

**DIFFERENTIAL REAR**

D12W-55238-0365

SAMPLE SHIP TIME (days) : 6

M & D TRUCK & EQUIP

SALES LLC

RECEIVED DATE: 26-Aug-25

EQUIP NUM: A45G

VOLVO A45GFS\_VOLVO

**No Action Required**

ANALYSIS READINGS APPEAR TO BE ACCEPTABLE. MORE SAMPLE HISTORY NEEDED TO ESTABLISH A NORMAL WEAR TREND.

SERIAL NUMBER:

Interp By: Linda Lovejoy

Interpreted On: 26-Aug-25

**SAMPLE INFORMATION**

Sampled Date	20-Aug-25
Sample Id	D12W-55238-0365
Lab Date	26-Aug-25
Meter [Hr]	10508
Comp Meter [Hr]	10508
Meter On Fluid	
Fluid Brand	
Fluid Weight	
Fluid Type	
Fluid Change	U
Filter Change	U
Total Fluid Added	0

For additional sample history, go to:

S.O.S WEB

**CONDITION / CONTAMINATION**

20-Aug-25

**VISCOSITY (CENTISTOKES) ASTM D445**

V100	Viscosity at 100 C	14.03
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**INFRARED (UFM) ASTM E2412**

ST	Soot	0
OXI	Oxidation	8
SUL	Sulfate By-Product	24
NIT	Nitration	0

**WATER**

W	Water	N
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**WEAR LEVELS / ADDITIVES**

20-Aug-25

**ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]**

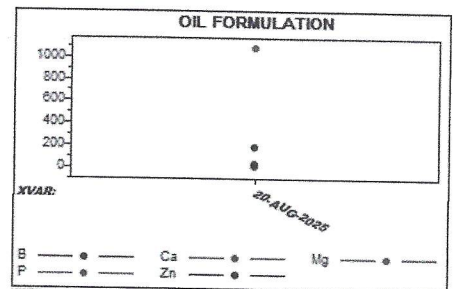
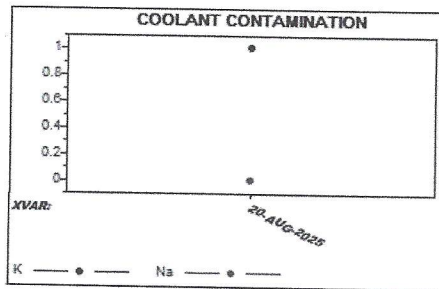
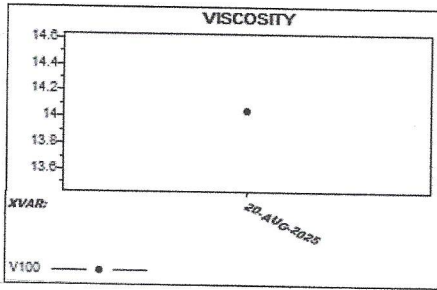
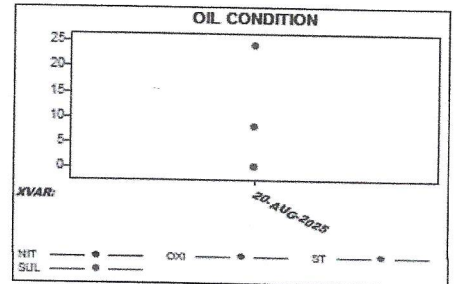
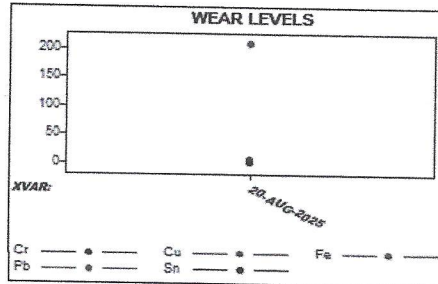
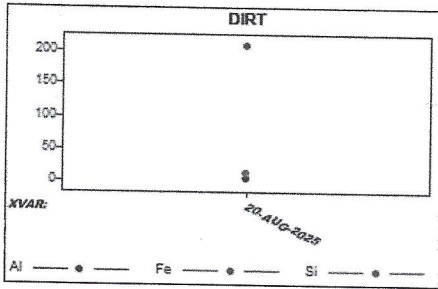
Cu	Copper	2
Fe	Iron	206
Cr	Chromium	3
Al	Aluminum	3
Pb	Lead	0
Sn	Tin	0
Si	Silicon	10
Na	Sodium	0
K	Potassium	1
Mo	Molybdenum	4
Ni	Nickel	0
Ag	Silver	0
Ti	Titanium	0
V	Vanadium	0
Mn	Manganese	7
Cd	Cadmium	0
Ca	Calcium	26
P	Phosphorus	1068
Zn	Zinc	14
Mg	Magnesium	3
Ba	Barium	0
B	Boron	172

**CLEANLINESS**

20-Aug-25

**PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406**

ISO	ISO Code Rating	X
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Report Comment

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**DIFFERENTIAL CENTER**

D12W-55238-0399

SAMPLE SHIP TIME (days) : 6

M & D TRUCK & EQUIP

SALES LLC

RECEIVED DATE: 26-Aug-25

EQUIP NUM: A45G

VOLVO A45GFS\_VOLVO

No Action Required



READINGS APPEAR TO BE NORMAL. CONTINUE SAMPLING AT THE NORMAL INTERVAL.

Interp By: Linda Lovejoy  
Interpreted On: 26-Aug-25

**SAMPLE INFORMATION**

Sampled Date 20-Aug-25  
Sample Id D12W-55238-0399  
Lab Date 26-Aug-25  
Meter [Hr] 10508  
Comp Meter [Hr] 10508  
Meter On Fluid 10508  
Fluid Brand  
Fluid Weight  
Fluid Type  
Fluid Change U  
Filter Change U  
Total Fluid Added 0

For additional sample history, go to:

S.O.S WEB

**CONDITION / CONTAMINATION**

20-Aug-25

**VISCOSITY (CENTISTOKES) ASTM D445**  
V100 Viscosity at 100 C 13.97

**INFRARED (UFM) ASTM E2412**

ST Soot 0  
OXI Oxidation 8  
SUL Sulfate By-Product 23  
NIT Nitration 0

**WATER**

W Water N

**WEAR LEVELS / ADDITIVES**

20-Aug-25

**ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]**

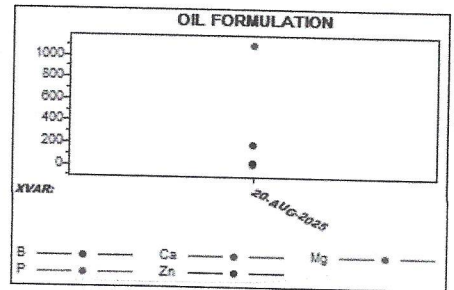
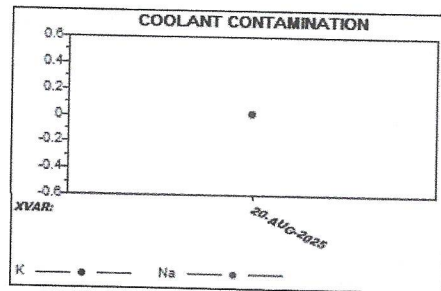
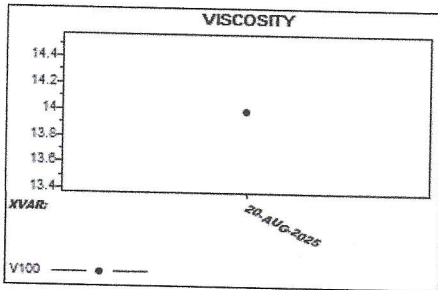
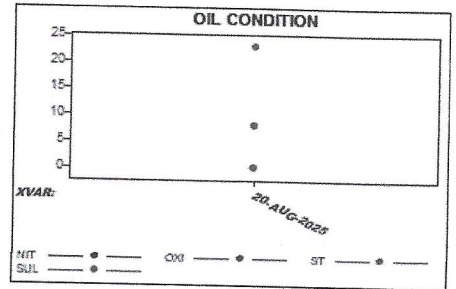
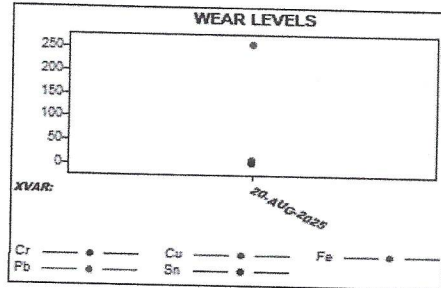
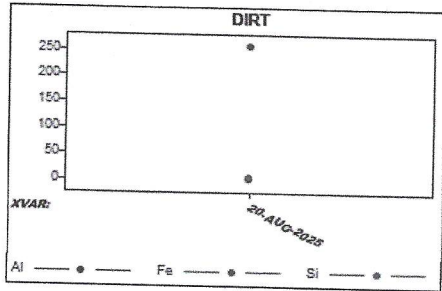
Cu	Copper	1
Fe	Iron	253
Cr	Chromium	4
Al	Aluminum	1
Pb	Lead	0
Sn	Tin	0
Si	Silicon	3
Na	Sodium	0
K	Potassium	0
Mo	Molybdenum	3
Ni	Nickel	0
Ag	Silver	0
Ti	Titanium	0
V	Vanadium	0
Mn	Manganese	5
Cd	Cadmium	0
Ca	Calcium	5
P	Phosphorus	1078
Zn	Zinc	5
Mg	Magnesium	1
Ba	Barium	0
B	Boron	171

**CLEANLINESS**

20-Aug-25

**PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406**

ISO ISO Code Rating X



**Report Comment**

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**ENGINE**

D12W-55238-0546

SAMPLE SHIP TIME (days) : 6

M & D TRUCK & EQUIP

SALES LLC

RECEIVED DATE: 26-Aug-25

**EQUIP NUM: NO SN ON TAG**  
**UNKNOWN #1FIN**  
**No Action Required**

ABSENT INFORMATION( MAKE, MODEL, SERIAL NUMBER/ OIL BRAND, BLEND, WEIGHT) CAN INHIBITS EVALUATION ..  
 READINGS APPEAR TO BE NORMAL. CONTINUE SAMPLING AT THE NORMAL INTERVAL.

Interp By: Linda Lovejoy  
 Interpreted On: 26-Aug-25

**SAMPLE INFORMATION**

Sampled Date	20-Aug-25
Sample Id	D12W-55238-0546
Lab Date	26-Aug-25
Meter [Hr]	10508
Comp Meter [Hr]	10508
Meter On Fluid	10508
Fluid Brand	
Fluid Weight	
Fluid Type	
Fluid Change	U
Filter Change	U
Total Fluid Added	0

For additional sample history, go to:

S.O.S WEB

**CONDITION / CONTAMINATION**

20-Aug-25

**VISCOSITY (CENTISTOKES) ASTM D445**

V100	Viscosity at 100 C	10.88
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**INFRARED (UFM) ASTM E2412**

ST	Soot	17
OXI	Oxidation	12
SUL	Sulfate By-Product	19
NIT	Nitration	0

**WATER**

W	Water	N
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**WEAR LEVELS / ADDITIVES**

20-Aug-25

**ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]**

Cu	Copper	2
Fe	Iron	8
Cr	Chromium	0
Al	Aluminum	3
Pb	Lead	0
Sn	Tin	0
Si	Silicon	5
Na	Sodium	3
K	Potassium	3
Mo	Molybdenum	10
Ni	Nickel	0
Ag	Silver	0
Ti	Titanium	1
V	Vanadium	0
Mn	Manganese	0
Cd	Cadmium	0
Ca	Calcium	1403
P	Phosphorus	756
Zn	Zinc	872
Mg	Magnesium	735
Ba	Barium	0
B	Boron	71

**ANTIFREEZE**

A	Antifreeze	N
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**FUEL**

F	Fuel	N
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Notice: This analysis is intended as an aid in predicting mechanical wear. No guarantee, expressed or implied, is made against failure of this piece of equipment or component thereof.

ENGINE

SERIAL NUMBER: UNK\_MDTRUCK

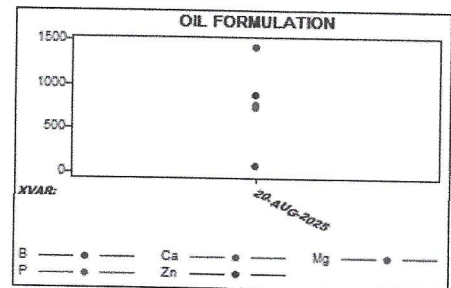
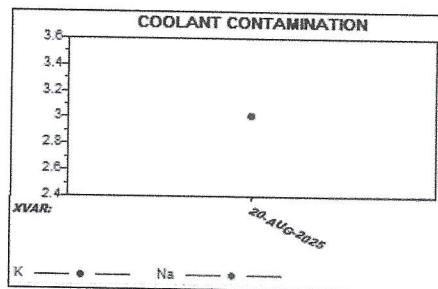
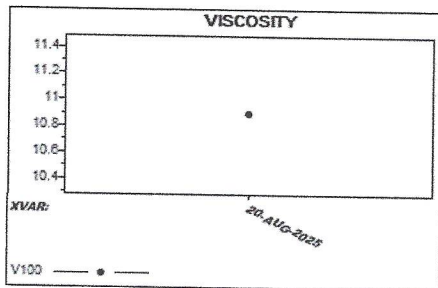
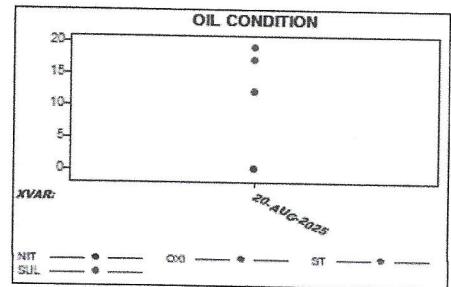
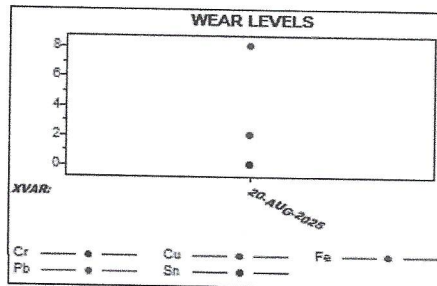
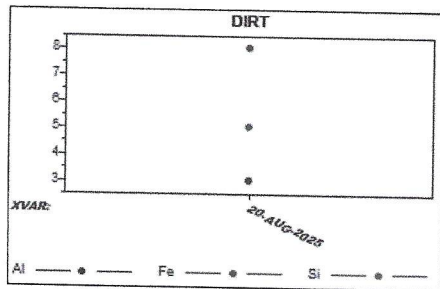
EQUIP NUM: NO SN ON TAG

UNKNOWN #1FIN

D12W-55238-0548



No Action Required



Report Comment

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**DIFFERENTIAL FRONT**

D12W-55238-0628

SAMPLE SHIP TIME (days) : 6

M & D TRUCK & EQUIP  
SALES LLC

RECEIVED DATE: 26-Aug-25

EQUIP NUM: A45G  
VOLVO A45GFS\_VOLVO  
**No Action Required**

✓  
READINGS APPEAR TO BE NORMAL. CONTINUE SAMPLING AT THE NORMAL INTERVAL.

Interp By: Linda Lovejoy  
Interpreted On: 26-Aug-25

**SAMPLE INFORMATION**

✓  
Sampled Date 20-Aug-25  
Sample Id D12W-55238-0628  
Lab Date 26-Aug-25  
Meter [Hr] 10508  
Comp Meter [Hr] 10508  
Meter On Fluid 10508  
Fluid Brand  
Fluid Weight  
Fluid Type  
Fluid Change U  
Filter Change U  
Total Fluid Added 0

For additional sample history, go to: S.O.S WEB

**CONDITION / CONTAMINATION**

20-Aug-25

**VISCOSITY (CENTISTOKES) ASTM D445**  
V100 Viscosity at 100 C 14.05

**INFRARED (UFM) ASTM E2412**  
ST Soot 0  
OXI Oxidation 8  
SUL Sulfate By-Product 23  
NIT Nitration 0

**WATER**  
W Water N

**CLEANLINESS**

20-Aug-25

**PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406**  
ISO ISO Code Rating X

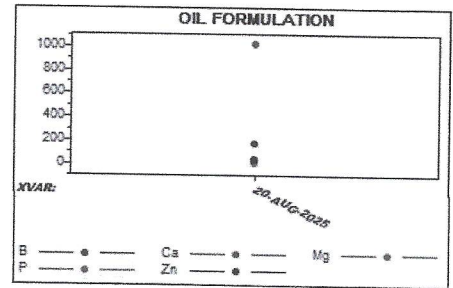
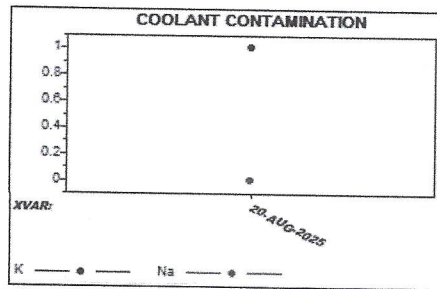
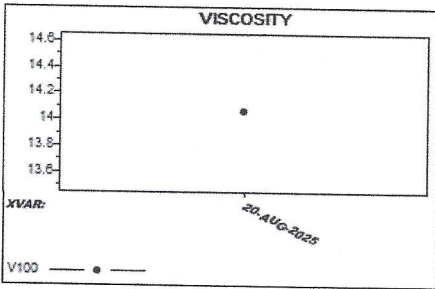
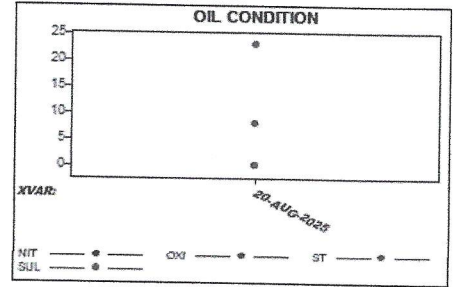
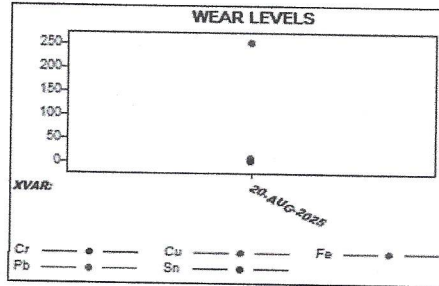
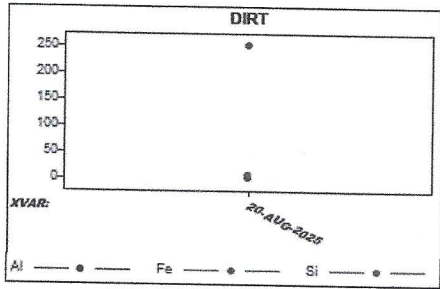
**WEAR LEVELS / ADDITIVES**

20-Aug-25

**ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]**

Cu	Copper	5
Fe	Iron	250
Cr	Chromium	3
Al	Aluminum	1
Pb	Lead	0
Sn	Tin	0
Si	Silicon	6
Na	Sodium	0
K	Potassium	1
Mo	Molybdenum	4
Ni	Nickel	0
Ag	Silver	0
Ti	Titanium	0
V	Vanadium	0
Mn	Manganese	6
Cd	Cadmium	0
Ca	Calcium	29
P	Phosphorus	1006
Zn	Zinc	22
Mg	Magnesium	3
Ba	Barium	0
B	Boron	161

Notice: This analysis is intended as an aid in predicting mechanical wear. No guarantee, expressed or implied, is made against failure of this piece of equipment or component thereof.



**Report Comment**

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## DROP BOX

D12W-55238-0627

SAMPLE SHIP TIME (days) : 6

M & D TRUCK & EQUIP

SALES LLC

RECEIVED DATE: 26-Aug-25

EQUIP NUM: A45G

VOLVO A45GFS\_VOLVO

No Action Required

OIL TYPE/ GRADE MAY HAVE BEEN CHANGED - NOTE CHANGES TO VISCOSITY & METAL ADDITIVE PACKAGE. OTHER READINGS APPEAR TO BE NORMAL. CONTINUE SAMPLING AT THE NORMAL INTERVAL.

Interp By: Linda Lovejoy

Interpreted On: 26-Aug-25

## SAMPLE INFORMATION

	20-Aug-25	19-Sep-23	11-Jan-22
Sampled Date	20-Aug-25	19-Sep-23	11-Jan-22
Sample Id	D12W-55238-0627	D12W-53263-0544	D12W-52019-0315
Lab Date	26-Aug-25	20-Sep-23	19-Jan-22
Meter [Hr]	10508	8470	7493
Comp Meter [Hr]	10508	8470	7493
Meter On Fluid	3015	977	7493
Fluid Brand			
Fluid Weight			
Fluid Type			
Fluid Change	U	U	Y
Filter Change	U	U	U
Total Fluid Added	0	0	0

## PREVIOUS SAMPLE

IRON AND SILICON LEVELS APPEAR HIGHER THAN LAST SAMPLE. REVIEWING MAINTENANCE RECORDS, COMPONENT SERVICE LIFE ETC, MAY HELP DETERMINE A COURSE OF ACTION.

For additional sample history, go to:

S.O.S WEB

## CONDITION / CONTAMINATION

		20-Aug-25	19-Sep-23	11-Jan-22
<b>VISCOSITY (CENTISTOKES) ASTM D445</b>				
V100	Viscosity at 100 C	14.50	15.78	12.12

## INFRARED (UFM) ASTM E2412

		20-Aug-25	19-Sep-23	11-Jan-22
ST	Soot	0	3	3
OXI	Oxidation	5	62	31
SUL	Sulfate By-Product	18	59	36
	Sulfur Products	18	59	36
NIT	Nitration	0	4	3

## WATER

		20-Aug-25	19-Sep-23	11-Jan-22
W	Water	N	N	N

## CLEANLINESS

		20-Aug-25	19-Sep-23	11-Jan-22
<b>PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406</b>				
ISO	ISO Code Rating	X	X	X

## WEAR LEVELS / ADDITIVES

ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]

		20-Aug-25	19-Sep-23	11-Jan-22
Cu	Copper	0	1	0
Fe	Iron	21	202	61
Cr	Chromium	0	2	1
Al	Aluminum	0	3	9
Pb	Lead	0	0	0
Sn	Tin	0	0	0
Si	Silicon	0	60	10
Na	Sodium	0	11	2
K	Potassium	2	5	1
Mo	Molybdenum	1	2	2
Ni	Nickel	0		
Ag	Silver	0		
Ti	Titanium	0		
V	Vanadium	0		
Mn	Manganese	0		
Cd	Cadmium	0		
Ca	Calcium	7	86	7
P	Phosphorus	812	692	417
Zn	Zinc	5	83	9
Mg	Magnesium	2	16	0
Ba	Barium	0		
B	Boron	107		

DROP BOX

SERIAL NUMBER: VCEVA45GL00342129

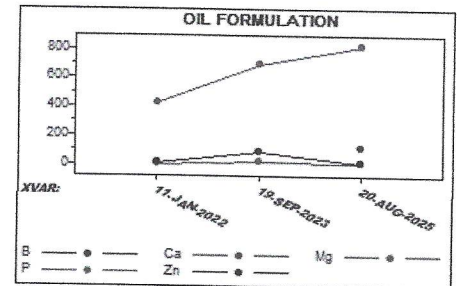
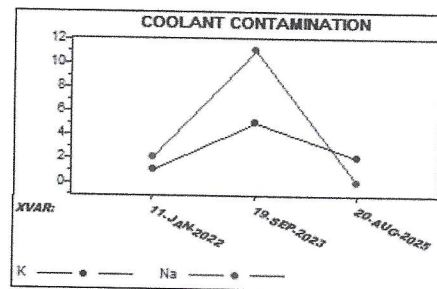
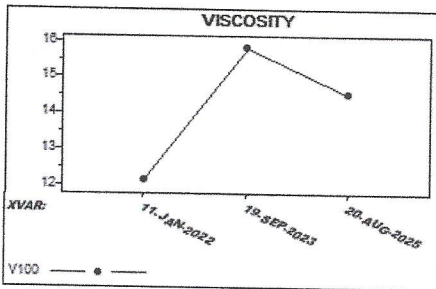
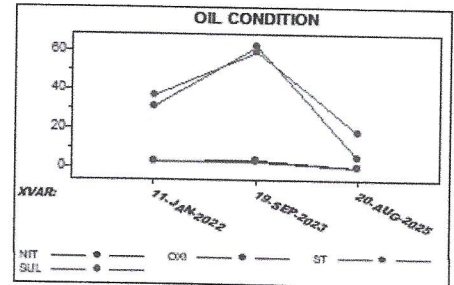
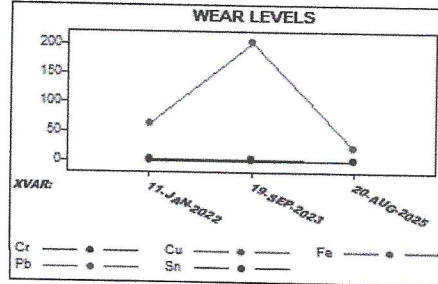
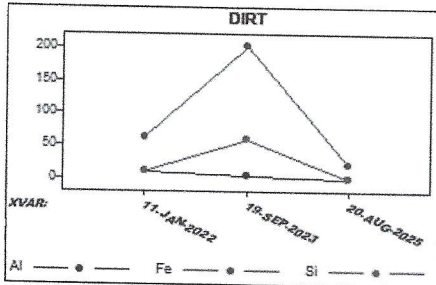
EQUIP NUM: A45G

VOLVO A45GFS\_VOLVO

D12W-55238-0627



No Action Required



### Report Comment

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