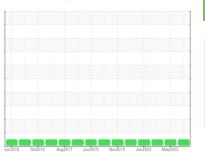


# **OIL ANALYSIS REPORT**



Sample Rating Trend



NORMAL

Machine Id TEREX ADVANCE MIXER FD6000 GL874613 Component **Diesel Engine** Fluid

MOBIL DELVAC 1300 SUPER15W40 (10 GAL)

SAMPLE INFORMATION         method         init/base         current         history1         history2           Sample Number         Client Info         04 Aug 2023         31 May 2023         18 Oct 2022           Machine Age         hrs         Client Info         0118         9708         9919           Oil Age         hrs         Client Info         10118         9708         9919           Oil Age         hrs         Client Info         1010         305         9919           Oil Changed         Client Info         Changed         Changed         Changed         Changed           Sample Status         method         imit/base         current         history1         history2           Fuel         WC Method         >3.0         <1.0         <1.0         <1.0         <1.0           Glycol         WC Method         >3.0         <1.0         <1.0         <1.0         <1.0           Tron         ppm         ASTM 05185         >90         21         24         21           Chromium         ppm         ASTM 05185         >2         0         <1         <1           Titanium         ppm         ASTM 05185         >2         0         <1 <td< th=""><th>UPER15W40 (10</th><th>0 GAL)</th><th>Jun2016 0</th><th>lct2016 Aug2017 Jun</th><th>2019 Nov2019 Jun2022</th><th>May2023</th><th></th></td<>	UPER15W40 (10	0 GAL)	Jun2016 0	lct2016 Aug2017 Jun	2019 Nov2019 Jun2022	May2023	
Sample Date         Client Info         04 Aug 2023         31 May 2023         18 Oct 2022           Machine Age         hrs         Client Info         10118         9708         9919           Oll Age         hrs         Client Info         410         305         9919           Oll Age         hrs         Client Info         410         305         9919           Oll Changed         Client Info         Changed         Changed <thchanged< th=""></thchanged<>	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         10118         9708         9919           Dil Age         hrs         Client Info         410         305         9919           Dil Age         hrs         Client Info         Changed	Sample Number		Client Info		RW0004371	RW0004378	RW0004027
Dil Age     hrs     Client Info     410     305     9919       Dil Changed     Client Info     Changed     Changed     Changed     Changed       Sample Status     Imit base     NORMAL     NORMAL     NORMAL     NORMAL     NORMAL       CONTAMINATION     method     Imit base     current     history1     history2       Fuel     WC Method     >3.0     <1.0	Sample Date		Client Info		04 Aug 2023	31 May 2023	18 Oct 2022
Dil Changed     Client Info     Changed     NORMAL     NORMAL     NORMAL       Sample Status     Imit base     current     NIStory2       Supel     WC Method     >3.0     <1.0	Machine Age	hrs	Client Info		10118	9708	9919
Sample Status         Image: Status         NORMAL         NORMAL         NORMAL         NORMAL           CONTAMINATION         method         imit/base         current         history1         history2           Fuel         WC Method         >3.0         <1.0	Dil Age	hrs	Client Info		410	305	9919
CONTAMINATION         method         limit/base         current         history1         history2           Fuel         WC Method         >3.0         <1.0	Oil Changed		Client Info		Changed	Changed	Changed
Fuel         WC Method         >3.0         <1.0         <1.0         <1.0           Silycol         WC Method         NEG         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           ron         ppm         ASTM D5185m         >4         <1         <1         <1           Chromium         ppm         ASTM D5185m         >4         <1         <1         0           Silver         ppm         ASTM D5185m         >2         0         <1         <1         0           Silver         ppm         ASTM D5185m         >2         1         <1         0         0           Auminum         ppm         ASTM D5185m         >2         2         2         1         <1           Lead         ppm         ASTM D5185m         >55         2         2         2         <1           Vanadum         ppm         ASTM D5185m         >4         1         0         0           Cadmium         ppm         ASTM D5185m         0         58         73         75           Barium         ppm         ASTM D5185m         0	Sample Status				NORMAL	NORMAL	NORMAL
Baycol         WC Method         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           ron         ppm         ASTM D5185m         >90         21         24         21           Chromium         ppm         ASTM D5185m         >4         <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS         method         limit/base         current         history1         history2           ron         ppm         ASTM D5185m         >90         21         24         21           Dromium         ppm         ASTM D5185m         >4         <1	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
ron         ppm         ASTM D5185m         >90         21         24         21           Chromium         ppm         ASTM D5185m         >4         <1	Glycol		WC Method		NEG	NEG	NEG
Dromium         ppm         ASTM D5185m         >4         <1         <1         <1           Nickel         ppm         ASTM D5185m         >4         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >4         <1         <1         0           Fitanium         ppm         ASTM D5185m         >2         0         <1	ron	ppm	ASTM D5185m	>90	21	24	21
Titanium         ppm         ASTM D5185m         >2         0         <1         <1           Silver         ppm         ASTM D5185m         >2         <1	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Silver         ppm         ASTM D5185m         >2         <1         <1         0           Aluminum         ppm         ASTM D5185m         >15         1         2         1           _ead         ppm         ASTM D5185m         >50         2         3         1           Copper         ppm         ASTM D5185m         >55         2         2         <1	Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Auminum         ppm         ASTM D5185m         >15         1         2         1           Lead         ppm         ASTM D5185m         >50         2         3         1           Copper         ppm         ASTM D5185m         >55         2         2         <1	Titanium	ppm	ASTM D5185m	>2	0	<1	<1
ead         ppm         ASTM D5185m         >50         2         3         1           Copper         ppm         ASTM D5185m         >55         2         2         <1	Silver	ppm	ASTM D5185m	>2	<1	<1	0
Copper         ppm         ASTM D5185m         >55         2         2         <1           Vanadium         ppm         ASTM D5185m         >4         <1	Aluminum	ppm	ASTM D5185m	>15	1	2	1
Tin         ppm         ASTM D5185m         >4         <1         <1         <1           Vanadium         ppm         ASTM D5185m         <1	_ead	ppm	ASTM D5185m	>50	2	3	1
Tin         ppm         ASTM D5185m         >4         <1         <1         <1           Vanadium         ppm         ASTM D5185m         <1	Copper	ppm	ASTM D5185m	>55	2	2	<1
Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         <1		ppm	ASTM D5185m	>4	<1	<1	<1
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         58         73         75           Barium         ppm         ASTM D5185m         0         4         0         0           Molybdenum         ppm         ASTM D5185m         0         53         32         31           Manganese         ppm         ASTM D5185m         0         606         678         732           Calcium         ppm         ASTM D5185m         0         606         678         732           Calcium         ppm         ASTM D5185m         1932         1366         1402           Phosphorus         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6         5	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron         ppm         ASTM D5185m         0         58         73         75           Barium         ppm         ASTM D5185m         0         4         0         0           Molybdenum         ppm         ASTM D5185m         0         53         32         31           Manganese         ppm         ASTM D5185m         0         53         32         31           Manganese         ppm         ASTM D5185m         0         606         678         732           Calcium         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         918         753         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Soldium         ppm         ASTM D5185m         >20         1         4         1<	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium         ppm         ASTM D5185m         0         4         0         0           Molybdenum         ppm         ASTM D5185m         0         53         32         31           Manganese         ppm         ASTM D5185m         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         53         32         31           Manganese         ppm         ASTM D5185m          <1	Boron	ppm	ASTM D5185m	0	58	73	75
Manganese         ppm         ASTM D5185m         <1         <1         <1         <1           Magnesium         ppm         ASTM D5185m         0         606         678         732           Calcium         ppm         ASTM D5185m         1932         1366         1402           Phosphorus         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           S	Barium	ppm	ASTM D5185m	0	4	0	0
Magnesium         ppm         ASTM D5185m         0         606         678         732           Calcium         ppm         ASTM D5185m         1932         1366         1402           Phosphorus         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6         6           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sul	Volybdenum	ppm	ASTM D5185m	0	53	32	31
Calcium         ppm         ASTM D5185m         1932         1366         1402           Phosphorus         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6         5           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/.mm< *ASTM D7624	Vanganese	ppm	ASTM D5185m		<1	<1	<1
Phosphorus         ppm         ASTM D5185m         918         753         761           Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6         6           Sodium         ppm         ASTM D5185m         >15         5         6         6           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Soulfation         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Vagnesium	ppm	ASTM D5185m	0	606	678	732
Zinc         ppm         ASTM D5185m         1074         879         898           Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         6         6           Sodium         ppm         ASTM D5185m         >15         5         6         5           Potassium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4 <td>Calcium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>1932</th> <td>1366</td> <td>1402</td>	Calcium	ppm	ASTM D5185m		1932	1366	1402
Sulfur         ppm         ASTM D5185m         3033         3176         3253           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         5         6           Sodium         ppm         ASTM D5185m         >15         5         5         6           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7615         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Phosphorus	ppm	ASTM D5185m		918	753	761
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         5         5         6           Sodium         ppm         ASTM D5185m         >15         5         5         6           Sodium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Zinc	ppm	ASTM D5185m		1074	879	898
Silicon         ppm         ASTM D5185m         >15         5         6           Sodium         ppm         ASTM D5185m         3         2         5           Potassium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Sulfur	ppm	ASTM D5185m		3033	3176	3253
Sodium         ppm         ASTM D5185m         3         2         5           Potassium         ppm         ASTM D5185m<>20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844<>6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624<>20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415<>30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414<>25         20.4         13.4         11.7	CONTAMINANTS	\$	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         1         4         1           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Silicon	ppm	ASTM D5185m	>15	5	5	6
INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Sodium	ppm	ASTM D5185m		3	2	5
Soot %         %         *ASTM D7844         >6         1.4         1.5         1.2           Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Potassium	ppm	ASTM D5185m	>20	1	4	1
Nitration         Abs/cm         *ASTM D7624         >20         8.1         9.3         7.8           Sulfation         Abs/.1mm         *ASTM D7615         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Soot %	%	*ASTM D7844	>6	1.4	1.5	1.2
Sulfation         Abs/.1mm         *ASTM D7415         >30         24.0         21.9         19.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7	Vitration	Abs/cm	*ASTM D7624	>20	8.1	9.3	7.8
Dxidation         Abs/.1mm         *ASTM D7414         >25         20.4         13.4         11.7							
	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Base Number (BN)         mg KOH/g         ASTM D2896         9.4         11.05         7.37         9.63	Dxidation	Abs/.1mm	*ASTM D7414	>25	20.4	13.4	11.7
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	11.05	7.37	9.63

## DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Machine

### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

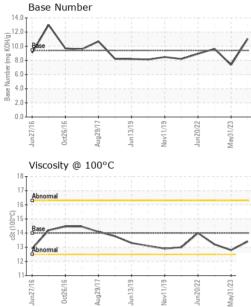
### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



# **OIL ANALYSIS REPORT**

VISUAL



		No. mber Number ckage report, c	: RW0004 : 0599748 : 1072584 : MOB 2 contact Cus	1371 30 10 stomer Ser	Receive Diagnos Diagnos				13 HOMER CONCR 205 S CEDAI IMLAY CITY US 44 Contact: DENNIS ONDRA homerconcrete@aol T: (810)724-3					
			12	Uct26/16	Jun13/19	Jun20/22	May31/23	5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0ct26/16	Aug29/17	Jun13/19	Nov11/19	Jun20/22	May31/23
			16 - Abnormal				Rase Number (ma KOH/a)	B10.0 - B	ase	~			_	$\checkmark$
			<sup>18</sup>	ty @ 100°	°C	1	1	15.0-	ase Num	ber				
			Jun27/16	Uct26/16 Aug29/17	Jun13/19	Nov11/19 Jun20/22	May31/23	Jun27/16	0ct26/16	Aug29/17	Jun13/19	Nov11/19	Jun20/22	May31/23
			40 20 0					10				-	_	
		aud						5 20	bnormal					
			120 100 Severe					40 T	evere	1		1		
			,	r (ppm)	Jun	VoV Juni	May		ेष्ट ilicon (pp		Jun	Nov	Jun	May
			Jun27/16	uctzb/16	Jun13/19 +	Jun20/22	May31/23	Jun27/16	0ct26/16	Aug29/17	Jun13/19		Jun20/22	May31/23
			Abnormal						bnormal					
			30 - Severe						evere					
			,	um (ppm		- 7	2		hromium					2
			Jun27/16	Uctzb/16 +	Jun13/19 -	Jun20/22	May31/23 +	Jun27/16	0ct26/16 -	Aug29/17	Jun13/19	Nov11/19	Jun20/22	May31/23
		_	50			$\searrow$		20-						
Jun 13/19 Nov1 1/19	Jun20/22	May31/23 ppm	150 - Abnormal						bnormal					
	2		Iron (p	pm)				100	ead (ppm <sup>evere</sup>	)				
	$\wedge$	$\overline{}$	GRAP	HS										
			FLUID Visc @ 1	PROPEF	RTIES cSt	method ASTM D44			current 13.4		histor 12.8	ry1	hi: 13.2	story2 2
			Free Wa		scalar				NEG		NEG		NEC	
u No	ηſ	Ma	Odor Emulsifie	ed Water	scalar scalar		NORML >0.2		NORML NEG		NORM NEG	L	NOI NEC	RML G
Jun13/19 -	Jun20/22 -	May31/23 -	Appeara		scalar	*Visual	NORML		NORML		NORM	L	NO	RML
		Debris Sand/Dir	t	scalar scalar		NONE NONE		NONE NONE		NONE NONE		NOI NOI		
			Precipita Silt	te	scalar scalar		NONE NONE		NONE NONE		NONE NONE		NOI NOI	
			Yellow M		scalar		NONE		NONE		NONE			NE

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Contact/Location: DENNIS ONDRAJKA - HOMIML