WEAR CONTAMINATION **FLUID CONDITION**

SEVERE SEVERE NORMAL

NISSAN KOMATSU FORKLIFT

Component Propane Engine							
{not provided} (QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform an accurate viscosity test.	Sample Number		Client Info		WC0620236		
	Sample Date	bro	Client Info		29 Jan 2024		
	Machine Age	hrs	Client Info		2550		
	Oil Age Filter Age	hrs	Client Info		0		
	Oil Changed	hrs	Client Info		N/A		
	Filter Changed		Client Info		N/A N/A		
	Sample Status		Client into		SEVERE		
WEAD			AOTA DE LOS	400			
WEAR	Iron	ppm	ASTM D5185m		666		
The tin level is severe. Cylinder, crank, or cam shaft wear is indicated.	Chromium	ppm	ASTM D5185m		12		
	Nickel	ppm	ASTM D5185m	>5	2		
	Titanium	ppm	ASTM D5185m	_	5		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		4 1		
	Lead	ppm	ASTM D5185m		3		
	Copper	ppm	ASTM D5185m		9		
	Tin	ppm	ASTM D5185m	>8	26		
	Vanadium	ppm	ASTM D5185m	NONE	4 NONE		
	White Metal	scalar	*Visual	NONE			
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>50	153		
	Potassium	ppm	ASTM D5185m	>20	4		
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress. There is a high concentration of water present in the oil.	Water	%	ASTM D6304	>0.1	2.10		
	ppm Water	ppm	ASTM D6304	>1000	21000		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	20.6		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.1		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	LIGHT		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	▲ MILKY		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	0.2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		25		
	Boron	ppm	ASTM D5185m		47		
The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		66		
	Manganese	ppm	ASTM D5185m		8		
	Magnesium	ppm	ASTM D5185m		243		
	Calcium	ppm	ASTM D5185m		1424		
	Phosphorus	ppm	ASTM D5185m		630		
	Zinc	ppm	ASTM D5185m		639		
	Sulfur	ppm	ASTM D5185m		2305		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2		
	Base Number (BN)		ASTM D2896		9.7		
	Visc @ 100°C	cSt	ASTM D445		8.8		





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: WC0620236 : 06076316 : 10858407

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved

: 31 Jan 2024 Diagnosed : 05 Feb 2024 Diagnostician : Jonathan Hester

Test Package : MOB1+ (Additional Tests: Glycol, KF)

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.

Contact: Mark Oliphant FIVEPOINTSMOTORCO@NORTHSTATE.NET

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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HIGH POINT, NC

US 27260

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