A completed **Standard Inspection Report** is to be submitted to the Director within 60 days from completion of the inspection. A **Post Inspection Memorandum (PIM)** is to be completed and submitted to the Director within 30 days from the completion of the inspection, or series of inspections, and is to be filed as part of the **Standard Inspection Report.**

Exhibit VGS-AG-048

Inspection Report		Post Inspection Memorandum	
Inspector/Submit Date:	12/10/2014	**Inspector/Submit Date:**	
		Peer Review/Date:	
		Director Approval/Date:	

POST INSPECTION MEMORANDUM (PIM)

Name of Operator:	Vermont Gas Systems Inc.	**OPID #:**	21190
Name of Unit(s):	ARNG Phase 1	**Unit #(s):**	ARNG Phase 1
Records Location:	85 Swift Street, South Burlington, Vermont 05403	**Activity #**	
Unit Type & Commodity:	Natural Gas Pipeline		
Inspection Type:	Pipeline & Regulator Station Construction	**Inspection Date(s):**	8/4/14, 8/5/14, 8/6/14, 8/7/14, 8/11/14, 8/13/14, 8/16/14, 8/18/14, 8/19/14, 8/20/14,8/21/2014, 8/25/14, 8/26/14, 8/27/14, 8/28/14, 9/2/14, 9/3/14, 9/4/14, 9/9/14, 9/10/14, 9/11/14, 9/12/14, 9/15/14, 9/16/14, 9/17/14, 9/19/14, 9/22/14, 9/23/14, 9/24/14, 9/25/14, 10/02/14, 10/03/14, 10/04/14, 10/6/14, 10/8/14, 10/9/14, 10/10/14, 10/14/14, 10/15/14, 10/16/14, 10/17/14, 10/20/14, 10/21/14, 10/22/14, 10/23/14, 10/28/2014, 10/29/2014, 11/3/2014, 11/4/2014, 11/5/2014, 11/6/2014, 11/10/14, 11/12/14,11/13/14, 11/14/14, 11/17/14, 11/18/14, 11/19/14, 11/20/14, 11/24/14, 11/25/14, 11/26/14, 12/1/2014, 12/2/2014, 12/3/2014, 12/4/2014
PHMSA Representative(s):	John McCauley Jr,	**AFO Days:**	

Summary:
Approximately 41.2 miles of 12.750", .312 WT, X-65 transmission pipeline, extending from a new tie-in to be located at Vermont Gas' existing 10-inch mainline north of Severance Road in Colchester ("Colchester Tie-In"), Vermont, to just north of the intersection of U.S. Route 7 and Exchange Street in Middlebury, Vermont.

Three new pressure regulation stations gate stations, one located near Route 2 in Williston to reinforce the existing distribution system, one off Plank Road in New Haven, and the third north of the intersection of U.S. Route 7 and Exchange Street in Middlebury.

The pipeline will have an MAOP of 1440 psig.

Findings:

SEE ATTACHMENT A

Name of Operator:	Vermont Gas Systems Inc.		
OP ID No. [1]	21190	**Unit ID No.** [1]	ARNGP Phase 1
H.Q. Address:		**System/Unit Name & Address:** [1]	
85 Swift Street, South Burlington, Vermont 05403		Same	
Co. Official:	Don Gilbert, CEO	**Activity Record ID#:**	
Phone No.:	1-802-863-4511	**Phone No.:**	
Fax No.:		**Fax No.:**	
Emergency Phone No.:		**Emergency Phone No.:**	

Persons Interviewed	Titles	Phone No.
Lynndeane Luccioni	Construction Manager AK Inspections	1-255-722-7036
Kay Peebles	Office Manager, AK Inspections	
Kristey Oxholm	O&M Manager Vermont Gas Systems	1-802-922-0482
Fred Robinson	Project Superintendant, Over and Under	1-315-277-1195
Hugh Clark	AK Inspection	1-207-450-6851
Rhonda Hunter	Materials Manager AK Inspections	1-308-249-3668
JohnStamatov	Price Waterhouse, Liason	1-774-262-9290
Ephrain Mazariegos	Project Manager	630-546-0929
Jim Sinclair	VP	802-598-7995
Steve Billington	Foreman, Frank Lill and Sons.	585-747-8844

PHMSA Representative(s) [1]	MCCAULEY	**Inspection Date(s)** [1]	8/4/14, 8/5/14, 8/6/14, 8/7/14, 8/11/14, 8/13/14, 8/16/14, 8/18/14, 8/19/14, 8/20/14,8/21/2014, 8/25/14, 8/26/14, 8/27/14, 8/28/14, 9/2/14, 9/3/14, 9/4/14, 9/9/14, 9/10/14, 9/11/14, 9/12/14, 9/15/14, 9/16/14, 9/17/14, 9/19/14, 9/22/14, 9/23/14, 9/24/14, 9/25/14, 10/02/14, 10/03/14, 10/04/14, 10/6/14, 10/8/14, 10/9/14, 10/10/14, 10/14/14, 10/15/14, 10/16/14, 10/17/14, 10/20/14, 10/21/14, 10/22/14, 10/23/14, , 10/28/2014, 10/29/2014, 11/3/2014, 11/4/2014, 11/5/2014, 11/6/2014, 11/10/2014, 11/13/2014, 11/10/14, 11/12/14,11/13/14, 11/14/14, 11/17/14, 11/18/14, 11/19/14, 11/20/14, 11/24/14, 11/25/14, 11/26/14, 12/1/2014, 12/2/2014, 12/3/2014, 12/4/2014
Company Construction Maps (copies for Region Files):			
Description of Construction [1]			

[1] Information not required if included on page 1.

Approximately 41.2 miles of 12.750", .312 WT, X-65 transmission pipeline, extending from a new tie-in to be located at Vermont Gas' existing 10-inch mainline north of Severance Road in Colchester ("Colchester Tie-In"), Vermont, to just north of the intersection of U.S. Route 7 and Exchange Street in Middlebury, Vermont.

Three new pressure regulation stations gate stations, one located near Route 2 in Williston to reinforce the existing distribution system, one off Plank Road in New Haven, and the third north of the intersection of U.S. Route 7 and Exchange Street in Middlebury.

The pipeline will have an MAOP of 1440 psig.

PIPE SPECIFICATIONS			
.51	.55	Steel Pipe	
		▪ Manufacturer:	PARAGON
		▪ Manufacturing Standard:	API 5L
		▪ Pipe Grade:	X65
		▪ Outside Diameter (D):	12.750
		▪ Wall Thickness (t):	.312
		▪ Type of Longitudinal Seam:	ERW
		▪ Specified Min. Yield Strength:	65000
		▪ Joint Design - Bevel:	30
		▪ External Coating:	FBE, PRITEC, ARO
		▪ Internal Coating:	None
		▪ Minimum Joint Length:	60
		▪ Footage or Miles:	12 miles

DESIGN REQUIREMENTS				S	U	N/A	N/C
.51	**MATERIAL SPECIFICATIONS**						
	.55		Does the steel pipe meet one of the **API** or **ASTM** listed specifications?	X			
	.63(a)		Are pipe, valves, and fittings properly marked for identification?	X			
	.63(c)		Were pipe, valves, and fittings marked with other than field die stamping?	X			
.101	**PIPE DESIGN**						
	.105(a)		Was the pipeline designed in accordance with this formula: **P = (2St/D) x F x E x T**	X			
	.112		If the pipeline is designed to the alternative MAOP standard in 192.620 (80% SMYS) Refer to Attachment 1 for additional design requirements.				
	.113		Is the **longitudinal joint factor (E)** for steel pipe equal to **1**? (See table)	X			
	.115		Is the **temperature derating factor (T)** for steel pipe equal to **1**? (See table)	X			
.141	**DESIGN of PIPELINE COMPONENTS**						
	.143(b)		The design and installation of pipeline components and facilities must meet applicable requirements for corrosion control found in subpart I of this part.				X[2]
	.145		Does each valve meet minimum requirements of **API 6D** or a national or international standard that provides an equivalent performance level?	X			
	.147		Does each flange or flange accessory meet the minimum requirements of **ASME/ANSI 16.5, MSS SP44, or ASME/ANSI B16.25**, or equivalent?	X			
	.149		Are steel butt welded fittings rated at or above the pressure and temperature as the pipe?	X			
	.159		Is the pipeline designed with enough flexibility to prevent thermal expansion or contraction from causing excessive stresses in the pipe or component?	X			
	.161(d)		For a pipeline to operate at 50% of SMYS, are structural supports not welded directly to the pipe, but to a member that completely encircles the pipe?	X			
	.161(e)		Is each underground pipeline that is connected to a relatively unyielding line or fixed object provided with enough flexibility to allow for possible movement, or is it anchored?	X			
	.179		Are transmission line valves spaced properly Each point in a Class 1 location within 10 miles of a valve Each point in a Class 2 location within 7 ½ miles of a valve Each point in a Class 3 location within 4 miles of a valve Each point in a Class 4 location with 2 ½ miles of a valve	X[3]			
	.199		Are pressure relief and pressure limiting devices designed and installed correctly?				X[4]
	.201		Do pressure relief and pressure limiting devices have adequate capacity?				X[5]
.163	**DESIGN of COMPRESSOR STATION**						
	.163(a)		Is each compressor building located on property under the control of the operator?			X	
			Is the distance to adjacent property far enough to prevent the spread of fire?			X	
			Is there enough space around compressor buildings to allow free movement of firefighting equipment?			X	
	.168(b)		Are buildings constructed with non-combustible material?			X	
	.163(c)		Are there two separate and unobstructed exits on each operating floor of each compressor building?			X	

[2] Installation of CP has not commenced as of 12/8/14
[3] As designed spacing is adequate; valves not installed as of 12/8/14
[4] Request has been submitted for additional information
[5] Request has been submitted for additional information

DESIGN REQUIREMENTS				S	U	N/A	N/C
			Do doors swing outward?			X	
		.163(d)	Does each fence around a compressor station have at least two gates?			X	
			Does each gate located within 200 feet of a building open outwardly and when occupied must be operated from the inside without a key?			X	
		.163(e)	Is electrical equipment and wiring installed per ANSI/NFPA 70?			X	
		.165(a)	Are compressors protected from liquids?			X	
		.165(b)	Do liquid separators have a manual drain and if slugs of liquid could be carried into the compressor, automatic liquid removal, compressor shutdown, or high liquid level alarm?			X	
			Are liquid separators manufactured in accordance with Section VIII of the ASME Boiler and Pressure Vessel Code or a design factor less than or equal to 0.4 if constructed of pipe and fittings with no internal welding?			X	
		.167(a)	Does the compressor station have an emergency shutdown system?			X	
			Is the ESD able to isolate station and blowdown station piping?			X	
			Is discharge of gas from the blowdown piping at a location where the gas will not create a hazard?			X	
			Will ESD shutdown compressor, gas fired equipment and electrical facilities (except emergency lighting and circuits needed to protect equipment)?			X	
			Are there at least two ESD stations outside gas area near exits gates or emergency exists?			X	
		.169(a)	Does compressor station have overpressure protection devices of sufficient capacity to prevent pressure greater than 110% MAOP?			X	
		.169(b)	Do relief valves vent in safe location?			X	
		.171(c)	Are there slots or holes in baffles of gas engine mufflers?			X	
		.173	Are buildings ventilated to prevent the accumulation of gas?			X	
		.735(b)	Are aboveground oil or gasoline storage tanks protected per NFPA No. 30? (Dikes)			X	
		.736(a)	Does the compressor building have a fixed gas detection and alarm system?			X	

Comments:
[8/6/14 Mountainview Road- Pipe Heat # SD1399-178 Weld AO666, pipe and MTR verified; TUBE TURN ANG P-51, PO21914, HEAT PSKY fitting and MTR verified.]

8/16/14 Observed stockpiled pipe at Winooski River crossing staging area, HT number stenciled on pipe was crossed out another number marked in paint on ARO coated pipe. Verified that the correct heat number (matches against pipe marking on inside circumference of pipe) is also correctly referenced in inventory sheets. HT#312-PC5641.

8/18/14 . Verified that the correct heat number (matches against pipe marking on inside circumference of pipe) is also correctly referenced in inventory sheets. HT#312-SD1170-149 utilized for girth weld on welder qualification test.

10/9/14, 10/10/14 Requested mill certs for Cameron valves used on pressure test at Winooski River.

11/10/14 Audit main line valves in yard. Becker 600 Class, Series FPBV, Serial #s BJ130076011-029, BJ130076011-008, BJ130076011-018, BJ130076011-017. MOP @ 65 deg farenheit = 1456psig.
11/19/14 Verified design formulas for smys with Tyler Billingsly

11/24/14 Audited records for Williston Regulator Station Valves, (18 valves in population, 5 audited and verified serial numbers, MTRs and weld maps all compliant).

11/26/14 Audited Williston Regulator Station records, (4 regulators in population, 4 audited and verified serial numbers and manufactuer pressure tests and weld maps, all compliant).

12/2/14 Audited records for Williston Regulator Station Valves, Pipe heats and MTRs, Flanges and conformance documents

12/4/14 Audited records for Williston Regulator Station Valves, weldolets and fittings

.13(c)	WELDING AND WELD DEFECT REPAIR/REMOVAL REQUIREMENTS		S	U	N/A	N/C
	.225	(a) Are welding procedures qualified under **Section 5 of API 1104** or **Section IX of ASME Boiler and Pressure Code** by destructive test.		X		

.13(c)	WELDING AND WELD DEFECT REPAIR/REMOVAL REQUIREMENTS	S	U	N/A	N/C
	(b) Are welding procedures recorded in detail, including results of the qualifying tests?	X			
	Note: Alternate welding procedures criteria are addressed in API 1104 Appendix A, section A.3.			N/A	
	.227 (a) Are welders qualified according to **Section 6, API Std. 1104** or **Section IX, ASME Boiler and Pressure Vessel Code**? (Welders qualified under an earlier edition may weld but may not requalify under earlier edition)		X		
	(b) Welders may be qualified under **section I of Appendix C** to weld on lines that operate at **< 20% SMYS.**			N/A	
	.229 (a) Are all welders on compressor station piping and components qualified by means other than nondestructive testing?			N/A	
	(b) Has the welder welded with this same process and has a weld been tested and found acceptable according to **Section 6 or 9, API Std. 1104** at least twice each calendar year not to exceed 7 ½ months? (Welders qualified under an earlier edition may weld but may not requalify under earlier edition). (c) For "low stress" welder requalification requirements, references 192.229(d).			N/A	
	.231 Is the welding operation protected from the weather conditions that could impair the quality of the completed weld?	X			
	.233 Miter joints (**consider pipe alignment**)			N/A	
	.235 Are welding surfaces clean, free of foreign material, and aligned in accordance with the qualified welding procedure?	X			
	Repair and Removal of Weld Defects				
	.245 (a) Are cracks longer than 8% of the weld length removed?			N/A[6]	
	For each weld that is repaired, is the defect removed down to clean metal and is the pipe preheated if conditions demand it?	X			
	(b) Are the repairs inspected to insure acceptability?	X			
	If additional repairs are required, are they done in accordance with qualified written welding procedures to assure minimum mechanical properties are met?			N/A[7]	
	(c) Repair of a crack or any other defect in a previously repaired area must be in accordance with a written weld repair procedure, qualified under **§192.225**			N/A[8]	

Comment

Comments:

8/18/14 Witnessed qualification of welders Brian Acosta and Reid Hebert. No qualification procedure was on site when tests were administered. The root beads did not conform to procedures in place for this project. Vermont Gas could not produce any current qualification certificates for Lee M Brown, the individual administering the test. Never once did Mr. Brown verify the welding current or voltages on either welder nor did he check travel speeds.
8/19/14 I checked open circuit voltage and amperage on Ray Brumleys root bead while welding fitting ANGB-79 (radiograph #RGT040) on line pipe on Redmund Road. Mr Brumley was utilizing E6010 electrode 1/8" diameter I registered 24-25 volts and 100- 105 amps with EXTECH Model MA40, Ser. 131215959.
8/20/14 inspect welding on mainline on Redmund Road. Asked Welding Inspector Adam Crawford to verify volts and amps during hot pass welding . Welder Brumley registered 28 volts ,160 amp at 7 inches per minute with 5/32 E8018 electrode. Welder Martinez registered 27 volts ,15[illegible] amp at 7 inches per minute with 5/32 E8018 electrodes.
8/21/14 Inspect welding on Williston Road, 1/8" 6010 root and 5/32 hot pass and fillers.
8/25/14 Inspect welding on Redmund Road 1/8" 6010 root and 5/32 hot pass and fillers.

8/19/14 Witnessed destructive testing of coupons from previous days welder qualification test.
9/10/14 Observed voltages and travel speeds Welder Chadwick.
9/17/14 Observed voltages and travel speeds Welder Martinez
9/22/14 Inspection of line up and field welds behind landfill welder Martinez.
10/2/14 Reviewed TEAM Radiography Inspection Protocals.
10/6/14 Inspected welding at Railroad Crossing Redmund Road. Inspected welding at Mountainview Road.
10/20/14 Inspected welding at Fay Lane.
10/21/14 Inspected welding and fit up of pipe at Fay Lane.
10/22/14 Inspected welding at Fay Lane, Inspected welding at Rt 289.
10/28/14 Inspected tie in weld at Mill Pond Road.
10/28/14 Inspected welding at Rt. 289 Essex Road.
10/29/14 Inspected welding at Route 89 HDD site

11/5/14 Inspected welding at Williston Regulator Station, Welder Perry qualified to welding procedure FL-7 6/4/2014 and welding procedure FL-9 on 6/16/14.

[6] All cracks cut out
[7] One repair then cut out
[8] One repair then cut out

Comment

11/10/2014 inspected welding @ Rt289/Rt2a.
11/10/2014 inspected welding @ Rt289 Alder Creek
1125/14 Witnessed Weld Procedure Qualification for [16" X65 Butt Weld] and [WPS-VGS-X65-2 "2014-2"] girth welds.
11/26/14 Witnessed destructive testing of straps for girth weld procedure qualifications prepared on 11/25/14. Both procedures passed.
12/1/14 Preparation of girth welds for VGS-B-2:2014-1 and
12/4/14 Destructive testing of procedure qualification straps.
12/2/14 Verified credentials of Wayne B. king AWS certified welding inspector #07081201, exp 8/1/16.

.13(c)	WELD INSPECTIONS and NONDESTRUCTIVE TESTING REQUIREMENTS	S	U	N/A	N/C
	.241 Are inspectors performing visual inspection to check for adherence to the welding procedure and the acceptability of welds as per Section 9, API Std. 1104, except for Subsection 9.7 for depth of undercutting adjacent to the root bead? Note: If the alternative acceptance criteria in API 1104 Appendix A are used, has the operator performed an Engineering Critical Assessment (ECA)?	X			
	.243 (a) Is a detailed written **NDT** procedure established and qualified?		X[9]		
	(b) Are there records to qualify procedures?		X[10]		
	(c) Is the radiographer trained and qualified? (Level II or better)	X			
	(d) Are the following percentages of each days field butt welds nondestructively tested:				
	(1) **10%** in **Class 1** locations.			N/A	
	(2) **15%** in **Class 2** locations			N/A	
	(3) **100%** in **Class 3** and **4** locations, river crossings, within railroad or public highway ROWs, tunnels, bridges, overhead road crossings: however, if impracticable may test not less than **90%**.	X			
	(4) **100% at pipeline tie-ins.**	X			
	(e) Is a sample of each welder's work for each day nondestructively tested? (see code for exceptions)	X			
	(f) Do the radiograph records and daily reports show:				
	▪ Number of welds made.	X			
	▪ Number of welds tested.	X			
	▪ Number of welds rejected.	X			
	▪ Disposition of rejected welds.	X			
	▪ Is there a correlation of welds and radiographs to a bench mark? (Engineering station or survey marker)	X			

Comments:
8/2/14 Verified qualifications of Radiographer Daniel fantone, Level 2 RDT exp 6/10/16.

[8/6/14 Mountainview Road- Pipe Heat # SD1399-178 Weld AO666, pipe and MTR verified; TUBE TURN ANG P-51, PO21914, HEAT PSKY fitting and MTR verified.]

8/14/14 Verified credentials of AK Inspections CWI, Adam M Crawford. AWS# 12061391 expires 6/1/2015.

8/16/14 Observed stockpiled pipe at Winooski River crossing staging area, HT number stenciled on pipe was crossed out another number marked in paint on ARO coated pipe. Verified that the correct heat number (matches against pipe marking on inside circumference of pipe) is also correctly referenced in inventory sheets. HT#312-PC5641.

8/18/14 . Verified that the correct heat number (matches against pipe marking on inside circumference of pipe) is also correctly referenced in inventory sheets. HT#312-SD1170-149 utilized for girth weld on welder qualification test.

8/19/14 Verified Radiographer Qualifications for Joshua M. Brown, RT2- 1/15/17, UT-2 2/17/14, MT-2 3/27/14

9/2/14 Williston pipe yard, witness UT testing of feathered out anomalies (gouge) found on line pipe.

9/17/14 Inspection of NDT procedures at Redmund Road. Radiographer advised that he uses TEAM procedures. Unable to locate NDT procedures in any of VGS documents.

10/2/14 Verified Radiographer Qualifications of Radiographer Daniel Torres RT level2 exp 11/13/15.
11/10/14 Verified IQI on girth weld at Rt 289/@a #4 penny clearly visible.

[9] As of 12/8/14 ndt procedures have not been adopted from Team NDT
[10] As of 12/8/14 have not been provided that information

Comments:
8/2/14 Verified qualifications of Radiographer Daniel fantone, Level 2 RDT exp 6/10/16.

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9/2/14 Williston pipe yard, witness UT testing of feathered out anomalies (gouge) found on line pipe.

10/02/14 Inspected TEAM Procedures RT.ASME.1 Procedure for Radiographic Examination of Welds 8/14/13, RT.API.1 Procedure for Radiography of Pipeline Welds 8/16/13. Have not as yet received detailed procedures from Vermont Gas.

10/6/14 Verified qualification records of AWS Welding Inspector Jim Reid #03020018 exp 2/1/15.

10/17/14 Inspection of pig launcher fabrication. Observed welding on grade B/X42 pipe using the procedure for X65 pipe. Notified Welding Inspector Foreman Hugh Clark of issue.

11/12/14 Inspected radiography at Rt289/Rt2a. IQI #4 wire penny visible.

.301	CONSTRUCTION REQUIREMENTS		S	U	N/A	N/C
	.303	Are comprehensive written construction specifications available and adhered to?		X		
	.305	Are inspections performed to check adherence to the construction specifications?				
	.307	Is material being visually inspected at the site of installation to insure against damage that could impair its serviceability?				
	.309(a)	Are any defects or damage that impairs the serviceability of a length of steel pipe such as a gouge, dent, groove, or arc burn repaired or removed?	X			
	.309(c)	If repairs are made by grinding, is the remaining wall thickness in conformance with the tolerances in the pipe manufacturing specifications or the nominal wall thickness required for the design pressure of the pipe?	X			
	.313(b)	If a circumferential weld is permanently deformed during bending, is the weld nondestructively tested?				
	.319(a)	When pipe is placed in the ditch, is it installed so as to fit the ditch, minimize stresses, and protect the pipe coating from damage?		X		
	.319(b)	Does backfill provide firm support under the pipe and is the ditch backfilled in a manner that prevents damage to the pipe and coating from equipment or the backfill material?		X		
	.461(c)	External protective coating is inspected (by jeeping, etc.) prior to lowering the pipe into the ditch. Coating damage repaired, as required.				
	.325(a)	Is there **12 inches** clearance between the pipeline and any other underground structure? If **12 inches** cannot be attained, are adequate provisions made to protect the pipeline from damage that could result from the proximity of the other structure?		X		
	.327(a)	▪ Is pipe in a **Class 1** location installed with **30 inches** of cover in **normal soil**, or **24 inches** of cover in **consolidated rock**?	X			
		▪ Is pipe in **Class 2, 3,** and **4** locations, drainage ditches of public roads and railroad crossings, installed with **36 inches** of cover in **normal soil** or **24 inches** of cover in consolidated rock?	X			
		▪ Does pipe installed in a river or harbor have **48 inches** of cover in **soil** or **24 inches** of cover in **consolidated rock**?	X			
		▪ If the above cover cannot be attained, is additional protection provided to withstand anticipated external loads?			N/A	
	.328	If the pipeline will be operated at the alternative MAOP standard calculated under 192.620 (80% SMYS) Refer to Attachment 1 for additional construction requirements				

Comments:
8/11/14 Redmund Road, verified repair of pipe observed to have a gouge in the heat affected zone. Piece cut out as cylinder, as per VGS Operating Procedure Repairs- Steel Pipe effective 2/8/14. Weld number RTCBML033C.
8/27/14 Inspection of pipe in coating yard, observed repairs on coatings. Investigation revealed numerous coating and pipe damage. Put in request for report.
9/2/14 Williston pipe yard, witness UT testing of feathered out anomalies (gouge) found on line pipe.
9/19/14 Observed debris in backfill (after 12" padding) between sta. 400+00 and 450+00.
9/23/14 During inspection of coatings behind landfill, GC Morris observed patch on Pritech Coating that was out of specification. Patch cut out bare metal exposed, and recoated with a Canusa shrink sleeve. As per Bryan Kemp, coatings inspector, crew to receive additional training.
10/16/14 Verified that additional training was conducted for condition that was found on 9/23/14. Training was conducted on 9/23/14 by Coatings Inspector Bryan Kemp.
10/15/14 Observed pipe at Staion 198 being forced into ditch. Chief Pipeline Inspector Eric Curtis of finding. After meeting with contractor the section was cut out and replaced with a field bend. Investigation revealed a permanent deformation of .250 high low.
11/3/14 – 11/6/14 Observed insufficient pipe support on installation between Station 120+00 and 156+00. After meeting with company officials remedial measures taken to install more sand bags.
11/14/14 Construction inspections at New Haven and Middlebury regulator stations. Inspected welds and wlk through of construction with contractor.
11/18-19/14 Inspections and verification of as built drawings and identify heat numbers and mtr info on flanges and pipe.

.451	CORROSION REQUIREMENTS		S	U	N/A	N/C
	.455(a)	(1) Does the pipeline have an effective external coating and does it meet the coating specifications?	X			
		(2) Is a cathodic protection system installed or being provided for?			N/A[11]	
	.471(a)	Are test leads mechanically secure and electrically conductive?				

[11] CP work had not commenced as of 12/8/14

.451	CORROSION REQUIREMENTS		S	U	N/A	N/C
	.471(b)	Are test leads attached to the pipe by cadwelding or other process so as to minimize stress concentration on the pipe?				
	.471(c)	Are bare test leads and the connections to the pipe coated?				
	.476	Systems designed to reduce internal corrosion (a) New construction				
		(b) Exceptions – offshore pipeline and systems replaced before 5/23/07				
		(c) Evaluate changes to existing systems				

Comments:
8/20/14 Witnessed installation of Zinc ribbon for AC mitigation. Op Qual record review of Karl James and Nick Feagle of ARK Engineering.
10/16/14 Conducted an audit of Mainline Coating Daily Reports, and Mainline Jeep Report- Coating Repair Report. Conducted audit of 25% of records using a random sampling. These reports reflect only the inspector observed conditions. Found three discrepencies in pipe weld totals which appear to be transcription errors. Notified Chief Inspector Curtis of findings. Corrections are to be made.

.501	TESTING REQUIREMENTS		S	U	N/A	N/C
	.503(a)	(1) Is a hydrostatic pressure test planned to substantiate the MAOP?				
		(2) If the pipeline has been hydrostatically tested, have all potentially hazardous leaks been located and eliminated?				
	.505(a)	▪ Is there a specified hydrostatic pressure testing procedure?	X			
		▪ Is the **specified test pressure equal to: 1.1 x MAOP for Class 1 locations, 1.25 x MAOP for Class 2 locations, and 1.5 x MAOP for Class 3 and 4 locations**? Refer to Attachment 1 for additional testing requirements for Alternate MAOP.	X			
	NOTE:	Verify ASME Vessels (ASME Code standard is a 1.3 test factor) are designed for 1.5 test factor, or isolate them when testing to 1.5 x MAOP.				
	.505(c)	For pipelines which operate at **30% of more of SMYS**, is the minimum test duration for the pipeline at least **8 hours**? (Strength Test)	X[12]			
	.505(e)	Is the minimum test duration for pretested fabricated units and **short sections of pipe** at least **4 hours**?	X			
	.515(a)	Does the operator take every reasonable precaution to protect the general public and all personnel during the test?	X			
	.515(b)	Does the operator insure that the test medium is disposed of in a manner that will minimize damage to the environment?	X			
	.517 (a)	Do the test records include the following:				
		(1) Operator's name, name of operator's employee responsible for making the test, and the name of the test company used.		X[13]		
		(2) Test medium used.		X		
		(3) Test pressure.		X		
		(4) Test duration.		X		
		(5) Pressure recording charts, or other record of pressure readings.		X		
		(6) Elevation variations, whenever significant for the particular test.			X	
		(7) Leaks and failures noted and their disposition.		X		

Comments:
9/4/2014 Witness preparation for hydrotest of pipe string for Winooski River bore. Placed request for Hydrotest Plan.
9/24/14 Witness test of HDD bore pipe for Winooski River. Test washed out due to leak on valve and chart box issues.
9/25/14 Witness test of HDD bore pipe for Winooski River. Four hour pressure test successfully concluded at 3:20 pm. Pressure test procedure on site. Questioned efficacy of bleeding off pressure when so far from smys. Chart Box s/n28310 cal. 9/11/14; Chart Box 2 sn23935 calibrated 9/3/14; Deadweight Tester s/n 14295 calibrated 8/5/2014.
10/23/14 Inspected preparation for pressure test at Winooski River Bore post test.
10/29/14 Inspection at Rt. 89 HDD site, preparation for pressure test.

.801 - .809	OPERATOR QUALIFICATION FIELD VERIFICATION	S	U	N/A	N/C
	Operator Qualification - Use PHMSA Form 15 Operator Qualification Field Inspection Protocol Form if applicable to the project.	X			

[12] Only pre and post HDD tests have been conducted
[13] Items 1-7, the company has not provided the requested documentation

.801 - .809	OPERATOR QUALIFICATION FIELD VERIFICATION	S	U	N/A	N/C
.620	If performance of a construction task associated with implementing the alternative MAOP standard in 192.620 can affect the integrity of the pipeline, the operator treats those tasks as "covered tasks" and implements the requirements of subpart N as appropriate.			X	

Comments:

Attachment 1
Additional Requirements for Steel Pipe Using Alternative MAOP

For additional guidance refer to http://primis.phmsa.dot.gov/maop/faqs.htm
For FAQs refer to http://primis.phmsa.dot.gov/maop/faqs.htm

	Additional Design Requirements for Pipe Using Alternative MAOP	S	U	N/A	N/C
.112(a)	General Standards				
	(1) Plate microalloyed, fine grain, fully killed, continuously cast				X
	(2) Carbon equivalents not greater than 0.25% by weight Pcm or 0.43% IWW				X
	(3) Diameter to wall thickness ratio less than 100 and measures to prevent denting and ovality				X
	(4) Pipe manufactured to API 5L level 2				X
.112(b)	Fracture Control				
	(1) Pipe toughness properties for fracture propagation per API 5L or ASME B31.8 and correction factors				X
	(2) (i) Resistance to fracture initiation through full range of operating variables and pipeline life				X
	(ii) Toughness adjusted for each pipe grade and decompressive behavior of gas				X
	(iii) Ensure 99% probability of fracture arrest within 8 pipe lengths; 90% within 5 and,				X
	(iv) Fracture toughness testing equivalent to API 5L supplementary requirements				X
	(3) Crack arrestors or heavier wall pipe used if toughness properties not achieved				X
.112(c)	Plate/Coil Quality Control				
	(1) Quality program at mills to eliminate defects and inclusions				X
	(2) (i) Mill inspection program includes ultrasonic test at ends and at least 35% of plate/coil or pipe to identify defects. Also, 95% of the pipe is tested and done in accordance with ASTM A578 or API 5L				X
	(ii) Macro etch test or equivalent to identify inclusions or,				X
	(iii) Operator audits of steelmaking facilities quality control plans and manufacturing specs, equipment maintenance records, casting superheat and speeds, and centerline segregation monitoring				X
.112(d)	Seam Quality Control				
	(1) Quality assurance program for seam welds to assure tensile strength per API 5L				X
	(2) Vickers Hardness test to a minimum of 280 Vickers for a seam cross section of one pipe from each heat plus one pipe from each welding line per day and a minimum of 13 readings for each cross section sample				X
	(3) Ultrasonic test of all pipe seams after cold expansion and mill hydrostatic testing				X
.112(e)	Mill Hydrostatic Test				
	(1) Hydrostatic test at the mill to 95% hoop stress for 10 seconds per API 5L, Appendix K				X
	(2) Pipe in operation prior to 11/17/08 must have mill hydrostatic test to 90% SMYS for 10 seconds				X
.112(f)	Coating				
	(1) Pipe coating must be non- shielding				X
	(2) Pipe coating used for trenchless installation must also be abrasion resistant				X
	(3) Coating quality inspection and testing must cover pipe surface quality, surface cleanliness, blast cleaning, application temperature control, adhesion, cathodic disbondment, moisture penetration, bending, thickness, holiday detection and repair.				X
.112(h)	Compressor Stations				
	(1) Designed to limit the temperature of the nearest downstream segment to 120°F or,				X
	(2) Research , testing and monitoring to demonstrate coating will withstand higher temperatures if needed				X
	(3) If operating above 120°F , implement a long-term coating integrity monitoring program				X

Comments:
Vermont Gas has not provided QA/QC data to substantiate pipe inspection conducted at pipe and coating mills.

192.328	Additional Construction Requirements for Pipe Using Alternative MAOP	S	U	N/A	N/C
	(a) Quality Assurance				
	(1) Quality assurance plan addressing pipe inspections, hauling and stringing, bending, welding, NDT, coating, lowering, backfill, and hydrostatic testing				X

	(2) Quality plan for girth weld coating equivalent to plan required in §192.113(f)(3) and performed by individuals with knowledge, skills and abilities in coating application				X
	(b) All girth welds have non-destructive testing in accordance with §192.243(b) and (c)				X
	(c) At least 36 inches of cover or top of pipe 1 foot below deepest tilling penetration				X
	(d) No initial hydrotest failures indicative of systemic material defects – root cause analysis of any failures				X
	(e) Impacts of induced alternating current on corrosion control addressed				X

Comments:
Vermont Gas has not provided QA/QC program details.

192.620	Pressure Testing & Notification Requirements for Pipe Using Alternative MAOP	S	U	N/A	N/C
	(a)(2)(ii) The alternative test factor for Class 1 is 1.25, and Class 2 and 3 is 1.5.			X	
	(c) If an operator elects to use the alternative maximum allowable operating pressure calculated under paragraph (a) of this section for a pipeline segment, the operator must do each of the following:			X	
	(1) Notify each PHMSA pipeline safety regional office where the pipeline is in service of its election with respect to a segment at least 180 days before operating at the alternative maximum allowable operating pressure. An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State.			X	
	(3) Send a copy of the certification required by paragraph (c)(2) of this section to each PHMSA pipeline safety regional office where the pipeline is in service 30 days prior to operating at the alternative MAOP.			X	

Comments:

ATTACHMENT A

PIPELINE CONSTRUCTION ISSUES

CATEGORY	DISCOVERY DATE	ISSUE	CODE REQUIREMENT	VIOLATION	STATUS
ISSUE#1 **WELDING**	8/12/2014	VG SYSTEMS INC. Failed to qualify welding procedure "16 X-65 Butt Weld" in accordance with the written procedure specification. "Job 16 Butt Weld Procedure Qualification" record indicates that electrode E6010 was used in the root pass only, while the Welding Procedure Specification requires E6010 electrode in both the root pass and the hot pass. API 1104, 20th Edition states "5.1 PROCEDURE QUALIFICATION Before production welding is started, a detailed procedure specification shall be established and qualified to demonstrate that welds with suitable mechanical properties (such as strength, ductility, and hardness) and soundness can be made by the procedure. The quality of the welds shall be determined by destructive testing. These procedures shall be adhered to except where a change is specifically authorized by the company, as provided for in 5.4."	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Company requalified procedures 11/252014 - 12/3/2014.
ISSUE#2 **WELDING**	8/14/2014	Company failed to followed Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welder Martinez made root pass with 1/8" E6010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed
ISSUE#3 **WELDING**	8/19/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welder Brumley made root pass with 1/8" E6010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed

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PIPELINE CONSTRUCTION ISSUES

ISSUE#4 **WELDING**	8/19/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welder Brumley made hot pass with 5/32" E8010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed
ISSUE#5 **WELDING**	8/20/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welder Martinez and Welder Brumley (2 welders on each joint) made root passes with 1/8" E6010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed
ISSUE#6 **WELDING**	8/20/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welders Martinez and Brumley made hot passes with 5/32" E8010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test *welds used to qualify welding procedures shall be* determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed
ISSUE#7 **WELDING**	8/25/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welders Acosta and Welder Brumley (2 welders on each joint) made root passes with 1/8" E6010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed

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ISSUE#8 **WELDING**	8/25/2014	Company failed to follow Welding Procedure Specification "16 X-65 Butt Weld" on production weld at Williston Road Bore. Welders Acosta and Brumley made hot passes with 5/32" E8010 electrode which is not specified in the procedure. API 1104, 20th Edition states: 7.1 GENERAL Piping shall be welded by qualified welders using qualified procedures. The surfaces to be welded shall be smooth, uniform, and free from laminations, tears, scale, slag, grease, paint, and other deleterious material that might adversely affect the welding. The joint design and spacing between abutting ends shall be in accordance with the procedure specification used.	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Requalified procedures include electrodes within the parameters of the welding which was observed
ISSUE#9 **Compliance with specifications or standards**	9/4/2014	Company failed to follow VGS Operating Procedure Inspection Effective Date April 1, 2013, Paragraph Weld/Fusion Tests which states; As required by regulations, or at the request of an Operations Department, welds or fusions shall be inspected or tested for flaws. The type and number of tests shall be determined by regulatory requirements, type of pipe material or number of flaws found under inspection, if any. Any inspection or test shall be conducted by personnel trained or experienced in carrying out such inspection or test. At all times that welding or cutting is occuring at a work site, a VGS employee in addition to the welder must be on site (outside of any excavation) to respond to any unusual circumstances. At a critical tie in weld at the Williston Road Bore, fit up and welding was being conducted without a welding inspector present. I questioned Lynndeane Luccione, as to why no inspection staff was present, and she advised me that the contractor had been ordered to stop work, and had disregarded the order.	**§ 192.303 Compliance with specifications or standards.** Each transmission line or main must be constructed in accordance with comprehensive written specifications orstandards that are consistant with this part.	Y	UNRESOLVED
ISSUE#10 **Compliance with specifications or standards**	9/19/2014	Company failed to follow ANGP Scope of Work and Narrative Specification, Article 13, Backfilling, paragraph b which states; "The CONTRACTOR shall take all necessary precautions to ensure that backfill material is kept free of all stones, rocks, skids, stumps, brush, welding rods, cans, bottles, trash and other debris.During frost conditions, the CONTRACTOR shall backfill with the utmost care. After bedding and padding of the pipe in frost conditions the CONTRACTOR will sift for smaller backfill material prior to backfilling with larger frozen clumps." On said date, in a pipeline ditch which traversed an abandoned sanitary landfill, numerous articles of plastic, metal and glass were observed in the backfill material in the ditch.	**§ 192.303 Compliance with specifications or standards.** Each transmission line or main must be constructed in accordance with comprehensive written specifications orstandards that are consistant with this part.	Y	UNRESOLVED

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PIPELINE CONSTRUCTION ISSUES

ISSUE#11 **Nondestructive Testing (procedures)**	9/24/2014	Company failed to establish written procedures for Non destructive testing of welds. This violation is pursuant to Formal Request for Information RFSI20140918 Request All Written NDT Procedures, which sought " all written NDT procedures which have been adopted by VGS for the ANGP project. Please also provide copies of the documents which substantiate when and how VGS adopted each NDT procedure". On 9/24/2014 VGS Representative Kristy Oxholm presented the following response to our request; "***All non-destructive examinations (NDE) will be provided by a third party company. Personnel will be qualified and certified to American Society for Nondestructive Testing procedures ASNT SNT-TCl A or ASNT CP189 . Examinations will be performed in conformance with the VOS NDT specification and using procedures approved by a certified ASNT Corporate Level III .*** " It is the exclusive responsibility of the OPERATORS of pipelines to conform to the requirements of the Pipeline Safety Regulations embodied in 49CFR§ 192. The above statement does not constitute a procedure.	**§ 192.243 Nondestructive testing.** (a) Nondestructive testing of welds must be performed by any process, other than trepanning, that will clearly indicate defects that may affect the integrity of the weld. (b) Nondestructive testing of welds must be performed: (1) In accordance with written procedures; and (2) By persons who have been trained and qualified in the established procedures and with the equipment employed in testing. (c) Procedures must be established for the proper interpretation of each nondestructive test of a weld to ensure the acceptability of the weld under § 192.241(c). **§ 192.303 Compliance with specifications or standards.** Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.	Y	UNRESOLVED
ISSUE#12 **Pipeline Construction QA/QC**		110 identified anomolies by Materials Manager on site		N	Have not received QC findings from mill inspections
ISSUE#13 **Pipeline Costruction-Installation of pipe in ditch**	10/15/2014	Observed pipe being forced around radius with out a field bend or fitting. After consultation contractor determined to cut out and replace with a field bend. Further investigation revealed a permanent deformation of .250 high low from ovality in pipe.	**§ 192.319(a) Installation of Pipe in a ditch.** When installed in a ditch, each transmission line that is to be operated at a pressure producing a hoop stress of 20% or more of SMYS must be installed so that the pipe fits the ditch so as to minimize stresses and protect the pipe coating from damage.	N	Contractor cut out the damaged pipe and replaced with a field bend.
ISSUE#14 **Welding**	10/17/2014	Observed fabrication of pig launcher piping consisting of Grade B/X42 pipe being welded with Welding Procedure Specification "16 X-65 Butt Weld".	**§ 192.225 Welding procedures.** (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see§ 192.7) or section IX of the ASME Boiler and Pressure Vessel Code " Welding and Brazing Qualifications" (incorporated by reference, see§ 192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).	Y	Company qualified procedures for grade B/ X42 pipe during the week of 12/1/2014. The pieces prepared with X65 procedure have been segregated.

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PIPELINE CONSTRUCTION ISSUES

ISSUE#15 **PROCEDURES/ SUPPORT**	11/3/2014	Observed installation of pipe in ditch at station 120+00 in area where shot rock in ditch, supported by sandbags spaced between 23' and 35' on center. ANGP Scope of Work and Narrative Specification PAGE 22 OF 49 paragraph I requires " The pipe shall rest on undisturbed trench bottom provided the material does not include rocks, sharp objects and/or debris that may cause damage to the pipe. Structured pipe pillows shall be installed in the bottom of the trench at maximum intervals of every 16ft to protect the pipe from lying on rocks, sharp objects and/or debris which may cause damage to the pipe or pipeline coating. The COMPANY may require the CONTRACTOR to use select fill trench bottom padding material. Select fill base material for rock trench areas and areas with cobbles/boulders, shall provide a minimum of nine (9) inches of padding below and twelve (12) inches of padding on the sides and top of the pipe. Select fill material and/or padding material shall be sand in accordance with VTrans Standard Specification 703.03 or shall be screened native material containing silts, sands and gravels with the largest material being no larger than 1-inch on the longest dimension. Topsoil from the RIGHT-OF-WAY shall not be used for padding material.	§ 192.303 Compliance with specifications or standards. Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.	Y	Contractor went back and put in sandbags at 16' on center. Company has rewritten procedure for pipe support. Awaiting detail drawings for placement of sandbags.