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Our reference	PIT/2013/125
Date	April 16, 2013

**Turbine Oil Approval according to Siemens TLV 901304  
“SINOPEC Greatwall Weiyue L-TSA 32 (Grade A)” and “SINOPEC Greatwall Weiyue L-TSA 46 (Grade A)”**

Dear Mr. Schulte,

We carried out approval testing on the products “SINOPEC Greatwall Weiyue L-TSA 32 (Grade A)” and “SINOPEC Greatwall Weiyue L-TSA 46 (Grade A)” according to Siemens turbine oil specifications TLV 901304. The results are in accordance with this specification. They are listed in the enclosed test certificates.

Herewith we give the formal approval for “SINOPEC Greatwall Weiyue L-TSA 32 (Grade A)” and “SINOPEC Greatwall Weiyue L-TSA 46 (Grade A)” for use in Siemens turbosets without gearbox. The products will be published in the corresponding list of approved turbine oils.

Sincerely yours,

Enclosure  
2 Test Certificates



Dr. Ludger Quick

**SIEMENS****Test Certificate**  
Lube Oil Analysis**No. S3774**

19889

Code word:	<b>Approval TLV 901304</b>	Customer:	<b>H. Dr. Schulte</b>
Turbine type:		Department:	<b>Fa. Afton</b>
Serial No:		Telephone:	<b>+49 174 186 9405</b>
Oil type:	<b>L-TSA 32 *</b>	SAP account no:	<b>70010771</b>
Manufacturer/Supplier:	<b>Sinopec</b>	Date of receipt:	<b>2013-02-19</b>
Sampling date:		Sampling:	<b>R13 001568 T</b>

**Test Results:**

Air release at 50°C	DIN ISO 9120	<b>3 min</b>
Neutralization Number	DIN 51558-1	<b>0.17 mg KOH/g</b>
Water content	DIN 51777-1	<b>&lt; 0.01 %</b>
Foaming tendency at 25°C	ISO 6247	<b>20 ml</b>
Foam stability at 25°C	ISO 6247	<b>15 s</b>
Rest after 600 s at 25°C	ISO 6247	<b>0 ml</b>
Water separability	DIN 51589-1	<b>135 s</b>
Viscosity at 40°C	DIN 51562-1	<b>33.6 mm<sup>2</sup>/s</b>
Density at 15°C	DIN 51757	<b>0.868 g/ml</b>
Colour (ASTM scale)	DIN ISO 2049	<b>&lt; 0.5</b>
Flash point (Cleveland open cup)	DIN EN ISO 2592	<b>224 °C</b>
Pour point	DIN ISO 3016	<b>&lt; -12 °C</b>
Cleanliness code	ISO 4406	<b>15/14/12</b>
Corrosiveness to copper	DIN EN ISO 2160	<b>passed</b>

**Comments:**

\* full product name:  
SINOPEC Greatwall Weiyue L-TSA 32 (Grade A)

Elaborator: **Henrichs**Testing date: **2013-03-01**Counter-signature: **sgd. Quick**

**SIEMENS****Test Certificate****No. S3775**

Lube Oil Analysis

19889

Code word:	<b>Approval TLV 901304</b>	Customer:	<b>H. Dr. Schulte</b>
Turbine type:		Department:	<b>Fa. Afton</b>
Serial No:		Telephone:	<b>+49 174 186 9405</b>
Oil type:	<b>L-TSA 46 *</b>	SAP account no:	<b>70010771</b>
Manufacturer/Supplier:	<b>Sinopec</b>	Date of receipt:	<b>2013-02-19</b>
Sampling date:		Sampling:	<b>R13 001569 T</b>

**Test Results:**

Air release at 50°C	DIN ISO 9120	<b>2 min</b>
Neutralization Number	DIN 51558-1	<b>0.14 mg KOH/g</b>
Water content	DIN 51777-1	<b>&lt; 0.01 %</b>
Foaming tendency at 25°C	ISO 6247	<b>20 ml</b>
Foam stability at 25°C	ISO 6247	<b>10 s</b>
Rest after 600 s at 25°C	ISO 6247	<b>0 ml</b>
Water separability	DIN 51589-1	<b>120 s</b>
Viscosity at 40°C	DIN 51562-1	<b>45.7 mm<sup>2</sup>/s</b>
Density at 15°C	DIN 51757	<b>0.860 g/ml</b>
Colour (ASTM scale)	DIN ISO 2049	<b>&lt; 0.5</b>
Flash point (Cleveland open cup)	DIN EN ISO 2592	<b>234 °C</b>
Pour point	DIN ISO 3016	<b>&lt; -12 °C</b>
Cleanliness code	ISO 4406	<b>16/14/12</b>
Corrosiveness to copper	DIN EN ISO 2160	<b>passed</b>

**Comments:**

\* full product name:  
SINOPEC Greatwall Weiyue L-TSA 46 (Grade A)

Elaborator: **Henrichs**Testing date: **2013-03-01**Counter-signature: **sgd. Quick**