

Web: www.zieglercat.com Email: fluidlab@zieglercat.com

TRANSMISSION POWER

SHIFT

Mg

Ba

Magnesium

Barium Boron

E500-54037-2054

SAMPLE SHIP TIME (days): 6

CLEVERINGA EXCAVATING

RECEIVED DATE: 06-Feb-24

EQUIP NUM: D6R CAT D6RIII

No Action Required

SERIAL NUMBER: MRT00235

Interp By: Chris Gillis

Interpreted On: 06-Feb-24

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT
. NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT

Sampled Date Sample Id E	31-Jan-24 500-54037-2054	08-Feb-23	03-Mar-22	1
		08-Feb-23	02 Mar 22	
Sample Id E	500-54037-2054		U3-Wai-22	25-Apr-19
		E500-53079-2072	E500-52067-2036	E500-49120-2026
Lab Date	06-Feb-24	20-Mar-23	08-Mar-22	30-Apr-19
Meter [Hr]	16825	16312	15610	12864
Meter On Fluid	512	702	1056	
Fluid Brand	CAT	CAT	CENEX	UNKNOWN
Fluid Weight	30		30	30
Fluid Type				
Fluid Change	Υ	Y	Υ	U
Filter Change	Υ	Υ	Υ	U
	0	0	0	

	WEAR LEVELS / ADDITIVES						
		31-Jan-24	08-Feb-23	03-Mar-22	25-Apr-19		
ELEN	IENTAL ANALYSIS (PPM)						
Cu	Copper	1	0	1	1		
Fe	Iron	5	0	12	6		
Cr	Chromium	0	0	0	0		
AI -	Aluminum	3	0	3	1		
Pb	Lead	0	0	0	0		
Sn	Tin	0	0	0	0		
Si	Silicon	7	0	4	4		
Na	Sodium	0	0	2	1		
K	Potassium	0	0	1	2		
Мо	Molybdenum	0	0	0	1		
Ni	Nickel	1	0	0	0		
Ag	Silver	0	0	0	0		
Ti	Titanium	0	0	0	0		
V	Vanadium	0	0	0	0		
Mn	Manganese	0	0	0	0		
Cd	Cadmium	0	0	0	0		
Ca	Calcium	3666	3255	3201	3140		
P	Phosphorus	1134	1057	1015	1060		
Zn	Zinc	1414	1309	1284	1300		

0

0

		PREVIOUS	SAMPLE		
RESUL NORMA INDICA SAMPL	AL TRENDS FOR	SAMPLE INDICATION THIS COMPARTICIME. CONTINUINTERVALS.	MENT. N	O EXCESSIVE	DN'T EXCEED WEAR IS ARTMENT BY
	For addition	nal sample history, go	to:	S.O.S WE	В
		CONDITION / CO	NTAMINATIO	ON	
		31-Jan-24	08-Feb-23	03-Mar-22	25-Apr-19
VISCO	OSITY (CENTISTOKES)				
V100	Viscosity at 100 C	13.00	11.20	11.20	11.1
INFR/	ARED (UFM)				
ST	Soot	0	1	1	0
OXI	Oxidation	11	3	3	3
SUL	Sulfur Products	24	16	18	18
NIT	Nitration	0	8	4	5
WATE	R				
W	Water	N	N	N	N
		CLEANL	INESS		
		31-Jan-24	08-Feb-23	03-Mar-22	25-Apr-19
PQ IN	IDEX				
PQI	PQ Index	9	10	13	8
PART	TCLE COUNT				
ISO	ISO Code Rating	23/20/15	21/17/14	22/20/14	HBL

1

1

TRANSMISSION POWER SHIFT SERIAL NUMBER: MRT00235 EQUIP NUM: D6R CAT D6RIII



Re	port	Com	ment



Web: www.zieglercat.com Email: fluidlab@zieglercat.com

FINAL DRIVE REAR LEFT

E500-54037-1059

SAMPLE SHIP TIME (days) : 6

CLEVERINGA EXCAVATING

RECEIVED DATE: 06-Feb-24

EQUIP NUM: D6R CAT D6RIII

No Action Required

SERIAL NUMBER: MRT00235

Interp By: Chris Gillis Interpreted On: 06-Feb-24

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT
. NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT RECOMMENDED INTERVALS.

		SAMPLE INFORMA	TION	
	1	1	1	1
Sampled Date	31-Jan-24	02-Feb-22	25-Apr-19	13-Nov-17
Sample Id	E500-54037-1059	E500-52067-1086	E500-49120-1024	E500-47319-0545
Lab Date	06-Feb-24	08-Mar-22	30-Apr-19	15-Nov-17
Meter [Hr]	16825	15610	12864	11505
Comp Meter [Hr]				11505
Meter On Fluid	512	1000		
Fluid Brand	CENEX	UNKNOWN	UNKNOWN	UNKNOWN
Fluid Weight	50	50		
Fluid Type				
Fluid Change	Υ	Υ	U	N
Filter Change				
Kidney Loop	0	0		U

	WEAR LEVELS / ADDITIVES							
		31-Jan-24	02-Feb-22	25-Apr-19	13-Nov-17			
ELEN	IENTAL ANALYSIS (PPM	0	经 国际数据的证据	STATE OF STREET				
Cu	Copper	0	0	0	0			
Fe	Iron	18	81	22	43			
Cr	Chromium	0	1	0	1			
AI	Aluminum	2	8	3	2			
Pb	Lead	0	0	1	0			
Sn	Tin	0	0	0	0			
Si	Silicon	5	33	14	24			
Va	Sodium	3	15	1	23			
K	Potassium	2	3	3	1			
Mo	Molybdenum	3	1	0	4			
Ni	Nickel	0	1	0	0			
Ag	Silver	0	0	0	0			
Гі	Titanium	0	0	0	0			
/	Vanadium	0	0	0	0			
Mn	Manganese	0	1	0	1			
Cd	Cadmium	0	0	0	0			
Ca	Calcium	3306	3167	3443	3929			
>	Phosphorus	1043	1013	1178	873			
Zn	Zinc	1289	1286	1434	1104			
Mg	Magnesium	11	13	14	10			
Ва	Barium	0	0	0	0			
3	Boron	6	1	1	11			

PREVIOUS SAMPLE										
RESULTS	OF	LATEST	SAMPLE	INDICATE	ELEME	NTS	TESTED	DIDN	N'T EX	CEED
NORMAL	TREND	s FOR	THIS	COMPARTM	ENT.	NO	EXCES	SIVE	WEAR	IS
INDICATED	AT	THIS	TIME.	CONTINUE	то	MONI	TOR C	OMPAF	RTMENT	BY
SAMPLING	AT	RECOMME	NDED IN	TERVALS.	***	PLEASE	DO	NOT	STICK	THE
SAMPLE I	LABEL	TO TH	E BOTTLE	E. ***	*** MA	CHINE	INFORM	ATION	WAS	NOT
FILLED OUT	ON LAB	EL. PLEAS	E FILL OUT	LABELS COM	PLETELY.	***				

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

CONDITION / CONTAMINATION								
		31-Jan-24	02-Feb-22	25-Apr-19	13-Nov-17			
VISCO	OSITY (CENTISTOKES)	a de la companya de l						
V100	Viscosity at 100 C	18.40	17.90	15.7	15.9			

ST	ARED (UFM) Soot	0	2	0	0
OXI	Oxidation	5	3	3	9
SUL	Sulfur Products	19	17	18	15
NIT	Nitration	0	5	5	5
WATE	R	Harris Marie 19			
W	Water	N	N	N	N

		CLEAN	LINESS		
		31-Jan-24	02-Feb-22	25-Apr-19	13-Nov-17
PQIN	DEX	The state of the s			
PQI	PQ Index	10	105	23	34

PART	TICLE COUNT				
ISO	ISO Code Rating	23/20/15	24/22/17	24/23/19	23/23/17

FINAL DRIVE REAR LEFT SERIAL NUMBER: MRT00235 EQUIP NUM: D6R CAT D6RIII



Repor	t Cor	mme	n
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Web: www.zieglercat.com Email: fluidlab@zieglercat.com

HYDRAULIC SYSTEM

E500-54037-2020

SAMPLE SHIP TIME (days): 7

CLEVERINGA EXCAVATING

RECEIVED DATE: 06-Feb-24

EQUIP NUM: D6R

CAT D6RIII

No Action Required

SERIAL NUMBER: MRT00235

Interp By: Chris Gillis Interpreted On: 06-Feb-24

ISO CODE 18/15 IS RECOMMENDED (FOR

THE OIL/FILTER CHECK

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT RECOMMENDED INTERVALS.

PARTICLE COUNT DATA IS HIGH.

SOURCE OF CONTAMINATION.

		SAMPLE INFORMA	TION	
	1	2	2	
Sampled Date	30-Jan-24	16-Jun-23	08-Feb-23	
Sample Id	E500-54037-2020	E500-53178-2003	E500-53079-2073	
Lab Date	06-Feb-24	27-Jun-23	20-Mar-23	
Meter [Hr]	16825	16438	16312	
Meter On Fluid	513	200	702	
Fluid Brand	CAT	CAT	CAT	
Fluid Weight	10W	10W		
Fluid Type				
Fluid Change	N	N	Υ	
Filter Change	Υ	N	Υ	
Total Fluid Added	0	0	0	

		SAMPLE INFORMA	IION	
	1	2	2	
Sampled Date	30-Jan-24	16-Jun-23	08-Feb-23	
Sample Id	E500-54037-2020	E500-53178-2003	E500-53079-2073	
Lab Date	06-Feb-24	27-Jun-23	20-Mar-23	
Meter [Hr]	16825	16438	16312	
Meter On Fluid	513	200	702	
Fluid Brand	CAT	CAT	CAT	
Fluid Weight	10W	10W		
Fluid Type				
Fluid Change	N	N	Y	
Filter Change	Υ	N ·	Υ	
Total Fluid Added	0	0	0	

		WEAR LEV	ELS / ADDIT	IVES
		30-Jan-24	16-Jun-23	08-Feb-23
ELEM	ENTAL ANALYSIS (PPM)			
Cu	Copper	2	3	0
Fe	Iron	6	10	11
Or	Chromium	0	0	0
AI	Aluminum	0	0	0
Pb	Lead	1	1	0
Sn	Tin	0	0	0
Si	Silicon	3	1	0
Va	Sodium	0	2	0
<	Potassium	0	2	0
Ло	Molybdenum	0	0	0
li	Nickel	0	0	0
g	Silver	0	0	0
i	Titanium	0	0	0
	Vanadium	0	0	0
1n	Manganese	0	0	0
d	Cadmium	0	0	0
a	Calcium	199	137	259
•	Phosphorus	808	745	755
'n	Zinc	1066	979	935
1g	Magnesium	2	2	0
a	Barium	0	0	0
3	Boron	0	1	0

FILLED	OUT ON LABEL. PLEASE	FILL OUT LABELS CO	MPLETELY. ***		WAS	NO.
	For addition	al sample history, go	o to:	S.O.S WEB		
	C	ONDITION / CO	ONTAMINATIO	ON		
		30-Jan-24	16-Jun-23	08-Feb-23		
VISCO	OSITY (CENTISTOKES)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
V100	Viscosity at 100 C	6.400	6.500	6.600		
INFRA	RED (UFM)					
ST	Soot	0	0	1		
IXC	Oxidation	3	4	3		
SUL	Sulfur Products	13	13	12		
TIV	Nitration	0	4	4		
WATE	R					
N	Water	N	N	N		
		CLEANL	INESS			
SAMULTON CONTROL		30-Jan-24	16-Jun-23	08-Feb-23		
PQ IN	DEX					
PQI	PQ Index	20	10	26		
PARTI	CLE COUNT					
ISO	ISO Code Rating	23/22/18	23/21/15	23/23/21		

PREVIOUS SAMPLE

FOR VISIBLE DEBRIS. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING

WHEN YOU CHANGE

THE LAST 2 POSITIONS) TO PREVENT ACCELERATED WEAR.

HYDRAULIC SYSTEM SERIAL NUMBER: MRT00235 EQUIP NUM: D6R CAT D6RIII



Report	Comment
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Web: www.zieglercat.com Email: fluidlab@zieglercat.com

FINAL DRIVE REAR

RIGHT

E500-54037-1055

SAMPLE SHIP TIME (days): 6

CLEVERINGA EXCAVATING

RECEIVED DATE: 06-Feb-24

EQUIP NUM: D6R CAT D6RIII

No Action Required

SERIAL NUMBER: MRT00235

Interp By: Chris Gillis Interpreted On: 06-Feb-24

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT.

NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT RECOMMENDED INTERVALS.

CAR		INTE	-	
SAN	אורות	INE)KM4	MOITA

Sampled Date	31-Jan-24	02-Feb-22	25-Apr-19	
Sample Id	E500-54037-1055	E500-52067-1085	E500-49120-1023	
Lab Date	06-Feb-24	08-Mar-22	30-Apr-19	
Meter [Hr]	16825	15610	12864	
Meter On Fluid	512	1050		
Fluid Brand	CENEX	UNKNOWN	UNKNOWN	
Fluid Weight	50	50	30	
Fluid Type				
Fluid Change	Υ	U	U	
Filter Change				
	0	0		

PREVIOUS SAMPLE

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT. NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT RECOMMENDED INTERVALS. *** PLEASE DO NOT STICK THE SAMPLE LABEL TO THE BOTTLE. *** *** MACHINE INFORMATION WAS NOT FILLED OUT ON LABEL. PLEASE FILL OUT LABELS COMPLETELY. ***

For additional sample history, go to:

S.O.S WEB

CONDITION / CONTAMINATION

		31-Jan-24	02-Feb-22	25-Apr-19
VISCO	OSITY (CENTISTOKES)			
V100	Viscosity at 100 C	18.30	17.30	13.4

W	E	٩R	LE	VEI	S	A	D	DI	TI	٧	ES	3

		31-Jan-24	02-Feb-22	25-Apr-19	
ELEN	MENTAL ANALYSIS (PP	M)			
Cu	Copper	1	0	0	
Fe	Iron	13	80	6	
Cr	Chromium	1	3	0	
Al	Aluminum	3	7	0	
Pb	Lead	0	0	0	
Sn	Tin	0	0	0	
Si	Silicon	7	33	4	
Na	Sodium	2	3	7	
K	Potassium	2	4	1	
Мо	Molybdenum	3	2	1	
Ni	Nickel	0	1	0	
Ag	Silver	1	0	0	
Ti	Titanium	0	1	1	
V	Vanadium	1	0	0	
Mn	Manganese	1	1	0	
Cd	Cadmium	0	0	0	
Ca	Calcium	3184	3363	3098	
P	Phosphorus	986	1066	1063	
Zn	Zinc	1244	1365	1290	
Mg	Magnesium	11	14	18	
Ва	Barium	1	1	0	
R	Boron	6	1	21	

INFR	ARED (UFM)		BA THE BUT		
ST	Soot	0	2	0	
OXI	Oxidation	4	3	11	
SUL	Sulfur Products	18	17	24	
NIT	Nitration	0	5	4	

WATER W Water N N N

		CLEANL	INESS		
*******************************		31-Jan-24	02-Feb-22	25-Apr-19	
PQ IN	DEX				
PQI	PQ Index	13	54	7	

PART	TICLE COUNT	The sales to the			
ISO	ISO Code Rating	23/20/15	24/22/17	22/20/16	

FINAL DRIVE REAR RIGHT SERIAL NUMBER: MRT00235 EQUIP NUM: D6R CAT D6RIII



Report Comm	en
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Web: www.zieglercat.com Email: fluidlab@zieglercat.com

ENGINE

E500-54037-0139

Phosphorus

Zinc

Barium

Boron

Zn

Mg

Ba

SAMPLE SHIP TIME (days) : 6

CLEVERINGA EXCAVATING

RECEIVED DATE: 06-Feb-24

EQUIP NUM: D6R

CAT D6RIII

No Action Required

SERIAL NUMBER: MRT00235 COMP SERIAL NUM: THX01586

Interp By: Chris Gillis

TESTED DIDN'T EXCEED

NO EXCESSIVE WEAR

Interpreted On: 06-Feb-24

RESULTS OF LATEST SAMPLE INDICATE ELEMENTS TESTED DIDN'T EXCEED NORMAL TRENDS FOR THIS COMPARTMENT

NO EXCESSIVE WEAR IS INDICATED AT THIS TIME. CONTINUE TO MONITOR COMPARTMENT BY SAMPLING AT RECOMMENDED INTERVALS. *** MACHINE INFORMATION WAS NOT FILLED OUT ON LABEL. PLEASE FILL OUT LABELS

NORMAL

PQ Index

		SAMPLE INFORMA	TION	
	1	1		\triangle
Sampled Date	31-Jan-24	16-Jun-23	09-Feb-23	01-Mar-22
Sample Id	E500-54037-0139	E500-53178-0113	E500-53079-0060	E500-52067-0179
Lab Date	06-Feb-24	27-Jun-23	20-Mar-23	08-Mar-22
Meter [Hr]	16825	16438	16312	15610
Meter On Fluid	23	200	200	250
Fluid Brand	CENEX	NORTHLAND	NORTHLAND	UNKNOWN
Fluid Weight Fluid Type	15W-40	15W-40	15W-40	15W-40
Fluid Change	N	Υ	Υ	Y
Filter Change	N	Υ	Υ	Y
Make Up Fluid [Gal]		1		
Total Fluid Added	0	1	0	0

		WEAR LEY	VELS / ADDIT	TIVES	
		31-Jan-24	16-Jun-23	09-Feb-23	01-Mar-22
ELEN	MENTAL ANALYSIS (PPM	n and a second			
Cu	Copper	0	1	5	0
Fe	Iron	3	13	63	14
Cr	Chromium	0	0	1	1
AI	Aluminum	2	1	15	0
Pb	Lead	0	0	1	1
Sn	Tin	0	0	0	0
Si	Silicon	7	4	45	4
Na	Sodium	1	3	23	1
<	Potassium	0	1	5	1
Mo	Molybdenum	93	103	64	41
Ni	Nickel	1	1	1	0
Ag	Silver	0	0	0	0
Гі	Titanium	0	0	1	0
/	Vanadium	0	0	0	0
۸n	Manganese	0	0	2	0
Cd	Cadmium	0	0	0	0
Ca	Calcium	1637	1656	1276	778

1121

1380

489

0

456

1238

1445

542

0

463

	For additional sample history, go to:			S.O.S WEB		
	C	ONDITION / CO	ONTAMINATIO	ION		
		31-Jan-24	16-Jun-23	09-Feb-23	01-Mar-22	
VISC	OSITY (CENTISTOKES)					
V100	Viscosity at 100 C	12.80	13.20	8.900	5.200	
INFR/	ARED (UFM)			(m) (18. 45 m) (20)		
ST	Soot	1	14	16	12	
OXI	Oxidation	20	15	21	15	
SUL	Sulfur Products	24	21	16	19	
NIT	Nitration	0	25	50	10	
WATE	R		洲 第二个是1			
W	Water	N	N	Р	N	
FUEL						
	Fuel	N	N	N	Р	
FUEL (CONTENT (%)					
Fc	Percent Fuel			4.90	30.11	
		CLEANL	INESS			
		31-Jan-24	16-Jun-23	09-Feb-23	01-Mar-22	

PREVIOUS SAMPLE

OF LATEST SAMPLE INDICATE ELEMENTS

TRENDS FOR THIS COMPARTMENT.

1029

1269

924

0

19

721

851

662

0

10

ENGINE
SERIAL NUMBER: MRT00235
EQUIP NUM: D6R
CAT D6RIII
COMP SERIAL NUM: THX01586

E500-54037-0139

No Action Required

Report Com	men	
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