

LABORATORY ANALYSIS



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Department **TRANSFER ATIZAPAN**
Equipment No. **61 HYD KAUFMAN 179 (00007)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENLUBE 15-AW (--- GAL)**

DIAGNOSIS

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. Zinc (Zn) ppm levels are severely low. cSt Vis. @ 40C is severely high. The viscosity is very high and is no longer within acceptable limits. Viscosity of sample indicates oil is within ISO 68 range, advise investigate.

SAMPLE INFORMATION

Lab Number	New	2312-00069	2310-00491	2306-00811
Date of Sample	(Typical)	13 Nov 2023	20 Sep 2023	16 Jun 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	ABNORMAL	ABNORMAL

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

SSU Vis. @ 100F	SSU	376.8	206.1	218.0
cSt Vis. @ 40C	cSt	32.0	39.92	42.24

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	RED	1.0	RED
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PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	22/19/14	22/19/15	22/19/13
4 Micron & Larger	particles/ml	>5000	33,007	30,359	36,098
6 Micron & Larger	particles/ml	>2500	4,892	4,430	3,411
14 Micron & Larger	particles/ml	>160	82	243	48
21 Micron & Larger	particles/ml	>40	10	46	13
38 Micron & Larger	particles/ml	>10	1	2	1
70 Micron & Larger	particles/ml	>3	0	0	0

ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm	<5	<5	<5
Antimony (Sb)	ppm	<5	<5	<5
Cadmium (Cd)	ppm	<5	<5	<5
Chromium (Cr)	ppm	<5	<5	<5
Cobalt (Co)	ppm	<5	<5	<5
Copper (Cu)	ppm	6	9	8
Iron (Fe)	ppm	<5	8	9
Lead (Pb)	ppm	<5	6	<5
Manganese (Mn)	ppm	<5	<5	<5
Molybdenum(Mo)	ppm	<5	<5	<5
Nickel (Ni)	ppm	<5	<5	<5
Silver (Ag)	ppm	<5	<5	<5
Tin (Sn)	ppm	<5	<5	<5
Titanium (Ti)	ppm	<5	<5	<5
Vanadium (V)	ppm	<5	<5	<5
Barium (Ba)	ppm	<5	<5	<5
Boron (B)	ppm	<5	<5	<5
Calcium (Ca)	ppm	13	48	47
Magnesium (Mg)	ppm	<5	6	7
Phosphorus(P)	ppm	318	474	457
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	668	174	566
Sulfur (S)	ppm	623	1,600	1,640

Customer Id: ENC0005J03
Sample No.: EN23120069
Lab Number: 23120069
Test Package: TEST



To manage this report scan the QR code

To discuss the diagnosis or test data:

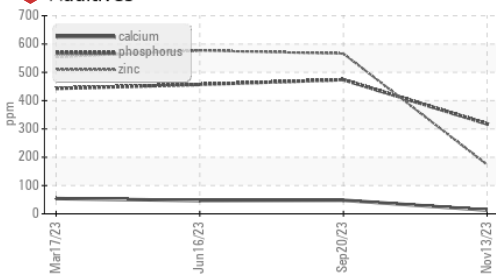
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To change component or sample information:

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OIL ANALYSIS REPORT

Additives



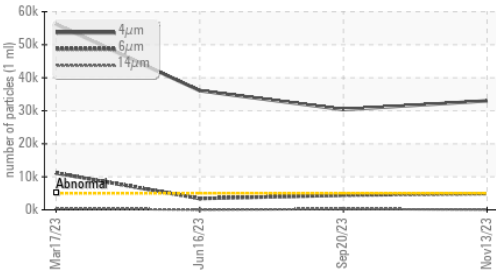
DR FERROGRAPHY READINGS

L		■ 10.1	■ 6.6	▲ 20.4
S		■ 5.3	■ 2.2	■ 4.1
WPC	DL + DS	■ 15.4	■ 8.8	■ 24.5

CONTAMINATION

Water	>0.05	NEG	NEG	NEG
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▲ Particle Trend



Viscosity @ 40°C

