

1200 New Jersey Avenue, SE Washington, DC 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 12303 (ELEVENTH REVISION)

EXPIRATION DATE: 2026-12-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: Halliburton Energy Services, Inc.

Houston, TX

2. <u>PURPOSE AND LIMITATION</u>:

- a. This special permit authorizes the transportation in commerce of certain Division 2.1, Division 2.2, and Class 3 hazardous materials in a non-DOT specification cylinder used for oil well sampling. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
- c. This special permit serves as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
- d. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 173.301(f) in that a cylinder charged with a compressed gas that is not equipped with a pressure relief device is not authorized, except as specified herein; and §§ 173.201, 173.302a, and 173.304a in that a non-DOT specification cylinder is not authorized, except as specified herein.

Tracking Number: 2024095404

5. <u>BASIS</u>: This special permit is based on the application of Halliburton Energy Services, Inc. dated September 27, 2024, submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated October 3, 2024.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Compressed gas, flammable, n.o.s.	2.1	UN1954	N/A
Hydrocarbon gas mixture, compressed, n.o.s.	2.1	UN1964	N/A
Hydrocarbon gas mixture, liquefied, n.o.s.	2.1	UN1965	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Petroleum crude oil	3	UN1267	I

7. <u>SAFETY CONTROL MEASURES</u>:

- a. <u>PACKAGING</u>: Packagings prescribed are non-DOT specification oil well sampling cylinders, threaded on both ends:
 - (1) Oil well sampling cylinders with a design pressure of 20,000 psig, and a maximum water capacity of 0.29 gallons (1,100 cubic centimeters). The cylinders must be transported in an ATA spec 300 category I box, with a maximum of three cylinders per box.
 - (2) Oil well sampling cylinders with a design pressure of 27,500 psig, and a maximum water capacity of 0.12 gallons (450 cubic centimeters). The cylinders must be transported in an ATA spec 300 category I box, with a maximum of three cylinders per box.
 - (3) Each cylinder must comply with the design calculations, drawings, material specifications, and engineering specifications submitted with Haliburton Energy Services, Inc.'s application for special permit on file with the Office of Hazardous Materials Safety (OHMS). In addition, each cylinder must conform with §§ 178.35 and 178.36, except as follows:

- § 178.35(e) *Safety devices*. No pressure relief device is required on the completed cylinder. The cylinder must be equipped with elastomeric seals that relieve pressure when subjected to a pool fire.
- § 178.35(f) *Marking*. Applies except that cylinders must be marked "DOT-SP 12303" in lieu of the DOT specification marking. The marking must be clearly visible and no less than 1/8 inch high.

§ 178.36(b) Steel.

- (1) Inconel Alloy 718 (UNS N07718) must meet the requirements of Halliburton specification 770.10907. Material must meet the requirements of the National Association of Corrosion Engineers (NACE) Specification MR-01-75 for suitability in hydrogen sulfide (H₂S) service.
- (2) Cobalt Alloy MP35N must meet the requirements of Halliburton specification D02211933. Material must meet the requirements of the National Association of Corrosion Engineers (NACE) Specification MR0175-95 for suitability in hydrogen sulfide (H₂S) service.

§ 178.36(f) Wall thickness.

- (1) Minimum wall thickness may not be less than 0.325 inch for the oil well sampling cylinder specified in paragraph 7.a.(1).
- (2) Minimum wall thickness may not be less than 0.246 inch for the oil well sampling cylinder specified in paragraph 7.a.(2).
- (3) In no instance may the wall stress at the minimum specified test pressure exceed 67% of the minimum tensile strength of the material as determined from the reported physical test results.
- § 178.36(g) *Heat treatment*. No heat treatment required for the completed cylinder. However, the heat treatment of the purchased stock material must conform to the Halliburton Technology Specification 770.10907 or Haliburton Technology Specification D02211933, as applicable, on file with OHMS.
- § 178.36(j) *Flattening test*. No flattening test is required.

§ 178.36(1) Acceptable results for physical tests.

(1) For Inconel bar stock:

Minimum Tensile strength	170,000 psi.	
Minimum Yield strength	125,000 psi	
Elongation	20% on 1-inch gage specimen or in 4D.	
Reduction in area	25% minimum	
Hardness	40 Rc Maximum (363HB)	

(2) For Cobalt bar stock

Minimum Tensile strength	198,000 psi.	
Minimum Yield strength	188,000 psi	
Elongation	10% on 2-inch gage specimen	
Reduction in area	40% minimum or in 4D.	
Hardness	51 Rc Maximum (480 HB)	

- (3) Yield strength must be determined by the "offset" method as prescribed in ASTM Standard E8. Cross-head speed of the testing machine may not exceed 1/8 inch per minute during yield strength determination.
- b. <u>TESTING</u>: Each cylinder must be reinspected and hydrostatically retested in accordance with § 180.205 as prescribed for DOT 3A specification cylinders. Reheat treatment or repair of rejected cylinders is not permitted.

c. <u>OPERATIONAL CONTROLS</u>:

(1) Each cylinder must be packed in the transportation box as specified in the application for special permit on file with the OHMS.

(2) Emergency response information provided with the shipment, and available via an emergency response telephone number, must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed to fire.

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.
- b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- c. The cylinders are authorized for oil well sampling service only.
- d. Transportation of Division 2.1 (flammable gases) hazardous materials are not authorized aboard cargo vessel or aircraft unless specifically authorized in the hazardous materials table (§ 172.101).
- e. Halliburton Energy Services, Inc. must act as the shipper and may act as the carrier for transportation by motor vehicle under the terms of this special permit.
- 9. <u>MODES OF TRANSPORTATION AUTHORIZED</u>: Motor vehicle, rail freight, cargo vessel, and cargo-only aircraft (see restrictions in paragraph 8.d. above.).
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each cargo vessel or 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. <u>COMPLIANCE</u>: 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 <u>et seq</u>:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR 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 this 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. <u>REPORTING REQUIREMENTS</u>: 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.:

Ward By

for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-13, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: L Majors