1. **GRANTEE**: Schlumberger Technology Corporation
   (Former Grantee: Kihei Industries)
   Houston, TX

2. **PURPOSE AND LIMITATIONS:**
   a. This special permit authorizes the manufacture, marking, sale, and use of non-DOT specification packaging described as a hermetically sealed electron tube device for the transportation in commerce of the materials listed in paragraph 6 below. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

   b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.


4. **REGULATIONS FROM WHICH EXEMPTED**: 49 CFR §§ 173.302a, 173.306(b)(4), and 175.3 in that the electron tube is not an authorized packaging, except as specified herein.
5. **BASIS:** This special permit is based on the application of Schlumberger Technology Corporation dated August 14, 2007, and additional information dated September 5, 2007, October 12, 2007 and October 23, 2007, submitted in accordance with § 107.105 and the public proceeding thereon.

6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proper Shipping Name</strong></td>
</tr>
<tr>
<td>Compressed gases, n.o.s. (May contain Helium, Argon, Neon, Nitrogen, Xenon, Krypton, Carbon Dioxide and not more than 5% Methane)</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING** - Prescribed packagings are non-DOT specification metal, single trip, inside containers, described as hermetically sealed electron tube radiation sensors. Each radiation sensor is designed and constructed in accordance with Kihei Industries’ Tube Specification dated May 23, 2003 on file with the Office of Special Permits and Approvals (OHMSPA). The radiation sensor is not equipped with a pressure relief device. Each radiation sensor must conform with the following design criteria:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>1/2 inch to 6 inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>4 to 320 cubic inches water capacity</td>
</tr>
<tr>
<td>Operating Pressure</td>
<td>25 to 588 psig for cylinders less than or equal to 1 inch in diameter and 25 to 310 psig for cylinders greater than 1 inch in diameter</td>
</tr>
<tr>
<td>Minimum Burst Pressure</td>
<td>Four times the design operating pressure</td>
</tr>
</tbody>
</table>
b. OPERATIONAL CONTROLS -

(1) The radiation sensor must be shipped in a strong outside packaging capable of withstanding a minimum drop test of four feet without breakage of the radiation sensor or rupture of the outside packaging.

(2) Equipment containing radiation sensors covered by this special permit must be in strong outside packagings providing equivalent protection for the devices as specified in paragraph 7.b.(1) above.

3) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the radiation sensors are not fitted with pressure relief devices, and provide appropriate guidance for exposure to fire.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package or its contents and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.
e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. Except when offered for transportation by air:

   (1) Packages covered by this special permit are excepted from labeling requirements of Subpart E of Part 172.

   (2) Shipments are not subject to the placarding requirements of Subpart F of 49 CFR Part 172.

g. Packagings permanently marked “DOT-E 13244”, prior to October 1, 2007 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007 must be marked “DOT-SP 13244”.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

   o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.

   o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

   o Registration required by § 107.601 et seq., when applicable.
Each “Hazmat employee”, as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

[Signature]

for Theodore L. Willke
Associate Administrator for Hazardous Materials Safety

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm)

Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BMoore