

OIL ANALYSIS REPORT

Sample Rating Trend



UNIT 1 TURBINE (S/N SMR-U1-TLO-RES)

Turbine

MOBIL JET OIL II (150 GAL)

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. The amount and size of particulates present in the system are acceptable.

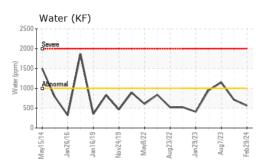
Fluid Condition

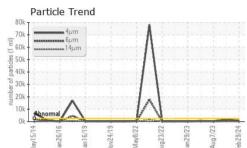
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

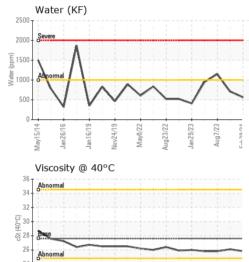
Sample Number Client Info USP0006133 USP245480 USPM24548	SAMPLE INFORM	/ ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Sample Status Imit/base current history1 history2 Iron ppm ASTM 05185m >15 3 0 0 Nickel ppm ASTM 05185m >4 <1 0 0 Silver ppm ASTM 05185m 2 0 <1 <1 Itanium ppm ASTM 05185m 0 <1 <1 0 Lead ppm ASTM 05185m 0 <1 <1 0 Cadmium ppm ASTM 05185m 0 0 0 0 Cadmium ppm ASTM 05185m 0 0 0 0 Astm 05185m 0 0 0 0 0 0 Astm 05185m 0 0	Sample Number		Client Info		USP0006133	USP245480	USPM245481
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Oil Changed Sample Status Client Info N/A N/A N/A N/A WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >15 3 0 0 Nickel ppm ASTM D5185m >2 0 <1	Machine Age	hrs	Client Info		0	0	0
Oil Changed Client Info N/A N/A N/A N/A Sample Status Image: Client Info N/A NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 3 0 0 Chromium ppm ASTM D5185m >4 <1 0 0 Nickel ppm ASTM D5185m >2 0 <1 <1 Aluminum ppm ASTM D5185m 0 <1 <1 0 Lead ppm ASTM D5185m >5 <1 1 0 Cadmium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Barron 0 0 0 0 0	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m<>15 3 0 0 Chromium ppm ASTM 05185m<>2 0 <1	-		Client Info		N/A	N/A	N/A
Iron ppm ASTM D5185m >15 3 0 0 Chromium ppm ASTM D5185m >4 <1	Sample Status				NORMAL	NORMAL	NORMAL
Dromium ppm ASTM D5185m >4 <1 0 0 Nickel ppm ASTM D5185m >2 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >2 0 <1 <1 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 <1	Iron	ppm	ASTM D5185m	>15	3	0	0
Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 <1	Chromium	ppm	ASTM D5185m	>4	<1	0	0
Silver ppm ASTM D5185m 0 <1 <1 Aluminum ppm ASTM D5185m >10 <1	Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum ppm ASTM D5185m >10 <1 <1 <1 0 Lead ppm ASTM D5185m 0 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m 0 <1 <1 Copper ppm ASTM D5185m >5 0 0 <1	Silver	ppm	ASTM D5185m		0	<1	<1
Copper ppm ASTM D5185m >5 0 0 <1 Tin ppm ASTM D5185m >5 <1	Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Tin ppm ASTM D5185m >5 <1 1 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 3 2 0 0 Calcium ppm ASTM D5185m 3 0 0 0 0 Sulfur ppm ASTM D5185m 6 4 0	Lead	ppm	ASTM D5185m		0	<1	<1
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Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 3 2 0 Magnesium ppm ASTM D5185m 3 2 0 Calcium ppm ASTM D5185m 6 4 0 Phosphorus ppm ASTM D5185m 3030 2715 2938 Zinc ppm ASTM D5185m 3030 19 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	ADDITIVES		method	limit/base	current	history1	history2
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Phosphorus ppm ASTM D5185m 3030 2715 2938 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 30 19 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Magnesium	ppm	ASTM D5185m		3	2	0
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CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Zinc	ppm	ASTM D5185m		0	0	0
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Sodium ppm ASTM D5185m 2 <1 3 Potassium ppm ASTM D5185m >20 0 1 0 Water % ASTM D5185m >20 0 1 0 Water % ASTM D6304 >.1 0.056 0.070 0.115 ppm Water ppm ASTM D6304 >1000 561 707.9 1150.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 806 1729 402 Particles >6µm ASTM D7647 >640 264 516 155 Particles >14µm ASTM D7647 >80 18 44 18 Particles >21µm ASTM D7647 >20 4 14 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >18/16/13 17/15/11 18/16/13 16/14/11	CONTAMINANTS	3	method	limit/base	current	history1	history2
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Water % ASTM D6304 >.1 0.056 0.070 0.115 ppm Water ppm ASTM D6304 >1000 561 707.9 1150.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 806 1729 402 Particles >6µm ASTM D7647 >640 264 516 155 Particles >14µm ASTM D7647 >80 18 44 18 Particles >21µm ASTM D7647 >20 4 14 5 Particles >38µm ASTM D7647 >3 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >18/16/13 17/15/11 18/16/13 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		2	<1	3
ppm Water ppm ASTM D6304 >1000 561 707.9 1150.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 806 1729 402 Particles >6µm ASTM D7647 >640 264 516 155 Particles >14µm ASTM D7647 >80 18 44 18 Particles >14µm ASTM D7647 >20 4 14 5 Particles >21µm ASTM D7647 >4 0 1 0 Particles >38µm ASTM D7647 >3 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >18/16/13 17/15/11 18/16/13 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	0	1	0
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Oil Cleanliness ISO 4406 (c) >18/16/13 17/15/11 18/16/13 16/14/11 FLUID DEGRADATION method limit/base current history1 history2							
FLUID DEGRADATION method limit/base current history1 history2							
			ISO 4406 (c)	>18/16/13	17/15/11	18/16/13	16/14/11
Acid Number (AN) mg KOH/g ASTM D8045 0.03 0.263 0.19 0.21	FLUID DEGRADA	ATION	method	limit/base	current	history1	
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.03	0.263	0.19	0.21

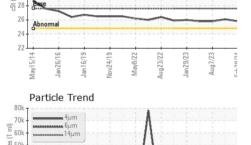


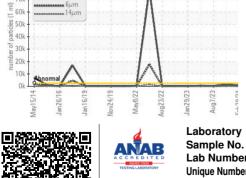
OIL ANALYSIS REPORT











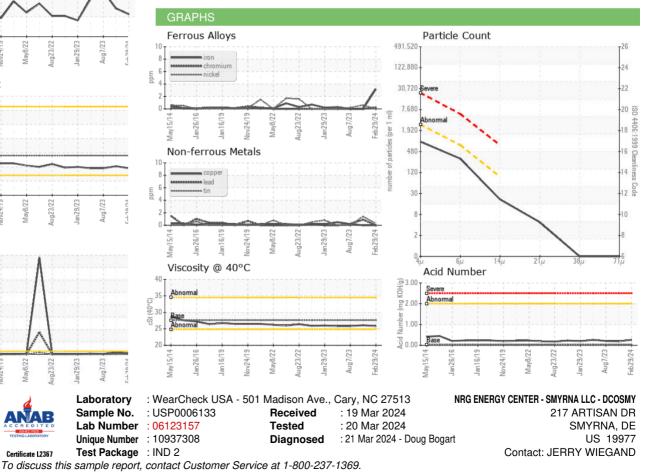
Certificate L2367

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	>.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	27.6	25.8	26.1	25.8
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
					In the second se	

Color



Bottom



* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (302)659-0200 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (302)659-0600