Construction Records

Introduction

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192.13 What general requirements apply to pipelines regulated under this subpart?

(a) No person may operate a segment of pipeline listed in the first column of paragraph(a)(3) of this section that is readied for service after the date in the second column unless:

(a)(3)

Pipeline	**Date**
(i) *Offshore* gathering pipeline	July 31, 1977.
(ii) Regulated onshore gathering pipeline to which this part did not apply until April 14, 2006	March 15, 2007.
(iii) Regulated onshore gathering pipeline to which this part did not apply until May 16, 2022	May 16, 2023.
(iv) All other pipelines	March 12, 1971.

192.13 What general requirements apply to pipelines regulated under this subpart? Cont.

(a)(1) The pipeline has been designed, installed, constructed; initially inspected, and initially tested in accordance with this part; or

(a)(2) The pipeline qualifies for use under this part according to the requirements in 192.14.

(a)(3)- See chart on previous slide.

192.13 What general requirements apply to pipelines regulated under this subpart? Cont.

(b) No person may operate a segment of pipeline listed in the first column of this paragraph (b) that is replaced, relocated, or otherwise changed after the date in the second column of this paragraph(b), unless the replacement, relocation, or change has been made according to the requirements in this part.

Pipeline	**Date**
(1) Offshore gathering pipeline	July 31, 1977.
(2) Regulated onshore gathering pipeline to which this part did not apply until April 14, 2006	March 15, 2007.
(3) Regulated onshore gathering pipeline to which this part did not apply until May 16, 2022	May 16, 2023.
(4) All other pipelines	November 12, 1970.

192.13 What general requirements apply to pipelines regulated under this subpart? Cont.

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Retroactive VS. Non-Retroactive

Retroactive Subparts

A - General

I – Corrosion

K – Uprating

L – Operations

M – Maintenance

O – Pipeline Integrity Management

P – Distribution Integrity Management

Retroactive VS. Non-Retroactive

Non-Retroactive Subparts

B – Materials
C – Pipe Design
D – Design of Pipeline Components
E – Welding of Steel in Pipelines
F – Joining of Materials other than by Welding
G – General Construction Requirements for Transmission Lines
H – Customer Meters, Services, Regulators, and Service Lines
J – Testing Requirements
N – Operator Qualifications

Subpart B - Materials

- (a) For *steel* transmission pipelines installed after [July 1, 2020, an *operator* must collect or make, and retain for the life of the *pipeline*, records that document the physical characteristics of the pipeline, including diameter, *yield strength*, ultimate *tensile strength*, wall *thickness*, seam type, and chemical composition of materials for pipe in accordance with §§192.53 and 192.55. Records must include tests, inspections, and attributes required by the manufacturing specifications applicable at the time the pipe was manufactured or installed.
- (b) For steel transmission pipelines installed on or before July 1, 2020], if operators have records that document tests, inspections, and attributes required by the manufacturing specifications applicable at the time the pipe was manufactured or installed, including diameter, yield strength, ultimate tensile strength, wall thickness, seam type, and chemical composition in accordance with §§192.53 and 192.55, operators must retain such records for the life of the pipeline.
- (c) For steel transmission pipeline segments installed on or before July 1, 2020], if an operator does not have records necessary to establish the *MAOP* of a pipeline segment, the operator may be subject to the requirements of §192.624 according to the terms of that section.

CC JAKE K
DAVE [redacted]
5-26-92

STUPP CORPORATION

MANUFACTURER OF CUSTOM STEEL LINE PIPE
FOR THE OIL AND GAS INDUSTRY

P.O. BOX 3558 • BATON ROUGE, LA. 70821-3558
TELEPHONE 504-775-5500

DATES ALIGN WITH PROJECT TIMELINE

PO NUMBER MATCHES MATERIAL LIST

PIPE SPECS MATCH

CERTIFICATE OF TESTS & CRIS [redacted]

DATE 4-13-92 ER 7126 Ordered Footage 138,050.0 Ft

Customer PO 06225783 Complete Shipped Footage Ft

Size/Wall/Grade 18 " x .258 " API5L X70 ERW

Test Pressure 2010 psi @ 20 sec. Seam Annealed Min 1650 F API 37 Edition

ELECTROMAGNETIC & ULTRASONIC - 1/8" DRILL HOLE - N-10 NOTCH P08000-92
P09004-92

CUSTOMER ENRON CORPORATION

CHEMICAL AND PHYSICAL TESTS Tranverse Specimen Size 1 1/2" x 2"

Heat No	58333	58333	58374	21718	43433			
Yield	82886	79006	86750	86664	86149			
Tensile	102145	97190	100339	103491	102150			
W. TENS.	109013	108067	105250	108436	108156			

Subpart C – Pipe Design

- (a) For *steel* transmission pipelines installed after July 1, 2020, an *operator* must collect or make, and retain for the life of the pipeline, records documenting that the *pipe* is designed to withstand anticipated external pressures and loads in accordance with §192.103 and documenting that the determination of design *pressure* for the pipe is made in accordance with §192.105.
- (b) For steel transmission pipelines installed on or before July 1, 2020, if operators have records documenting pipe design and the determination of design pressure in accordance with §§192.103 and 192.105, operators must retain such records for the life of the pipeline.
- (c) For steel transmission pipeline segments installed on or before July 1, 2020, if an operator does not have records necessary to establish the *MAOP* of a pipeline segment, the operator may be subject to the requirements of §192.624 according to the terms of that section.

WORK ORDER MATCHES

ENGINEERING DESIGN
PROJECT NUMBER: S28154
PROJECT NAME: ST. PETE/SARASOTA 18" CONNECTOR

FLORIDA GAS TRANSMISSION COMPANY
MATERIALS LIST

RUN DATE: 03/10/92
RUN TIME: 17:08:25
PAGE 1 OF 27

CTR FUR	MARK NUMBER	REQUEST QUANTITY AND UNIT	ITEM DESCRIPTION	UNIT NO. PRIME-SUB	PURCHASE ORDER OR TRANSFER	QUANTITY RECEIVED	QUANTITY NOT ACCOUNTED	QUANTITY TRANSFERRED	QUANTITY SURPLUS	QUANTITY INSTALLED
	P-0001	129630 FT	999 PIPE-AS DESCRIBED BELOW: ITEM NUMBER - 10-999-0001 NOTES: PIPE, LINE-18.000" O.D. X 0.258" W.T. (48.89 LB/FT), ERW, API5L, GR X 70, SWEET GAS SERVICE. Mfg. Stupp COATED WITH 16 MILS AVERAGE FUSION BONDED EPOXY (14 MILS MINIMUM). PIPE TO BE 60 FEET AVG LENGTHS, 45 FEET MINIMUM - 70 FEET MAXIMUM PIPE TO BE DESIGNED, MANUFACTURED, TESTED AND INSPECTED IN ACCORDANCE WITH ENRON E.S. 4905, REVISION 7, DATED 11/91, ATTACHED HERETO. FBE TO BE APPLIED PER ENRON E.S. 6624, REVISION 4, DATED 10/91.	344-18	D6225783 06225783	129,809.2 241	(238.12)	TC21020012 (4103)	~~4102.9~~	125,709.08
	P-0002	49409 FT	999 PIPE-AS DESCRIBED BELOW: ITEM NUMBER - 10-999-0001 NOTES: PIPE, LINE-18.000" O.D. X 0.309" W.T. (57.36 LB/FT), ERW, GR X 70, SWEET GAS SERVICE Mfg. Stupp COATED WITH 16 MILS AVERAGE FUSION BONDED EPOXY (14 MILS MINIMUM). Mfg. Stupp PIPE TO BE 60 FEET AVERAGE LENGTHS, 45 FEET MINIMUM - 70 FEET MAXIMUM. PIPE TO BE DESIGNED, MANUFACTURED, TESTED AND INSPECTED IN ACCORDANCE WITH ENRON E.S. 4905, REVISION 7, DATED 11/91. FBE TO BE APPLIED PER ENRON E.S. 6624, REVISION 4, DATED 10/91.	344-18	D6225725 D6225914	49,660.1 4,484	(10.0)	TC21020014 (1179) TC21020017 (80)	~~1258.9~~	49,660.1 3,215.0
	P-0003	833 FT	PIPE, LINE-18" O.D. X, 0.309" WALL, ERW, API5L, GR X70, SWEET GAS SERVICE, CONCRETE COATING PER ENRON STD. Mfg. Stupp ITEM NUMBER - 10-010-0861 NOTES:	344-18	D6225783	850				850

PIPE SPECS MATCH

PO NUMBERS MATCH MTRS

Subpart D – Design of Pipeline Componets

- (a) For *steel* transmission pipelines installed after July 1, 2020, an *operator* must collect or make, and retain for the life of the *pipeline*, records documenting the manufacturing standard and *pressure* rating to which each *valve* was manufactured and tested in accordance with this subpart. Flanges, fittings, branch connections, extruded outlets, anchor forgings, and other components with material *yield strength* grades of 42,000 psi (X42) or greater and with nominal diameters of greater than 2 inches must have records documenting the manufacturing specification in effect at the time of manufacture, including yield strength, ultimate *tensile strength*, and chemical composition of materials.
- (b) For steel transmission pipelines installed on or before July 1, 2020, if operators have records documenting the manufacturing standard and pressure rating for valves, flanges, fittings, branch connections, extruded outlets, anchor forgings, and other components with material yield strength grades of 42,000 psi (X42) or greater and with nominal diameters of greater than 2 inches, operators must retain such records for the life of the pipeline.
- (c) For steel transmission pipeline segments installed on or before July 1, 2020, if an operator does not have records necessary to establish the *MAOP* of a pipeline segment, the operator may be subject to the requirements of §192.624 according to the terms of that section.

Subpart E – Welding of Steel in Pipelines

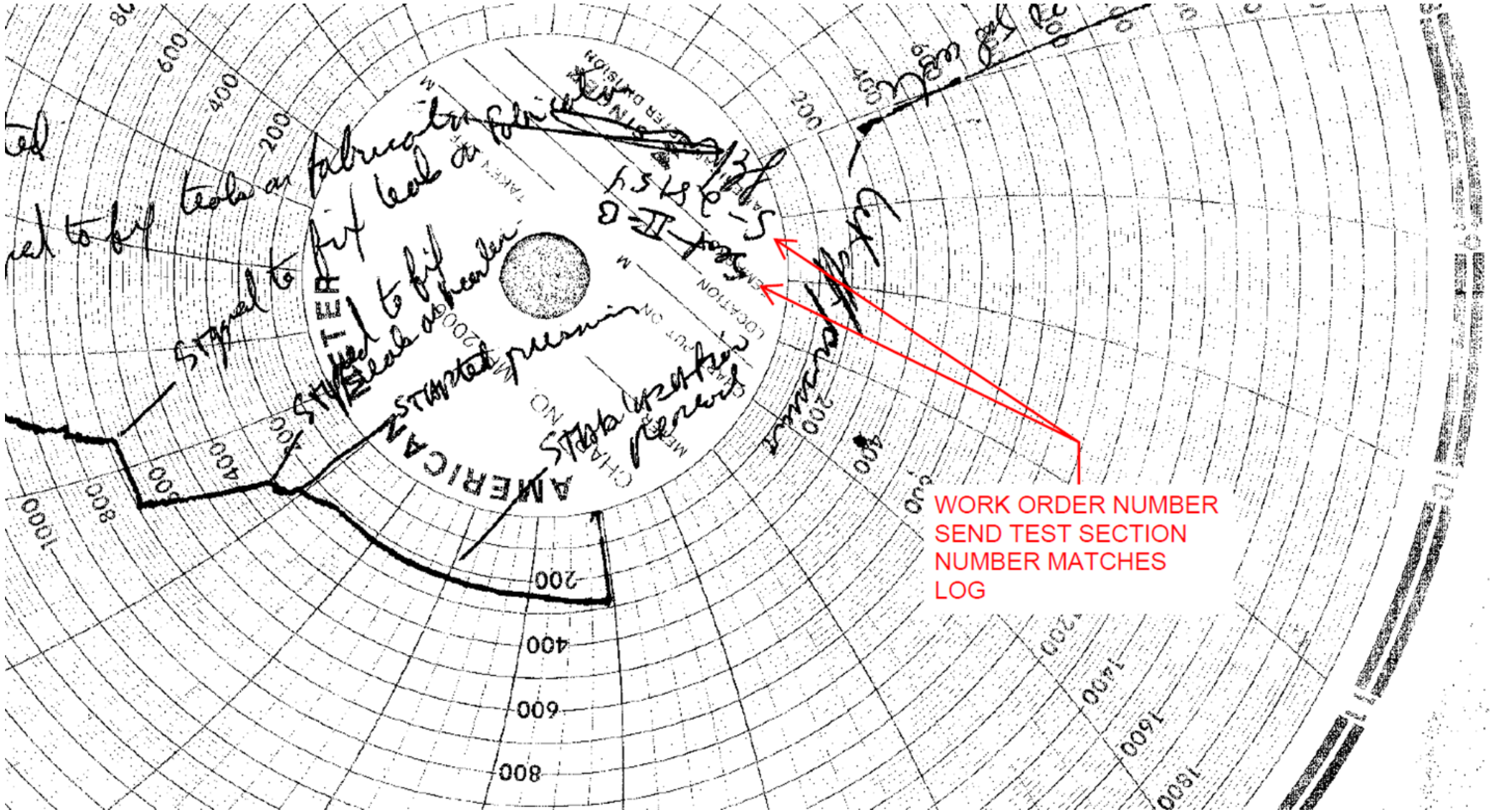
- Welding procedures need to be recorded in detail including the qualifying tests.
- All welder qualifications need to be record and kept
- 192.227 (c) For steel transmission pipe installed after July 1, 2021 records demonstrating each individual welder qualification at the time of construction in accordance with this section must be retained for a minimum of 5 years following construction.
- 192.241 (f) When nondestructive testing is required under 192.241(b), each operator must retain, for the life of the pipeline, a record showing by

Subpart I - Corrosion

- (a) Each *operator* shall maintain records or maps to show the location of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system. Records or maps showing a stated number of anodes, installed in a stated manner or spacing, need not show specific distances to each buried anode.
- (b) Each record or map required by paragraph (a) of this section must be retained for as long as the *pipeline* remains in service.
- (c) Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years with the following exceptions:
- (1) Operators must retain records related to §§ 192.465(a) and (e) and 192.475(b) for as long as the pipeline remains in service.
- (2) Operators must retain records of the two most recent atmospheric corrosion inspections for each distribution service line that is being inspected under the interval in § 192.481(a)(2).

Subpart J – Testing Requirements

- (a) An *operator* must make, and retain for the useful life of the *pipeline*, a record of each test performed under §§192.505, 192.506, and 192.507. The record must contain at least the following information:
- (1) The operator's name, the name of the operator's employee responsible for making the test, and the name of any test company used.
- (2) Test medium used.
- (3) Test *pressure*.
- (4) Test duration.
- (5) Pressure recording charts, or other record of pressure readings.
- (6) Elevation variations, whenever significant for the particular test.
- (7) Leaks and failures noted and their disposition.
- (b) Each operator must maintain a record of each test required by §§192.509, 192.511, and 192.513 for at least 5 years.


WORK ORDER NUMBER
SEND TEST SECTION
NUMBER MATCHES
LOG

Subpart N – Operator Qualifications

- Each *operator* shall maintain records that demonstrate compliance with this subpart.
- (a) Qualification records shall include:
- (1) Identification of *qualified* individual(s);
- (2) Identification of the covered tasks the individual is qualified to perform;
- (3) Date(s) of current qualification; and
- (4) Qualification method(s).
- (b) Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

How do the Records Apply to my TIMP or DIMP?

- Help us identify problems in our system.
- Helps us trace problems back to their origins.
- Helps keep our TIMP or DIMP up to date after identifying problems.

Traceable, Verifiable, and Complete Records

Applicability

- § 192.607 - Verification of Pipeline Material Properties and Attributes: Onshore steel transmission pipelines.

  (a) Wherever required by *this part*, operators of onshore steel transmission pipelines must document and verify material properties and attributes in accordance with this section.

- Applies to both line pipe and certain components.

Compliance Dates

- By July 1, 2020:
  - Operators must prepare and follow procedures (per §§ 192.13(c) and 192.605) addressing applicable regulations without timeframes explicitly defined in the Final Rule ---192.607 (if material verification is being used per § 192.712).
- By July 1, 2021:
  - Operators must develop and document processes for performing a spike test or material verification per §§ 192.506 and 192.607, if applicable.

Pipeline Attributes - § 192.607(b)

- Operators must capture the following physical pipeline characteristics and attributes:
  - diameter,
  - wall thickness,
  - seam type, and
  - grade (e.g., yield strength, ultimate tensile strength, or pressure rating for valves and flanges…).

- These must be maintained for the life of the pipeline and be *traceable, verifiable, and complete*.

Material Verification: TVC Records

- If an Operator determines they do not have TVC records, they must implement procedures for gathering these material properties [§ 192.607(b)].

- This is nothing new for operators – See *Pipeline Safety: Verification of Records* (77 FR 26822).

  - **Advisory Bulletin issued by PHMSA in 2012**

- https://www.federalregister.gov/documents/2012/05/07/2012-10866/pipeline-safety- verification-of-records

TVC Records: Review

- **Traceable, Verifiable, & Complete (TVC) Records**

- Traceable: Records that can be clearly linked to original information about pipeline segment or facility.
  - – Examples: pipe mill records, which include mechanical and chemical properties; purchase requisition; as-built documents indicating minimum pipe yield strength, seam type, wall thickness, and diameter.

TVC Records: Review

- **Traceable, Verifiable, & Complete (TVC) Records**

- Verifiable: Records are those in which information is confirmed by other complementary, but separate documentation.
  - – Examples: pressure test of a segment complemented by pressure charts or field logs; purchase order to a pipe mill with pipe specifications verified by a metallurgical test of a coupon pulled from the same pipeline segment.

TVC Records: Review

- **Traceable, Verifiable, & Complete (TVC) Records**

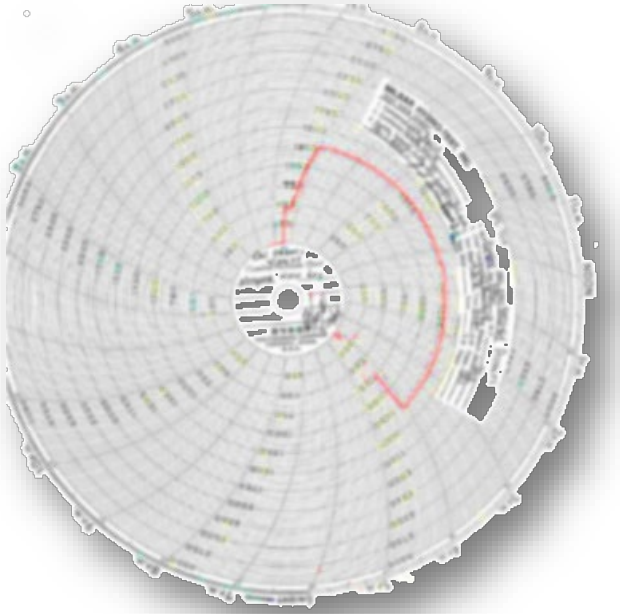
- Complete: Records finalized as evidenced by a signature, date, or other appropriate marking such as a corporate stamp or seal.
  - – Example: Complete pressure testing record that identifies a specific segment of pipe, who conducted test, duration, medium, temperatures, accurate pressure readings, and elevation information, as applicable.

Opportunistic Digs - § 192.607(c)

- The Rule allows Operators to gather these material properties "opportunistically."
  - Operators must define what an "Opportunistic Dig" means to them in its procedures – pretty much any time the operator is going safely expose the pipe.

- The Rule and preamble gives some guidance…

Opportunistic Digs - § 192.607(c)



- Opportunistic Digs – From the rule:
  - Anomaly direct examinations,
  - In situ evaluations,
  - Repairs,
  - Remediations,
  - Maintenance,
  - Excavations that are associated with replacements or relocations of pipeline segments that are removed from service, and
  - *Other opportunities defined by the Operator….*

Opportunistic Digs - § 192.607(c)

- Operators must define criteria that would render an exposure inappropriate for material verification.
  - Unsafe conditions, e.g. confined spaces or unstable excavations.
- In most cases, an operator should be able to conduct material properties tests after completing an immediate repair – or make plans to go back after emergency abates.

See FAQs-24 and 25.

Methods for Gathering Pipeline Properties

- Tests, examinations, and assessments used by Operators "must be appropriate for verifying the necessary material properties and attributes."
- Operator must have procedures for gathering material properties using both NDT and DT methods.

See § 192.607(c)(3).

Methods for Gathering Pipeline Properties

- Nondestructive Testing Methods
  - "…at each test location, material properties for minimum yield strength and ultimate tensile strength must be determined at a minimum of 5 places in at least 2 circumferential quadrants of the pipe for a minimum total of 10 test readings at each pipe cylinder location."

See § 192.607(c)(1).

Methods for Gathering Pipeline Properties

- Destructive Testing Methods
  - "…a set of material properties tests for minimum yield strength and ultimate tensile strength must be conducted on each test pipe cylinder removed from each location, in accordance with API Specification 5L."

See § 192.607(c)(2).

Questions?

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