

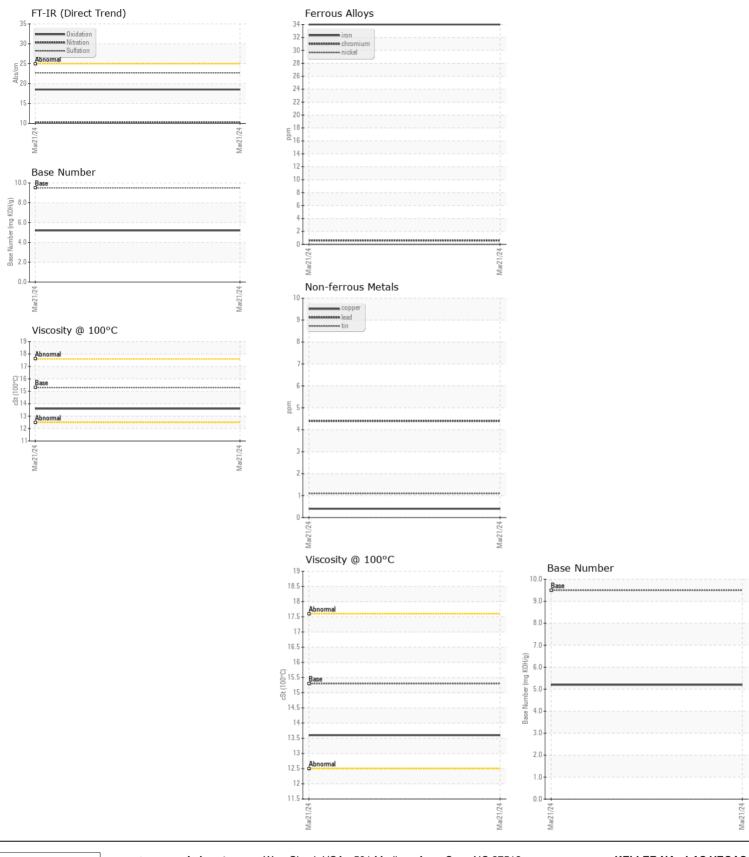
## Machine Id **3820016** Component **Diesel Engine** Fluid **CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)**

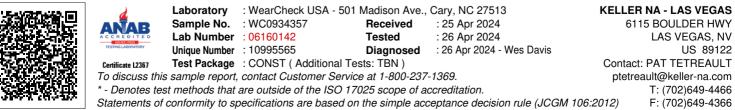
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0934357		
	Sample Date		Client Info		21 Mar 2024		
	Machine Age	hrs	Client Info		3402		
	Oil Age	hrs	Client Info		312		
	Filter Age	hrs	Client Info		312		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		34		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>20	2		
	Lead	ppm	ASTM D5185m	>40	4		
	Copper	ppm	ASTM D5185m	>330	<1		
	Tin	ppm		>15	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	1		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	10.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7		
	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	>0.2	NEG		
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	85	30		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		8		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		794		
	Calcium	ppm	ASTM D5185m		1451		
	Phosphorus	ppm	ASTM D5185m		793		
	Zinc	ppm	ASTM D5185m		906		
	Sulfur	ppm	ASTM D5185m	3500	3271		
	Oxidation	Abs/.1mm		>25	18.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.5	5.2		
		-					

13.6

ASTM D445 15.3

Visc @ 100°C cSt





Contact/Location: PAT TETREAULT - HAYLAS Page 2 of 2