

Machine Id WACKER G25 WACKER G25 Component Genset Fluid

TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (10 QTS)

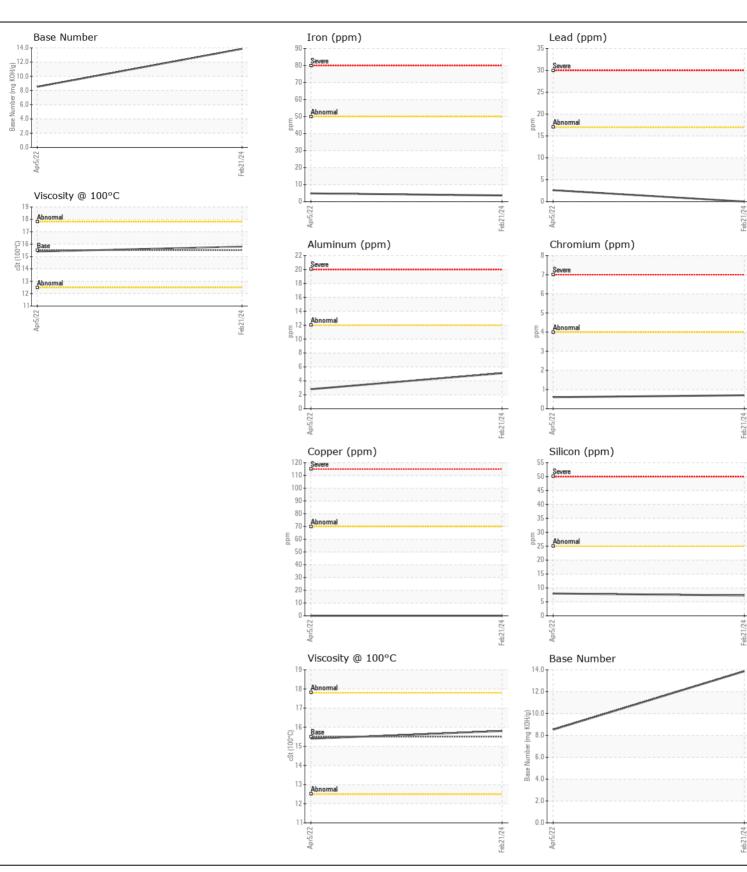
Recommendation Test Sample Number UOM Method turks Research Research History 2 Resample at the next service interval to monitor. Sample Number Citent Into 1	TRC PRO-SPEC III STNTHETIC BLEND 13W40	(10 (13)						
Basemple at the next service interval to monitor. Sample Number of the interval to monitor. Sample Number of the interval to monitor. Interval to mo	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age Dial fund bate Direct ale Probate Direct ale Direc		Sample Number		Client Info		TR06101162	TR05562017	
Oil Age ins Client Info O 0 0		Sample Date		Client Info		21 Feb 2024	05 Apr 2022	
File Age hrs Client Info O O O O O O OI Changd Client Info Client Info Changed Chan		Machine Age	hrs	Client Info		0	682	
OI Changed Fitter Changed Client Info Changed Changed Changed Changed <th>Oil Age</th> <td>hrs</td> <td>Client Info</td> <td></td> <th>0</th> <td>0</td> <td></td>		Oil Age	hrs	Client Info		0	0	
Filter Changed Sample Status Client Info Changed NORMA Changed NORMA		Filter Age	hrs	Client Info		0	0	
Sample StatusNormalNormalNormalNormalNormalWEARIronpmAND 10%>504551010NickepmAND 10%>400010		Oil Changed		Client Info		Changed	Changed	
WEAR Iron ppm ASTM D3188n >50 4 5 All component wear rates are normal. Promunum ppm ASTM D3188n >4 <1		Filter Changed		Client Info		Changed	Changed	
All component wear rates are normal. Ohromium ppm ASTM 0518m >4 c1 s1 s		Sample Status				NORMAL	NORMAL	
All component wear rates are normal. Nickel ppm 4311 0515m >2 0 0	WEAR	Iron	ppm	ASTM D5185m	>50	4	5	
Native ppm As Nu bolisity 2 0 0		Chromium	ppm	ASTM D5185m	>4	<1	<1	
Silver pp ASTU D318m >5 0 0	All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	0	0	
Aluminum ppm ASTM D5185m >12 5 3 Lead ppm ASTM D5185m >77 0 3 Copper ppm ASTM D5185m >75 0 0 0 Tin ppm ASTM D5185m >15 0 1 Vanadium ppm ASTM D5185m >15 0 0 0 White Metal scalar Visual NONE NONE NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >25 7 8 There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >20 1.0 Water WC Method >0.1 0.1 Silicon %0 %STM D764 >0.1 0.1 Silicon %0 %STM D764 >0.1 0.1		Titanium	ppm	ASTM D5185m		0	0	
Lead pp ASTM D5185m >17 0 3 Copper ppm ASTM D5185m >15 0 0 Tin ppm ASTM D5185m 15 0 0 0 Vanadium ppm ASTM D5185m 15 0 0 0 White Metal scalar Visual NONE NONE NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >20 0 <1		Silver	ppm	ASTM D5185m	>5	0	0	
Copper ppm ASTM D5185m >70 0 0 Tin ppm ASTM D5185m >15 0 1 Vanadium ppm ASTM D5185m >15 0 0 White Metal scalar 'Visual NONE NONE NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >20 0 <1		Aluminum	ppm	ASTM D5185m	>12	5	3	
Tin ppm ASTM DS18m >15 0 1 Vanadium ppm ASTM DS18m I 0		Lead	ppm	ASTM D5185m	>17	0	3	
Vanadium ppm ASTM D5185m 0 0		Copper	ppm	ASTM D5185m	>70	0	0	
White Metal Yellow Metal scalar 'Visual NONE		Tin	ppm	ASTM D5185m	>15	0	1	
Yellow Metal scalar Visual NONE NONE		Vanadium	ppm	ASTM D5185m		0	0	
Silicon ppm ASTM D5185m >25 7 8 Potassium ppm ASTM D5185m >20 0 <1		White Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium pp ASTM D5185m >20 0 <1 I= Fuel WC Method >4.0 <1.0		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium pp ASTM D5/85m >20 0 <1 I= Fuel WC Method >4.0 <1.0	CONTAMINATION	Silicon	mag	ASTM D5185m	>25	7	8	
Fuel WC Method >4.0 <1.0		Potassium				0		
Water WC Method >0.1 NEG NEG Glycol WC Method NEG NEG Sod % % ASTM D784 0.1 0.1 0.1 Nitration Abs/m "ASTM D784 >20 10.8 7.8 Nitration Abs/m "ASTM D784 >20 10.8 7.8 Sulfation Abs/m "ASTM D784 >20 10.8 7.8 Sulfation Abs/m "ASTM D784 >30 22.0 20.4 Sulfation Abs/m "ASTM D784 NONE NONE NONE NONE Sulfation scalar "Visual NOR NOR NOR Appearance scalar "Visual NOR NORM NORM Boron ppm ASTM D5185m N 181 17.3 Marganese ppm ASTM D5185m S <td rowspan="12">There is no indication of any contamination in the oil.</td> <th>Fuel</th> <td></td> <td>WC Method</td> <td>>4.0</td> <th><1.0</th> <td><1.0</td> <td></td>	There is no indication of any contamination in the oil.	Fuel		WC Method	>4.0	<1.0	<1.0	
Glycol WC Method NEG NEG <t< td=""><th>Water</th><td></td><td>WC Method</td><td>>0.1</td><th>NEG</th><td>NEG</td><td></td></t<>		Water		WC Method	>0.1	NEG	NEG	
Nitration Abs/cm *ASTM D7624 >20 10.8 7.8 Sulfation Abs/tm 'ASTM D7415 >30 22.0 20.4 Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORM NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odo scalar *Visual NORML		Glycol		WC Method		NEG	NEG	
SulfationAbs/ImYASTM D7415>3022.020.4Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMNORMLNORMLEmulsified Waterscalar*VisualNORNORMLNORMLBoronppmASTM D5185m00BariumppmASTM D5185m1000MolybdenumppmASTM D5185m1000MaganeseppmASTM D5185m117471MagnesiumppmASTM D5185m1161138MagnesiumppmASTM D5185m1665922.9322.93OcaliumppmASTM D5185m1685911030MagnesiumppmASTM D5185m103655922.93OpentorASTM D5185m103655922.93MagnesiumppmASTM D5185m103655922.93MagnesiumppmASTM D5185m103655922.93MagnesiumppmASTM D5185m10 <th>Soot %</th> <td>%</td> <td>*ASTM D7844</td> <td></td> <th>0.1</th> <td>0.1</td> <td></td>		Soot %	%	*ASTM D7844		0.1	0.1	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORNORMLNORMLEmulsified Waterscalar*VisualNORNORMLNORMLBoronppASTM D5185m00BariumppASTM D5185m100ManganeseppASTM D5185m100ManganesumppASTM D5185m101103ManganesumppASTM D5185m101103ManganesumppASTM D5185m1011031ManganesumppASTM D5185m101327CalciumppASTM D5185m101327ZincpmASTM D5185m10362613327SuffurpmASTM D5185m1036263655Cixciationkbs/tm'ASTM D714i-2519.817.7Norda		Nitration	Abs/cm	*ASTM D7624	>20	10.8	7.8	
Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML NORML Odor scalar *Visual NORM NORML NORML Ddor scalar *Visual NORM NORML NORML Emulsified Water scalar *Visual NORM NORML NORML FLUID CONDITION Sodium ppm ASTM D5185m 0 44 Boron ppm ASTM D5185m 0 44 Molybdenum ppm ASTM D5185m 0 0 Maganesium ppm ASTM D5185m <		Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	20.4	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m04BoronppmASTM D5185m00BariumppmASTM D5185m00MolybdenumppmASTM D5185m00MaganeseppmASTM D5185m174MaganeseppmASTM D5185m1163MagnesiumppmASTM D5185m36592293MagnesiumppmASTM D5185m36592293MagnesiumppmASTM D5185m36592293MagnesiumppmASTM D5185m36592293SulfurppmASTM D5185m36592293SulfurppmASTM D5185m36592293SulfurppmASTM D5185m36592293SulfurppmASTM D5185m36593655SulfurppmASTM D5185m36593655SulfurppmASTM D5		Silt	scalar	*Visual	NONE	NONE	NONE	
Appearance Odorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visuals0.11NORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m04BoronppmASTM D5185m0181173BariumppmASTM D5185m00MolybdenumppmASTM D5185m00MaganeseeppmASTM D5185m01138MagnesiumppmASTM D5185m04161388CalciumppmASTM D5185m0416138MagnesiumppmASTM D5185m082691103PhosphorusppmASTM D5185m082601103SulfurppmASTM D5185m036592293SulfurppmASTM D5185m036592293SulfurppmASTM D5185m036593657SulfurppmASTM D5185m035263655OxidationAbs/:1mm'ASTM D5144>2519.817.7		Debris	scalar	*Visual	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service.SodiumppmASTM D5185mI181173IBariumppmASTM D5185mI181173IIMalganeseeppmASTM D5185mI17477IMagnesiumppmASTM D5185mI416138ICalciumppmASTM D5185mI416138IPhosphorusppmASTM D5185mI8261103IZincppmASTM D5185mI8261103ISulfurppmASTM D5185mI10831327IOxidationAbs/:1mm'ASTM D7414>2519.817.7I		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.1 NEG NEG FLUID CONDITION Sodium ppm ASTM D5185m 0 4 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 174 7 Manganesum ppm ASTM D5185m 416 138 Manganesum ppm ASTM D5185m 416 138 Calcium ppm ASTM D5185m 416 138 Phosphorus ppm ASTM D5185m 416 138 Zinc ppm ASTM D5185m 826 1103 Sulfur ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 19.8		Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium ppm ASTM D5185m 0 4 Boron ppm ASTM D5185m 181 173 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 174 7 Manganese ppm ASTM D5185m 416 138 Calcium ppm ASTM D5185m 416 138 Calcium ppm ASTM D5185m 3659 2293 Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 3656 3655 Oxidation Abs/:nm 'ASTM D7141<>25 19.8 17.7 -		Odor	scalar	*Visual	NORML	NORML	NORML	
Boron ppm ASTM D5185m 181 173 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 174 7 1 Manganese ppm ASTM D5185m 1 416 138 1 Magnesium ppm ASTM D5185m 1 416 138 1 Calcium ppm ASTM D5185m 1 416 138 1 Phosphorus ppm ASTM D5185m 1 416 138 1 Zinc ppm ASTM D5185m 1 416 138 1 Sulfur ppm ASTM D5185m 1 416 1383 1 Sulfur ppm ASTM D5185m 1 4163 1327 Sulfur ppm ASTM D5185m 1 3655 3655 1 Sulfur ppm ASTM D5185m 1 36526 36555 </td <th>Emulsified Water</th> <td>scalar</td> <td>*Visual</td> <td>>0.1</td> <th>NEG</th> <td>NEG</td> <td></td>		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Boron ppm ASTM D5185m 181 173 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 174 7 1 Manganese ppm ASTM D5185m 1 416 138 1 Magnesium ppm ASTM D5185m 1 416 138 1 Calcium ppm ASTM D5185m 1 416 138 1 Phosphorus ppm ASTM D5185m 1 416 138 1 Zinc ppm ASTM D5185m 1 416 138 1 Sulfur ppm ASTM D5185m 1 416 1383 1 Sulfur ppm ASTM D5185m 1 4163 1327 Sulfur ppm ASTM D5185m 1 3655 3655 1 Sulfur ppm ASTM D5185m 1 36526 36555 </td <td>FLUID CONDITION</td> <th>Sodium</th> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>0</th> <td>4</td> <td></td>	FLUID CONDITION	Sodium	ppm	ASTM D5185m		0	4	
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 174 7 1 Manganese ppm ASTM D5185m 1 1 1 1 1 Manganese ppm ASTM D5185m 1 416 138 1 1 Calcium ppm ASTM D5185m 1 416 138 1 1 Phosphorus ppm ASTM D5185m 1 416 138 1								
Molybdenum ppm ASTM D5185m 174 7 Manganese ppm ASTM D5185m	, ,							
Manganese ppm ASTM D5185m <1 <1 Magnesium ppm ASTM D5185m 416 138 Calcium ppm ASTM D5185m 3659 2293 Phosphorus ppm ASTM D5185m 6 826 1103 Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 1083 3655 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 17.7								
Magnesium ppm ASTM D5185m 416 138 Calcium ppm ASTM D5185m 3659 2293 Phosphorus ppm ASTM D5185m 0 826 1103 Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 0 36526 36555 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 17.7		,						
Calcium ppm ASTM D5185m 3659 2293 Phosphorus ppm ASTM D5185m 6 826 1103 Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 6 36526 36555 Oxidation Abs/.1mm *ASTM D7141 >25 19.8 17.7		-						
Phosphorus ppm ASTM D5185m 826 1103 Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 0 3526 3655 Oxidation Abs/.1mm *ASTM D7141 >25 19.8 17.7		U U						
Zinc ppm ASTM D5185m 1083 1327 Sulfur ppm ASTM D5185m 0 3526 3655 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 17.7								
Sulfur ppm ASTM D5185m 3526 3655 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 17.7								
Oxidation Abs/.1mm *ASTM D7414 >25 19.8 17.7								
					>25			
					-			

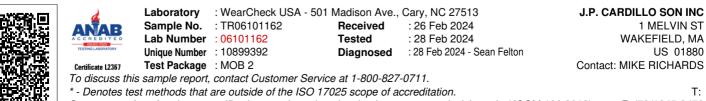
Visc @ 100°C cSt

ASTM D445 15.5

15.4

15.8





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (781)245-3478

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Contact/Location: MIKE RICHARDS - JPCWAK

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