H177-56115-0209 ✓ **No Action Required**

C147 ASE02482 - CAT 14H

Wheel Assembly Left Front **Group :** -

Customer : GUTIERREZ CANALES ENGINEERING PC

S·O·S SERVICES

Interpretation

Interpreted by: Brandon Hepler; 04/27/2026

NO PROBLEMS PRESENTLY ASSOCIATED WITH THIS SAMPLE. CONTINUE SAMPLING AT THE NORMAL INTERVAL.

For additional sample history go to vl.cat.com

Sample Information

◆ Action Required ▲ Monitor ✓ No Action ■ No Comment

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Sample ID	H177-56115-0209	H177-54270-0624	H160-53291-0149
Lab Date	04/27/2026	09/30/2024	10/18/2023
Submitted Date	04/27/2026	09/30/2024	08/31/2024
Service Meter	18,000.0 h	17,491.0 h	17,173.0 h
Comp. Meter	-	-	17,173.0 h
Meter on Fluid	18,000.0 h	17,491.0 h	17,173.0 h
Fluid Brand	-	-	-
Fluid Type	-	-	-
Fluid Grade	-	-	-
Fluid Change	Yes	No	No
Filter Change	No	No	No

Elemental Analysis by ICP

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Aluminum (PPM)	2	12	0
Barium (PPM)	0	0	0
Boron (PPM)	170	1,803	3
Cadmium (PPM)	0	-	-
Calcium (PPM)	1,082	679	4,056
Chromium (PPM)	3	21	1
Copper (PPM)	0	1	11
Iron (PPM)	37	241	65
Lead (PPM)	1	0	7
Magnesium (PPM)	14	12	19
Manganese (PPM)	0	2	1
Molybdenum (PPM)	3	20	3
Nickel (PPM)	0	1	0

H177-56115-0209 ✓ **No Action Required**

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Elemental Analysis by ICP

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Phosphorus (PPM)	447	566	923
Potassium (PPM)	191	1,929	1
Silicon (PPM)	11	55	15
Silver (PPM)	0	0	0
Sodium (PPM)	4	13	8
Tin (PPM)	0	0	1
Titanium (PPM)	0	1	1
Vanadium (PPM)	0	2	0
Zinc (PPM)	486	210	1,273

Infrared

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Oxidation	3	3	5
Sulfur Products	22	17	12
Nitration	0	3	3
Soot	0	2	1
Antiwear	17	18	15

Viscosity at 100 °C

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Viscosity at 100 C (CST)	17.10	14.20	11.10

Particle Count

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
4µ	66,449	43,788	84,544
6µ	24,410	26,548	43,723
10µ	1,998	7,588	7,571
14µ	474	2,128	1,469
18µ	214	-	-
21µ	127	423	213
38µ	11	7	3

H177-56115-0209 ✓ **No Action Required**

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Particle Count

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
70µ	2	0	0
ISO	23/22/16	23/22/18	24/23/18
25µ	-	158	73

Water

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Water	N	N	N

Debris

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
Debris	N	N	N

Particle Volume Indicator

Sample Date	✓ 04/22/2026	▲ 09/20/2024	◆ 10/13/2023
PVI	6.27	7.45	9.32

EMPIRE SOUTHWEST
1725 S Country Club Dr Mesa
85210-6003 USA

H177-56115-0209 No Action Required

C147 ASE02482 - CAT 14H

Wheel Assembly Left Front **Group :** -

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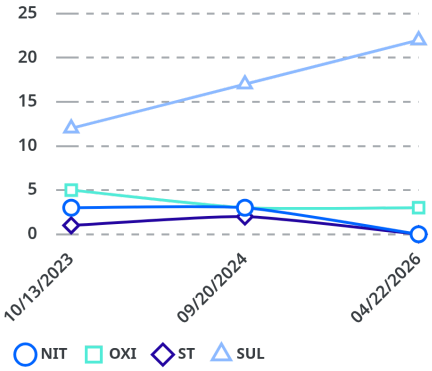
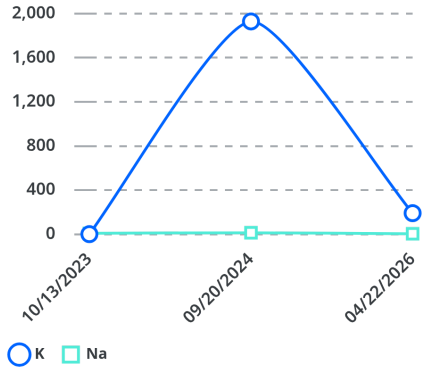
S·O·S SERVICES

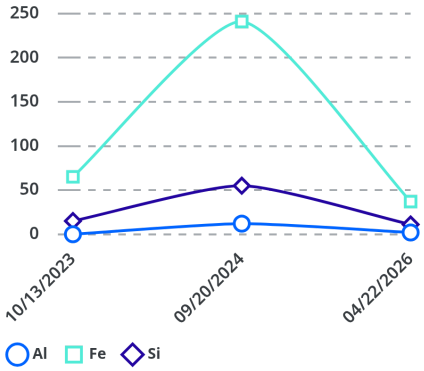
Condition



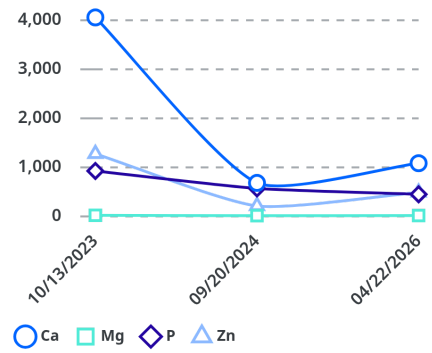
Coolant Contamination



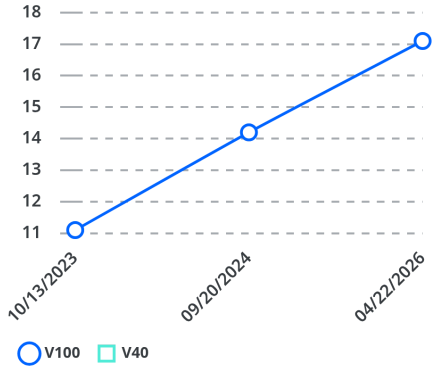
Dirt



Formulation



Viscosity



Wear Levels