5185m 0 4 689 Sulfur ppm ASTM D5185m 0 4 689 Sulfur ppm ASTM D5185m 0 4 689 689 689 689 689 689 689 689 689 689 689 689 689 689 689 680 680 680 680 680 680 6873 792			AOTIVI DOTODITI		•	0	
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Silicon ppm ASTM D5185m >15 24 43 Sodium ppm ASTM D5185m >15 <1	Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 0 0 451	0 0 <1 2 689	
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Potassium ppm ASTM D5185m >20 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 873 792 Particles >6µm ASTM D7647 >1300 185 216 Particles >14µm ASTM D7647 >160 19 24 Particles >21µm ASTM D7647 >40 8 4 Particles >38µm ASTM D7647 >10 0 0	Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0 451 0 5	0 0 <1 2 689 4 17	
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 873 792 Particles >6μm ASTM D7647 >1300 185 216 Particles >14μm ASTM D7647 >160 19 24 Particles >21μm ASTM D7647 >40 8 4 Particles >38μm ASTM D7647 >10 0 0	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 0 451 0 5 current	0 0 <1 2 689 4 17 history1	
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Particles >6μm ASTM D7647 >1300 185 216 Particles >14μm ASTM D7647 >160 19 24 Particles >21μm ASTM D7647 >40 8 4 Particles >38μm ASTM D7647 >10 0 0	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 method ASTM D5185m	>15	0 <1 0 451 0 5 <u>current</u> 24 <1	0 0 <1 2 689 4 17 history1 • 43 0	 history2
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Particles >21μm ASTM D7647 >40 8 4 Particles >38μm ASTM D7647 >10 0 0	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20 limit/base	0 <1 0 451 0 5 <u>current</u> 24 <1 0 <u>current</u>	0 0 <1 2 689 4 17 history1 43 0 0 0 history1	 history2 history2
Particles >21μm ASTM D7647 >40 8 4 Particles >38μm ASTM D7647 >10 0 0	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20 limit/base >5000	0 <1 0 451 0 5 <u>current</u> 24 <1 0 <u>current</u> 873	0 0 <1 2 689 4 17 history1 43 0 0 0 history1 792	 history2 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20 limit/base >5000 >1300	0 <1 0 451 0 5 <u>current</u> 24 <1 0 <u>current</u> 873 185	0 0 <1 2 689 4 17 history1 • 43 0 0 0 • history1 792 216	 history2 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	0 <1 0 451 0 5 <u>current</u> 24 <1 0 <u>current</u> 873 185 19	0 0 <1 2 689 4 17 history1 • 43 0 0 0 • history1 • 792 216 24	 history2 history2
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ISO 4406 (c) >19/17/14

17/15/11

Oil Cleanliness

17/15/12



OIL ANALYSIS REPORT

	FLUID DEGRAD	ATION	method	limit/base	current	history1	history
Abnormal	Acid Number (AN)	mg KOH/g	ASTM D8045		0.80	0.633	
	VISUAL		method	limit/base	current	history1	history
Base	White Metal	scalar	*Visual	NONE	NONE	NONE	
Ab	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Abnormal	Precipitate	scalar	*Visual	NONE	NONE	NONE	
20 +	Silt	scalar	*Visual	NONE	NONE	NONE	
0ct23/20 Mar28/24	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Particle Trend	Appearance	scalar	*Visual	NORML	NORML	NORML	
Aphonia 4µm	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual		NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D445	217.7	221.8	217.2	
50	Visc @ 100°C	cSt	ASTM D445	25.9	29.28	28.88	
0ct23/20 Mar28/24	Viscosity Index (VI)	Scale	ASTM D2270	152	171	172	
	SAMPLE IMAGE	S	method	limit/base	current	history1	history
Viscosity @ 100°C							,
Abnormal	Only						
	Color						no image
Base							
						Contraction of the	
Abnormal	Bottom					(sonth)	no image
20 +	-						
0ct23/20 Mat28/24	GRAPHS						
Viscosity @ 40°C	Ferrous Alloys				Particle Count		
	10			491,52	⁰ T		I
Abnormal	E 5			122,88	0 - Severe		
	and nickel			30,72	0		-
Base	20 20			₹ <u></u> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 Abnormal		
	0ct23/20			Mar28/24 ticles (per 1 ml) 89'2	0-		
Abnormal	Non-ferrous Meta	ls					
20 + 10	10 copper 1			12 of ba			
0ct23/20				quine 3			
					8-		-
Particle Trend	20			1/24	2		
Aunonnan 4µm	0ct23/20			Mar28/24	0		
*************************************	Viscosity @ 40°C				4µ 6µ Acid Number	14μ 21μ	38µ 71µ
	260 240 Abnormal			(B/H0) Bu			
	0.210 Base			<u>ل</u> ق 0 5	0		
	²⁰⁰ - Abnormal			(24			
	1804			Acid			
0ct23/20 ****	0ct23/20			Mar28/24	0ct23/20		
00				_			
) Laboratema					P		
Laboratory	. : WC0919965	Recei		2 Apr 2024			3RD STRE GROTON,
ANAR Sample No.		Deta	d	Anr 2024			
Sample No.	er :06136715 er :10956180	Teste Diagr		5 Apr 2024 Apr 2024 - Jona	than Hester		5 57445-64
Sample No. Lab Number Unique Number	er : 0 <mark>6136715</mark> er : 10956180 e : IND 2 (Additional Tes	Diagr sts: FT-IR	i osed :05 , ICP-NewO	Apr 2024 - Jona il, KV100, Pr			S 57445-64 IN KRUEG

Report Id: POEGRO [WUSCAR] 06136715 (Generated: 04/05/2024 12:59:08) Rev: 1

Submitted By: GAVIN KRUEGER

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