WEAR CONTAMINATION **FLUID CONDITION**

NORMAL **ABNORMAL ABNORMAL**

CATERPILLAR EMD CAT 309T

Component
Diesel Fngine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RP034709		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		17 Mar 2007		
	Machine Age	hrs	Client Info		9368		
	Oil Age	hrs	Client Info		518		
	Filter Age	hrs	Client Info		518		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m		80		
VEAIL	Chromium	ppm	ASTM D5185m		3		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		2		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5105m		15		
	Lead	ppm	ASTM D5185m		12		
	Copper	ppm	ASTM D5185m		6		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
NONT A BAIN A TION	0.00		AOTM DEADE				
CONTAMINATION	Silicon	ppm	ASTM D5185m		26		
Sodium and/or potassium levels are high indicating a possible coolant leak. There is a trace of moisture present in the oil.	Potassium	ppm	ASTM D5185m		12		
	Fuel	0/	WC Method		<1.0		
	Water	%	*ASTM D2982		▲ 0.145 NEG		
	Glycol Soot %	%	*ASTM D7844		0.6		
	Nitration	Abs/cm	*ASTM D7624		19.		
	Sulfation	Abs/.1mm	*ASTM D7024		46.		
	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			TTOTANE	NEG		
LUID CONDITION	Sodium	nnm	ASTM D5185m		 △ 60		
FLUID CONDITION	Boron	ppm	ASTM D5165III		3		
The oil viscosity is higher than normal.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		121		
	Manganese	ppm	ASTM D5105m		2		
	Magnesium	ppm	ASTM D5185m		2994		
	Calcium	ppm	ASTM D5105m		6442		
	Phosphorus	ppm	ASTM D5185m		1090		
	Zinc	ppm	ASTM D5105m		1641		
	Oxidation	Abs/.1mm	*ASTM D7414		35.		
	Base Number (BN)	mg KOH/g	ASTM D2896		22.0		
	Visc @ 100°C		. 10 1 111 0 2 0 0 0		△ 19.48		





Laboratory

Sample No.

Lab Number : 01946140

: RP034709

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

Received **Tested** : 23 Apr 2007

: 20 Apr 2007

AV 6 DICIEMBRE Y GASPAR CANTERO

QUITO-ECUADOR,

: 23 Apr 2007 - Doug Bogart Unique Number : 4084825 Diagnosed Test Package : MOB 2 (Additional Tests: Glycol, KF)

Contact: DANNY BARREIRO oilmax.ec@gmail.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)

T: (593)996-451694 F: x: