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TRANSMISSION POWER

SHIFT REAR

E250-55038-3010

SAMPLE SHIP TIME (days) : 7

SAVERY CREEK

ENTERPRISES

RECEIVED DATE: 07-Feb-25

EQUIP NUM: 0368

CAT 627F



No Action Required

WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.

SERIAL NUMBER: 1DL00368

Interp By: Mary Gossett
Interpreted On: 13-Feb-25

SAMPLE INFORMATION

Sampled Date	31-Jan-25	28-Jan-25
Sample Id	E250-55038-3010	E250-55031-3011
Lab Date	07-Feb-25	31-Jan-25
Meter [Hr]	1814	1815
Comp Meter [Hr]	1814	1815
Meter On Fluid	1814	1815
Fluid Brand		
Fluid Weight	30	30
Fluid Type		
Fluid Change	Y	N
Filter Change	Y	N
Kidney Loop	U	U
Total Fluid Added	0	0

PREVIOUS SAMPLE

SILICON AND ALUMINUM IN THIS RATIO USUALLY INDICATE DIRT ENTRY. CHECK FOR DIRT ENTRY AND REPAIR IF NECESSARY. ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.

For additional sample history, go to:

S.O.S WEB

CONDITION / CONTAMINATION

	31-Jan-25	28-Jan-25
VISCOSITY (CENTISTOKES) ASTM D445		
V100 Viscosity at 100 C	11	10.40

INFRARED (UEM) ASTM E2412

ST	Soot	0	0
OXI	Oxidation	3	3
SUL	Sulfate By-Product	17	16
NIT	Nitration	0	0

WATER

W	Water	N	N
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ANTIFREEZE

A	Antifreeze	N	N
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CLEANLINESS

		31-Jan-25	28-Jan-25
PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406			
ISO	ISO Code Rating	20/18/15	24/23/19
4μ	4μ	8930	134250
6μ	6μ	1855	66760
10μ	10μ	455	14005
14μ	14μ	205	4135
21μ	21μ	80	560
38μ	38μ	20	30

WEAR LEVELS / ADDITIVES

31-Jan-25 28-Jan-25

ELEMENTAL ANALYSIS (PPM) ASTM D6105 [OIL] / ASTM D6130 [COOLANT]

Cu	Copper	8	9
Fe	Iron	16	22
Cr	Chromium	0	0
Al	Aluminum	1	8
Pb	Lead	1	1
Sn	Tin	0	0
Si	Silicon	6	24
Na	Sodium	4	5
K	Potassium	4	4
Mo	Molybdenum	1	1
Ni	Nickel	0	0
Ag	Silver	0	0
Ca	Calcium	2960	2852
P	Phosphorus	1042	990
Zn	Zinc	1252	1257
Mg	Magnesium	12	14
B	Boron	2	2

ENGINE FRONT

EQUIP NUM: 0368

SERIAL NUMBER: 1DL00368

CAT 627F

Monitor Compartment



SOOT IS INCREDIBLY HIGH. CHECK AIR FILTER(S) FOR PLUGGING. RESAMPLE AT THE NORMAL INTERVAL.

Interp By: Damir Schebler

Interpreted On: 02-Mar-26

E250-58058-1021

SHOP JOB NUM : SUMMER

FIELD

SAMPLE SHIP TIME (days) : 44

SAVERY CREEK

ENTERPRISES

RECEIVED DATE: 27-Feb-26

SAMPLE INFORMATION

	14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
Sample Id	E250-56058-1021	E250-55352-1063	E250-55274-1112	E250-55267-1149
Lab Date	27-Feb-26	18-Dec-25	01-Oct-25	24-Sep-25
Meter [Hr]	259	1051	22123	823
Comp Meter [Hr]	259	1051	22123	823
Meter On Fluid	208	209	243	243
Fluid Brand				
Fluid Weight	15W-40	15W-40	15W-40	15W-40
Fluid Type				
Fluid Change	Y	Y	Y	Y
Filter Change	Y	Y	Y	Y
Kidney Loop	U	U	U	U
Total Fluid Added	0	0	0	0

PREVIOUS SAMPLE

SOOT IS EXTREMELY HIGH. IRON IS HIGH. HIGH SOOT CAN BE CAUSED BY EXTENDED USAGE, INCORRECT TIMING, PLUGGED AIR FILTERS. OXIDATION AND SULFATION ARE HIGH. MODERATELY ELEVATED OXIDATION CAN RESULT FROM HIGHER TEMPERATURES, EXTENDED OIL SERVICE DURATION. OIL AND FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 250 HRS.

For additional sample history, go to:

S.O.S WEB

CONDITION / CONTAMINATION

		14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
VISCOSITY (CENTISTOKES) ASTM D445					
V100	Viscosity at 100 C	17.29	18.33	13.92	24.47

INFRARED (UFM) ASTM E2412

ST	Soot	401	404	66	392
OXI	Oxidation	36	91	13	89
SUL	Sulfate By-Product	38	58	22	55
NIT	Nitration	31	6	0	13

WATER

W	Water	N	N	N	N
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ANTIFREEZE

A	Antifreeze	N	N	N	N
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FUEL

F	Fuel	N	N	N	N
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WEAR LEVELS / ADDITIVES

		14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
ELEMENTAL ANALYSIS (PPM) ASTM D5185 (OIL) / ASTM D6130 (COOLANT)					
Cu	Copper	4	6	5	12
Fe	Iron	56	85	31	127
Cr	Chromium	1	1	1	3
Al	Aluminum	2	2	5	3
Pb	Lead	1	3	0	8
Sn	Tin	0	0	0	1
Si	Silicon	4	6	11	10
Na	Sodium	2	1	2	5
K	Potassium	3	4	3	2
Mo	Molybdenum	9	18	37	79
Ni	Nickel	0	1	0	2
Ag	Silver	0	0	0	0
Ca	Calcium	2619	2836	2464	2796
P	Phosphorus	1019	1119	1057	1218
Zn	Zinc	1187	1320	1230	1452
Mg	Magnesium	42	36	51	57
B	Boron	7	9	21	33

ENGINE REAR

EQUIP NUM: 0368

SERIAL NUMBER: 1DL00368

E250-56058-1006

SHOP JOB NUM : SUMMER

FIELD

SAMPLE SHIP TIME (days) : 44

SAVERY CREEK

ENTERPRISES

RECEIVED DATE: 27-Feb-26

CAT 627F

Monitor Compartment



SOOT AND IRON HAVE INCREASED. CHECK AIR FILTERS FOR PLUGGING. RESAMPLE AT THE NORMAL INTERVAL

Interp By: Damir Schebler

Interpreted On: 02-Mar-26

SAMPLE INFORMATION

	14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
Sample Id	E250-56058-1006	E250-55352-1064	E250-55274-1114	E250-55267-1150
Lab Date	27-Feb-26	18-Dec-25	01-Oct-25	24-Sep-25
Meter [Hr]	259	1051	22123	823
Comp Meter [Hr]	259	1051	22123	823
Meter On Fluid	208	209	243	243
Fluid Brand				
Fluid Weight	15W-40	15W-40	15W-40	15W-40
Fluid Type				
Fluid Change	Y	Y	Y	Y
Filter Change	Y	Y	Y	Y
Kidney Loop	U	U	U	U
Total Fluid Added	0	0	0	0

PREVIOUS SAMPLE

IRON IS HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. OIL AND FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 250 HRS

For additional sample history, go to:

S.O.S WEB

CONDITION / CONTAMINATION

	14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
VISCOSITY (CENTISTOKES) ASTM D445				
V100 Viscosity at 100 C	12.74	12.74	14.71	13.28

INFRARED (UFM) ASTM E2412

ST	Soot	32	18	133	0
OXI	Oxidation	13	13	18	10
SUL	Sulfate By-Product	20	20	27	17
NIT	Nitration	0	0	0	0

WEAR LEVELS / ADDITIVES

		14-Jan-26	09-Dec-25	22-Sep-25	27-Aug-25
ELEMENTAL ANALYSIS (PPM) ASTM D6185 [OIL] / ASTM D6130 [COOLANT]					
Cu	Copper	3	6	13	8
Fe	Iron	128	74	247	13
Cr	Chromium	2	1	7	0
Al	Aluminum	2	2	7	3
Pb	Lead	1	2	1	5
Sn	Tin	0	0	0	0
Si	Silicon	5	6	22	8
Na	Sodium	3	1	5	5
K	Potassium	2	4	10	5
Mo	Molybdenum	7	8	43	16
Ni	Nickel	1	0	1	0
Ag	Silver	0	0	0	0
Ca	Calcium	2554	2469	2495	2345
P	Phosphorus	1014	1022	1025	1010
Zn	Zinc	1165	1148	1239	1131
Mg	Magnesium	43	36	40	52
B	Boron	7	8	23	18

WATER

W	Water	N	N	N	N
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ANTIFREEZE

A	Antifreeze	N	N	N	N
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FUEL

F	Fuel	N	N	N	N
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TRANSMISSION POWER

SHIFT FRONT

E250-55038-3001

SAMPLE SHIP TIME (days) : 7

SAVERY CREEK

ENTERPRISES

RECEIVED DATE: 07-Feb-25

EQUIP NUM: 0368

CAT 627F



Monitor Compartment

BREAK-IN WEAR CONTINUES. LABEL SAID OIL & FILTER(S) WERE CHGD WHEN THIS SAMPLE WAS TAKEN. RESAMPLE IN 250 HRS.

SERIAL NUMBER: 1DL00368

Interp By: Mary Gossett

Interpreted On: 13-Feb-25

SAMPLE INFORMATION

	31-Jan-25	28-Jan-25
Sampled Date	31-Jan-25	28-Jan-25
Sample Id	E250-55038-3001	E250-55031-3006
Lab Date	07-Feb-25	31-Jan-25
Meter [Hr]	1814	1815
Comp Meter [Hr]	1814	1815
Meter On Fluid	1814	1815
Fluid Brand		
Fluid Weight	30	30
Fluid Type		
Fluid Change	Y	N
Filter Change	Y	N
Kidney Loop	U	U
Total Fluid Added	0	0

PREVIOUS SAMPLE

RELATIVELY HEAVY BREAK-IN WEAR. COPPER IS HIGH. LEAD IS HIGH. SOME OF THIS MAY INDICATE BUSHING / THRUST WEAR. CHG OIL NOW TO REMOVE BREAK-IN DEBRIS FROM THE SYSTEM.

For additional sample history, go to:

S.O.S WEB

CONDITION / CONTAMINATION

	31-Jan-25	28-Jan-25
VISCOSITY (CENTISTOKES) ASTM D445		
V100 Viscosity at 100 C	11	10.40

INFRARED (UFM) ASTM E2412

ST	Soot	0	0
OXI	Oxidation	4	4
SUL	Sulfate By-Product	13	14
NIT	Nitration	0	0

WEAR LEVELS / ADDITIVES

31-Jan-25 28-Jan-25

ELEMENTAL ANALYSIS (PPM) ASTM D6185 [OIL] / ASTM D6150 [COOLANT]

Cu	Copper	247	237
Fe	Iron	25	20
Cr	Chromium	0	0
Al	Aluminum	2	2
Pb	Lead	33	32
Sn	Tin	0	1
Si	Silicon	9	10
Na	Sodium	5	6
K	Potassium	1	0
Mo	Molybdenum	1	1
Ni	Nickel	0	0
Ag	Silver	0	0
Ca	Calcium	2777	2632
P	Phosphorus	945	889
Zn	Zinc	1111	1099
Mg	Magnesium	12	11
B	Boron	3	4

WATER

W	Water	N	N
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ANTIFREEZE

A	Antifreeze	N	N
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CLEANLINESS

31-Jan-25 28-Jan-25

PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406

ISO	ISO Code Rating	24/21/16	24/21/16
4μ	4μ	88780	89170
6μ	6μ	12125	16115
10μ	10μ	1575	1880
14μ	14μ	590	550
21μ	21μ	160	70
38μ	38μ	20	5