

# LABORATORY ANALYSIS



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Department **AZUL**  
 Equipment No. **APPLETON 453 (00063)**  
 System **Hydraulic System**  
 Oil Type **ENGINEERED LUBRICANTS ENLUBE 15-AW (--- GAL)**

**EGS MEXICO S DE RL DE CV**  
 VIA MONTERREY MATAMOROS NO 598  
 MEXICO, ZZ  
 Mexico  
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## DIAGNOSIS

We recommend that you drain the oil from the component if this has not already been done. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. Zinc (Zn) ppm levels are severely low. cSt Vis. @ 40C is abnormally high. The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil.

## SAMPLE INFORMATION

Lab Number	New	<b>2312-00036</b>	---	---
Date of Sample	(Typical)	<b>13 Nov 2023</b>	---	---
Oil Added		<b>UNK</b>	---	---
Last Drain Date		<b>--</b>	---	---
Last Filter Service		<b>--</b>	---	---
Sample Point		<b>---</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

## VISCOSITY @ 100F OR 40C (ASTM D-445)

SSU Vis. @ 100F	SSU	<b>189.5</b>	---	---
cSt Vis. @ 40C	cSt	32.0	<b>▲ 36.70</b>	---

## PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	<b>20/17/12</b>	---	---
4 Micron & Larger	particles/ml	>5000	<b>▲ 9,079</b>	---	---
6 Micron & Larger	particles/ml	>2500	<b>■ 1,282</b>	---	---
14 Micron & Larger	particles/ml	>160	<b>■ 34</b>	---	---
21 Micron & Larger	particles/ml	>40	<b>■ 10</b>	---	---
38 Micron & Larger	particles/ml	>10	<b>■ 1</b>	---	---
70 Micron & Larger	particles/ml	>3	<b>■ 1</b>	---	---

## ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm		<b>&lt;5</b>	---	---
Antimony (Sb)	ppm		<b>&lt;5</b>	---	---
Cadmium (Cd)	ppm		<b>&lt;5</b>	---	---
Chromium (Cr)	ppm		<b>&lt;5</b>	---	---
Cobalt (Co)	ppm		<b>&lt;5</b>	---	---
Copper (Cu)	ppm		<b>■ &lt;5</b>	---	---
Iron (Fe)	ppm		<b>■ 10</b>	---	---
Lead (Pb)	ppm		<b>&lt;5</b>	---	---
Manganese (Mn)	ppm		<b>&lt;5</b>	---	---
Molybdenum(Mo)	ppm		<b>&lt;5</b>	---	---
Nickel (Ni)	ppm		<b>&lt;5</b>	---	---
Silver (Ag)	ppm		<b>&lt;5</b>	---	---
Tin (Sn)	ppm		<b>&lt;5</b>	---	---
Titanium (Ti)	ppm		<b>&lt;5</b>	---	---
Vanadium (V)	ppm		<b>&lt;5</b>	---	---
Barium (Ba)	ppm		<b>&lt;5</b>	---	---
Boron (B)	ppm		<b>6</b>	---	---
Calcium (Ca)	ppm		<b>&lt;5</b>	---	---
Magnesium (Mg)	ppm		<b>&lt;5</b>	---	---
Phosphorus(P)	ppm		<b>113</b>	---	---
Silicon (Si)	ppm		<b>&lt;5</b>	---	---
Zinc (Zn)	ppm	668	<b>● 160</b>	---	---
Sulfur (S)	ppm		<b>882</b>	---	---

## DR FERROGRAPHY READINGS

L			<b>■ 4.7</b>	---	---
S			<b>■ 4.4</b>	---	---
WPC	DL + DS		<b>■ 9.1</b>	---	---

Customer Id: ENC0005J03  
 Sample No.: EN23120036  
 Lab Number: 23120036  
 Test Package: TEST



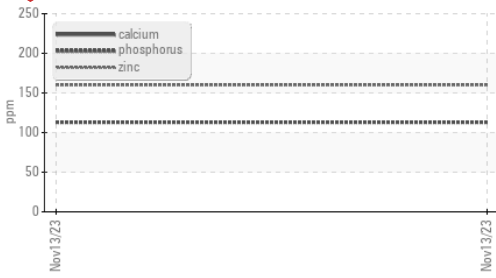
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# OIL ANALYSIS REPORT

### Additives



### CONTAMINATION

Water	>0.05	<b>NEG</b>	---	---
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### Particle Trend



### Viscosity @ 40°C

