

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

## Machine Id 232 - M-LUBE XFD 60W

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

## DIAGNOSIS

Recommendation

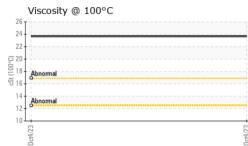
This is a baseline read-out on the submitted sample.

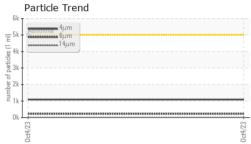
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108270		
Sample Date		Client Info		04 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		<1		
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		0		
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		112		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		<1		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		5		
Calcium	ppm	ASTM D5185m		293		
Phosphorus	ppm	ASTM D5185m		337		
Zinc	ppm	ASTM D5185m		4		
Sulfur	ppm	ASTM D5185m		12324		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		2		
Sodium	ppm	ASTM D5185m		3		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANL	INESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1092		
Particles >6µm		ASTM D7647	>1300	228		
Particles >14µm		ASTM D7647	>160	17		
Particles >21µm		ASTM D7647	>40	6		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11		
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.66		

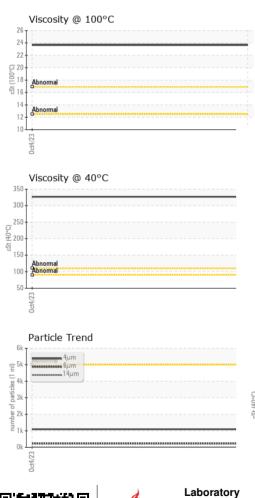


## **OIL ANALYSIS REPORT**

VISUAL







		method				history
<ul> <li>White Metal</li> </ul>	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 PROPE	RTIES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D445		326.8		
Visc @ 100°C	cSt	ASTM D445		23.65		
Viscosity Index (VI)	Scale	ASTM D2270		91		
SAMPLE IMAG	iES	method	limit/base	current	history1	history
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count		
10			491 520			
10 8 iron			491,520			
8 - iron			122,880	Severe		
8 - iron				Şevere		
8 iron 6 4 2 0			122,880	Severe Abnormal		
6 4 2 0			122,880	Severe Abnormal		
udd C C C C C C C C C C C C C C C C C C C			122,880	Severe Abnormal		
Reference in the second	s		122,880	Severe		
Non-ferrous Metal	5		122,880	Severe Abnormal		
Non-ferrous Metal	5		122,880 30,720 E 7.680 E 1.920 \$90 \$90 \$90 \$90 \$90 \$90 \$480	Abnormal		
Non-ferrous Metal	5		122,880 30,720 Te 7,680 200 30,720 Te 7,680 1,920 30 30 480 480 120 30	Severe Abnormal		
Non-ferrous Metal	5		122.880 30.720 Te 7.680 Te 1.32 30.720 Te 1.32 30 7680 1.920 480 1.20 30 30 8	Severe Abnormal		
Non-ferrous Metal	5		122.880 30.720 Te 7.680 Te 1.32 30.720 Te 1.32 30 7680 1.920 480 1.20 30 30 8	Severe Abnormal		
Non-ferrous Metal	5		122.880 30.720 The second seco		141 21.	
Non-ferrous Metal	5		122,880 30,720 Te 7,680 Te 7,680 1,920 abg apper 480 120 30 8 20 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 480 480 480 480 480 480 480 48		14μ 21μ	38μ 7
Non-ferrous Metal	5		122,880 30,720 Te 7,680 Te 7,680 1,920 abg apper 480 120 30 8 20 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 480 480 480 480 480 480 480 48	4 64	14μ 21μ	
Non-ferrous Metal	5		122,880 30,720 Te 7,680 Te 7,680 1,920 abg apper 480 120 30 8 20 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 480 480 480 480 480 480 480 48	4 64	14μ 21μ	
Non-ferrous Metal	5		122,880 30,720 Te 7,680 Te 7,680 1,920 abg apper 480 120 30 8 20 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 480 480 480 480 480 480 480 48	4 64	14μ 21μ	
Non-ferrous Metal	5		122,880 30,720 Te 7,680 Te 7,680 1,920 abg apper 480 120 30 8 20 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 480 480 480 480 480 480 480 48	4 64	14μ 21μ	
Non-ferrous Metal	5		122,880 30,720 The first state	4 64	14μ 21μ	

Certificate L2367Test Package: MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI)Contact: RIC ABERLETo discuss this sample report, contact Customer Service at 1-800-237-1369.RICHARD.ABERLE@PARKLANDUSA.COM\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.T: (701)663-5091Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)F: (701)663-9445