

OIL ANALYSIS REPORT

Sample Rating Trend







Sample Number Client Info WC0745746 WC0745740 WE0230 Status Client Info Status WE0745740 WC1745740 WC1745740 <t< th=""><th>SAMPLE INFORM</th><th>1ATI<u>ON</u></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	SAMPLE INFORM	1ATI <u>ON</u>	method	limit/base	current	history1	history2	
Sample Date Client Info 18 May 2023 02 Mar 2023 05 Jan 2023 Machine Age hrs Client Info 50051 48220 48886 Oil Age hrs Client Info 59108 57277 55943 Oil Changed Client Info Not Changd Not Changd Not Changd Not Changd Sample Status Imathibas Imathibas Not Changd Not Changd Not Changd Water WC Method >0.1 NEG NEG NEG WEAR METALS method Imitbase current history1 history2 Iron ppm ASTM 05185m >10 0 0 0 Nickel ppm ASTM 05185m >25 2 <1 0 0 Silver ppm ASTM 05185m >25 2 <1 0 0 Gopper ppm ASTM 05185m >25 2 <1 0 0 Gopper ppm ASTM 05185m >15 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
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Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >50 0 0 0 Nickel ppm ASTM D5185n 0 0 0 0 Nickel ppm ASTM D5185n 0 0 0 0 Aluminum ppm ASTM D5185n >25 0 0 0 Copper ppm ASTM D5185n >25 0 0 0 Cadmium ppm ASTM D5185n >50 <1 <1 <1 Vanadium ppm ASTM D5185n >50 0 0 0 Cadmium ppm ASTM D5185n 0 0 0 0 Barum ppm ASTM D5185n <1 0 0 0 Melybdenum ppm ASTM D5185n <1 0 0 0		J	method	limit/base	current	historv1	historv2	
Iron ppm ASTM D5185m >50 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 22 <1 0 0 Astm D5185m >25 2 <1 0 0 0 Lead ppm ASTM D5185m >50 <1 0 0 0 Vanadium ppm ASTM D5185m >15 <1 <1 <1 <1 <1 0								
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Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m 0 0 0 Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >25 2 <1	Iron	ppm	ASTM D5185m	>50	0	0	0	
Nickel ppm ASTM D5185m 0 0 0 Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>10	0	0	0	
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m<>25 2 <1	Nickel		ASTM D5185m		0	0	0	
Aluminum ppm ASTM D5185m >25 2 <1 0 Lead ppm ASTM D5185m >25 0 0 0 Copper ppm ASTM D5185m >50 <1	Titanium	ppm	ASTM D5185m		<1	0	0	
Aluminum ppm ASTM D5185m >25 2 <1 0 Lead ppm ASTM D5185m >25 0 0 0 Copper ppm ASTM D5185m >50 <1	Silver		ASTM D5185m		0	0	0	
Lead ppm ASTM D5185m<>25 0 0 0 Copper ppm ASTM D5185m >50 <1	Aluminum			>25	2	<1	0	
Copper ppm ASTM D5185m >50 <1 0 0 Tin ppm ASTM D5185m >15 <1	Lead		ASTM D5185m	>25	0	0	0	
Tin ppm ASTM D5185m >15 <1 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES rethod imit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Magnaese ppm ASTM D5185m <1	Copper			>50	-	0	0	
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 0 0 Boron ppm ASTM D5185m 0 0 0 Molydedenum ppm ASTM D5185m -1 0 0 Magnese ppm ASTM D5185m 0 -1 0 Galcium ppm ASTM D5185m 0 -1 0 Calcium ppm ASTM D5185m 0 -1 0 Sulfur ppm ASTM D5185m 0 1 0 Sulfur ppm ASTM D5185m 71 655 91 Sulfur ppm ASTM D5185m 71 655 91 Sulfur ppm ASTM D5185m 21 14 15 15 Sod	••		ASTM D5185m	>15	<1	<1	<1	
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0 -<1 0 0 Calcium ppm ASTM D5185m 0 -<1 4 0 Calcium ppm ASTM D5185m 71 65 91 Zinc ppm ASTM D5185m 71 65 91 Zinc ppm ASTM D5185m 71 1412 1772 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 2 14 15 15 Sodium </td <th>Vanadium</th> <td></td> <td></td> <td></td> <th>0</th> <td>0</td> <td></td>	Vanadium				0	0		
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Magnesium ppm ASTM D5185m 0 <1 0 Calcium ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m		<1	0	0	
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Silicon ppm ASTM D5185m >25 14 15 15 Sodium ppm ASTM D5185m <1 0 <1 Potassium ppm ASTM D5185m >20 2 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 623 1683 2713 Particles >6µm ASTM D7647 >20000 623 1683 2713 Particles >6µm ASTM D7647 >20001 135 270 545 Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >20 0 1 10 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >20 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADAT	Sulfur	ppm	ASTM D5185m		1741	1412	1772	
Sodium ppm ASTM D5185m <1 0 <1 Potassium ppm ASTM D5185m >20 2 <1	CONTAMINANTS		method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 2 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 623 1683 2713 Particles >6µm ASTM D7647 >2500 135 270 545 Particles >14µm ASTM D7647 >320 14 3 28 Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >20 0 1 10 Particles >38µm ASTM D7647 >20 0 1 1 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method Imit/base current history1 history2 Acid Numbe	Silicon	ppm	ASTM D5185m	>25	14	15	15	
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 623 1683 2713 Particles >6µm ASTM D7647 >2500 135 270 545 Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >80 6 1 10 Particles >21µm ASTM D7647 >20 0 1 1 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >20 0 0 0 Oli Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D8045 0.26 0.52 0.49	Sodium	ppm	ASTM D5185m		<1	0	<1	
Particles >4µm ASTM D7647 >20000 623 1683 2713 Particles >6µm ASTM D7647 >2500 135 270 545 Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >80 6 1 10 Particles >38µm ASTM D7647 >20 0 1 1 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Potassium	ppm	ASTM D5185m	>20	2	<1	0	
Particles >6µm ASTM D7647 >2500 135 270 545 Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >80 6 1 10 Particles >38µm ASTM D7647 >20 0 1 1 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D8045 0.26 0.52 0.49	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2	
Particles >14µm ASTM D7647 >320 14 3 28 Particles >21µm ASTM D7647 >80 6 1 10 Particles >38µm ASTM D7647 >20 0 1 1 Particles >38µm ASTM D7647 >20 0 1 1 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >4µm		ASTM D7647	>20000	623	1683	2713	
Particles >21μm ASTM D7647 >80 6 1 10 Particles >38μm ASTM D7647 >20 0 1 1 Particles >37μm ASTM D7647 >20 0 1 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >6µm		ASTM D7647	>2500	135	270	545	
Particles >38μm ASTM D7647 >20 0 1 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >14µm		ASTM D7647	>320	14	3	28	
Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >21µm		ASTM D7647	>80	6	1	10	
Oil Cleanliness ISO 4406 (c) >21/18/15 16/14/11 18/15/9 19/16/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >38µm		ASTM D7647	>20	0	1	1	
FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Particles >71µm		ASTM D7647	>4	0	0	0	
Acid Number (AN) mg KOH/g ASTM D8045 0.26 0.52 0.49	Oil Cleanliness		ISO 4406 (c)	>21/18/15	16/14/11	18/15/9	19/16/12	
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2	
:07:17) Rev: 1 Contact/Location: CHRIS ADEN - GRENAF	Acid Number (AN)	mg KOH/g	ASTM D8045		0.26	0.52	0.49	
	:07:17) Rev: 1				Contact/Loc	ation: CHRIS A	DEN - GRENAF	

VILTER 3 Component Compressor Fluid

MOBIL SHC 627 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

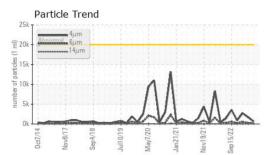
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

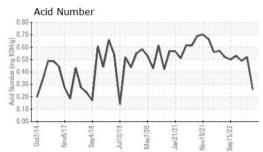
Fluid Condition

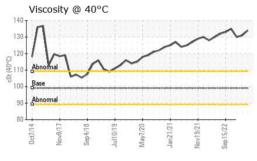
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

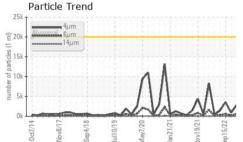


OIL ANALYSIS REPORT



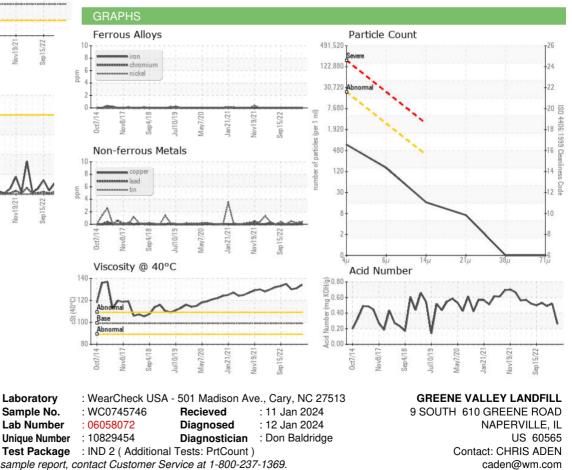






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	99.1	134	131	130
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color						
Bottom				(a)		

Bottom



 Certificate L2367
 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)

Contact/Location: CHRIS ADEN - GRENAP

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