

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

237 - MOBILUBE XFD 60W

New (Unused) Oil Fluid {not provided} (--- GAL)

DIAGNOSIS

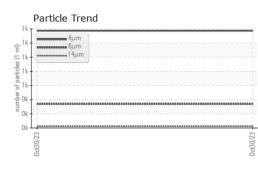
Recommendation

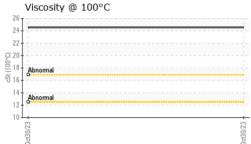
This is a baseline read-out on the submitted sample.

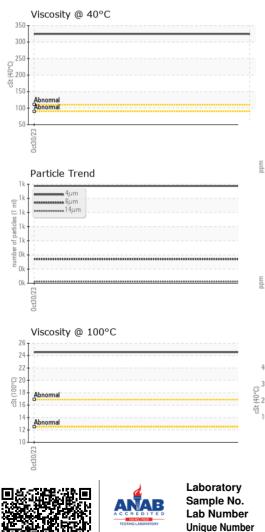
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108273		
Sample Date		Client Info		30 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		0		
Chromium	ppm	ASTM D5185m		0		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m		0		
Lead	ppm	ASTM D5185m		0		
Copper	ppm	ASTM D5185m		1		
Tin	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		103		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		17		
Calcium	ppm	ASTM D5185m		311		
Phosphorus	ppm	ASTM D5185m		327		
Zinc	ppm	ASTM D5185m		<1		
Sulfur	ppm	ASTM D5185m		12720		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		3		
Sodium	ppm	ASTM D5185m		5		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANL	INESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1374		
Particles >6µm		ASTM D7647	>640	338		
Particles >14µm		ASTM D7647	>80	22		
Particles >21µm		ASTM D7647	>20	5		
Particles >38µm		ASTM D7647	>4	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/16/13	18/16/12		
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.66		



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual		NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPER	RTIES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D445		324.5		
/isc @ 100°C	cSt	ASTM D445		24.55		
/iscosity Index (VI)	Scale	ASTM D2270		96		
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count		
iron			491,520	Ι		I ²⁶
chromium			122,880			-24
nickel			30,720			-22
•						
53			2 Ê 7,680	†		-20 -18 -16 -14 +12
0ct30/23			0ct30/23 (per 1 ml			-18
Non-ferrous Metals			E2/06290 1,0000 1,000 1,000 1,0000 1,000 1,000 1,000 1,000 1,000 1		•	16
) 		of barr	1.		10
copper			ag 120		•	-14
icau tin			30			-12
						-10
			0	Server mal	1	Ť ¹⁰
0ct30/23			0ct30/23			-8
Oct			0,000	ļ		
Viscosity @ 40°C				وہو Acid Number	14μ 21μ	38µ 71µ
			([®] 0.80	T		
			9 _{0.60}			
Ab			는 등 0.40			
Abrama			0.80 0.60 0.40 0.40 0.40 0.40 0.20 0.00 0.00			
L				L		
0ct30/23			0ct30/23	0ct30/23		0ct30/23
10			00	0		0
05993916	Received Diagnose Diagnost	l : 30 (ed : 03 l ician : Jon	ry, NC 27513 Oct 2023 Nov 2023 athan Hester wOil, KV100,		MISSOURI VALI 1722	LEY PETROLEUN MANDAN AVE MANDAN, NE US 58554

Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI) Certificate L2367 RICHARD.ABERLE@PARKLANDUSA.COM 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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