

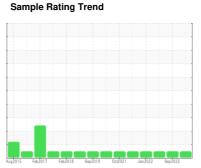
# **OIL ANALYSIS REPORT**



OKLAHOMA/102/EG - DOZER 36.19L [OKLAHOMA^102^EG - DOZER]

**Left Final Drive** 

**MOBIL DELVAC 1350 (4 GAL)** 







## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

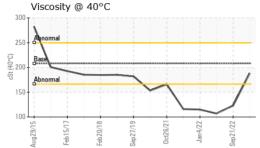
# **Fluid Condition**

The condition of the oil is acceptable for the time in service.

Client Info   WC0821801   WC0741148   WC0741158   Sample Date   Client Info   29 Jun 2023   21 Sep 2022   17 Sep	4 GAL)		4ug2015 Fe	b2017 Feb2018 Sep	2019 Oct2021 Jan2022	Sep2022	
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age   hrs   Client Info   14170   13106   13	Sample Number		Client Info		WC0821801	WC0741148	WC0741150
Dil Age	Sample Date		Client Info		29 Jun 2023	21 Sep 2022	17 Sep 2022
Oil Changed   Client Info   N/A   Not Changed   NoRMAL   NORMAL	Machine Age	hrs	Client Info		14170	13106	13106
NORMAL   NORMAL   NORMAL   NORMAL   WEAR METALS   method   limit/base   current   history1   history2   history2   limit   normal   history2   history2   limit   history2   history2   limit   history3   limit   history4   history2   limit   history4   history2   limit   history4   history2   limit   history4   history2   limit   history4   history4   history4   history4   history4   history4   history4   history4   history5   limit   history4   history5   limit   history6   limit   history1   history6   limit   history6   limit   history6   limit   history6	Oil Age	hrs	Client Info		500	500	500
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >800         103         183         29           Chromium         ppm         ASTM D5185m         >10         1         <1	Oil Changed		Client Info		N/A	Not Changd	Not Changd
Chromium	Sample Status				NORMAL	NORMAL	NORMAL
Chromium         ppm         ASTM D5185m         >10         1         <1         0           Nickel         ppm         ASTM D5185m         >5         <1         0         0           Titianium         ppm         ASTM D5185m         >5         <1         <1         <1         0           Siliver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >7         5         8         13         2           Lead         ppm         ASTM D5185m         >10         0         0         <1         20           Copper         ppm         ASTM D5185m         >8         0         0         0         0           Antimony         ppm         ASTM D5185m         >8         0         0         0         0           Caldmium         ppm         ASTM D5185m         0         0         0         0         0           ADDITIVES         method         Imit/base         current         history1         history2           Barium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>800	103	183	29
Titanium	Chromium	ppm	ASTM D5185m	>10	1	<1	0
Silver	Nickel	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m	>15	<1	<1	0
Lead	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper         ppm         ASTM D5185m         >75         <1         <1         20           Tin         ppm         ASTM D5185m         >8         0         0         0           Antimony         ppm         ASTM D5185m         >50              Vanadium         ppm         ASTM D5185m         <1	Aluminum	ppm	ASTM D5185m	>75	8	13	2
Copper	Lead	ppm	ASTM D5185m	>10	0	0	<1
Trin	Copper		ASTM D5185m	>75	<1	<1	20
Antimony	Tin				0		
Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         10         33         30           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         4         2         <1           Manganese         ppm         ASTM D5185m         1         2         <1           Magnesium         ppm         ASTM D5185m         39         20         15           Calcium         ppm         ASTM D5185m         3066         3061         3103           Phosphorus         ppm         ASTM D5185m         1061         1046         1025           Zinc         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         2         2         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         10         33         30           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         4         2         <1	•			7 0 0	<b>~1</b>	0	0
ADDITIVES	Cadmium						
Boron	ADDITIVES			limit/hase	current	history1	history2
Barium		nnm		mmadaoo			· ·
Molybdenum         ppm         ASTM D5185m         4         2         <1           Manganese         ppm         ASTM D5185m         1         2         <1							
Manganese         ppm         ASTM D5185m         1         2         <1           Magnesium         ppm         ASTM D5185m         39         20         15           Calcium         ppm         ASTM D5185m         3066         3061         3103           Phosphorus         ppm         ASTM D5185m         1061         1046         1025           Zinc         ppm         ASTM D5185m         1313         1213         1229           Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         >20         2         5         2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE							-
Magnesium         ppm         ASTM D5185m         39         20         15           Calcium         ppm         ASTM D5185m         3066         3061         3103           Phosphorus         ppm         ASTM D5185m         1061         1046         1025           Zinc         ppm         ASTM D5185m         1313         1213         1229           Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         >20         2         5         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Vellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Vellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE	-				-		
Calcium         ppm         ASTM D5185m         3066         3061         3103           Phosphorus         ppm         ASTM D5185m         1061         1046         1025           Zinc         ppm         ASTM D5185m         1313         1213         1229           Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         >20         2         5         2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           VISUAL         NONE         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE	-						
Phosphorus         ppm         ASTM D5185m         1061         1046         1025           Zinc         ppm         ASTM D5185m         1313         1213         1229           Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         20         2         5         2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE	-						
Zinc         ppm         ASTM D5185m         1313         1213         1229           Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         20         2         5         2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           VISUAL         method         limit/base         current         history1         history2           VISUAL         NONE         NONE <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Sulfur         ppm         ASTM D5185m         10440         10478         6349           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         20         2         5         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Silt         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE         NONE         NONE	·						
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         >20         2         5         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Silt         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NORML         NORML         NORML         NORML         NORM	-						
Silicon         ppm         ASTM D5185m         >400         63         46         7           Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         20         2         5         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE         NONE           Silt         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NONE         NONE         NONE         NONE           Appearance         scalar         *Visual         NORML         NORML         NORML         NORML         NORML         NORML           Codor			ASTM D5185m		10440	10478	
Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         >20         2         5         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Silt         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NORML         NOE         NEG         NEG <td>CONTAMINANTS</td> <td>;</td> <td>method</td> <td>limit/base</td> <td>current</td> <td>history1</td> <td>history2</td>	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 5 2  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE  Yellow Metal scalar *Visual NONE NONE NONE NONE NONE  Precipitate scalar *Visual NONE NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE NONE  Sand/Dirt scalar *Visual NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Odor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Silicon	ppm	ASTM D5185m	>400			
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sodium	ppm	ASTM D5185m		2	0	0
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	2	5	2
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	White Metal						
Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG							
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG

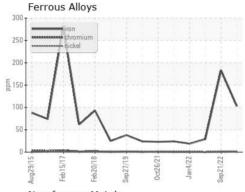


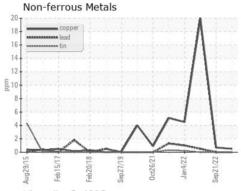
# **OIL ANALYSIS REPORT**

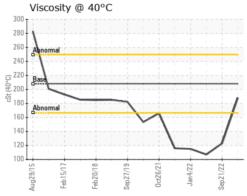


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	208	188	123	107
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image

## **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number Test Package : CONST

: WC0821801 : 05899439 Unique Number : 10560795

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 14 Jul 2023 : 18 Jul 2023 Diagnostician : Don Baldridge

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST

WICHITA, KS US 67213 Contact: DOUG KING doug.king@sherwood.net

T: (316)617-3161

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: x: