



LubeWatch®

UIN 039412F

Diesel Engine

Unit No. L-35

Unit:

Make Komatsu

Model WA320

Serial No. A35101

Site

Compartment:

Name Diesel Engine

Make Komatsu

Model

Serial No.

Capacity:

Customer:

KLB CONSTRUCTION(LAKESIDE IND)

P O Box 158

Lynnwood WA 98087

USA

DIAGNOSIS

All wear rates normal. Abrasive and other contaminant levels are acceptable. Viscosity within specified operating range. Action: As oil and filter(s) already changed, resample next service interval to further monitor.

ANALYST: Sam Smith Portland

LEGEND			
	Normal		Severe
	Abnormal		Caution
	Normal		

(800) LUBE-808

DATE SAMPLED	DATE RECEIVED	DATE REPORTED	LAB NO.	SIF NO.	TIME ON UNIT	OIL BRAND	OIL TYPE	OIL GRADE	OIL ADDED	FLITER	OIL CHANGED	W/O NUMBER
12-Oct-22	04-Nov-22	16-Nov-22	40111407601	700811839	12393 Hrs	Chevron Delo 400 LE	SAE 15W40				Changed	
22-Mar-22	05-Apr-22	07-Apr-22	40111339626	39844075	11861 Hrs	Chevron Delo 400 LE	SAE 15W40				Changed	
06-Jan-22	31-Jan-22	01-Feb-22	40111317601	39363891	11631 Hrs	Chevron Delo 400 LE	SAE 15W40	0.0			Not Changed	
05-Aug-21	30-Aug-21	01-Sep-21	40111268079	39023294	11352 Hrs	Chevron Delo 400 LE	SAE 15W40				Changed	
02-Mar-21	12-Mar-21	22-Mar-21	40111209561	38402834	11092 Hrs	Chevron Delo 400 LE	SAE 15W40				Not Changed	
12-Sep-20	17-Sep-20	24-Sep-20	401111749424	37237757	10951 Hrs	Chevron Delo 400 LE	SAE 15W40				Changed	

Metals (ppm)	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Iron (Fe)	23	36	16	25	12	31
Chromium (Cr)	<1	1	<1	<1	<1	1
Lead (Pb)	<1	<1	<1	2	<1	1
Copper (Cu)	2	1	<1	<1	<1	<1
Tin (Sn)	<1	<1	<1	<1	<1	<1
Aluminum (Al)	4	2	2	3	2	2
Nickel (Ni)	<1	<1	<1	<1	<1	<1
Silver (Ag)	<1	<1	<1	<1	<1	<1
Titanium (Ti)	<1	<1	<1	<1	<1	<1
Vanadium (V)	<1	<1	<1	<1	<1	<1

Contaminants (ppm)	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Silicon (Si)	5	8	4	5	4	4
Sodium (Na)	3	4	3	5	2	3
Potassium (K)	1	3	3	1	3	8

Additives (ppm)	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Magnesium (Mg)	801	892	806	788	732	807
Calcium (Ca)	1642	1857	1416	1494	1308	1476
Barium (Ba)	<1	<1	<1	<1	<1	<1
Phosphorus (P)	794	883	846	757	790	860
Zinc (Zn)	965	1073	896	903	827	984
Molybdenum (Mo)	64	9	2	8	7	11
Boron (B)	207	96	86	69	93	86

Contaminants	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Water (%)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Coolant	No	No	No	No	No	No

Physical Tests	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Viscosity (cSt 100C)	13.8	14.5	14.2	14.2	13.6	14.8
Fuel (%)	<1	<1	<1	<1	1.60	<1
Soot (%) Infrared	0.1	0.5	0.3	0.5	0.1	0.6

Physical / Chemical	40111407601	40111339626	40111317601	40111268079	40111209561	40111749424
Base Number (mgKOH/g)	7.6	4.8	5.2	3.6	5.2	4.4
Oxidation (Abs/0.1mm)	14	15	13	15	13	17
E2412/D7414	7	9	9	10	8	
Nitration (Abs/0.1mm) E2412						

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LubeWatch®

UIN 03AF6B0

Transmission

Unit No. L-35

Unit:

Make Komatsu

Model WA320

Serial No. A35101

Site

Compartment:

Transmission

Name

Make

Model

Serial No.

Capacity:

Customer:

KLB CONSTRUCTION(LAKESIDE IND)
P O Box 158
Lynnwood WA 98087
USA

DIAGNOSIS

All wear rates normal. Abrasive and other contaminant levels are acceptable. Viscosity within specified operating range. Action: Resample next service interval to further monitor.

ANALYST: Sam Smith Portland

LEGEND			
	Normal		Severe
	Abnormal		Caution
	Normal		

(800) LUBE-808

DATE SAMPLED	DATE RECEIVED	DATE REPORTED	LAB NO.	SIF NO.	TIME ON UNIT	OIL BRAND	OIL TYPE	OIL GRADE	OIL ADDED	FILTER	OIL CHANGED	W/O NUMBER
12-Oct-22	04-Nov-22	16-Nov-22	40111407602	700811806	12395	Chevron	Drive Train HD	SAE 30			Not Applicable	
22-Mar-22	05-Apr-22	07-Apr-22	40111339627	39844076	11861	Chevron	Drive Train HD	SAE 30			Changed	
05-Aug-21	30-Aug-21	01-Sep-21	40111268080	39023151	11352	Chevron	Drive Train HD	SAE 30	0.0		Not Changed	
12-Sep-20	17-Sep-20	24-Sep-20	40111149425	37496742	10851	Chevron	Drive Train HD	SAE 30			Changed	
07-Jul-18	25-Jul-18	26-Jul-18	40110876026	33998521	8762	Chevron	Drive Train HD	SAE 30			Not Changed	
08-Jan-18	02-Feb-18	05-Feb-18	40110818564	31071975	8199	Chevron	Undertified	SAE 30	0.0		Not Changed	

Metals (ppm)	17	19	13	17	12	11
Iron (Fe)	<1	<1	<1	<1	<1	<1
Chromium (Cr)	<1	<1	2	<1	<1	<1
Lead (Pb)	1	2	1	1	2	1
Copper (Cu)	<1	<1	5	<1	<1	<1
Tin (Sn)	1	<1	2	1	1	1
Aluminum (Al)	<1	<1	<1	<1	<1	<1
Nickel (Ni)	<1	<1	<1	<1	<1	<1
Silver (Ag)	<1	<1	<1	<1	<1	<1
Titanium (Ti)	<1	<1	<1	<1	<1	<1
Vanadium (V)	<1	<1	<1	<1	<1	<1

Contaminants (ppm)	10	12	12	15	9	8
Silicon (Si)	2	2	<1	<1	1	1
Sodium (Na)	1	3	2	6	3	3
Potassium (K)						

Additives (ppm)	65	41	20	16	43	43
Magnesium (Mg)	3468	4212	4074	3531	3022	3129
Calcium (Ca)	<1	<1	<1	<1	<1	<1
Barium (Ba)	937	1034	938	977	920	869
Phosphorus (P)	1170	1310	1196	1133	1074	1041
Zinc (Zn)	10	2	1	2	3	3
Molybdenum (Mo)	54	13	9	8	19	20

Contaminants	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Water (%)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Physical Tests	10.5	10.8	11.1	11.0	10.5	10.8
Viscosity (cSt 100C)	10.5	10.8	11.1	11.0	10.5	10.8
Solids (%)	<0.1	0.1	<0.1	<0.1	<0.1	0.1

Physical / Chemical	1.45	1.84	2.60	1.76	1.94	1.83
Acid Number (mgKOH/g)	1.45	1.84	2.60	1.76	1.94	1.83
Oxidation (Abs/0.1mm)	6	5	5	5	9	8
E2412/D7414						



LubeWatch®

UIN 03AF6B1

Hydraulic System

Unit No. L-35

Unit:

Make Komatsu

Model WA320

Serial No. A35101

Site

Compartment:

Hydraulic System

Name

Make

Model

Capacity: 15000
Litrs

Customer:
KLB CONSTRUCTION(LAKESIDE IND)
P O Box 158
Lynnwood WA 98087
USA

DIAGNOSIS

All wear rates normal. Abrasive and other contaminant levels are acceptable. Viscosity within specified operating range. Action: Resample next recommended service interval to further monitor.

ANALYST: Stan.Leitz

LEGEND

	Normal		Severe		Abnormal		Caution		Normal
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(800) LUBE-808

DATE SAMPLED	DATE RECEIVED	DATE REPORTED	LAB NO.	SIF NO.	TIME ON UNIT	OIL BRAND	OIL TYPE	OIL GRADE	OIL ADDED	FILTER	OIL CHANGED	W/O NUMBER
12-Oct-22	04-Nov-22	16-Nov-22	40111407603	700811804	12393	Chevron	Unidentified	ISO 46			Not Applicable	
22-Mar-22	05-Apr-22	07-Apr-22	40111339628	39844074	11961	Chevron	Unidentified	ISO 46			Not Changed	
05-Aug-21	30-Aug-21	01-Sep-21	40111268081	39023298	11352	Chevron	Unidentified	ISO 46	0.0		Not Changed	
07-Jul-18	25-Jul-18	27-Jul-18	40110876027	33998523	8762	Chevron	Unidentified	ISO 46			Changed	
08-Jan-18	02-Feb-18	06-Feb-18	40110818565	31071977	8199	Unidentified	Unidentified	ISO 46	0.0		Not Changed	
21-Feb-17	02-Mar-17	03-Mar-17	40110707326	31072174	7137	Unidentified	Unidentified	ISO 46	0.0		Not Changed	

Metals (ppm)	Iron (Fe)	Chromium (Cr)	Lead (Pb)	Copper (Cu)	Tin (Sn)	Aluminum (Al)	Nickel (Ni)	Silver (Ag)	Titanium (Ti)	Vanadium (V)
18	<1	4	9	<1	4	1	<1	<1	<1	<1
17	<1	2	10	<1	4	<1	<1	<1	<1	<1
19	<1	5	13	4	6	<1	<1	<1	<1	<1
13	<1	3	11	<1	4	<1	<1	<1	<1	<1
13	<1	3	12	<1	5	<1	<1	<1	<1	<1
10	<1	3	9	<1	4	<1	<1	<1	<1	<1

Contaminants (ppm)	Silicon (Si)	Sodium (Na)	Potassium (K)
10	3	<1	10
10	3	1	10
14	<1	<1	14
10	2	2	10
11	2	1	11
10	1	2	10

Additives (ppm)	Magnesium (Mg)	Calcium (Ca)	Barium (Ba)	Phosphorus (P)	Zinc (Zn)	Molybdenum (Mo)	Boron (B)
59	705	<1	516	686	5	40	
70	853	<1	582	775	6	45	
34	1060	<1	596	771	9	56	
40	955	<1	642	776	10	61	
42	1075	<1	664	808	11	71	
40	1070	<1	619	767	10	65	

Contaminants	Water (%)
<0.05	<0.05
<0.05	<0.05
<0.05	<0.05
<0.05	<0.05
<0.05	<0.05
<0.05	<0.05

Physical Tests	Viscosity (cSt 40C)	Solids (%)
48.6	<0.1	<0.1
48.7	0.1	<0.1
50.2	<0.1	<0.1
52.9	<0.1	<0.1
51.8	<0.1	<0.1
51.8	<0.1	<0.1

Physical / Chemical	Acid Number (mgKOH/g)	Oxidation (Abs/0.1mm)	E2412/D7414
0.51	6	8	1.43
0.75	6	8	0.97
1.43	8	12	0.80
0.97	12	N/A	1.35
0.80	11	N/A	N/A
1.35	N/A	N/A	N/A





LUBE CHECKLIST

500 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT #	L-35	JOB #	108	W.O. #	
MODEL		SERIAL NO.		HOUR METER READING	12393 <i>He</i>
OTHER		LOCATION			
TYPE OF SERVICE	<input checked="" type="checkbox"/> 500 HR	<input type="checkbox"/> 1500 HR			

FLUID / FILTERS CHANGED

1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR	3 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED?	5 <input type="checkbox"/> WINCH FILTER CHANGED?
2 <input checked="" type="checkbox"/> TRANSMISSION FILTER CHANGED?	4 <input checked="" type="checkbox"/> FUEL FILTER CHANGED AND SCREEN CLEANED?	6 <input type="checkbox"/> CHANGED HYD STEERING FILTER (OHT)

OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

7 <input checked="" type="checkbox"/> ENGINE F R	11 <input checked="" type="checkbox"/> REAR DIFF.	15 <input type="checkbox"/> CIRCLE DR.	19 <input type="checkbox"/> SWING DR.
8 <input checked="" type="checkbox"/> TRANS F R	12 <input type="checkbox"/> FINALS RF/LF	16 <input checked="" type="checkbox"/> SPEED REDUCER	20 <input checked="" type="checkbox"/> COOLANT _____ F°
9 <input checked="" type="checkbox"/> HYDRAULIC	13 <input type="checkbox"/> FINALS RR/LR	17 <input type="checkbox"/> SPINDLE L-R	
10 <input checked="" type="checkbox"/> FRONT DIFF.	14 <input type="checkbox"/> TANDEMS R-L	18 <input type="checkbox"/> STEERING	

OTHERS:

CHECKED

22 <input checked="" type="checkbox"/> AIR FILTERS	30 <input type="checkbox"/> INHIBITOR	38 <input checked="" type="checkbox"/> GREASED FITTINGS	46 <input checked="" type="checkbox"/> SEAT BELT CONDITION
23 <input checked="" type="checkbox"/> BATTERIES	31 <input type="checkbox"/> AIR TANKS	39 <input checked="" type="checkbox"/> BREATHERS	47 <input type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
24 <input checked="" type="checkbox"/> ALTERNATOR	32 <input checked="" type="checkbox"/> UNIV. JOINTS	40 <input checked="" type="checkbox"/> FIRE EX CHG.	
25 <input type="checkbox"/> BRAKE RESERVE	33 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	41 <input type="checkbox"/> BACK ALARM	
26 <input checked="" type="checkbox"/> GAUGES	34 <input checked="" type="checkbox"/> PRE-CLEANER	42 <input checked="" type="checkbox"/> BRAKE LIGHTS	48 <input type="checkbox"/> FRONT AXLE BEARING (MTG)
27 <input checked="" type="checkbox"/> HORN	35 <input checked="" type="checkbox"/> CAPS, COVERS	43 <input checked="" type="checkbox"/> EXPOSED WIRING	49 <input type="checkbox"/> RECOIL OIL COMPARTMENT (HIGH TRACK)
28 <input type="checkbox"/> ROTATING BEACON	36 <input type="checkbox"/> TURN SIGNALS	44 <input checked="" type="checkbox"/> GRAB IRONS	50 <input type="checkbox"/> HYD. STEERING FILTER (OHT)
29 <input checked="" type="checkbox"/> PARKING BRAKE	37 <input checked="" type="checkbox"/> FAN BELTS	45 <input type="checkbox"/> ROPS/FOPS	

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: *B7181, 3620, 6140, sample*

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE *[Signature]* DATE *10-12-22*



"An Equal Opportunity/Affirmative Action Employer"

AW



LUBE CHECKLIST

1000/2000 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT #	L-35	JOB #	0500	W.O #	
MODEL		SERIAL NO		HOUR METER READING	11861 Hrs
OTHER		LOCATION			
TYPE OF SERVICE	<input checked="" type="checkbox"/> 1000 HR	<input type="checkbox"/> 2000 HR			

FLUID / FILTERS CHANGED

- | | | |
|---|---|--|
| 1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR | 6 <input checked="" type="checkbox"/> FUEL FILTER CHANGED & SCREEN CHANGED? | 11 <input checked="" type="checkbox"/> DIFFERENTIAL OIL CHANGED? |
| 2 <input checked="" type="checkbox"/> TRANSMISSION FILTER CHANGED? | 7 <input type="checkbox"/> WINCH FILTER CHANGED? | 12 <input type="checkbox"/> BRAKE SYSTEM OIL CHANGED? |
| 3 <input checked="" type="checkbox"/> TRANSMISSION OIL CHANGED? | 8 <input type="checkbox"/> FINAL DRIVE OIL CHANGED? RF/LF/RR/LR? | 13 <input type="checkbox"/> SWING DRIVE OIL? |
| 4 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED? | 9 <input checked="" type="checkbox"/> COOLANT CHANGED | |
| 5 <input checked="" type="checkbox"/> HYDRAULIC OIL CHANGED? | 10 <input type="checkbox"/> STEERING SYSTEM OIL CHANGED? | |

OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

- | | | | |
|--|---|--|---|
| 14 <input checked="" type="checkbox"/> ENGINE F R | 18 <input checked="" type="checkbox"/> REAR DIFF. | 22 <input type="checkbox"/> CIRCLE DR. | 26 <input type="checkbox"/> SWING DR. |
| 15 <input checked="" type="checkbox"/> TRANS F R | 19 <input type="checkbox"/> FINALS RF/LF | 23 <input checked="" type="checkbox"/> SPEED REDUCER | 27 <input checked="" type="checkbox"/> COOLANT _____ F° |
| 16 <input checked="" type="checkbox"/> HYDRAULIC | 20 <input type="checkbox"/> FINALS RR/LR | 24 <input type="checkbox"/> SPINDLE L R | |
| 17 <input checked="" type="checkbox"/> FRONT DIFF. | 21 <input type="checkbox"/> TANDEM R L | 25 <input type="checkbox"/> STEERING | |

OTHERS:

CHECKED

- | | | | |
|--|---|--|---|
| 29 <input checked="" type="checkbox"/> AIR FILTERS | 39 <input checked="" type="checkbox"/> UNIV. JOINTS | 49 <input checked="" type="checkbox"/> BRAKE LIGHTS | 57 <input checked="" type="checkbox"/> COND OF ROPS & MOUNT BOLTS |
| 30 <input checked="" type="checkbox"/> BATTERIES | 40 <input checked="" type="checkbox"/> AIR FILTER INDICATOR | 50 <input checked="" type="checkbox"/> EXPOSED WIRING | 58 <input checked="" type="checkbox"/> STARTING AND CHARGING SYSTEM |
| 31 <input checked="" type="checkbox"/> ALTERNATOR | 41 <input type="checkbox"/> PRE-CLEANER | 51 <input checked="" type="checkbox"/> GRAB IRONS | 59 <input checked="" type="checkbox"/> ENGINE NOISE, SMOKE, LEAKS |
| 32 <input type="checkbox"/> BRAKE RESERVE | 42 <input checked="" type="checkbox"/> CAPS, COVERS | 52 <input checked="" type="checkbox"/> ROPS/FOPS | 60 <input checked="" type="checkbox"/> SEAT BELT CONDITION |
| 33 <input checked="" type="checkbox"/> GAUGES | 43 <input checked="" type="checkbox"/> TURN SIGNALS | 53 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED | 61 <input type="checkbox"/> BRAKE ACCUMULATOR CHARGE (OHT) |
| 34 <input checked="" type="checkbox"/> HORN | 44 <input checked="" type="checkbox"/> FAN BELTS | 54 <input type="checkbox"/> ENGINE VALVE ADJ. _____ INTAKE _____ EXHAUST | 62 <input checked="" type="checkbox"/> MAIN FRAME BODY SUPP. (OHT) |
| 35 <input type="checkbox"/> ROTATING BEACON | 45 <input type="checkbox"/> GREASED FITTINGS | 55 <input type="checkbox"/> VALVE COVER GASKET REPL | |
| 36 <input checked="" type="checkbox"/> PARKING BRAKE | 46 <input checked="" type="checkbox"/> BREATHERS | 56 <input checked="" type="checkbox"/> TRANS OPER. NOISE, LEAKS | |
| 37 <input type="checkbox"/> INHIBITOR | 47 <input type="checkbox"/> FIRE EX CHG. | | |
| 38 <input type="checkbox"/> AIR TANKS | 48 <input checked="" type="checkbox"/> BACK ALARM | | |

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: oil filter, 419-00-35153, L000-185-4100, 3620, 6140,

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE

DATE

3-22-22



"An Equal Opportunity/Affirmative Action Employer"

AJ

LUBE CHECKLIST

250 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <i>L-35</i>	JOB # <i>056</i>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <i>11631 Hrs</i>
OTHER	LOCATION	
TYPE OF SERVICE	<input checked="" type="checkbox"/> 250 HR <input type="checkbox"/> 750 HR <input type="checkbox"/> 1250 HR <input type="checkbox"/> 1750 HR	

FLUID / FILTERS CHANGED

ENGINE OIL & FILTER CHANGE? <i>N</i> FRONT / REAR	ENGINE OIL SAMPLE TAKEN? <i>Y</i> FRONT / REAR	FUEL FILTER CHANGED & SCREEN CLEANED? <i>N</i>
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FLUID LEVELS CHECKED

- | | | | |
|---|---|--|---|
| 1 <input checked="" type="checkbox"/> ENGINE F R | 5 <input checked="" type="checkbox"/> REAR DIFF | 9 <input type="checkbox"/> CIRCLE DR | 13 <input type="checkbox"/> SWING DR. |
| 2 <input checked="" type="checkbox"/> TRANS F R | 6 <input type="checkbox"/> FINALS RF/LF | 10 <input checked="" type="checkbox"/> SPEED REDUCER | 14 <input checked="" type="checkbox"/> COOLANT _____ F° |
| 3 <input checked="" type="checkbox"/> HYDRAULIC | 7 <input type="checkbox"/> FINALS RR/LR | 11 <input type="checkbox"/> SPINDEL L R | |
| 4 <input checked="" type="checkbox"/> FRONT DIFF. | 8 <input type="checkbox"/> TANDEMS R L | 12 <input type="checkbox"/> STEERING | |

OTHERS:

CHECKED

- | | | | |
|--|---|---|--|
| 16 <input checked="" type="checkbox"/> AIR FILTERS | 23 <input checked="" type="checkbox"/> PARKING BRAKE | 30 <input checked="" type="checkbox"/> TURN SIGNALS | 37 <input checked="" type="checkbox"/> EXPOSED WIRING |
| 17 <input checked="" type="checkbox"/> BATTERIES | 24 <input type="checkbox"/> INHIBITOR | 31 <input checked="" type="checkbox"/> FAN BELTS | 38 <input type="checkbox"/> GRAB IRONS |
| 18 <input checked="" type="checkbox"/> ALTERNATOR | 25 <input type="checkbox"/> AIR TANKS | 32 <input checked="" type="checkbox"/> GREASED FITTINGS | 39 <input checked="" type="checkbox"/> ROPS/FOPS |
| 19 <input type="checkbox"/> BRAKE RESERVE | 26 <input checked="" type="checkbox"/> UNIV. JOINTS | 33 <input checked="" type="checkbox"/> BREATHERS | 40 <input checked="" type="checkbox"/> SEAT BELT CONDITION |
| 20 <input checked="" type="checkbox"/> GAUGES | 27 <input checked="" type="checkbox"/> AIR FILTER INDICATOR | 34 <input checked="" type="checkbox"/> FIRE EX CHG. | 41 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED |
| 21 <input checked="" type="checkbox"/> HORN | 28 <input checked="" type="checkbox"/> PRE-CLEANER | 35 <input checked="" type="checkbox"/> BACK ALARM | |
| 22 <input type="checkbox"/> ROTATING BEACON | 29 <input type="checkbox"/> CAPS, COVERS | 36 <input type="checkbox"/> BRAKE LIGHTS | |

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: *Sample this*

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added


 SERVICEMAN SIGNATURE

1-6-22
 DATE



"An Equal Opportunity/Affirmative Action Employer"

AW



LUBE CHECKLIST

500 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT #	L-35	JOB #	C56	W.O. #	
MODEL		SERIAL NO.		HOUR METER READING	11352 Hcl
OTHER		LOCATION			
TYPE OF SERVICE	<input checked="" type="checkbox"/> 500 HR	<input type="checkbox"/> 1500 HR			

FLUID / FILTERS CHANGED

1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR	3 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED?	5 <input type="checkbox"/> WINCH FILTER CHANGED?
2 <input checked="" type="checkbox"/> TRANSMISSION FILTER CHANGED?	4 <input checked="" type="checkbox"/> FUEL FILTER CHANGED AND SCREEN CLEANED?	6 <input type="checkbox"/> CHANGED HYD STEERING FILTER (OHT)

OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

7 <input checked="" type="checkbox"/> ENGINE F R	11 <input checked="" type="checkbox"/> REAR DIFF.	15 <input type="checkbox"/> CIRCLE DR.	19 <input type="checkbox"/> SWING-DR.
8 <input checked="" type="checkbox"/> TRANS F R	12 <input type="checkbox"/> FINALS RE/LF	16 <input checked="" type="checkbox"/> SPEED REDUCER	20 <input checked="" type="checkbox"/> COOLANT _____ F°
9 <input checked="" type="checkbox"/> HYDRAULIC	13 <input type="checkbox"/> FINALS RR/LR	17 <input type="checkbox"/> SPINDLE L R	
10 <input checked="" type="checkbox"/> FRONT DIFF.	14 <input type="checkbox"/> TANDEMS R L	18 <input type="checkbox"/> STEERING	

OTHERS:

CHECKED

22 <input checked="" type="checkbox"/> AIR FILTERS	30 <input type="checkbox"/> INHIBITOR	38 <input checked="" type="checkbox"/> GREASED FITTINGS	46 <input checked="" type="checkbox"/> SEAT BELT CONDITION
23 <input checked="" type="checkbox"/> BATTERIES	31 <input type="checkbox"/> AIR TANKS	39 <input checked="" type="checkbox"/> BREATHERS	47 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
24 <input checked="" type="checkbox"/> ALTERNATOR	32 <input checked="" type="checkbox"/> UNIV. JOINTS	40 <input checked="" type="checkbox"/> FIRE EX CHG.	
25 <input type="checkbox"/> BRAKE RESERVE	33 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	41 <input checked="" type="checkbox"/> BACK ALARM	
26 <input checked="" type="checkbox"/> GAUGES	34 <input checked="" type="checkbox"/> PRE-CLEANER	42 <input checked="" type="checkbox"/> BRAKE LIGHTS	48 <input type="checkbox"/> FRONT AXLE BEARING(MTG)
27 <input checked="" type="checkbox"/> HORN	35 <input checked="" type="checkbox"/> CAPS, COVERS	43 <input checked="" type="checkbox"/> EXPOSED WIRING	49 <input type="checkbox"/> RECOIL OIL COMPARTMENT (HIGH TRACK)
28 <input type="checkbox"/> ROTATING BEACON	36 <input checked="" type="checkbox"/> TURN SIGNALS	44 <input checked="" type="checkbox"/> GRAB IRONS	50 <input type="checkbox"/> HYD. STEERING FILTER (OHT)
29 <input checked="" type="checkbox"/> PARKING BRAKE	37 <input type="checkbox"/> FAN BELTS	45 <input checked="" type="checkbox"/> ROPS/FOPS	

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS: B7181, 4140, 3620, RS 3517, samples

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE *[Signature]*

DATE 8-5-21



"An Equal Opportunity/Affirmative Action Employer"

[Handwritten mark]



LUBE CHECKLIST

250 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # <u>L35</u>		JOB # <u>005</u>	W.O. #
MODEL	SERIAL NO.	HOUR METER READING <u>11092</u>	
OTHER		LOCATION <u>E-320</u>	
TYPE OF SERVICE	<input checked="" type="checkbox"/> 250 HR	<input type="checkbox"/> 750 HR	<input type="checkbox"/> 1250 HR <input type="checkbox"/> 1750 HR

FLUID / FILTERS CHANGED

ENGINE OIL & FILTER CHANGE? <u>NO</u> FRONT / REAR	ENGINE OIL SAMPLE TAKEN? <u>YES</u> FRONT / REAR	FUEL FILTER CHANGED & SCREEN CLEANED? <u>NO</u>
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FLUID LEVELS CHECKED

1 <input checked="" type="checkbox"/> ENGINE F R	5 <input checked="" type="checkbox"/> REAR DIFF	9 CIRCLE DR	13 OWING DR.
2 <input checked="" type="checkbox"/> TRANS F R	6 FINALS RF/LF	10 SPEED REDUCER	14 <input checked="" type="checkbox"/> COOLANT _____ F°
3 <input checked="" type="checkbox"/> HYDRAULIC	7 FINALS RR/LR	11 SPINDEL L R	
4 <input checked="" type="checkbox"/> FRONT DIFF.	8 TANDEMS R L	12 STEERING	

OTHERS:

CHECKED

16 <input checked="" type="checkbox"/> AIR FILTERS	23 <input checked="" type="checkbox"/> PARKING BRAKE	30 TURN SIGNALS	37 <input checked="" type="checkbox"/> EXPOSED WIRING
17 <input checked="" type="checkbox"/> BATTERIES	24 INHIBITOR	31 <input checked="" type="checkbox"/> FAN BELTS	38 <input checked="" type="checkbox"/> GRAB IRONS
18 <input checked="" type="checkbox"/> ALTERNATOR	25 AIR TANKS	32 <input checked="" type="checkbox"/> GREASED FITTINGS	39 <input checked="" type="checkbox"/> ROPS/FOPS
19 BRAKE RESERVE	26 <input checked="" type="checkbox"/> UNIV. JOINTS	33 BREATHERS	40 SEAT BELT CONDITION
20 <input checked="" type="checkbox"/> GAUGES	27 <input checked="" type="checkbox"/> AIR FILTER INDICATOR	34 <input checked="" type="checkbox"/> FIRE EX CHG.	41 <input checked="" type="checkbox"/> SERVICE INTERVAL NOTIFICATION DECAL COMPLETED
21 <input checked="" type="checkbox"/> HORN	28 <input checked="" type="checkbox"/> PRE-CLEANER	35 BACK ALARM	
22 ROTATING BEACON	29 <input checked="" type="checkbox"/> CAPS, COVERS	36 BRAKE LIGHTS	

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

SERVICEMAN SIGNATURE

3-2-21

DATE



"An Equal Opportunity/Affirmative Action Employer"



LUBE CHECKLIST

1000/2000 HOUR PREVENTIVE MAINTENANCE CHECKLIST

EQUIPMENT # L35		JOB # 005	W.O. #
MODEL	SERIAL NO.	HOUR METER READING 10851	
OTHER		LOCATION E320	
TYPE OF SERVICE <input type="checkbox"/> 1000 HR <input checked="" type="checkbox"/> 2000 HR			

FLUID / FILTERS CHANGED

- | | | |
|---|---|--|
| 1 <input checked="" type="checkbox"/> ENGINE OIL AND FILTER CHANGED? FRONT/REAR | 6 <input checked="" type="checkbox"/> FUEL FILTER CHANGED & SCREEN CHANGED? | 11 <input checked="" type="checkbox"/> DIFFERENTIAL OIL CHANGED? |
| 2 <input checked="" type="checkbox"/> TRANSMISSION FILTER CHANGED? | 7 WINCH FILTER CHANGED? | 12 BRAKE SYSTEM OIL CHANGED? |
| 3 <input checked="" type="checkbox"/> TRANSMISSION OIL CHANGED? | 8 FINAL DRIVE OIL CHANGED? RF/LF/RR/LR? | 13 SWING DRIVE OIL? |
| 4 <input checked="" type="checkbox"/> HYDRAULIC FILTER CHANGED? | 9 <input checked="" type="checkbox"/> COOLANT CHANGED | |
| 5 <input checked="" type="checkbox"/> HYDRAULIC OIL CHANGED? | 10 STEERING SYSTEM OIL CHANGED? | |

OIL SAMPLES TAKEN AND FLUID LEVELS CHECKED

- | | | | |
|--|---|-----------------------------|---|
| 14 <input checked="" type="checkbox"/> ENGINE F R | 18 <input checked="" type="checkbox"/> REAR DIFF. | 22 CIRCLE DR. | 26 SWING DR. |
| 15 <input checked="" type="checkbox"/> TRANS F R | 19 FINALS RF/LF | 23 SPEED REDUCER | 27 <input checked="" type="checkbox"/> COOLANT _____ F° |
| 16 <input checked="" type="checkbox"/> HYDRAULIC | 20 FINALS RR/LR | 24 SPINDLE L-R | |
| 17 <input checked="" type="checkbox"/> FRONT DIFF. | 21 TANDEMS R-L | 25 STEERING | |

OTHERS:

CHECKED

- | | | | |
|--|---|---|---|
| 29 <input checked="" type="checkbox"/> AIR FILTERS | 39 <input checked="" type="checkbox"/> UNIV. JOINTS | 49 BRAKE LIGHTS | 57 <input checked="" type="checkbox"/> COND OF ROPS & MOUNT BOLTS |
| 30 <input checked="" type="checkbox"/> BATTERIES | 40 <input checked="" type="checkbox"/> AIR FILTER INDICATOR | 50 <input checked="" type="checkbox"/> EXPOSED WIRING | 58 <input checked="" type="checkbox"/> STARTING AND CHARGING SYSTEM |
| 31 <input checked="" type="checkbox"/> ALTERNATOR | 41 <input checked="" type="checkbox"/> PRE-CLEANER | 51 <input checked="" type="checkbox"/> GRAB IRONS | 59 <input checked="" type="checkbox"/> ENGINE NOISE, SMOKE, LEAKS |
| 32 BRAKE RESERVE | 42 <input checked="" type="checkbox"/> CAPS, COVERS | 52 <input checked="" type="checkbox"/> ROPS/FOPS | 60 SEAT BELT CONDITION |
| 33 <input checked="" type="checkbox"/> GAUGES | 43 TURN SIGNALS | 53 SERVICE INTERVAL NOTIFICATION DECAL COMPLETED | 61 BRAKE ACCUMULATOR CHARGE (OHT) |
| 34 <input checked="" type="checkbox"/> HORN | 44 <input checked="" type="checkbox"/> FAN BELTS | 54 ENGINE VALVE ADJ. _____ INTAKE _____ EXHAUST | 62 MAIN FRAME BODY SUPP. (OHT) |
| 35 ROTATING BEACON | 45 <input checked="" type="checkbox"/> GREASED FITTINGS | 55 VALVE COVER GASKET REPL. | |
| 36 <input checked="" type="checkbox"/> PARKING BRAKE | 46 <input checked="" type="checkbox"/> BREATHERS | 56 TRANS OPER. NOISE LEAKS | |
| 37 INHIBITOR | 47 <input checked="" type="checkbox"/> FIRE EX CHG. | | |
| 38 AIR TANKS | 48 <input checked="" type="checkbox"/> BACK ALARM | | |

OTHER:

WALK AROUND VISUAL INSPECTION

COMMENTS/RECOMMENDATIONS:

ABBREVIATIONS: Yes No RR = Requires Repair OK = No Repair Required NA = Not Applicable MF = Make up Fluid Added

[Signature]

SERVICEMAN SIGNATURE

9-12-20

DATE



"An Equal Opportunity/Affirmative Action Employer"

[Signature]

incoming / outgoing machine quantity assurance inspection

Customer: L-35
 Model: WA320-6
 M/O #: 13425

Date: 9-27-21
 S/N: A35101
 Hours: 11,463

Authorization #
 P O #

Checkmark = OK; X = Needs Repair; NA = Not Applicable

Fluid Checks	In	Out	Comments
1 Engine Oil:	✓	✓	
2 Engine Coolant:	X	✓	low, leak
3 Transmission:	NA	—	
4 Hydraulic:	✓	✓	
5 Finals:	NA	—	
6 Differentials:	X	✓	Front low - top off 100% THF
7 Attachment:	NA	—	
8 Bevel:	NA	—	
9 Pump Drive:	NA	—	
10 Swing/Circle:	NA	—	
11 Swing Grease	✓	✓	
12 Tandems:	NA	—	
13 Pivot Shaft:	NA	—	
14 Fuel:	✓	✓	
15 Service Brakes:	NA	—	
16 Lubricate Machine:	X	✓	grease
17 SOS All	X	—	last service 500 @ 11,352
18 Batteries	X	✓	Clean tops
19 Recoil Housings	NA	—	
20 Transfer Drive	✓	✓	
21 Feeder Planetaries	NA	—	

Visual Checks	In	Out	Comments
22 Leaks	X	✓	Hyd., A/C condenser
23 Loose Hrdwr	X	✓	Missing bolts, cleamps
24 Undercarriage	✓	✓	
25 Attachments	X	✓	Coupler hoses, brackets
26 Under Guards	✓	✓	
27 Air/Pre Cleaners	✓	✓	
28 Cab/Glass/Clean?	✓	✓	
29 Latches	X	✓	Cab fire latches
30 Rails/Steps	X	✓	LH step supports
31 Tires/Press	✓	✓	
32 Seat/Belt	X	✓	Air comp switches
33 Heater/AC	X	✓	No A/C
34 Belts/Pulleys	X	✓	Replace belts
35 Travel Alarm	✓	✓	
36 Swing/Parking Brake	✓	✓	
37 Service brakes	✓	✓	
38 Starting	✓	✓	
39 Steering	✓	✓	
40 Transmission	X	✓	U-joints, slip joint
41 Gauges	X	✓	Coupler label warning map
42 Hydraulics	X	✓	Tube
43 Implements	X	✓	Bucket
44 Linkage/Pins	X	✓	Articulation joint loose, lock pin

Ops Checks	In	Out	Comments
33 Heater/AC	X	✓	No A/C
34 Belts/Pulleys	X	✓	Replace belts
35 Travel Alarm	✓	✓	
36 Swing/Parking Brake	✓	✓	
37 Service brakes	✓	✓	
38 Starting	✓	✓	
39 Steering	✓	✓	
40 Transmission	X	✓	U-joints, slip joint
41 Gauges	X	✓	Coupler label warning map
42 Hydraulics	X	✓	Tube
43 Implements	X	✓	Bucket
44 Linkage/Pins	X	✓	Articulation joint loose, lock pin

Repair Recommendation:
 (continued on back)

incoming inspector: Neal

outgoing inspector: Neal

WORK ORDER

NO. 13425 EQUIPMENT# L-35 LOCATION shop DATE 9-24-21

HOURS 11,463 MILEAGE _____ MECH Neal DATE COMP. 10-26-21

DESCRIPTION OF WORK Inspection - Hitch loose

ITEM _____ REPAIRS MADE _____ MECH _____

ITEM	REPAIRS MADE	MECH
1.	Machine Inspection completed. Checked fluids, greased fittings. Replaced windshield and rear window wipers. Hole in stack patched. Replaced cab filters. Replaced belts. Cleaned off batteries. Replace hold down U-bolt for intake tube, missing bolts for muffler. Welded tube in front.	NM.
2.	Removed front electrical harness and disconnected all hoses. Removed hitch pins and separated frames. Bottom bearing completely gone and bore damaged. Had lower front frame welded and bored. Replaced all bearings and seals and lower pin. Re-connected.	NM.
3.	Replaced hose to front of transfer case.	NM.
4.	Connected wire from coupler switch to wire that goes to monitor - sounds beeper alarm and says pin disconnected on monitor when released.	NM.
5.	Glass guy replaced RH side windshield glass.	NM.
6.	Replaced switch/valve for seat air compressor.	NM.
7.	Straightened hood prop.	NM.
8.	Replaced pad.	NM.
9.	Tightened coolant hose clamps. topped off coolant.	NM.
10.	Replaced metal ring in turbo connector to muffler elbow and gasket between elbow and muffler.	NM.
11.	Replaced coupler hoses from top of frame along boom to bracket on both sides. Straightened brackets at bottom of boom. Built shorter hose for RH coupler.	NM.
12.	LH headlight plugged into turn signal wiring. Replaced horn marker/turn signal lamps. Replaced headlight bulb.	NM.
13.	No refrigerant. Pressurized system with air. Condenser leaking. Replaced condenser and dryer. Evacuated system and charge.	NM.
14.	Bad U-joints and worn slip spline. Replaced driveshaft.	NM.