PAUL BARNETTE RITCHIE EQUIPMENT, INC.

PRINCETON, WV 24740 P.O. BOX 1588

FAX: 304-325-6525

SAMPLE TYPE: OIL PHONE: 304-325-6525

SAMPLE SHIP TIME (days)

D100-50315-0151

No Action Required

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

LAB CONTROL NUMBER

SA

B150-48100-0443

06-Mar-2018

10-Apr-2018

3357 HR

8

No Action Required

NORMAL WEAR METAL READINGS. CONTINUE NORMALLY SCHEDULED SAMPLING.

CUSTOMER EQUIP NUM 8 A327

COMPANY NAME: RITCHIE EQUIPMENT, INC.

COMPARTMENT NAME: ENGINE

MANUFACTURER : CATERPILLAR SERIAL NUMBER : 74Z00618

JOB SITE MODEL : D11N

FLUID TYPE

SHOP JOB NUM: 4206767

COMPARTMENT MODEL: COMP MANUFACTURER

FLUID BRAND/WEIGHT

COMP SERIAL NUM:

SAMPLE LABEL NUM

EXT WARR EXPIRE DATE

Fluids Analysis Laboratory Salem, VA 24153-5457 1330 Lynchburg Turnpike

540-387-1111

MAKE UP FLUID

MAKE UP FLUID UNITS

FILTER CHANGED

www.cartermachinery.com

	EXT WARR NUMBER	/BER	EAT WARK EXPIRE DATE	PIKE DALE:
			FUELC	FUEL CONSUMED:
AMPLE DATE	PROCESS DATE	EQUIPMENT METER	METER ON FLUID	FLUID CHANGED
09-Nov-2020	10-Nov-2020	3485 HR	391 HR	No

B150-48100-0443	D100-50315-0151	Wear Metals (ppm)
ω	2	Cr Cr
3	5	2
0	0	Ω
_	ún	≥
0	_	공
0	->	S _n
٥	7	æ
10	ω	2
٥	٥	~
	218	₩
62	74	Mo
0	0	2
	0	≥
	0	=
	0	<
1058	1834	S.
259	88	Вм
918	1081	Zn
796	950	٥

	11.1	z	z	Z	30	12	23	31	B150-48100-0443
12	12.9	z	z	Ż	21	00	15	0	D100-50315-0151
PQI	V100	71	>	W	SUL	NIT	ΙΧΟ	81	Oil Condition / Particle Count (ct/ml)

Ag = Silver, Al = Aluminum, B = Boron, Ca = Calcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nickei, Pb = Lead, Si = Silicon, Sn = Tin, S = Sulphur, V = Vanadium, Zn = Zinc, A = Antifreeza, F = Fuel, W = Valuer, P = Postitve, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, POI = Particle Quantifying index, NatW = Salt Water, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Particle Volume Indicator

PAUL BARNETTE RITCHIE EQUIPMENT, INC.

PRINCETON, WV 24740 P.O. BOX 1588

SAMPLE TYPE: OIL PHONE: 304-325-6525 FAX: 304-325-6525

B150-48108-0514

15-Apr-2018

18-Apr-2018

3359 HR

공

Monitor Compartment

VISIBLE LARGE PARTICLES IN SAMPLE. NORMAL WEAR METAL READINGS. EXAMINE THE OIL, INSPECT ANY SCREEN(S) OIL FILTER(S) FOR LARGE DEBRIS. RESAMPLE IN 250 HOURS TO MONITOR.

CUSTOMER EQUIP NUM: A327

COMPANY NAME: RITCHIE EQUIPMENT, INC.

MANUFACTURER: CATERPILLAR

COMPARTMENT NAME: TRANSMISSION POWER SHIFT SERIAL NUMBER: 74Z00618

COMP MANUFACTURER

SAMPLE LABEL NUM

FLUID BRAND/WEIGHT:

COMPARTMENT MODEL:

EXT WARR EXPIRE DATE:

SHOP JOB NUM: 4206767

FLUID TYPE

COMP SERIAL NUM:

FUEL CONSUMED

EXT WARR NUMBER

JOB SITE : MODEL: D11N



540-387-1111 Salem, VA 24153-5457 1330 Lynchburg Turnpike Fluids Analysis Laboratory

Monitor Compartment ISO PARTICLE COUNT READING EXCEEDS RECOMMENDED CLEANLINESS LEVEL. CHECK POSSIBLE SOURCE OF CONTAMINATION. OTHER	D100-50315-0121 09-Nov-2020 10-Nov-2020 3485 HR 3485 HR No	LAB CONTROL NUMBER SAMPLE DATE PROCESS DATE EQUIPMENT METER ON FLUID FLUID CHA	SAMPLE SHIP TIME (days): 1
MENDED CLEANLINES			a incomban.
SS LEVEL, CHECK POS	185 HR		
SIBLE SOURCE OF CONTA	3485 HR	WETER ON FLUID	FUEL CO.
MINATION. OTHER READING	No	FLUID CHANGED	NSUMED :
. OTHER READINGS APPEAR TO BE NORMAL. RESAMPLE IN 250		MAKE UP FLUID	WWW.ca
RESAMPLE IN 250		MAKE UP FLUID UNITS	www.cartermachinery.com
		FILTER CHANGED	

B150-48108-0514	D100-50315-0121	Wear Metals (ppm)
28	24	ξ
16	12	a
0	0	유
κ,	2	≥
42	15	8
0	0	Sn
60	13	छ
Ó	2	N.
0	0	~
	22	B
	_	Mo
0	0	2
	0	Ą
	_	=
	0	<
2523	2585	C.
22	32	Mg Mg
839	1065	Zn
801	889	70

B150-48108-0514	D100-50315-0121	Particle Count (ctiml)
0	0	81
100	7	IXO
œ	6	NIT
22	16	SUL
Z	z	W
z	z	Þ
8.4	11.3	V100
	4	PQI
≨	22/20/18	ISO
	32147	4
	5791	dp.
	874	10µ
	390	14µ
	286	18µ
	249	21μ
	128	38µ
	89	50µ

Ag = Silver, Al = Aluminum, B = Boron, Ca = Catolum, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Polassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nicket, Pb = Lead, Si = Silicon, Sn = Tin, S = Sulphur, V = Vanadium, Zn = Zinc, A = Antifreeze, F = Fuel, W = Valeir, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Raining, PFC = Percent Fuel Content, PQI = Particle Quantifying index , NaW = Sait Water, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Particle Volume Indicator

PRINCETON, WV 24740 P.O. BOX 1588 PAUL BARNETTE RITCHIE EQUIPMENT, INC.

FAX: 304-325-6525

PHONE: 304-325-6525

SAMPLE SHIP TIME (days) SAMPLE TYPE: OIL

LAB CONTROL NUMBER

SAMPLE DATE

PROCESS DATE

EQUIPMENT METER

METER ON FLUID

FLUID CHANGED

EXT WARR NUMBER

JOB SITE MODEL: D11N CUSTOMER EQUIP NUM : A327 COMPANY NAME: RITCHIE EQUIPMENT, INC.

COMPARTMENT NAME: HYDRAULIC SYSTEM

MANUFACTURER: CATERPILLAR SERIAL NUMBER: 74Z00618

COMP SERIAL NUM

COMPARTMENT MODEL COMP MANUFACTURER

FLUID BRAND/WEIGHT SAMPLE LABEL NUM: FLUID TYPE

SHOP JOB NUM: 4206767

EXT WARR EXPIRE DATE

FUEL CONSUMED

540-387-1111 Salem, VA 24153-5457 Fluids Analysis Laboratory 1330 Lynchburg Turnpike

MAKE UP FLUID www.cartermachinery.com MAKE UP FLUID UNITS

FILTER CHANGED

D100-50315-0123 Monitor Compartment ISO PARTICLE COUNT READING EXCEEDS RECOMMENDED CLEANLINESS LEVEL, CHECK POSSIBLE SOURCE OF CONTAMINATION. OTHER READINGS APPEAR TO BE NORMAL. RESAMPLE IN 250 HOURS TO MONITOR. 09-Nov-2020 10-Nov-2020 3485 HR 3485 HR

B150-48100-0815 Monitor Compartment 06-Apr-2018 10-Apr-2018 3357 HR

VISIBLE LARGE PARTICLES IN SAMPLE. ALUMINUM AND SILICON ARE ELEVATED INDICATING DIRT ENTRY MAY BE PRESENT. OTHER READINGS APPEAR TO BE NORMAL EXAMINE THE OIL INSPECT ANY SCREEN(S) OIL FILTER(S) FOR LARGE DEBRIS. CONSIDER CHANGING THE OIL BEFORE THE NEXT SCHEDULED OIL CHANGE TO RID THE SYSTEM OF CONTAMINANTS/DEBRIS. RESAMPLE IN 125 HOURS TO MONITOR. 공

1000	r	-	
Oil Condition / Particle Count (ct/ml)	B150-48100-0815	D100-50315-0123	Wear Metals (ppm)
क्ष	ક્ષ	GD	Ç _L
	22	00	20
IXO	2	0	្ន
	22	ću	≥
	2	0	₽
ı	2 0	0	Sn
	39	0 7 1	œ
	υ.	_	Z a
	ch Ch		_
		0 9 1	00
	2	_	No.
	0	0	2
		0 0 0	&
		a	ⅎ
		0	<
	2132	2207	Ω
Ĭ	30	5	Mg.
	956	1107	Zn
	856	924	ъ

B150-48100-0815 D100-50315-0123

0 0

6 di

(7) 4

8 6

z z

z z

6.4 7.7

€

0

22/20/13

20754

7428

1152

8

흍 쓚

21µ 2

⋨

9

Ag = Silver, Al = Aluminum, B = Boron, Ca = Catcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Nl = Nickel, Pb = Lead, Si = Silicon, Sn = Tin, S = Sulphur, V = Vanadium, Zn = Zinc, A = Antifreeze, F = Fuel, W = Water, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, PQI = Particle Quantifying index, NaW = Salt Water, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Perticle Volume Indicator

PRINCETON, WV 24740 RITCHIE EQUIPMENT, INC. P.O. BOX 1588 PAUL BARNETTE

CUSTOMER EQUIP NUM: A327

COMPANY NAME: RITCHIE EQUIPMENT, INC.

COMPARTMENT NAME: FINAL DRIVE REAR RIGHT SERIAL NUMBER: 74Z00618

MANUFACTURER: CATERPILLAR

FLUID BRAND/WEIGHT SAMPLE LABEL NUM:

COMPARTMENT MODEL COMP SERIAL NUM

FLUID TYPE

COMP MANUFACTURER

EXT WARR EXPIRE DATE

SHOP JOB NUM: 4206767

Salem, VA 24153-5457 Fluids Analysis Laboratory 540-387-1111 1330 Lynchburg Turnpike

MAKE UP FLUID www.cartermachinery.com MAKE UP FLUID UNITS

FILTER CHANGED

No Action Required

D100-50315-0180 LAB CONTROL NUMBER

SAMPLE DATE 09-Nov-2020

PROCESS DATE

EQUIPMENT METER

METER ON FLUID 3485 IR

FLUID CHANGED

중

FUEL CONSUMED

3485 HR

10-Nov-2020

EXT WARR NUMBER

JOB SITE: MODEL: D11N

SAMPLE SHIP TIME (days): SAMPLE TYPE: OIL

PHONE: 304-325-6525

FAX: 304-325-6525

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

No Action Required

B150-48100-1519

06-Apr-2018

NORMAL WEAR METAL READINGS. CONTINUE NORMALLY SCHEDULED SAMPLING.

10-Apr-2018

3357 HR

₹

B150-48100-1518	D100-50315-0180	Wear Metals
510	180	(ppm)
0		Cu
_		_
6	· "	e l
0	0	ç,
_	2	≥
0		8
0	0	S
7	4	छ
ယ	2	2
	0	~
	45	
7	4	₹ .
0	٥	Z.
	0	P P
	0	=
	0	<
2650	2372	č.
42	ಚ	ž
944	974	Zn
800	793	٥

17 N 16.4 2 NORMAL N 16.4 29/22/17	16.4 2	16.4 2 NORMAL 16.4 23/22/17	16.4 2 NORMAL 16.4 23/22/17 42539	16.4 2 NORMAL 16.4 23/22/17 42539 21357	B150-48100-1518
16.4 2	16.4 2 NORMAL	16.4 2 NORMAL	16.4 2 NORMAL 219247 42530 21357	16.4 2 NORMAL 16.4 2 NORMAL 29/2017 49536 21357 1003	
16.4 2 NORMAL 16.4 23/2017		42539	42539 21357	42539 21357 1093	z
2 NORMAL 23/22/17		42539	42539 21357	42539 21357 1083	16.4
NORMAL 23/22/17		42539	42539 21357	42539 21357 1083	
	42539	42539	42539 21357	42539 21357 1093	23/22/17
1093	177		22		_

Ag = Silver, Al = Aluminum, B = Boron, Ca = Calcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nickei, Pb = Lead, Si = Silcon, Sn = Tin, S = Sulphur, V = Vanedium, Zn = Zinc, A = Antifreeza, F = Fuel, W = Waiter, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, PQI = Particle Quantifying index, NaW = Salt Waiter, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Particle Volume Indicator

PAUL BARNETTE RITCHIE EQUIPMENT, INC.

PRINCETON, WV 24740 P.O. BOX 1588

FAX: 304-325-6525

SAMPLE TYPE: OIL PHONE: 304-325-6525

SAMPLE SHIP TIME (days)

D100-50315-0178

No Action Required

LAB CONTROL NUMBER

CUSTOMER EQUIP NUM : A327

COMPANY NAME: RITCHIE EQUIPMENT, INC.

COMPARTMENT NAME: FINAL DRIVE REAR LEFT

SERIAL NUMBER: 74Z00618

MANUFACTURER CATERPILLAR MODEL DIIN

EXT WARR NUMBER

JOB SITE :

FLUID BRAND/WEIGHT

EXT WARR EXPIRE DATE FLUID TYPE

COMP SERIAL NUM : SHOP JOB NUM :: 4206767

COMP MANUFACTURER SAMPLE LABEL NUM

COMPARTMENT MODEL

FUEL CONSUMED



www.cartermachinery.com 540-387-1111 Salem, VA 24153-5457 Fluids Analysis Laboratory 1330 Lynchburg Turnpike

MAKE UP FLUID UNITS

FILTER CHANGED

3				TOTAL C	I OLL COMSCINED	
1						
ER	SAMPLE DATE	PROCESS DATE	EQUIPMENT METER	METER ON FLUID	FLUID CHANGED	MAKE U
	09-Nov-2020	10-Nov-2020	3485 HR	3485 HR	No	

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

B150-48100-1520 No Action Required

NORMAL WEAR METAL READINGS. CONTINUE NORMALLY SCHEDULED SAMPLING.

10-Apr-2018

3357 FR

06-Apr-2018

중

B150-48100-1520	D100-50315-0178	Wear Metals (ppm
°	0	δ
26	Ch	77
٥	0	ស
6	2	≥
0	0	문
0		ठु
6	180	∞
4	_	N a
~	۰	~
	18	æ
7	->	₹
٥		z
		Ag
	0	크
		<
2673	2161	Ca
42	31	Mg g
989	962	Zn
797	793	v

T _P	-	
B150-48100-1520	D100-50315-0178	Oil Condition / Particle Count (ct/ml)
	0	ST
	o	DXO
	6	NIT
	16	SUL
z	2	w
16.3	18.0	V100
	СЛ	PQI
23/22/20	NORMAL	180
23/22/20 41834		44
30376		ę.
5864		10µ
421		14µ
27		21µ
		36µ

Ag = Silver, Al = Aluminum, B = Boron, Ca = Calcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nickel, Pb = Lead, Si = Sillcon, Sn = Tin, S = Sulphur, V = Vanadium, Zn = Zinc, A = Antifreeza, F = Fuel, W = Velter, P = Postive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, POI = Particle Quantifying index, NeW = Salt Weter, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Particle Volume indicator