



# Microscopic Analysis Report

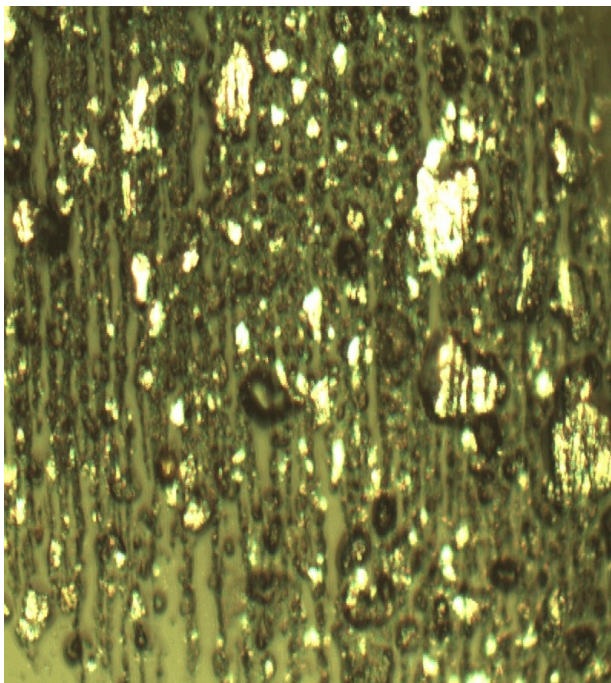
Customer Name: EXAMPLE REPORT  
Reservoir Description: EXAMPLE REPORT

Sample Date: 00/00/00  
Lab Number: XXXXXX

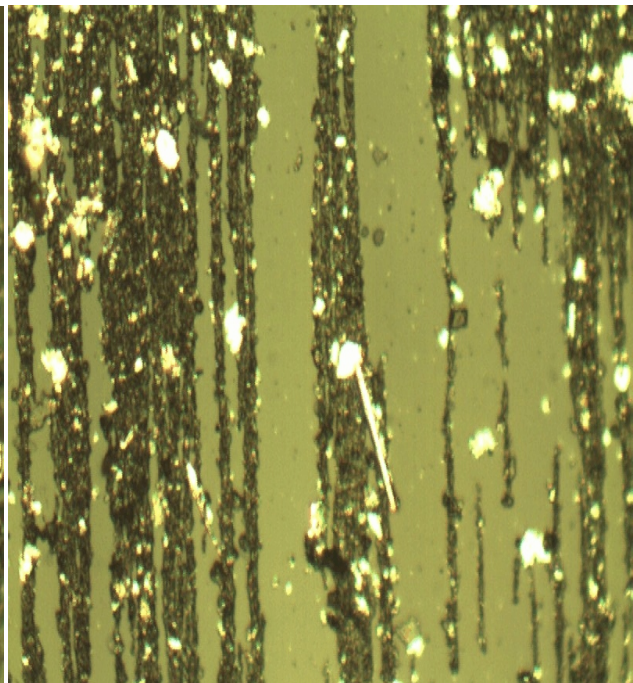
## Discussion of Results

**Ferrogram Interpretation:** There were moderate amounts of ferrous sliding wear particles, ferrous rolling wear platelet particles, and ferrous cutting wear particles present on the slide. Also, there were moderate amounts of ferrous rubbing wear particles and abrasive/dust/dirt particles found on the slide. Sliding wear particles are indicative of possible excessive running speeds, lubricant degradation, overheating, and/or heavy abrasive contamination. The presence of cutting wear particles suggests possible misalignment and/or abrasive contamination. The presence of rolling wear platelet particles suggests possible surface fatigue and/or rolling contact failure due to metal-to-metal sliding and/or abrasive contamination. The morphology of the abrasive/dust/dirt particles suggests possible contamination of the sample and/or reservoir from an external source.

## Microscopic Analysis



**Figure 1:** Ferrous Sliding Wear Particles, Ferrous Rolling Wear Platelet Particles, and Ferrous Rubbing Wear Particles at the Head of the Slide (Magnification 400X).



**Figure 2:** Ferrous Cutting Wear Particles, Ferrous Rolling Wear Platelet Particles, and Ferrous Rubbing Wear Particles at the Head of the Slide (Magnification 400X).

		Particle Rating												Key			
Max Size (µm)		30	80	140	105								60				
Severity	4																
	3																
2		R	C	S	L	X	B	R	C	S	L	A	O	M			
1																	
		Ferrous Based					Nonferrous Based					Contaminants					

**Key**  
R: Normal Rubbing Wear  
C: Cutting Wear  
S: Sliding Wear  
L: Rolling Wear  
X: Red Oxides  
B: Black Oxides  
A: Abrasives  
O: Corrosive Wear  
M: Molybdenum Disulfide  
1: Least Severe  
4: Most Severe