

**HYDRAULIC SYSTEM**

EQUIP NUM: 7XM05040

SERIAL NUMBER: 7XM05040

CAT D8R

Monitor Compartment

Interp By: Gregory Scribner

Interpreted On: 07-Feb-23

N030-53032-0454

LABEL#: 200553641

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

UNABLE TO TEST FOR PARTICLE COUNT (ISO CODE) DUE TO EXCESS PARTICULATE. WEAR METALS APPEAR TO BE AT ACCEPTABLE LEVELS. OTHER READINGS APPEAR TO BE NORMAL. SUGGEST RESAMPLING TO VERIFY ISO RESULTS. INSPECT ANY SCREEN(S)/ OIL FILTER(S) FOR VISIBLE METAL OR DEBRIS.

**SAMPLE INFORMATION**

Sampled Date 26-Jan-23  
Sample Id N030-53032-0454  
Lab Date 01-Feb-23  
Meter [Hr] 25198  
Meter On Fluid 25198  
Fluid Brand  
Fluid Weight  
Fluid Type  
Fluid Change N  
Filter Change N

**CONDITION / CONTAMINATION**

26-Jan-23

**VISCOSITY (Centistokes)**

V100 Viscosity at 100 C 7.500

**VISCOSITY (Centistokes)**

V40 Viscosity at 40 C 47.40

**VISCOSITY INDEX**

VI Viscosity Index 122

**INFRARED (UFM)**

ST Soot 0  
OXI Oxidation 8  
SUL Sulfur Products 15  
NIT Nitration 3

**ANTIFREEZE**

A Antifreeze N

**WATER**

W Water N

**CLEANLINESS**

26-Jan-23

**PARTICLE COUNT**

ISO ISO Code Rating 8LH

**WEAR LEVELS / ADDITIVES**

26-Jan-23

**ELEMENTAL ANALYSIS (ppm)**

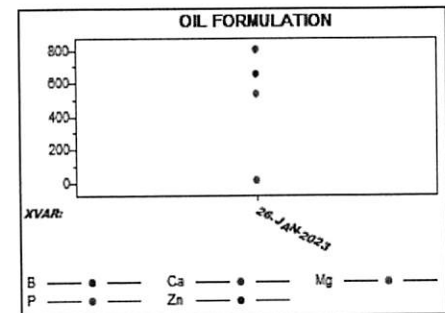
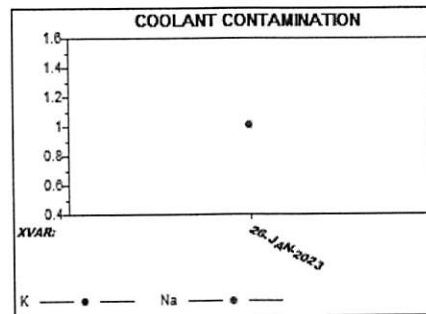
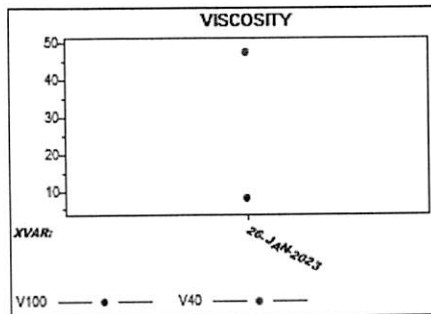
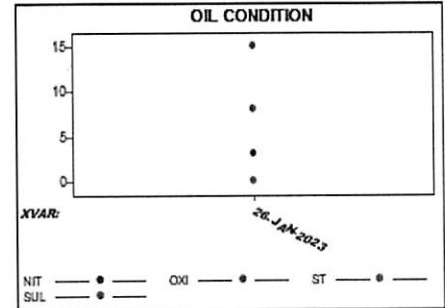
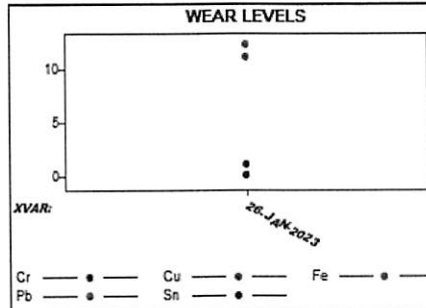
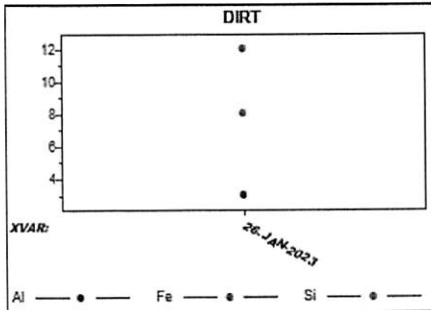
Na Sodium 1  
K Potassium 1  
Si Silicon 8  
Al Aluminum 3  
Fe Iron 12  
Cr Chromium 1  
Pb Lead 0  
Cu Copper 11  
Sn Tin 0  
Ni Nickel 0  
Ag Silver 0  
Ti Titanium 0  
V Vanadium 0  
Zn Zinc 649  
Ca Calcium 791  
Mg Magnesium 8  
Ba Barium 0  
B Boron 3  
Mo Molybdenum 1  
P Phosphorus 524

HYDRAULIC SYSTEM  
SERIAL NUMBER: 7XM06040  
EQUIP NUM: 7XM06040  
CAT D8R

N030-63032-0454



Monitor Compartment



### Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVUrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilsupport@finning.com](mailto:oilsupport@finning.com).

**RADIATOR**

EQUIP NUM: 7XM05040

SERIAL NUMBER: 7XM05040

N030-53032-9005

LABEL#: 200191061

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

CAT D8R

No Action Required

Interp By: Greg Eyre

Interpreted On: 07-Feb-23

ALL LEVEL 1 TESTS APPEAR NORMAL. CONTINUE TO USE THIS COOLANT. SAMPLE AGAIN AT THE REGULAR INTERVAL TO MONITOR THE COOLING SYSTEM.

**SAMPLE INFORMATION**

Sampled Date 26-Jan-23  
 Sample Id N030-53032-9005  
 Lab Date 01-Feb-23  
 Meter [Hr] 25198  
 Meter On Fluid 25198  
 Fluid Brand  
 Fluid Weight  
 Fluid Type  
 Fluid Change N  
 Filter Change N

**ADDITIONAL CHARACTERISTICS**

26-Jan-23

**REFRACTIVE INDEX**

GL Glycol (%) 58  
 FP Freeze Point (°C) -50  
 BP Boil Point (°C) 109

**pH**

pH pH 7.8

**CONDUCTIVITY (µS/cm)**

CON Conductivity 3562

**CORROSION LEVELS/ CHEMISTRY**

26-Jan-23

**NITRITE (ppm)**

NO2 Nitrite 383

**PHYSICAL**

Foam Foam norm

**PHYSICAL CHARACTERISTICS**

26-Jan-23

**PHYSICAL**

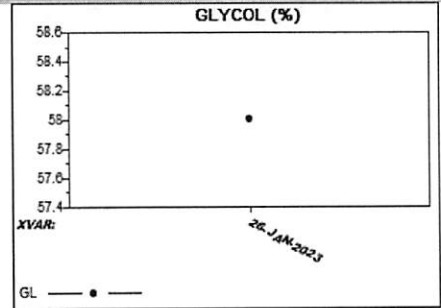
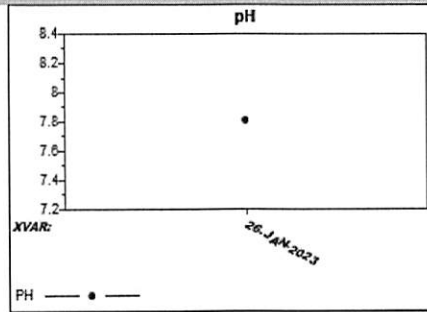
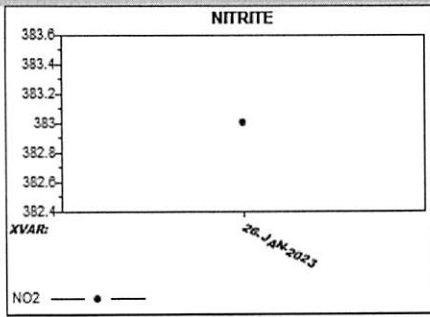
Color Color orange  
 App Appearance clear  
 Odor Odor norm  
 Oil Oil none  
 PAmt Precip Amount none

RADIATOR  
SERIAL NUMBER: 7XM06040  
EQUIP NUM: 7XM06040  
CAT D8R

N030-53032-9005



No Action Required



#### Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVUrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilssupport@finning.com](mailto:oilssupport@finning.com).

**TRANSMISSION POWER**
**SHIFT**

N030-53032-0453

LABEL#: 200555754

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

EQUIP NUM: 7XM05040

CAT D8R

No Action Required

SERIAL NUMBER: 7XM05040

Interp By: Gregory Scribner

Interpreted On: 07-Feb-23

 SLIGHTLY ELEVATED COPPER AND ALUMINUM. PARTICLE COUNT (ISO CODE) FLUID CLEANLINESS LEVEL IS ACCEPTABLE.  
 OTHER READINGS APPEAR TO BE NORMAL. RESAMPLE AT THE NEXT SERVICE INTERVAL.

**SAMPLE INFORMATION**

Sampled Date 26-Jan-23  
 Sample Id N030-53032-0453  
 Lab Date 01-Feb-23  
 Meter [Hr] 25198  
 Meter On Fluid 25198  
 Fluid Brand  
 Fluid Weight  
 Fluid Type  
 Fluid Change N  
 Filter Change N

**CONDITION / CONTAMINATION**

26-Jan-23

**VISCOSITY (Centistokes)**

V100 Viscosity at 100 C 10.00

**VISCOSITY (Centistokes)**

V40 Viscosity at 40 C 68.60

**VISCOSITY INDEX**

VI Viscosity Index 129

**INFRARED (UFM)**

ST Soot 0  
 OXI Oxidation 9  
 SUL Sulfur Products 18  
 NIT Nitration 4

**ANTIFREEZE**

A Antifreeze N

**WATER**

W Water N

**CLEANLINESS**

26-Jan-23

**PARTICLE COUNT**

ISO ISO Code Rating 23/17/11  
 4μ 4μ 42462  
 6μ 6μ 690  
 10μ 10μ 22  
 14μ 14μ 10  
 18μ 18μ 7  
 21μ 21μ 5  
 38μ 38μ 4  
 50μ 50μ 3

**WEAR LEVELS / ADDITIVES**

26-Jan-23

**ELEMENTAL ANALYSIS (ppm)**

Na Sodium 0  
 K Potassium 0  
 Si Silicon 7  
 Al Aluminum 4  
 Fe Iron 22  
 Cr Chromium 0  
 Pb Lead 0  
 Cu Copper 12  
 Sn Tin 0  
 Ni Nickel 0  
 Ag Silver 0  
 Ti Titanium 0  
 V Vanadium 0  
 Zn Zinc 1046  
 Ca Calcium 2380  
 Mg Magnesium 103  
 Ba Barium 0  
 B Boron 21  
 Mo Molybdenum 0  
 P Phosphorus 904

TRANSMISSION POWER SHIFT

SERIAL NUMBER: 7XM06040

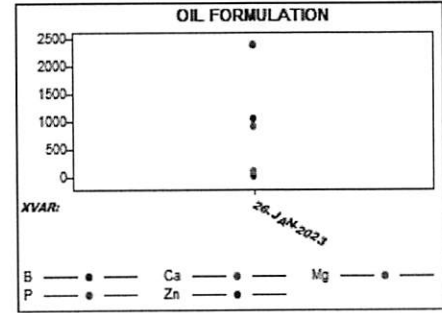
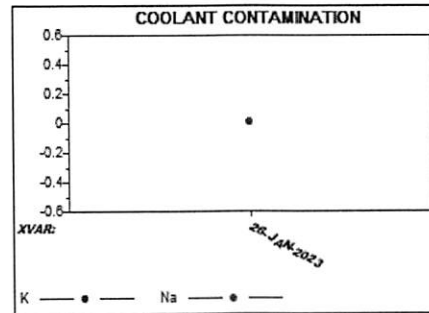
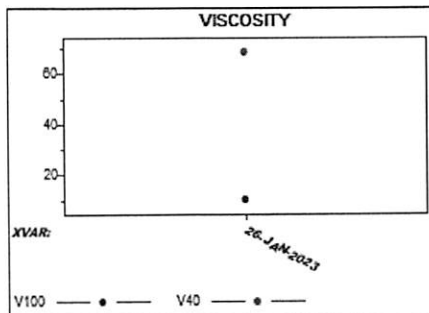
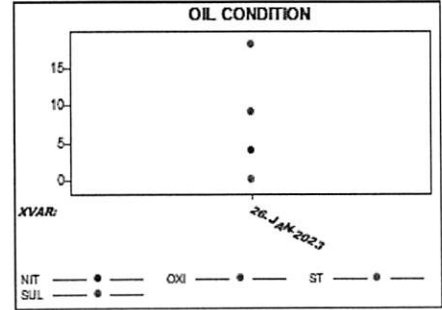
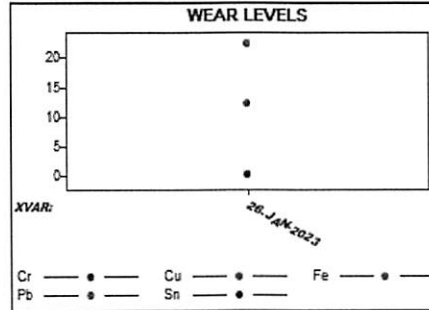
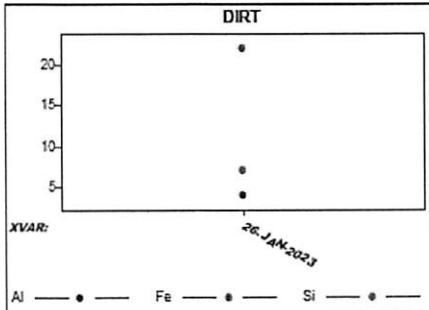
EQUIP NUM: 7XM06040

CAT D8R

N030-63032-0453



No Action Required



Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJUVrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilsupport@finning.com](mailto:oilsupport@finning.com).

**ENGINE**
**EQUIP NUM: 7XM05040**
**SERIAL NUMBER: 7XM05040**
**N030-53032-0450**

LABEL#: 200566103

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

**CAT D8R**

**Action Required**

10.28% FUEL DILUTION MAY BE LOOSE LINES, LEAKING INJECTORS, FUEL PUMP, LOW ENG TEMP, PROLONGED IDLING ETC.  
ELEVATED COPPER MAY BE SOURCED TO OIL COOLER LEACHING. OTHER READINGS APPEAR TO BE NORMAL.  
RECOMMEND OIL CHANGE. RESAMPLE AT HALF THE NORMAL INTERVAL TO MONITOR. SUGGEST INVESTIGATING  
POSSIBLE SOURCES OF FUEL DILUTION.

**Interp By: Gregory Scribner**
**Interpreted On: 07-Feb-23**
**SAMPLE INFORMATION**


Sampled Date 26-Jan-23  
Sample Id N030-53032-0450  
Lab Date 01-Feb-23  
Meter [Hr] 25198  
Meter On Fluid 25198  
Fluid Brand  
Fluid Weight  
Fluid Type  
Fluid Change N  
Filter Change N

**CONDITION / CONTAMINATION**

26-Jan-23

**VISCOSITY (Centistokes)**

V100 Viscosity at 100 C 11.30

**VISCOSITY (Centistokes)**

V40 Viscosity at 40 C 71.30

**VISCOSITY INDEX**

VI Viscosity Index 151

**INFRARED (UFM)**

ST Soot 32  
OXI Oxidation 13  
SUL Sulfur Products 19  
NIT Nitration 7

**ANTIFREEZE**

A Antifreeze N

**FUEL**

F Fuel P

**FUEL CONTENT (%)**

PFc Percent Fuel 10.28

**WATER**

W Water N

**WEAR LEVELS / ADDITIVES**

26-Jan-23

**ELEMENTAL ANALYSIS (ppm)**

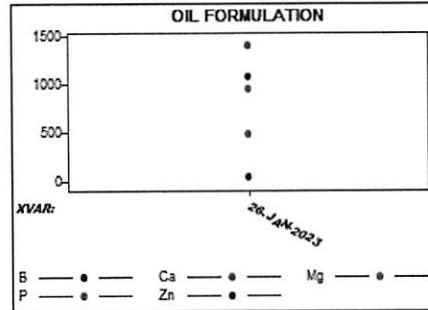
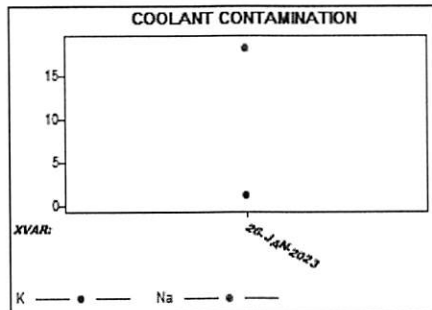
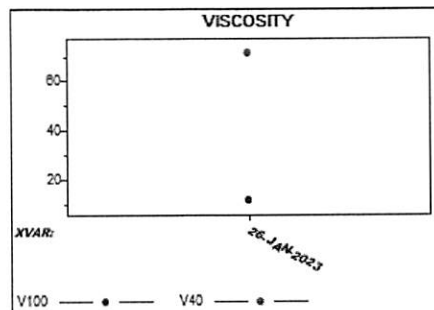
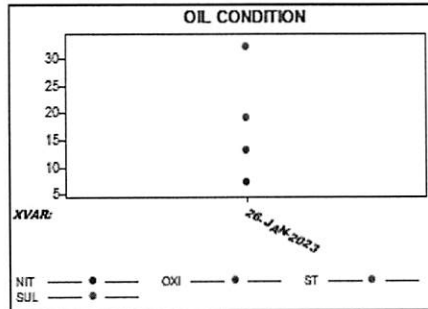
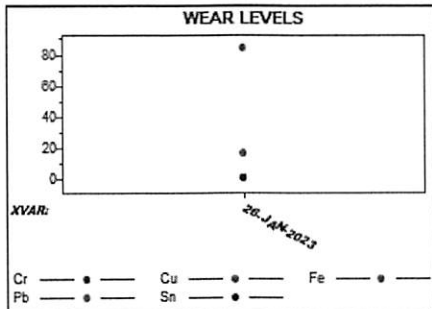
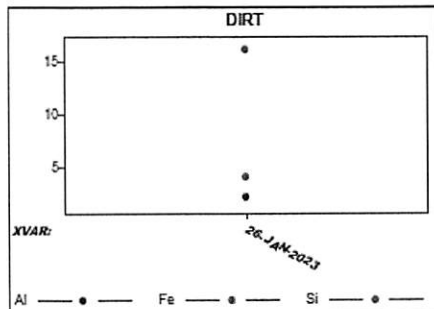
Na Sodium 18  
K Potassium 1  
Si Silicon 4  
Al Aluminum 2  
Fe Iron 16  
Cr Chromium 0  
Pb Lead 0  
Cu Copper 84  
Sn Tin 0  
Ni Nickel 0  
Ag Silver 0  
Ti Titanium 0  
V Vanadium 0  
Zn Zinc 1066  
Ca Calcium 1395  
Mg Magnesium 481  
Ba Barium 0  
B Boron 36  
Mo Molybdenum 60  
P Phosphorus 943

ENGINE  
SERIAL NUMBER: 7XM05040  
EQUIP NUM: 7XM05040  
CAT D8R

N030-53032-0450



Action Required



### Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVUrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilsupport@finning.com](mailto:oilsupport@finning.com).

**FINNING.**

FINNING CANADA LTD. - Fluid Analysis Laboratory 10910-170th St Edmonton, AB T5S 1H6

Web: www.finning.com Email: digitalservices@finning.com

**FINAL DRIVE REAR LEFT****EQUIP NUM: 7XM05040****SERIAL NUMBER: 7XM05040****N030-53032-0451**

LABEL#: 201110821

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

**CAT D8R****No Action Required****Interp By: Gregory Scribner****Interpreted On: 07-Feb-23**

DIRT AND WEAR METALS APPEAR TO BE AT ACCEPTABLE LEVELS. OTHER READINGS APPEAR TO BE NORMAL. RESAMPLE AT THE NEXT SERVICE INTERVAL.

**SAMPLE INFORMATION**

Sampled Date 26-Jan-23  
Sample Id N030-53032-0451  
Lab Date 01-Feb-23  
Meter [Hr] 25198  
Meter On Fluid 25198  
Fluid Brand  
Fluid Weight  
Fluid Type  
Fluid Change N  
Filter Change N

**CONDITION / CONTAMINATION**

26-Jan-23

**VISCOSITY (Centistokes)**

V100 Viscosity at 100 C 11.00

**VISCOSITY (Centistokes)**

V40 Viscosity at 40 C 96.10

**VISCOSITY INDEX**

VI Viscosity Index 99

**INFRARED (UFM)**

ST Soot 0  
OXI Oxidation 3  
SUL Sulfur Products 17  
NIT Nitration 4

**WATER**

W Water N

**CLEANLINESS**

26-Jan-23

**PARTICLE COUNT**

ISO ISO Code Rating 23/21/15  
4µ 4µ 58057  
6µ 6µ 13508  
10µ 10µ 1170  
14µ 14µ 283  
18µ 18µ 101  
21µ 21µ 58  
38µ 38µ 4  
50µ 50µ 2

**WEAR LEVELS / ADDITIVES**

26-Jan-23

**ELEMENTAL ANALYSIS (ppm)**

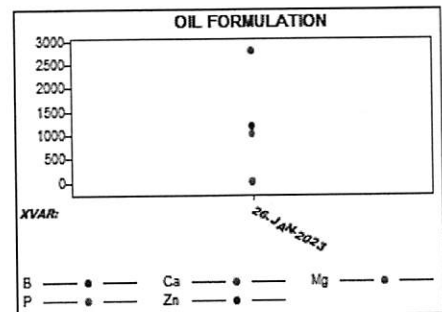
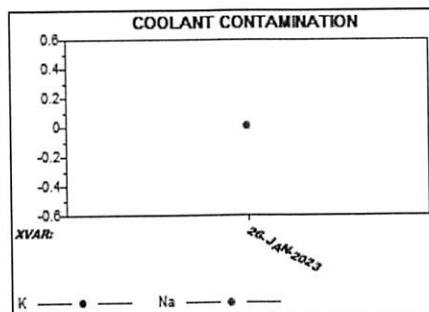
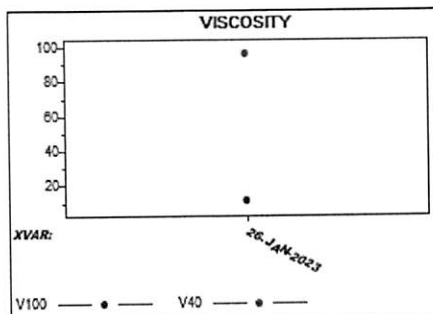
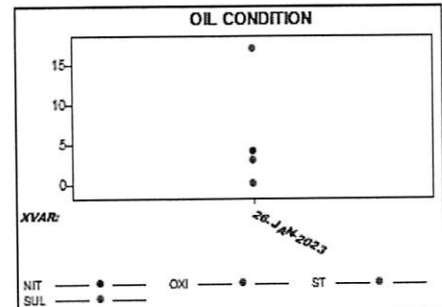
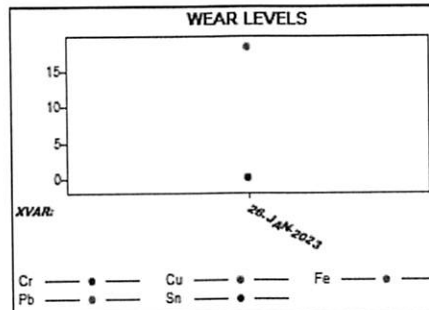
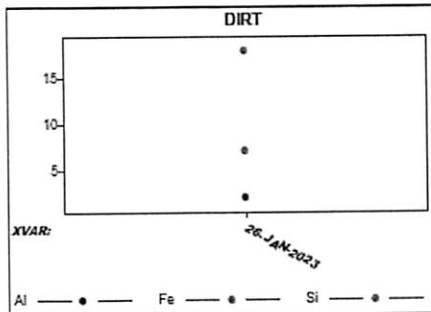
Na Sodium 0  
K Potassium 0  
Si Silicon 7  
Al Aluminum 2  
Fe Iron 18  
Cr Chromium 0  
Pb Lead 0  
Cu Copper 0  
Sn Tin 0  
Ni Nickel 0  
Ag Silver 0  
Ti Titanium 0  
V Vanadium 0  
Zn Zinc 1174  
Ca Calcium 2776  
Mg Magnesium 11  
Ba Barium 0  
B Boron 11  
Mo Molybdenum 0  
P Phosphorus 1019

FINAL DRIVE REAR LEFT  
SERIAL NUMBER: 7XM05040  
EQUIP NUM: 7XM05040  
CAT D8R

N030-53032-0451



No Action Required



#### Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVUrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilsupport@finning.com](mailto:oilsupport@finning.com).

**FINAL DRIVE REAR**
**RIGHT**

N030-53032-0452

LABEL#: 200565366

SHOP JOB NUM : 2214860

SAMPLE SHIP TIME (days) : 6

RECEIVED DATE: 01-Feb-23

EQUIP NUM: 7XM05040

CAT D8R


SERIAL NUMBER: 7XM05040

 **No Action Required**

Interp By: Gregory Scribner

Interpreted On: 07-Feb-23

DIRT AND WEAR METALS APPEAR TO BE AT ACCEPTABLE LEVELS. OTHER READINGS APPEAR TO BE NORMAL. RESAMPLE AT THE NEXT SERVICE INTERVAL.

**SAMPLE INFORMATION**


Sampled Date	26-Jan-23
Sample Id	N030-53032-0452
Lab Date	01-Feb-23
Meter [Hr]	25198
Meter On Fluid	25198
Fluid Brand	
Fluid Weight	
Fluid Type	
Fluid Change	N
Filter Change	N

**CONDITION / CONTAMINATION**

26-Jan-23

**VISCOSITY (Centistokes)**

V100 Viscosity at 100 C 11.00

**VISCOSITY (Centistokes)**

V40 Viscosity at 40 C 96.20

**VISCOSITY INDEX**

VI Viscosity Index 99

**WEAR LEVELS / ADDITIVES**

26-Jan-23

**ELEMENTAL ANALYSIS (ppm)**

Na	Sodium	1
K	Potassium	1
Si	Silicon	31
Al	Aluminum	6
Fe	Iron	26
Cr	Chromium	0
Pb	Lead	0
Cu	Copper	0
Sn	Tin	0
Ni	Nickel	0
Ag	Silver	0
Ti	Titanium	0
V	Vanadium	0
Zn	Zinc	1174
Ca	Calcium	2810
Mg	Magnesium	10
Ba	Barium	0
B	Boron	10
Mo	Molybdenum	0
P	Phosphorus	1009

**INFRARED (UFM)**

ST	Soot	0
OXI	Oxidation	3
SUL	Sulfur Products	17
NIT	Nitration	4

**WATER**

W Water N

**CLEANLINESS**

26-Jan-23

**PARTICLE COUNT**

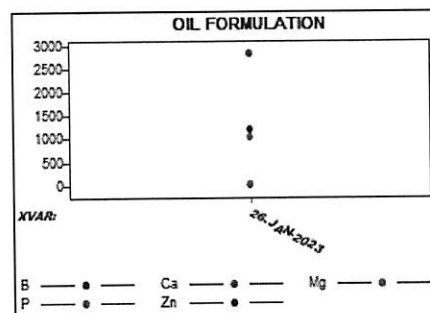
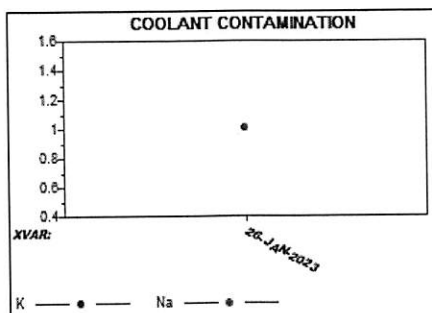
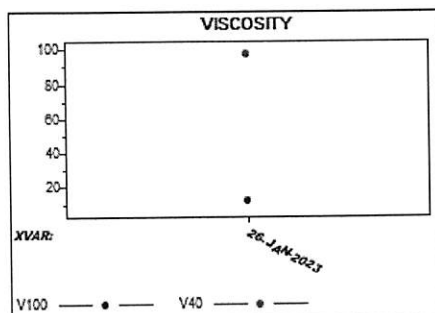
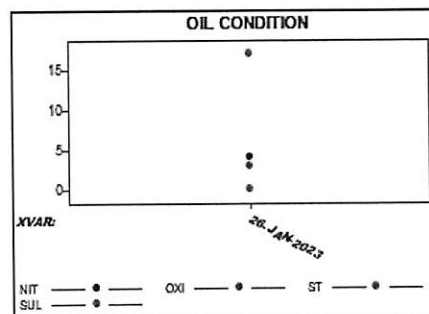
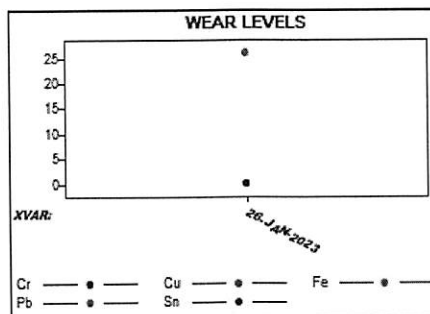
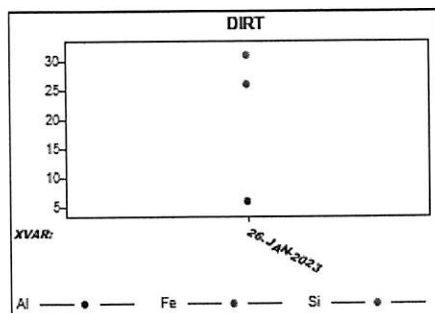
ISO	ISO Code Rating	23/22/14
4μ	4μ	68616
6μ	6μ	20126
10μ	10μ	812
14μ	14μ	143
18μ	18μ	50
21μ	21μ	28
38μ	38μ	3
50μ	50μ	1

FINAL DRIVE REAR RIGHT  
SERIAL NUMBER: 7XM05040  
EQUIP NUM: 7XM05040  
CAT D8R

N030-63032-0452



No Action Required



### Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVVrs>. Access our online platform: <https://soswebmc.cat.com/cat-sos/samples>. Want to sign up for online portal?, Go Paperless? Or have any questions on SOS? Contact us 8:00am - 4:00pm MST M-F at SOS Support: 1-888-FINNING or [oilsupport@finning.com](mailto:oilsupport@finning.com).