WEAR CONTAMINATION FLUID CONDITION

NORMAL

ABNORMAL

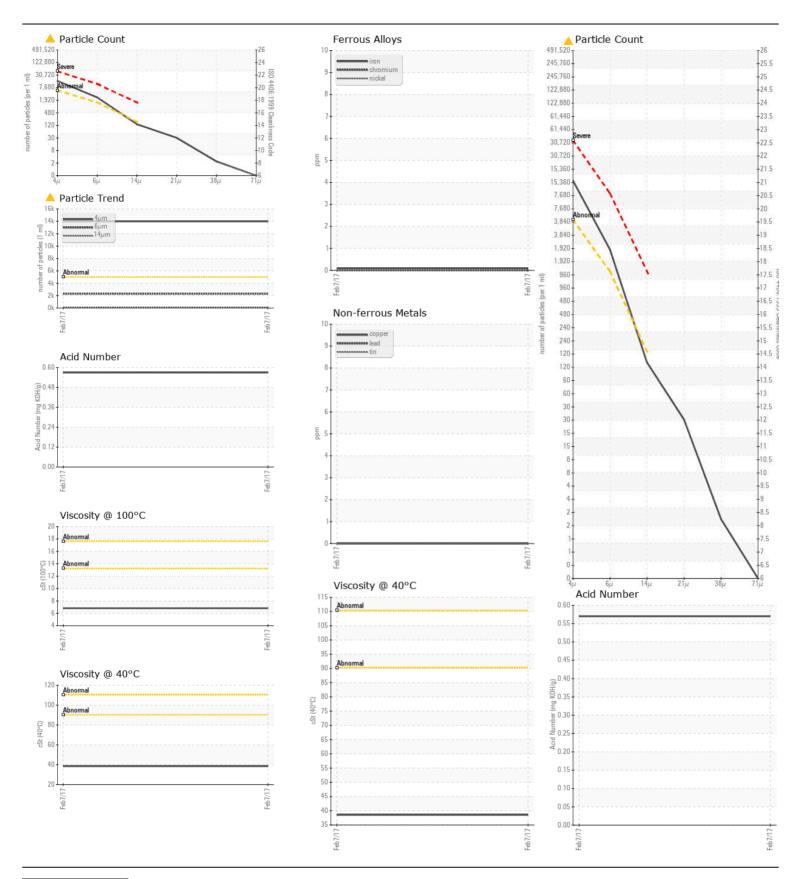
NORMAL

Machine Id

CAM2 AW46 2/7/17

Component

New (Unused) Oil							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WCI2278371		
This is a baseline read-out on the submitted sample. No corrective action is recommended at this time.	Sample Date	mla	Client Info		07 Feb 2017		
	Machine Age	mls	Client Info		0		
	Oil Age Filter Age	mls	Client Info		0		
	Oil Changed	mls	Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status		Olletti ittio		ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m		<1		
	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m		Ö		
	Titanium	ppm	ASTM D5185m		Ö		
	Silver	ppm	ASTM D5185m		Ö		
	Aluminum	ppm	ASTM D5185m		0		
	Lead	ppm	ASTM D5185m		ő		
	Copper	ppm	ASTM D5185m		Ö		
	Tin	ppm	ASTM D5185m		Ö		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION There is a high amount of silt (particulates < 14 microns in size) present in the oil.	Silicon	ppm	ASTM D5185m		<1		
	Potassium	ppm	ASTM D5185m	>20	0		
	Water		WC Method		NEG		
	Particles >4μm		ASTM D7647		<u> </u>		
	Particles >6µm		ASTM D7647		<u> </u>		
	Particles >14μm		ASTM D7647		120		
	Particles >21μm		ASTM D7647		27		
	Particles >38μm		ASTM D7647		2		
	Particles >71μm		ASTM D7647		0		
	Oil Cleanliness		ISO 4406 (c)		<u>^</u> 21/18/14		
	Particles 5-15µm		*NAS 1638		215138		
	Particles 15-25µm		*NAS 1638		9054		
	Particles 25-50µm	count	*NAS 1638		2518		
	Particles 50-100µm		*NAS 1638		217		
	Particles >100µm	count		>3	0		
	NAS Code		*NAS 1638		10		
	Silt	scalar	*Visual	NONE	NONE		
	Debris		*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance Odor	scalar	*Visual *Visual	NORML NORML	NORML NORML		
	Emulsified Water		*Visual	NONIVIL	NEG		
	Liliuisilieu vvalei	Scalai	visuai		INEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0		
	Boron	ppm	ASTM D5185m		2		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		3		
	Manganese	ppm	ASTM D5185m		Ö		
	Magnesium	ppm	ASTM D5185m		Ö		
	Calcium	ppm	ASTM D5185m		112		
	Phosphorus	ppm	ASTM D5185m		380		
	Zinc	ppm	ASTM D5185m		481		
	Sulfur	ppm	ASTM D5185m		949		
	Acid Number (AN)	mg KOH/g			0.570		
	Visc @ 40°C	cSt	ASTM D445		38.57		
	Visc @ 100°C	cSt	ASTM D445		6.82		
	Viscosity Index (VI)	Scale	ASTM D2270		135		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WCI2278371 Lab Number : 04160741

Unique Number: 7694149

Received : 10 Feb 2017 **Tested** : 15 Feb 2017 Diagnosed

: 15 Feb 2017 - Jonathan Hester

Test Package : IND 2 (Additional Tests: KV100, PrtCount, PrtCountNAS, VI) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: CHRIS CAMPBELL chrisc@campbelloil.net T: (910)862-0778

CAMPBELL OIL COMPANY

ELIZABETHTOWN, NC

PO BOX 637, 418 PEANUT ROAD

* - 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)

F: (910)862-6173

US 28337