

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

MOBIL XMP320 - SHOP OIL

Component New (Unused) Oil Fluid {not provided} (--- QTS)

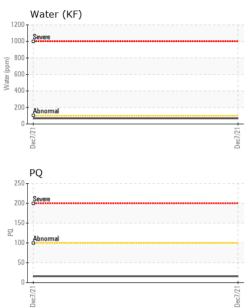
DIAGNOSIS

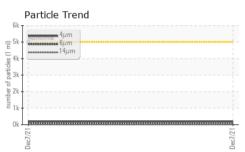
Recommendation

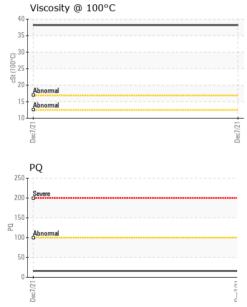
This is a baseline read-out on the submitted sample.

				Dec2021		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		MHI017439		
Sample Date		Client Info		07 Dec 2021		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		16		
Iron	ppm	ASTM D5185m	>5	0		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>5	<1		
Aluminum	ppm	ASTM D5185m	>5	0		
Lead	ppm	ASTM D5185m	>5	<1		
Copper	ppm	ASTM D5185m	>5	0		
Tin	ppm	ASTM D5185m	>5	<1		
Antimony	ppm	ASTM D5185m		0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		<1		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m		0		
Phosphorus	ppm	ASTM D5185m		430		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		4128		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	10		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	<1		
Water	%	ASTM D6304		0.006		
ppm Water	ppm	ASTM D6304		68.4		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	184		
Particles >6µm		ASTM D7647	>1300	48		
Particles >14µm		ASTM D7647	>160	7		
Particles >21µm		ASTM D7647	>40	1		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	15/13/10		









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Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	mg KOH/g scalar scalar scalar scalar	ASTM D8045 method *Visual *Visual	limit/booo	0.984		
White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	scalar scalar scalar	*Visual *Visual	limit/bass			
Yellow Metal Precipitate Silt Debris Sand/Dirt	scalar scalar scalar	*Visual		current	history1	history
Precipitate Silt Debris Sand/Dirt	scalar scalar		NONE	NONE		
Silt Debris Sand/Dirt	scalar	*1 // 1	NONE	NONE		
Debris Sand/Dirt		*Visual	NONE	NONE		
Sand/Dirt	coolor	*Visual	NONE	NONE		
	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NONE	NONE		
	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual		NEG		
			limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D445		348.7		
-	cSt	ASTM D445		38.19		
Viscosity Index (VI)	Scale	ASTM D2270		158		
SAMPLE IMAGES	5	method	limit/base	current	history1	history
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys			101 500	Particle Count		
10iron			491,520			
¹⁰ I			122,880			
			122,880 30,720	Severe		
10 E 5 0			122,880 30,720			
			122,880 30,720	Severe Abnormal		
Non-ferrous Metal	s		122,880 30,720 20 20 20 20 20 20 20 20 20 20 20 20 2	Severe Abnormal		
Non-ferrous Metal	S		122,880 30,720 12/L ³⁰ 12/L ³⁰ 1,920 spipe 480	Severe Abnormal	•	
Non-ferrous Metal	5		122,880 30,720 12/200 12/200 1,920 1,920 1,920 1,920 480	Severe Abnormal		
Non-ferrous Metal	S		122,880 30,720 12/L ³⁰ 12/L ³⁰ 1,920 spipe 480	Severe Abnormal		
Non-ferrous Metal	S		122,880 30,720 12/200 12/200 1,920 1	Severe Abnormal		
Non-ferrous Metal	S		122,880 30,720 10,000 10,0000 10,0000 10,0000 10,00000000	Severe Abnormal		
Non-ferrous Metal	5		122,880 30,720 (m 1,32) (12/129 (m 1,32) (12/129 (12/129 (12/129)	Abnormal	14μ 21μ	
Non-ferrous Metal	S		122,880 30,720 (m 1,32) (12/129 (m 1,32) (12/129 (12/129 (12/129)	Abnormal		
Non-ferrous Metal	S		122,880 30,720 (m 1,32) (12/129 (m 1,32) (12/129 (12/129 (12/129)	Abnormal		
Non-ferrous Metal	S		122,880 30,720 (m 1,32) (12/129 (m 1,32) (12/129 (12/129 (12/129)	Abnormal		
Non-ferrous Metal	S		122,880 30,720 12/200 12/200 1,920 1	Abnormal		
	Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom	Free WaterscalarFLUID PROPERTIESVisc @ 40°CcStVisc @ 100°CcStViscosity Index (VI)ScaleSAMPLE IMAGESColorBottom	Free Waterscalar*VisualFLUID PROPERTIESmethodVisc @ 40°CcStASTM D445Visc @ 100°CcStASTM D445Viscosity Index (VI)ScaleASTM D2270SAMPLE IMAGESmethodColorSame base base base base base base base bas	Free Waterscalar*VisualFLUID PROPERTIESmethodlimit/baseVisc @ 40°CcStASTM D445Visc @ 100°CcStASTM D445Viscosity Index (VI)ScaleASTM D2270SAMPLE IMAGESmethodlimit/baseColorEntomImit/base	Free Water scalar *Visual NEG FLUID PROPERTIES method limit/base current Visc @ 40°C cSt ASTM D445 348.7 Visc @ 100°C cSt ASTM D445 38.19 Viscosity Index (VI) Scale ASTM D2270 158 SAMPLE IMAGES method limit/base current Color Imit/base current	Free Waterscalar*VisualNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1Visc @ 40°CcStASTM D445348.7Visc @ 100°CcStASTM D44538.19Viscosity Index (VI)ScaleASTM D2270158SAMPLE IMAGESmethodlimit/basecurrenthistory1ColorImit (base)Currenthistory1