Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-49974

5. Indicate Type of Lease STATE ☐ FEE ■

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: INDEPENDENCE AGI

1. Type of Well: Oil Well ☐ Gas Well ☐ Other ■ ACID GAS INJECTION

8. Well Number: 2

2. Name of Operator: Piñon Midstream, LLC

9. OGRID Number: 330718

3. Address of Operator: 465 W NM Highway 128; Jal, NM 88252

10. Pool name or Wildcat: AGI: Devonian/Fusselman

4. Well Location
Unit Letter C : 1,110 feet from the NORTH line and 1,443 feet from the WEST line
Section 20 Township 25S Range 36E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3,102' (GR)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: Request to Revise Casing/Tubing Plan ■		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

INDEPENDENCE AGI #2 REQUEST TO REVISE CASING AND TUBING DESIGN

On behalf of Piñon Midstream, LLC (Piñon), we (Geolex, Inc.) are requesting approval for revision to the Independence AGI #2 (API: 30-025-49974) casing and tubing schedule, due to current challenges with supply chain and material availability, or to improve safety factor in key casing intervals. Piñon was granted authorization to inject, via the Independence AGI #2, on April 1, 2022 with the Agency's issuance of Order SWD-2464.

The requested changes are generally summarized below and a detailed description of the proposed revisions is included in the attached documents. All proposed revisions have been thoroughly reviewed to assess suitability and will not result in inadequate safety and performance standards.

24" Surface Casing	Propose to revise material grade to X-56 (originally X-65).
20" First Intermediate Casing	Propose revision to split-casing design utilizing 10", 133 #/ft., J55, BTC from 0' to 1,500', and 20", 133 #/ft., P-110, Liberty LD from 1,500' to 3,500' (originally 20", 133 #/ft., NT80 GB Butt 21 from 0' to 3,500').
13.625" Second Intermediate Casing	Propose revision of casing setting depth to approximately 5,425' (base of Capitan Reef) and removal of lower ECP/DVT.
9.625" Third Intermediate Casing	Propose revision of casing setting depth to 11,181' to better isolate interval from higher pressure zones of the Wolfcamp, Atoka, Morrow, and Barnett formations.
7" Production Casing	Propose to revise casing grade to P-110EC, VAMTOP (originally P-110HC, VAMTOP) to improve collapse performance.
3.5" Injection Tubing	Propose to revise connection type to BENOIT BTS-8 (2-step gas-tight connection) for 3.5", 9.2 #/ft.; L80 standard tubular interval (0' to 15,730' TVD)

As attachments to this submittal, we also provide a revised wellbore diagram, relevant casing calculations, cement revisions, and relevant manufacturer documentation.

Changes reviewed with OCD, Geolex and Permian Oilfield Partners personnel during video conference May 5, 2022.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Consultant to Piñon DATE 04/29/2022

Type or print name David A. White, P.G. E-mail address: dwhite@geolex.com PHONE: 505-842-8000

For State Use Only

APPROVED BY: [signature] TITLE UIC Manager DATE 05/09/2022

Conditions of Approval (if any):

REVISED WELLBORE SCHEMATIC ILLUSTRATING PROPOSED AND REQUESTED REVISION TO CASING/TUBING DESIGN

REVISED
WELL SCHEMATIC
INDEPENDENCE AGI #2
S20 - T25S - R36E

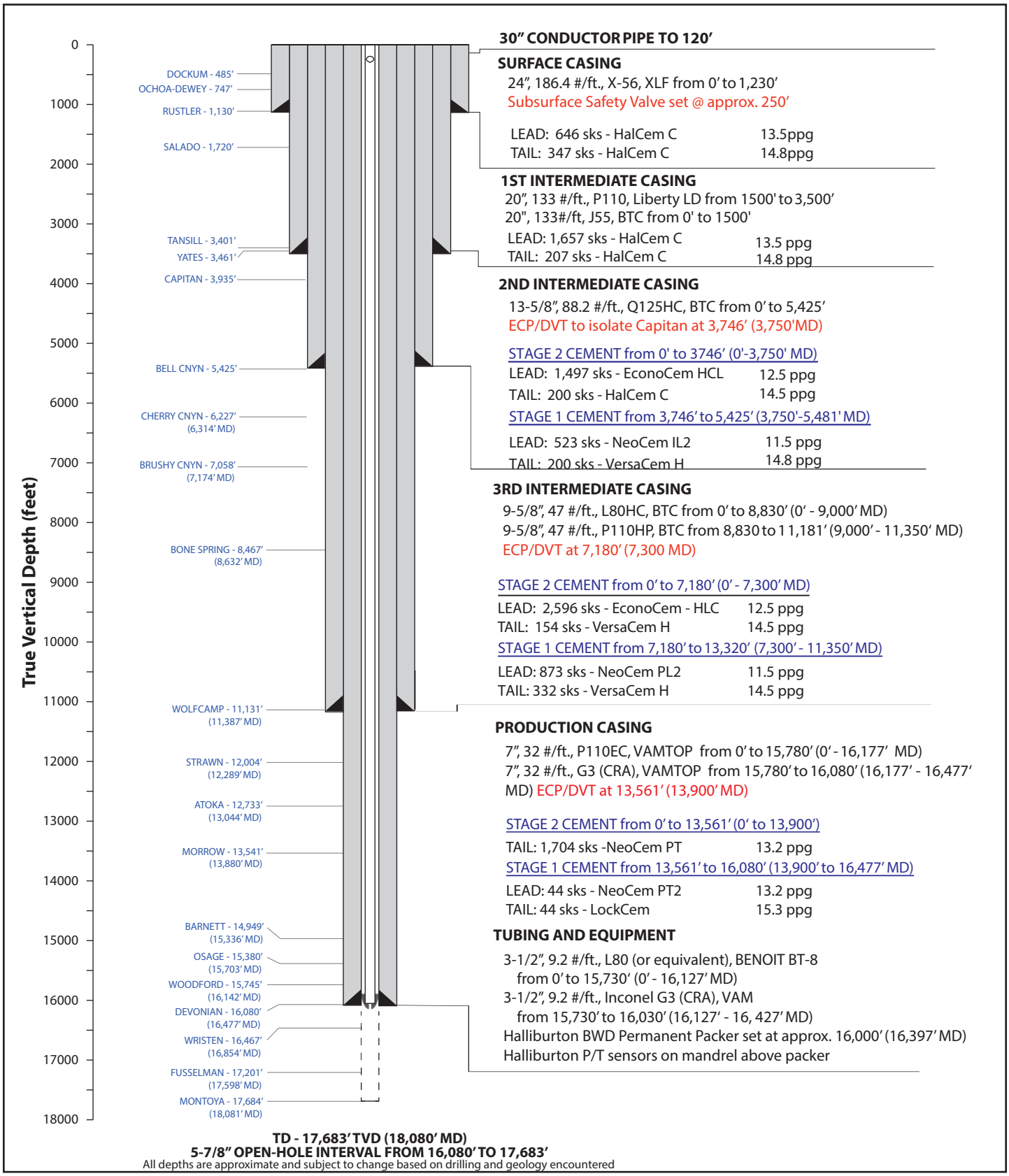


Figure 4. Well design consisting of a surface string of casing, three intermediate strings, and a production string with associating tubing/equipment and cement types

DETAILED SUMMARY AND DESCRIPTION OF PROPOSED REVISIONS TO INDEPENDENCE AGI #2 CASING/TUBING PLAN

PIÑON MIDSTREAM

INDEPENDENCE AGI #2 CASING & TUBING CHANGE REQUEST SUNDRY
Detailed Summary and Description of Requested Revision to Casing/Tubing Design

Piñon Midstream has an approved authorization to inject and permit to drill its Independence AGI #2. The UIC Permit number is SWD-2464. Pinon requests the following changes from the original C-108 application:

1. Surface Casing Change Request
    a. Original Proposed Surface Casing:
        i. 24", 186.4 #/ft, X-65, XLF from 0' to 1,230'
    b. Requested Casing Change via this Sundry
        i. 24", 186.4 #/ft, **X-56**, XLF from 0' to 1,230'
    c. Piñon requests to change the grade of the 24" surface casing from X65 to X56. Collapse and tensile failure calculations have been run for the X56 casing at the set depth of 1230', and this proposed casing exceeds the minimum API Safety Factors – See table below. Safety Factor shown is the minimum of the tube and connection Safety Factors. For burst, the maximum allowable mud weight for the next section of hole is assumed. A 100% evacuated fill condition is assumed; however the casing will be kept filled during running and cementing. See "Surface Casing Calculations" summary attached.

Safety Factors – Surface Casing		
Type	***API Min.***	***Calculated***
Burst	1.00	5.081
Collapse	1.125	1.885
Tension	1.8 (wet)	7.454

2. 1st Intermediate Casing Request
    a. Original Proposed 1st Intermediate Casing:
        i. 20", 133 #/ft, NT80, GB Butt 21 from 0' to 3,500'
    b. Requested 1st Intermediate Casing Change via this Sundry
        i. 20", 133 #/ft, **J55, BTC** from **0' to 1,500'**;
        ii. 20", 133 #/ft, **P-110, Liberty LD** from **1,500' to 3,500'**
    c. Piñon requests to change the 20" 1st Intermediate casing from NT-80 grade to P-110 from the set depth of 3500' to 1500', with a premium Liberty LD thread. This will offer better strength through the salt section. The uppermost 1500' of this casing is requested to change to J-55 grade, with BTC thread. Collapse and tensile failure calculations have been run, and this proposed casing exceeds the minimum API Safety Factors – See Table Below. Safety Factor shown is the minimum of the tube and connection Safety Factors. For burst, the maximum allowable mud weight for the next section of hole is assumed. A 70% evacuated fill condition is assumed. The casing string will be kept filled at all times during running and cementing. See "Intermediate #1 Casing Calculations" summary attached.

Safety Factors – 1st Intermediate Upper J55 BTC 0' – 1500'		
Type	***API Min.***	***Calculated***
Burst	1.00	4.670
3Collapse	1.125	1.923
Tension	1.8 (wet)	4.565

Safety Factors – 1st Intermediate Lower P110 BTC 1500' – 3500'		
Type	***API Min.***	***Calculated***
Burst	1.00	4.003
Collapse	1.125	1.256
Tension	1.8 (wet)	15.974

3. 2nd Intermediate Casing Request
   a. Original Proposed 2nd Intermediate Casing:
      i. 13-5/8", 88.2 #/ft, Q125HC, BTC from 0' to 7,058' (7,200' MD)
   b. Requested 2nd Intermediate Casing Change via this Sundry
      i. 13-5/8", 88.2 #/ft, Q125HC, BTC from 0' to **5,425'**
   c. Piñon requests to change the setting depth of the 13 5/8" 2nd Intermediate casing from 7,058' (Top of Brushy Canyon) to **5,425'** (Base of the Capitan Reef). This change will aid in the drilling, casing and isolation of the Capitan Reef from the below Delaware Mountain Group formations by reducing the potential for sticking, hole cave-in and lost circulation associated with having differing pressured zones open concurrently. The DV tool at 5349' in the original wellbore plan will be eliminated due to the new decreased depth, but the uppermost DV tool remains in the same position. Note that P-110 grade material will be used with this string. Collapse and tensile failure calculations have been run, and this proposed casing and connection combination exceeds the minimum API Safety Factors – See Table Below. Safety Factor shown is the minimum of the tube and connection Safety Factors. For burst, the maximum allowable mud weight for the next section of hole is assumed. For collapse, a 100% evacuated fill condition is assumed, however the casing will be kept filled during running and cementing. Calculation summary attached.

Safety Factors – 2nd Intermediate		
Type	***API Min.***	***Calculated***
Burst	1.00	3.555
Collapse	1.125	2.502
Tension	1.8 (wet)	4.521

4. 3rd Intermediate Casing Request
   a. Original Proposed 3rd Intermediate Casing:
      i. 9-5/8", 47 #/ft, L80HC, BTC from 0' to 8,824' (0'-9,000' MD)
      ii. 9-5/8", 47 #/ft, P110HP, BTC from 8,824' to 13,320' (9,000'-13,650' MD)

   b. Requested 3rd Intermediate Casing Change via this Sundry
      i. -5/8", 47 #/ft, L80HC, BTC from 0' to **8,830**' (0'-9,000' MD)
      ii. 9-5/8", 47 #/ft, P110HP, BTC from **8,830' to 11,181' (9,000'-11,350' MD)**

c. Piñon requests to change the setting depth of the 9 5/8" 3rd Intermediate casing from 13,320' (Middle of Atoka) to 11,181' (50' into the Wolfcamp). This change will aid in the drilling, casing and isolation of the lower pressured Delaware Mountain Group and Bone Spring formations from the underlying higher-pressure zones of the Wolfcamp, Atoka, Morrow and Barnett by reducing the potential for gas influx, sticking, sloughing, hole cave-in and lost circulation associated with having differing pressured zones open concurrently.

5. Production Casing Request
   a. Original Proposed 3rd Intermediate Casing:
      i. 7", 32 #/ft., P110HC, Var. SC from 0' to 15,780' (0'- 16,177' MD)
      ii. 7", 32 #/ft., G3 (CRA), VAM from 15,780' to 16,080' (16,177' - 16,477'MD)
   b. Requested 3rd Intermediate Casing Change via this Sundry
      i. 7", 32 #/ft., **P110EC, VAMTOP** from 0' to 15,780' (0'- 16,177' MD)
      ii. 7", 32 #/ft., G3 (CRA), VAMTOP from 15,780' to 16,080' (16,177' - 16,477'MD)
   c. Piñon requests to change the 7" 32#, HCP-110 production casing to premium VAM ECP-110, with a premium VAMTOP thread profile throughout. This change exceeds the performance of the previously approved HCP casing and maintains thread consistency with the previously approved G3 CRA tubulars used in the lowermost 300' of this casing string. See "Production Casing Calculations" summary attached

Safety Factors – Production Casing		
Type	***API Min.***	***Calculated***
Burst	1.00	1.967
Collapse	1.125	1.139
Tension	1.8 (wet)	2.210

6. Tubing Request:
   a. Original Proposed Tubing:
      i. 3-1/2", 9. 2 #/ft., L80 (or equivalent), VAM from 0' to 15,730' (0' - 16,127' MD)
      ii. 3-1/2", 9. 2 #/ft., Inconel G3 (CRA), VAM from 15,730' to 16,030' (16,127' - 16, 427' MD)
   b. Requested 3rd Intermediate Casing Change via this Sundry
      i. 3-1/2", 9. 2 #/ft., L80 (or equivalent), **BENOIT BTS-8** from 0' to 15,730' (0' - 16,127' MD)
      ii. 3-1/2", 9. 2 #/ft., Inconel G3 (CRA), VAM from 15,730' to 16,030' (16,127' - 16, 427' MD)
   c. Piñon requests to change the thread profile on the 3 ½" 9.2#/ft L80 tubing string from VAMTOP to Benoit BT-8. The Benoit BT-8 thread profile is a premium, 2-step gas tight connection, which we consider to be equivalent in performance to the VAMTOP. Please see attached documentation and statement from Benoit.

A revised wellbore schematic is attached, with commensurate cement volume changes included. Summary tables showing the differences in the casing, tubing, and cement volume are also included.

CASING CALCULATIONS FOR PROPOSED REVISIONS TO INDEPENDENCE AGI #2 DESIGN

Surface Casing

General Dimensions & Capacities						
Bit Size	Verify Size	**Max Bit Size:**	**26 "**	**PASS**	**26**	**"**
Casing Size	Verify Size	**Max Casing Size:**	**24 "**	**PASS**	**24**	**"**
Setting Depth	Casing Design Type	**(Conventional)**			**1230**	**'**
Mud Weight	From Mud Program Sheet				**8.7**	**ppg**
Mud Weight	Pressure Applied on Casing				**556**	**psi**
Length	Conductor				**80**	**'**
Conductor Setting Depth	Conductor Setting Depth				**80**	**'**
Annular Capacity (Per ft)	Surface Casing to Conductor				**1.134**	**ft³/ft**
Annular Capacity	Surface Casing to Conductor				**90.76**	**ft³**
Annular Capacity	Intermediate 1 Casing to All Surface Casing				**91**	**ft³**
Int. 1 Csg. length Below Conductor	Surface Casing Shoe to Conductor Length (Open Hole)				**1150**	**'**
Annular Capacity (Per ft)	Surface Casing Shoe to Conductor (Open Hole)				**0.55**	**ft³/ft**
Annular Capacity	Surface Casing Shoe to Conductor (Open Hole)				**627**	**ft³**
Total Annular Capacity	Surface Casing to Open Hole & Surface Casing to Conductor				**718**	**ft³**
ECP/DV Tool Present?	**NO**					

Casing Design Safety Factors							
Surface Casing	Collapse	BLM Minimum Safety Factors				Fully Evacuated - (100% Free Gas)	1.125
Surface Casing	Burst	(Applied or Hydrostatic)			1.0	100%	1.0
Surface Casing	Tension (Connection)	Dry:	1.6	Wet:	1.8		1.8
Surface Casing	Tension (Body)	Dry:	1.6	Wet:	1.8		1.8

First Casing - Select Size & Specs			
First Casing	Type		Casing
First Casing	Size		24.000 "
First Casing	Weight		186.4 #
First Casing	ID		22.5 "
First Casing	Drift		22.313 "
First Casing	Connection		XLF
First Casing	Grade		X-56
First Casing	Collapse		1049 psi
First Casing	Joint Yield		1709 klbs
First Casing	Body Yield		3101 klbs
First Casing	Joint Burst		3250 psi
First Casing	Tube Burst		3250 psi
First Casing	Max Running Depth (shows set depth of casing string if SF better than minimum)		2061 '

Burst Design Verification												
First Casing	24.000 "	186.4 #	X-56	XLF	Casing	=	1230	'	Dp SF:	1.000	SF: 5.081	PASS
Collapse Design							1230	'				PASS

Collapse Design Verification												
First Casing	24.000 "	186.4 #	X-56	XLF	Casing	=	1230	'	Dp SF:	1.125	SF: 1.885	PASS
Collapse Design							1230	'				PASS

Tension Design Verification												
First Casing	1230 '	186.4 #	X-56	XLF	Casing	=	229272	lbs	Dp SF:	1.8 (Conn)	SF: 7.454	PASS
Tension Design							229272	lbs	(AIR)			PASS

Surface Casing Design								
First Casing	1230 '	186.2 #	X-56	XLF	Casing	ID: 22.5	Drift: 22.313	Weight: 198819.078 lbs (Fluid)

Intermediate #1 Casing

General Dimensions & Capacities						
Bit Size	Verify Size	**Max Bit Size:**	**22 1/4 "**	**PASS**	**22**	**"**
Casing Size	Verify Size	**Max Casing Size:**	**20 "**	**PASS**	**20**	**"**
Setting Depth	Casing Design Type	**(Conventional)**			**3500**	**'**
Mud Weight	From Mud Program Sheet				**10.0**	**ppg**
Mud Weight	Pressure Applied on Casing				**1820**	**psi**
Length	Surface Casing 1				**1230**	**'**
Length	Surface Casing 2					**'**
Length	Surface Casing 3					**'**
Length	Surface Casing 4					**'**
Surface Casing Setting Depth	Sum of All Surface Casing's				**1230**	**'**
Annular Capacity (Per ft)	Intermediate 1 Casing to Surface Casing 1				**0.580**	**ft³/ft**
Annular Capacity (Per ft)	Intermediate 1 Casing to Surface Casing 2					**ft³/ft**
Annular Capacity (Per ft)	Intermediate 1 Casing to Surface Casing 3					**ft³/ft**
Annular Capacity (Per ft)	Intermediate 1 Casing to Surface Casing 4					**ft³/ft**
Annular Capacity	Intermediate 1 Casing to Surface Casing 1				**713**	**ft³**
Annular Capacity	Intermediate 1 Casing to Surface Casing 2					**ft³**
Annular Capacity	Intermediate 1 Casing to Surface Casing 3					**ft³**
Annular Capacity	Intermediate 1 Casing to Surface Casing 4					**ft³**
Annular Capacity	Intermediate 1 Casing to All Surface Casing				**713**	**ft³**
Int. 1 Csg. length Below Surface Csg. Shoe	Intermediate 1 Casing Shoe to Surface Casing Length (Open Hole)				**2270**	**'**
Annular Capacity (Per ft)	Intermediate 1 Casing Shoe to Surface Casing Shoe (Open Hole)				**0.46**	**ft³/ft**
Annular Capacity	Intermediate 1 Casing Shoe to Surface Casing Shoe (Open Hole)				**1040**	**ft³**
Total Annular Capacity	Intermediate 1 Casing to Open Hole & Intermediate 1 Casing to Surface Casing				**1753**	**ft³**
ECP/DV Tool Present?	**NO**					

Casing Design Safety Factors							
Surface Casing	Collapse	BLM Minimum Safety Factors				Partially Evacuated - % Free Gas	1.125
Surface Casing	Burst	(Applied or Hydrostatic)			1.0		1.0
Surface Casing	Tension (Connection)	Dry:	1.6	Wet:	1.8	70%	1.8
Surface Casing	Tension (Body)	Dry:	1.6	Wet:	1.8		1.8

First Casing - Select Size & Specs			
First Casing	Type	Casing	
First Casing	Size	20.000	"
First Casing	Weight	133	#
First Casing	ID	18.730	"
First Casing	Drift	18.543	"
First Casing	Connection	BTC	
First Casing	Grade	J-55	
First Casing	Collapse	1500	psi
First Casing	Joint Yield	2125	klbs
First Casing	Body Yield	2125	klbs
First Casing	Joint Burst	3060	psi
First Casing	Tube Burst	3060	psi
First Casing	Max Running Depth (shows set depth of casing string if SF better than minimum)	3500	'

Second Casing - (None)			
Second Casing	Type	Casing	
Second Casing	Size	20.000	"
Second Casing	Weight	133	#
Second Casing	ID	18.730	"
Second Casing	Drift	18.543	"
Second Casing	Connection	Liberty LD	
Second Casing	Grade	P-110	
Second Casing	Collapse	1600	psi
Second Casing	Joint Yield	4249	klbs
Second Casing	Body Yield	4250	klbs
Second Casing	Joint Burst	6120	psi
Second Casing	Tube Burst	6120	psi
Second Casing	Max Running Depth (shows set depth of casing string if SF better than minimum)	3500	'

Burst Design Verification													
First Casing	20.000 "	133.0 #	J-55	BTC	Casing	=	1500	'	Dp SF:	1.000	SF:	4.670	PASS
Second Casing	20.000 "	133.0 #	P-110	Liberty LD	Casing	=	3500	'	Dp SF:	1.000	SF:	4.003	PASS
Collapse Design							3500	'					PASS

Collapse Design Verification													
First Casing	20.000 "	133.0 #	J-55	BTC	Casing	=	1500	'	Dp SF:	1.125	SF:	1.923	PASS
Second Casing	20.000 "	133.0 #	P-110	Liberty LD	Casing	=	3500	'	Dp SF:	1.125	SF:	1.256	PASS
Collapse Design							3500	'					PASS

Tension Design Verification														
First Casing	1500 '	133.0 #	J-55	BTC	Casing	=	199500	lbs	Dp SF:	1.8	(Body)	SF:	4.565	PASS
Second Casing	2000 '	133.0 #	P-110	Liberty LD	Casing	=	266000	lbs	Dp SF:	1.8	(Conn)	SF:	15.974	PASS
Tension Design							465500	lbs			(AIR)			PASS

Intermediate #1 Casing Design										
First Casing	1500 '	133.0 #	J-55	BTC	Casing	ID: 18.730	Drift: 18.543	Weight: 169041.9847	lbs (Fluid)	
Second Casing	3500 '	133.0 #	P-110	Liberty LD	Casing	ID: 18.730	Drift: 18.543	Weight: 225389.313	lbs (Fluid)	

Intermediate #2 Casing

General Dimensions & Capacities						
Bit Size	Verify Size	**Max Bit Size:**	**18 1/2 "**	**PASS**	**17 1/2**	**"**
Casing Size	Verify Size	**Max Casing Size:**	**16 "**	**PASS**	**13 5/8**	**"**
Setting Depth	Casing Design Type	**(Conventional)**			**5425**	**'**
Mud Weight	From Mud Program Sheet				**8.4**	**ppg**
Mud Weight	Pressure Applied on Casing				**2370**	**psi**
Length	Intermediate #1 Casing 1				**1500**	**'**
Length	Intermediate #1 Casing 2				**2000**	**'**
Length	Intermediate #1 Casing 3					**'**
Length	Intermediate #1 Casing 4					**'**
Intermediate #1 Casing Setting Depth	Sum of All Intermediate #1 Casing's				**3500**	**'**
Annular Capacity (Per ft)	Intermediate #2 Casing to Intermediate #1 Casing 1				**0.901**	**ft³/ft**
Annular Capacity (Per ft)	Intermediate #2 Casing to Intermediate #1 Casing 2				**0.901**	**ft³/ft**
Annular Capacity (Per ft)	Intermediate #2 Casing to Intermediate #1 Casing 3					**ft³/ft**
Annular Capacity (Per ft)	Intermediate #2 Casing to Intermediate #1 Casing 4					**ft³/ft**
Annular Capacity	Intermediate #2 Casing to Intermediate #1 Casing 1				**1351.31**	**ft³**
Annular Capacity	Intermediate #2 Casing to Intermediate #1 Casing 2				**1801.75**	**ft³**
Annular Capacity	Intermediate #2 Casing to Intermediate #1 Casing 3					**ft³**
Annular Capacity	Intermediate #2 Casing to Intermediate #1 Casing 4					**ft³**
Annular Capacity	Intermediate #2 Casing to All Intermediate #1 Casings				**3153**	**ft³**
Int. #2 Csg. length Below Surface Csg. Shoe	Intermediate #2 Casing Shoe to Intermediate #1 Casing Length (Open Hole)				**1925**	**'**
Annular Capacity (Per ft)	Intermediate #2 Casing Shoe to Intermediate #1 Casing Shoe (Open Hole)				**0.66**	**ft³/ft**
Annular Capacity	Intermediate #2 Casing Shoe to Intermediate #1 Casing Shoe (Open Hole)				**1266**	**ft³**
Total Annular Capacity	Intermediate #2 Casing to Open Hole & Intermediate #2 Casing to Intermediate #1 Casing				**4419**	**ft³**
ECP/DV Tool Present?	**YES**					
ECP/DV Tool	Setting Depth				**3746**	**'**
Int. #1 Csg Length Above ECP/DV Tool	ECP/DV Tool Depth to Surface (Cased Hole)				**3500**	**'**
Int. #2 Csg Length Above ECP/DV Tool	ECP/DV Tool Depth to Intermediate #1 Casing Shoe (Open Hole)				**246**	**'**
Annular Capacity Above ECP/DV Tool	Intermediate #1 Casing Shoe to Surface (Cased Hole)				**3153**	**ft³**
Annular Capacity Above ECP/DV Tool	ECP/DV Tool to Intermediate #1 Casing Shoe (Open Hole)				**162**	**ft³**
TOTAL Annular Cap. Above ECP/DV Tool	ECP/DV Tool Depth to Surface (Open Hole + Cased Hole)				**3315**	**ft³**
Int. #2 Csg Length Below ECP/DV Tool	Intermediate #2 Casing Shoe to ECP/DV Tool (Open Hole)				**1679**	**'**
TOTAL Annular Cap. Below ECP/DV Tool	Intermediate #2 Casing Shoe to ECP/DV Tool Depth (All Open Hole)				**1104**	**ft³**

Casing Design Safety Factors						
Surface Casing	Collapse	BLM Minimum Safety Factors			Fully Evacuated - (100% Free Gas)	1.125
Surface Casing	Burst	(Applied or Hydrostatic)		1.0	100%	1.0
Surface Casing	Tension (Connection)	Dry:	1.6	Wet: 1.8		1.8
Surface Casing	Tension (Body)	Dry:	1.6	Wet: 1.8		1.8

First Casing - Select Size & Specs		
First Casing	Type	Casing
First Casing	Size	13.625 "
First Casing	Weight	88.2 #
First Casing	ID	12.375 "
First Casing	Drift	12.250 "
First Casing	Connection	BTC
First Casing	Grade	HCQ-125
First Casing	Collapse	5930 psi
First Casing	Joint Yield	2163 klbs
First Casing	Body Yield	3191 klbs
First Casing	Joint Burst	10030 psi
First Casing	Tube Burst	10030 psi
First Casing	Max Running Depth (shows set depth of casing string if SF better than minimum)	12068 '

Burst Design Verification				
First Casing	13.625 " 88.2 # HCQ-125 BTC Casing = 5425 '	Dp SF: 1.000	SF: 3.555	PASS
Collapse Design	5425 '			PASS

Collapse Design Verification				
First Casing	13.625 " 88.2 # HCQ-125 BTC Casing = 5425 '	Dp SF: 1.125	SF: 2.502	PASS
Collapse Design	5425 '			PASS

Tension Design Verification				
First Casing	5425 ' 88.2 # HCQ-125 BTC Casing = 478485 lbs	Dp SF: 1.8 (Conn)	SF: 4.521	PASS
Tension Design	478485 lbs	(AIR)		PASS

Intermediate #2 Casing Design								
First Casing	5425 '	88.2 #	HCQ-125	BTC	Casing	ID: 12.375	Drift: 12.250	Weight: 417122 lbs (Fluid)

Production Casing

General Dimensions & Capacities							
Bit Size	Verify Size	**Max Bit Size:**	**8 1/2 "**	**PASS**	**8 1/2**	"
Casing Size	Verify Size	**Max Casing Size:**	**7" FJ**	**FAIL**	**7**	"
Setting Depth	Casing Design Type	**(Conventional)**			**16477**	'
Mud Weight	From Mud Program Sheet				**12.0**	ppg
Mud Weight	Pressure Applied on Casing				**10282**	psi
Length	Intermediate #3 Casing 1				**6650**	'
Length	Intermediate #3 Casing 2				**4700**	'
Length	Intermediate #3 Casing 3				**0**	'
Length	Intermediate #3 Casing 4				**0**	'
Surface Casing Setting Depth	Sum of All Intermediate #3 Casing's				**11350**	'
Annular Capacity (Per ft)	Intermediate #4 Casing to Intermediate #3 Casing 1				**0.144**	ft^3/ft
Annular Capacity (Per ft)	Intermediate #4 Casing to Intermediate #3 Casing 2				**0.144**	ft^3/ft
Annular Capacity (Per ft)	Intermediate #4 Casing to Intermediate #3 Casing 3				**-0.267**	ft^3/ft
Annular Capacity (Per ft)	Intermediate #4 Casing to Intermediate #3 Casing 4				**-0.267**	ft^3/ft
Annular Capacity	Intermediate #4 Casing to Intermediate #3 Casing 1				**956.07**	ft^3
Annular Capacity	Intermediate #4 Casing to Intermediate #3 Casing 2				**675.72**	ft^3
Annular Capacity	Intermediate #4 Casing to Intermediate #3 Casing 3				**0.00**	ft^3
Annular Capacity	Intermediate #4 Casing to Intermediate #3 Casing 4				**0.00**	ft^3
Annular Capacity	Intermediate #4 Casing to All Intermediate #3 Casings				**1632**	ft^3
Int. #4 Csg. length Below Surface Csg. Shoe	Intermediate #4 Casing Shoe to Intermediate #3 Casing Length (Open Hole)				**5127**	'
Annular Capacity (Per ft)	Intermediate #4 Casing Shoe to Intermediate #3 Casing Shoe (Open Hole)				**0.13**	ft^3/ft
Annular Capacity	Intermediate #4 Casing Shoe to Intermediate #3 Casing Shoe (Open Hole)				**650**	ft^3
Total Annular Capacity	Intermediate #4 Casing to Open Hole & Intermediate #4 Casing to Intermediate #3 Casing				**2282**	ft^3
ECP/DV Tool Present?	**YES**					
ECP/DV Tool	**Setting Depth**				**13900**	'
Int. #3 Csg Length Above ECP/DV Tool	ECP/DV Tool Depth to Surface (Cased Hole)				**11350**	'
Int. #4 Csg Length Above ECP/DV Tool	ECP/DV Tool Depth to Intermediate #3 Casing Shoe (Open Hole)				**2550**	'
Annular Capacity Above ECP/DV Tool	Intermediate #3 Casing Shoe to Surface (Cased Hole)				**1632**	ft^3
Annular Capacity Above ECP/DV Tool	ECP/DV Tool to Intermediate #3 (Open Hole)				**323**	ft^3
TOTAL Annular Cap. Above ECP/DV Tool	ECP/DV Tool Depth to Surface (Open Hole + Cased Hole)				**1955**	ft^3
Int. #4 Csg Length Below ECP/DV Tool	Intermediate #4 Casing Shoe to ECP/DV Tool (Open Hole)				**2577**	'
TOTAL Annular Cap. Below ECP/DV Tool	Intermediate #4 Casing Shoe to ECP/DV Tool Depth (All Open Hole)				**327**	ft^3

Casing Design Safety Factors							
Surface Casing	Collapse	BLM Minimum Safety Factors				Fully Evacuated - (100% Free Gas)	1.125
Surface Casing	Burst	(Applied or Hydrostatic)			1.0	100%	1.0
Surface Casing	Tension (Connection)	Dry:	1.6	Wet:	1.8		1.8
Surface Casing	Tension (Body)	Dry:	1.6	Wet:	1.8		1.8

First Casing - Select Size & Specs		
First Casing	Type	Casing
First Casing	Size	7.000 "
First Casing	Weight	32 #
First Casing	ID	6.094 "
First Casing	Drift	5.969 "
First Casing	Connection	VAMTOP HT
First Casing	Grade	HCP-110
First Casing	Collapse	11710 psi
First Casing	Joint Yield	1165 klbs
First Casing	Body Yield	1165 klbs
First Casing	Joint Burst	14160 psi
First Casing	Tube Burst	14160 psi
First Casing	Max Running Depth (shows set depth of casing string if SF better than minimum)	16681 '

Burst Design Verification														
First Casing	7.000 "	32.0 #	ECP-110	VAMTOP HT	Casing	=	16477	'	Dp SF:	1.000	SF:	1.967	PASS
Third Casing														
Fourth Casing														
Collapse Design							16477	'					PASS

Collapse Design Verification														
First Casing	7.000 "	32.0 #	ECP-110	VAMTOP HT	Casing	=	16477	'	Dp SF:	1.125	SF:	1.139	PASS
Second Casing														
Third Casing														
Fourth Casing														
Collapse Design							16477	'						

Tension Design Verification														
First Casing	16477 '	32.0 #	ECP-110	VAMTOP HT	Casing	=	527264	lbs	Dp SF:	1.8	(Body)	SF:	2.210	PASS
Second Casing														
Third Casing														
Fourth Casing														
Tension Design							527264	lbs			(AIR)			PASS

Intermediate #4 Casing Design											
First Casing	16477 '	32.0 #	ECP-110	VAMTOP HT	Casing	ID: 6.094	Drift: 5.969		Weight:	430666	lbs (Fluid)
Second Casing											
Third Casing											
Fourth Casing											

BENOIT BTS-8 PREMIUM CONNECTION
MATERIAL TESTING AND SPECIFICATIONS

Benoit®
Consistently Exceeding Customer Expectations
P.O. Box 2618 Houma, LA 70361 Main Office (985) 879-2487 www.benoit-inc.com

Benoit "BTS®" Product Line Testing

Qualification testing of Benoit BTS® connections consisted of a physical test program in line with a modified CAL III test protocol and finite element analysis of the connection performance under a multitude of simulated well load combinations.

A connection **"product line"** is that set of products (connections) that are designed with common criteria; such as: uniform seal geometry, consistent geometric changes, uniform thread profile, and similar and consistent seal interference across the sizes, masses, and grades specified.

As qualification testing is extremely time-consuming and costly, when possible, it is beneficial to both the manufacturer and the end-user to use interpolation or extrapolation of significant performance parameters over a range of sizes and material grades to qualify a "product line' of connections. Testing is performed on worst-case combinations of the product population while verifying the material specifications, in order to give a level of confidence that the sizes not tested will perform as predicted.

The following sizes of Benoit's BTS® product line have completed and passed qualification testing consisting of a physical test program with finite element analysis also being run on these sizes:

2-3/8" 4.70# 13Cr-95 BTS-8	2-3/8" 5.95# 13Cr-95 BTS-6
3-1/2" 12.95# L80 BTS-6	4-1/2" 15.50# 13Cr-95 BTS-6
4-1/2" 12.75# 13Cr-95 BTS-8	4-1/2" 19.20# 13Cr-95 BTS-6
5-1/2" 26.0# 13Cr-110 BTS-4	4" 13.40# 13Cr-110 BTS-6

Benoit BTS® connections have been accepted and used in all parts of the world by both major and independent oil & gas companies including:

Chevron	Marubeni O&G	El Paso
Marathon	XTO Energy	Anadarko
ExxonMobil	Noble Energy	Exco Resources
ConocoPhillips	Murphy	Pan Meridian
Hess	Total	Key Energy
Energy XXI	Petroquest	Century Exploration
Chesapeake	Forest Oil	Quantum Resources
W&T Offshore	Petro Hawk	LLOG
Stone Energy	Unit Petroleum	EOG
Nexen	Samson Resource	Quicksilver
Cimarex		

For more information concerning Benoit's BTS® connections, please visit our website at www.benoit-inc.com or contact us by phone at 985-879-2487 or by email at technicalsupport@benoit-inc.com.

SUMMARY REPORT FOR

BENOIT "BTS-8" PRODUCT LINE

EVALUATION TESTING

Benoit	**Subject:** BTS-8 Product Line Qualification Testing	**Date of Test:** 2005
	Test Location: Houston, Texas	SUMMARY TEST REPORT

INTRODUCTION

In 2005, Benoit Machine, L.L.C., together with a major operator, performed extensive testing on 2-3/8" 4.70# and 4-1/2" 12.75# 13CR-95ksi BTS-8 in order to evaluate and qualify the BTS-8 product line. The evaluation consisted of finite element analysis (FEA) and physical testing. Physical testing was performed on a number of specimens to verify the FEA results and to explore performance parameters that cannot be studied conveniently through FEA, such as galling resistance and the effects of multiple make and breaks on the sealing capacity of the connections.

THE CONNECTIONS PASSED ALL PHASES OF THE TESTING.

This report supplies a brief summary of the testing performed. To view the entire report, please contact Benoit Machine, LLC, Quality Assurance Department, at (985) 879-2487.

FEA Overview

Finite Element Analysis was used to study structural and sealability performance of the connection design. CRM Engineering Services of Kilgore, Texas, was contracted to perform the analysis. The connection model for the FEA consisted of minimum thread clearance and minimum seal interference. Evaluated, were the performance of both the metal-to-metal seals and the structural integrity of the connection. The analysis was performed in the Abaqus FEA program using a linear element approach. The results indicate gas and liquid sealability throughout the entire load range.

Physical Testing Overview

Physical testing of the BTS-8 connections was performed in the test laboratory of a major oil and gas company in Houston, Texas.

The physical testing consisted of the connections being subjected to multiple make and break tests, combined load gas sealability tests, thermal cycle test, external pressure test, and structural failure tests. The test loads were obtained using the BTS connection performance envelope and the pipe body yield envelope. The connections were also subjected to additional test loads in excess of the targeted performance envelopes to confirm the connections failure limits, modes, and locations.

Test Specimens

Eight specimens from each the 2-3/8" 4.70# and 4-1/2" 12.75# were prepared for the physical test program, with two of the specimens being spares for use in case of problems. The test connections were machined on Kawasaki KO-HP1-13Cr95 integral joint tubing sections.

Specimen 1 was machined to minimum thread clearance and maximum seal interference.
Specimen 2 was machined to maximum thread clearance and minimum seal interference.
Specimens 3, 4, 5, 6, 13, and 15 were machined to minimum thread clearance and minimum seal interference (#13 & 15 were spares).

Benoit	**Subject:** BTS-8 Product Line Qualification Testing	**Date of Test:** 2005
	Test Location: Houston, Texas	SUMMARY TEST REPORT

Connection Gauging

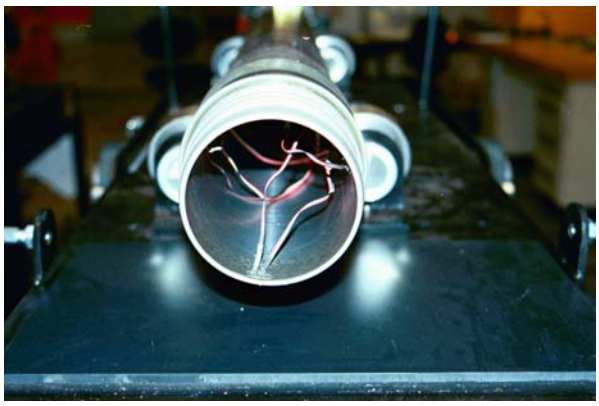
The gauging and inspection of each connection was performed and documented by Benoit Quality Control personnel and witnessed by a PPI third party monitor. The gauging was performed in accordance with Benoit's standard operating procedures.

SEA Inspection

After threading and gauging, all specimens were shipped to Tuboscope for SEA inspection to ensure that the test material had no unseen flaws that could affect the test results.

Strain Gauging

Biaxial strain gauges were installed inside the pins and outside the boxes on all test specimens prior to make and break cycles. Strain gauges were attached to each connection directly opposite of the internal 14degree seal in equally spaced locations around the diameter. Strain gauge readings were monitored during the make and break testing to determine the trapping of any thread compound in the seal area.



SUMMARY OF MAKE & BREAK TESTING

Make and break tests were conducted as follows:

Specimen	Activity
1, 3, 5	10 M&B's at maximum torque + Final Makeup at minimum torque
2, 4, 6	1 Makeup at minimum torque

After each M&B cycle, the thread compound was removed and the connections were inspected for galling, burrs, gouges, and scratches in the threads, seals, and shoulder areas.

The thread compound used for testing was Bestolife 72733 with the amount being .1 to .3 ounces per connection.

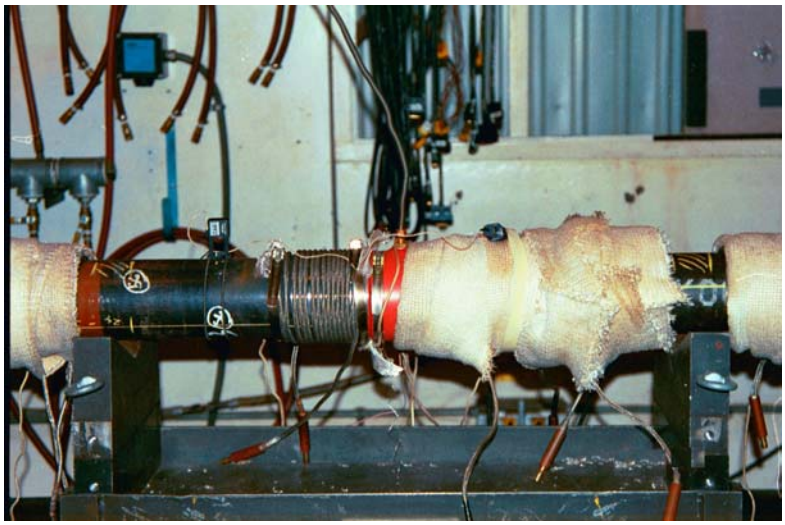
Benoit	**Subject:** BTS-8 Product Line Qualification Testing	**Date of Test:** 2005
	Test Location: Houston, Texas	SUMMARY TEST REPORT

Results of M&B Testing: *No galling, scratches, burrs, etc., was found on any connection during visual inspection. No field repairs were necessary. All strain gauge readings were normal.*

SEALABILITY TESTING

Sealability tests were conducted on specimens 2, 3, 4, 5, and 6.

The pressurization medium was nitrogen with helium added as a tracer gas. A rubber boot was installed around the mated pin and box external shoulder seal and was piped to an inverted flask filled with water and fitted with a leak detection device. Appearance of bubbles in the flask would indicate suspected leak. For the elevated temperature sealability tests, the temperature was held at 300°F +/- 30°F.



SPECIMEN #2 was subjected to an 18-step schedule of combined loads including internal pressure, tension/compression, and bending at ambient temperature and again at 300° F with stresses up to 94% VME.

RESULT: The specimen exhibited no leaks during the ambient or elevated temperature load cycles.

SPECIMENS #3 and #4 were subjected to a 32-step schedule of combined loads including internal pressure, tension/compression, and bending at ambient temperature and again at 300° F with stresses up to approximately 100% VME.

RESULT: Specimens 3 and 4 exhibited no leaks during testing.

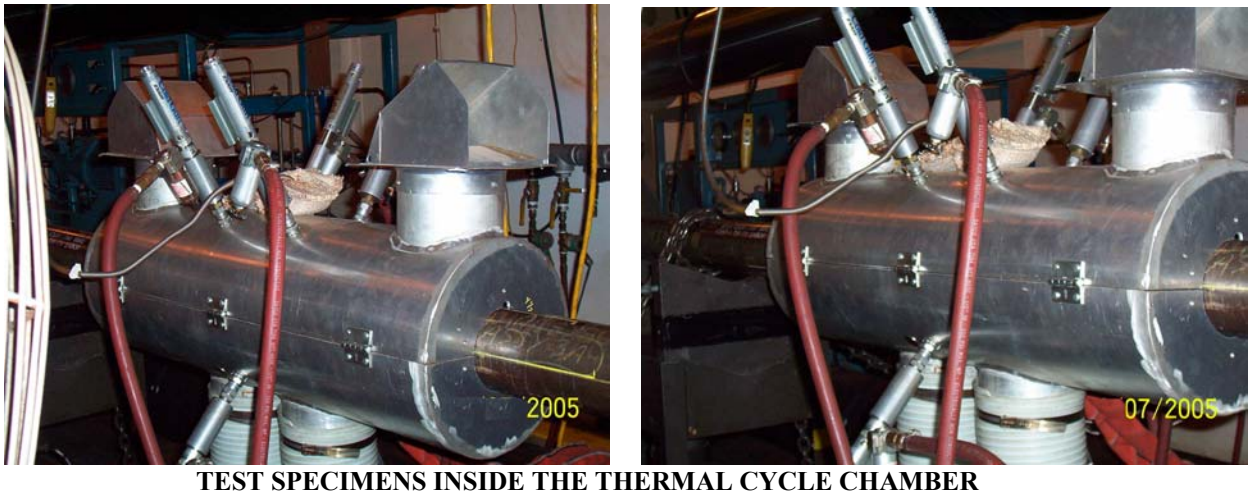
SPECIMENS #5 and #6 were subjected to a 45-step schedule of combined loads including internal pressure, tension/compression, and bending. Specimen #5 was tested at ambient temperature and specimen #6 at 300° F. This was the most severe load schedule with many of the load-steps well above 100% VME (see the last4 pages for VME plot of test loads for #5 & #6).

RESULT: The specimens exhibited no leaks during the entire load schedule.

THERMAL-CYCLE TESTING

Following sealability testing, specimen #3 and #5 were thermally cycled between 120°F or less and 300°F while applying 75% of the API Pipe Body Rating in tension and 80% of the API PBR internal pressure. The specimens were subjected to 20 cycles each.

*RESULT: **The** specimens exhibited no leaks during the thermal cycles testing.*



TEST SPECIMENS INSIDE THE THERMAL CYCLE CHAMBER

TENSILE-TO-FAILURE TESTING

Pure tension, with no pressure, was applied to Specimen #1 and gradually increased to establish the tensile failure mode. The tensile load was gradually increased until the specimen began elongating without applying any higher load. Both the 2-3/8" and 4-1/2" specimens failed in the pipe body and not the connections with loads as follows:

Benoit	**Subject:** BTS-8 Product Line Qualification Testing	**Date of Test:** 2005
	Test Location: Houston, Texas	SUMMARY TEST REPORT

2-3/8" 4.70# BTS-8 @ 162,000 lbs. or 130% of the API PBR
4-1/2" 12.75# BTS-8 @ 431,000 lbs. or 126% of the API PBR

4-1/2" 12.75# TENSILE FAILURE

2-3/8" 4.70# TENSILE FAILURE

INTERNAL PRESSURE TO FAILURE

Specimens 1, 5, & 6 were internally pressured with water at ambient temperature until failure.

RESULTS: All specimens ruptured in the pipe body at 160% to 173% of the API Pipe Body Ratings as followings:

2-3/8" 4.70# BTS-8: #1 @ 21,273 psi, #5 @ 22,999 psi, and #6 @ 22,830 psi.
4-1/2" 12.75# BTS-8: #1 @ 16,393 psi, #5 @ 16,434 psi, and #6 @ 16,710 psi.

EXAMPLE OF INTERNAL PRESSURE TO FAILURE

Benoit	**Subject:** BTS-8 Product Line Qualification Testing	**Date of Test:** 2005
	Test Location: Houston, Texas	SUMMARY TEST REPORT

EXTERNAL PRESSURE TEST

Specimen #3 from each the 2-3/8" and 4-1/2" was subjected to a 10-step schedule of loads combining tension/compression with external pressure. Initial loading was 90% of the API pipe body minimum tension rating with no pressure. Gradually, external pressure was increased while lessening the tension load until the specimens were loaded in compression with and external pressure equal to 84% of the API collapse rating for the pipe body.

RESULT: No leaks were observed.

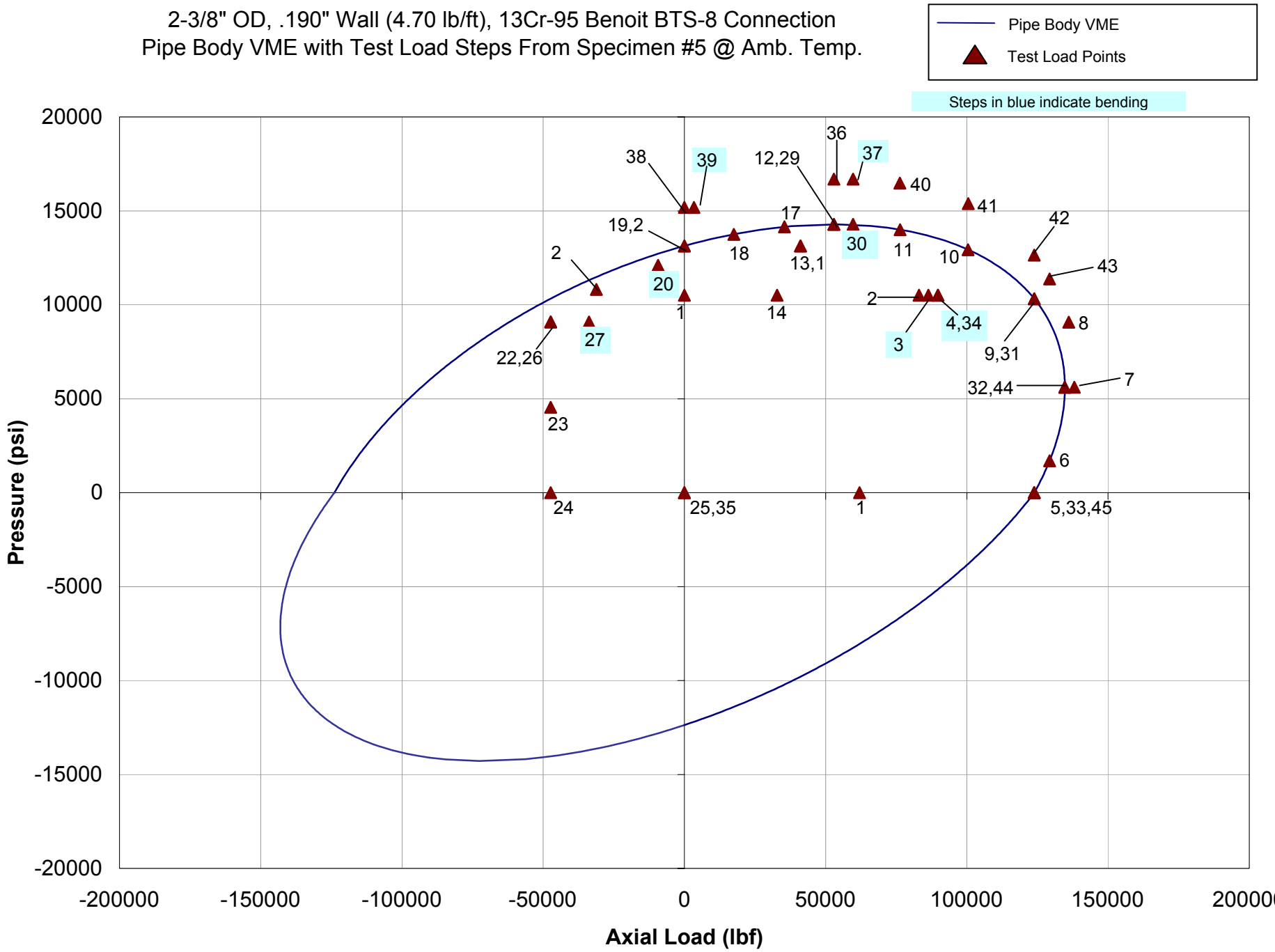
TEST SPECIMENS INSIDE THE EXTERNAL PRESSURE CHAMBER

COMPRESSION-TO-FAILURE TEST

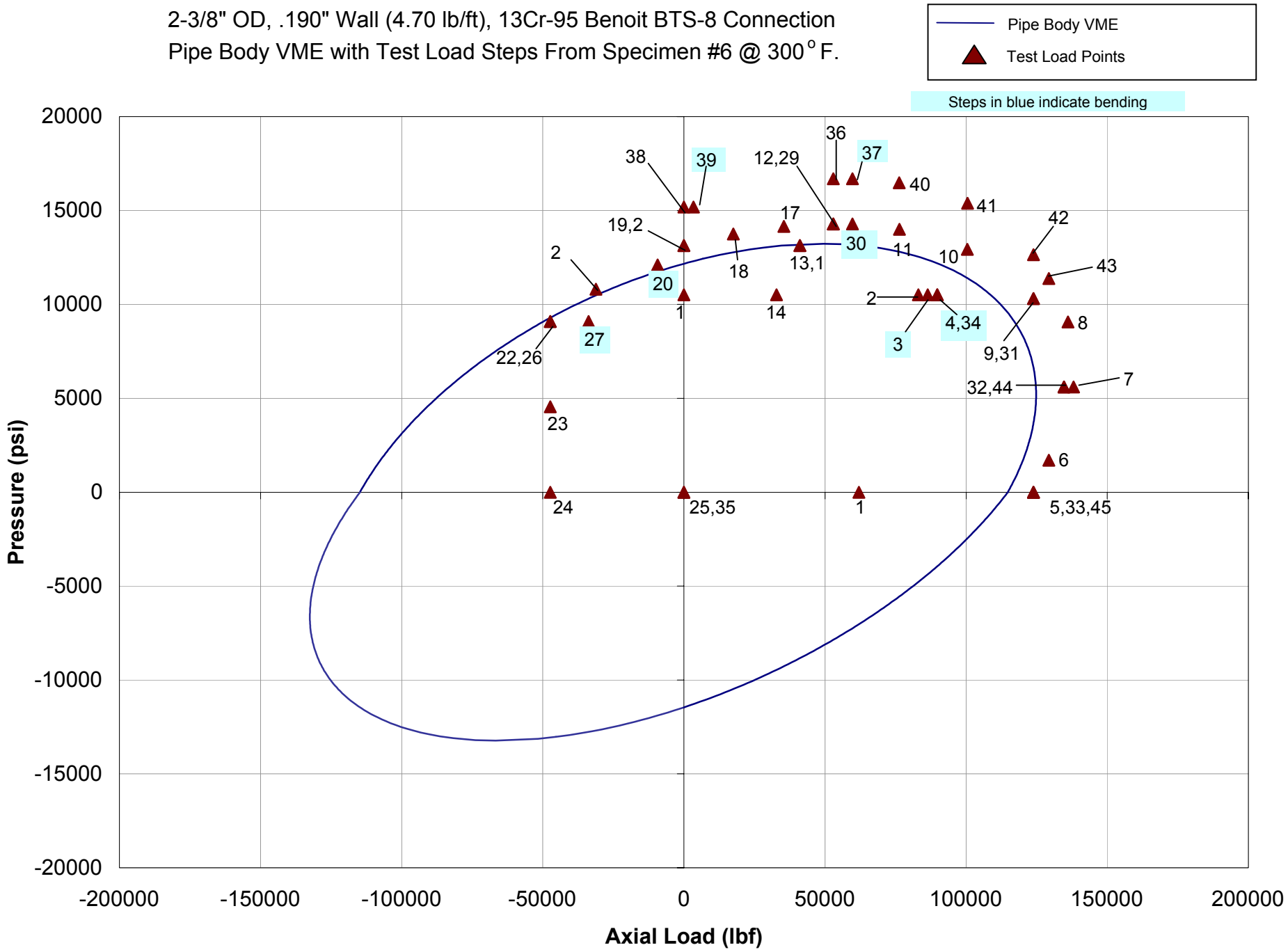
After sealability testing and thermal cycling, Specimen #4 from each size was shortened as much as the load frame would allow. A compressive force was gradually increased on the specimen (with no internal or external pressure) until yielding began. Both sizes buckled in the tube-body of the specimen, with no measurable yielding to the connections. The final compression loads were as follows:

2-3/8" 4.70# BTS-8 @ -122,200 lbs.

4-1/2" 12.75# BTS-8 @ -401,700 lbs.

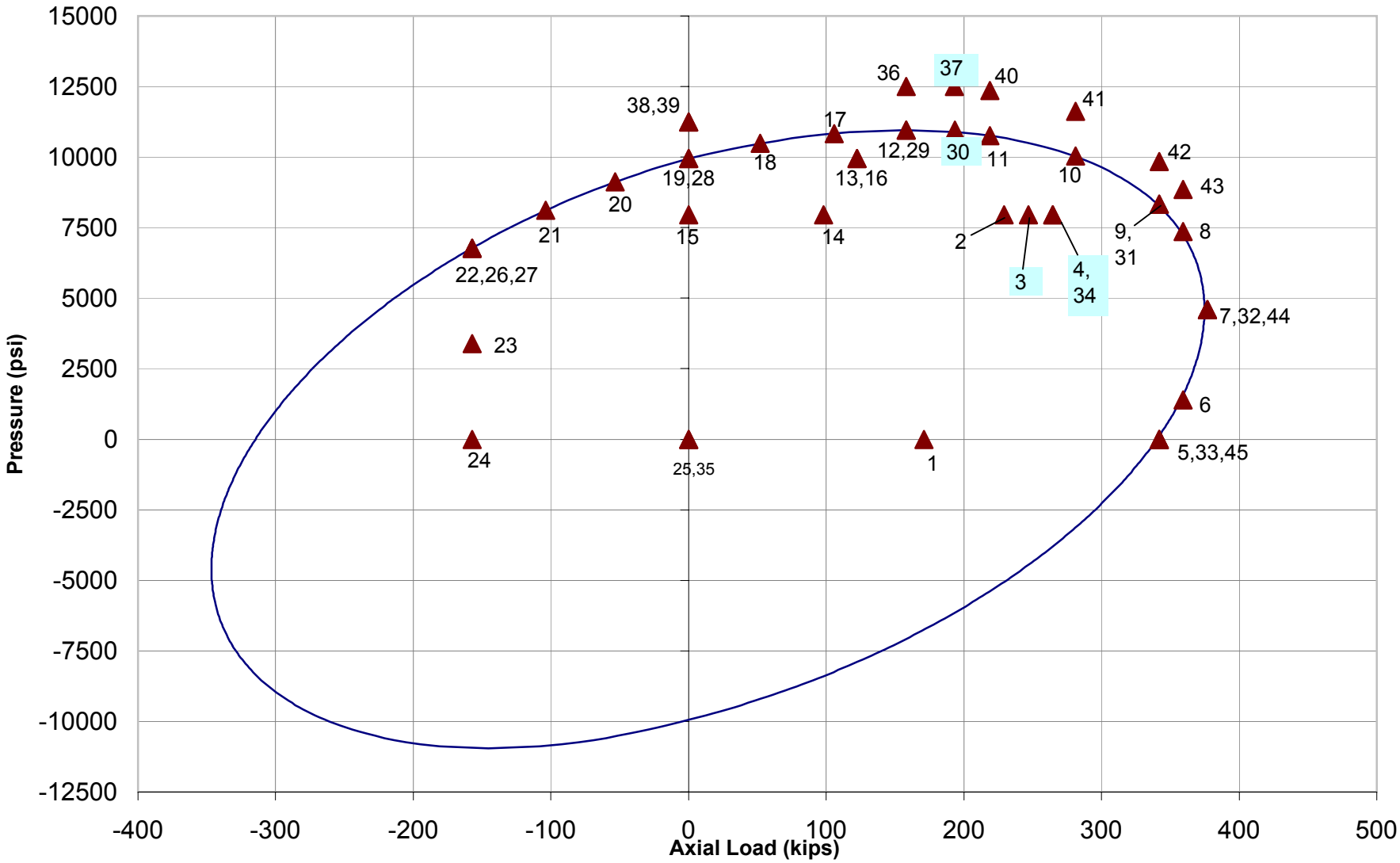


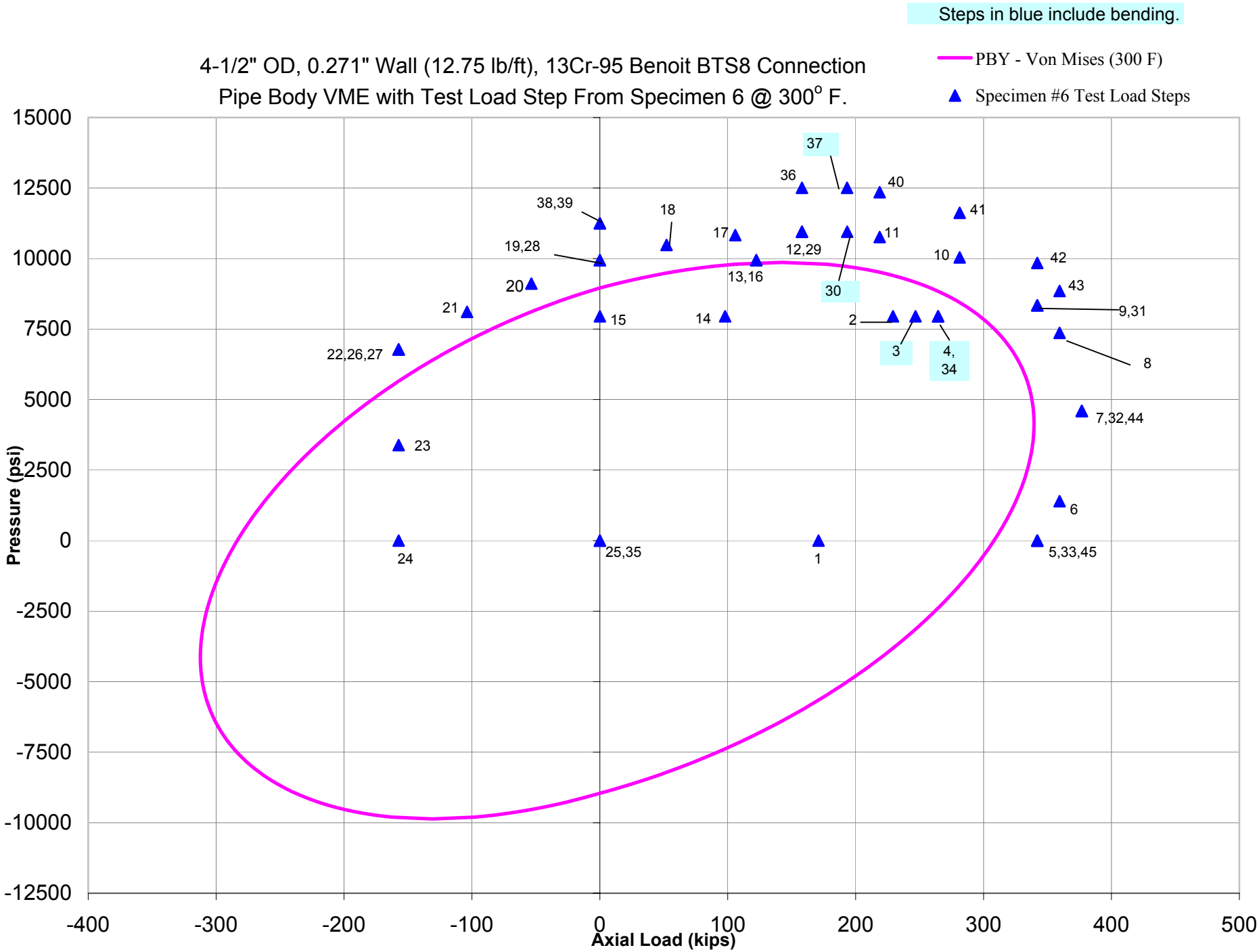
2-3/8" OD, .190" Wall (4.70 lb/ft), 13Cr-95 Benoit BTS-8 Connection
Pipe Body VME with Test Load Steps From Specimen #6 @ 300 ° F.



Steps in blue include bending.

4-1/2" OD, 0.271" Wall (12.75 lb/ft), 13Cr-95 Benoit BTS8 Connection
Pipe Body VME with Test Load Steps From Specimen #5 (Amb. Temp.)





Benoit™
Consistently Exceeding Customer Expectations
P.O. Box 2618 Houma, LA 70361 Main Office (985) 879-2487 www.benoit-inc.com

April 4, 2022

RE: BENOIT® "BTS®" CONNECTION PRESSURE INTEGRITY

Benoit Premium Threading, LLC is the proprietor of the **"BTS®"** line of tubing connections and maintains that based on extensive finite element analysis (FEA) and physical testing, it has been determined that the metal-to-metal seals of **"BTS-8®"** and **"BTS-6®"** tubing connections remain completely gas-tight when used in accordance with Benoit's Recommended Practices and within the operating range of the performance properties published in Technical Data Sheets for each size, weight, and grade of BTS connection. **BTS®** Recommended Practices and Technical Data Sheets can be found on Benoit's website at www.benoit-inc.com.

BENOIT PREMIUM THREADING, L.L.C. BENOIT HOUMA, LA - USA

Patrick Knight

Patrick Knight, V.P. of Operations
Benoit Premium Threading, LLC

SUMMARY OF PROPOSED CASING/TUBING REVISIONS AND REVISED CEMENT PLAN

Independence AGI #2 Proposed Casing Schedule - From Application

Casing	Hole Size (in.)	Csg. Size (in.)	Pounds Per Foot	Grade	Thread	Top (ft., MD)	Bottom (ft., MD)	Length (ft., MD)	Length (ft., TVD)
Proposed Casing									
Conductor	36	30	118	-	Welded	0	122	122	122
Surface	26	24	186.4	X-65	XLF	0	1230	1230	1230
1st Intermediate	22	20	133	NT-80DE	GB Butt 21	0	3500	3500	3500
2nd Intermediate	17.5	13.625	88.2	Q-125HC	BTC	0	7200	7200	7058
3rd Intermediate	12.25	9.625	47	L-80HC	BTC	0	9000	9000	8824
3rd Intermediate	12.25	9.625	47	P-110HP	BTC	9000	13650	4650	4496
Production	8.5	7	32	P-110HC	Var. SC	0	16177	16177	15780
Production	8.5	7	32	G3 (CRA)	VAM	16177	16477	300	300
Proposed Tubing									
Inj. Tubing	N/A	3.5	9.2	L-80HC	VAM	0	16127	16127	15730
Inj. Tubing (CRA)	N/A	3.5	9.2	G3 (CRA)	VAM	16127	16427	300	300

Independence AGI #2 Casing Schedule - Requested Changes via this Sundry (Changes Highlighted)

Casing	Hole Size (in.)	Csg. Size (in.)	Pounds Per Foot	Grade	Thread	Top (ft., MD)	Bottom (ft., MD)	Length (ft., MD)	Length (ft., TVD)
Proposed Casing									
Conductor	36	30	118	-	Welded	0	122	122	122
Surface	26	24	186.4	**X-56**	XLF	0	1230	1230	1230
1st Intermediate	22	20	133	**J-55**	**BTC**	0	**1500**	**1500**	**1500**
1st Intermediate	**22**	**20**	**133**	**P-110**	**Liberty LD**	**1500**	**3500**	**2000**	**3500**
2nd Intermediate	17.5	13.625	88.2	Q-125HC	BTC	0	**5425**	**5425**	**5425**
3rd Intermediate	12.25	9.625	47	L-80HC	BTC	0	9000	9000	**8830**
3rd Intermediate	12.25	9.625	47	P-110HP	BTC	9000	**11350**	**2350**	**2351**
Production	8.5	7	32	**P-110EC**	**VAM**	0	16177	16177	15780
Production	8.5	7	32	G3 (CRA)	VAM	16177	16477	300	300
Proposed Tubing									
Inj. Tubing	N/A	3.5	9.2	L-80HC	**BTS-8**	0	16127	16127	15730
Inj. Tubing (CRA)	N/A	3.5	9.2	G3 (CRA)	VAM	16127	16427	300	300

Independence AGI #2 Proposed Cementing Plan - From Application

Casing String	Stage #	Cement Type	# Sacks	Density (#/gallon)	Coverage Interval (MD)
Conductor	1	Redimix	-	-	0' – 122'
Surface	1	Lead: HalCem Tail: HalCem	Lead: 646 Tail: 347	Lead: 13.5 Tail: 14.8	0' – 1,230'
1st Intermediate	1	Lead: HalCem Tail: HalCem	Lead: 1,657 Tail: 207	Lead: 13.5 Tail: 14.8	0' – 3,500'
2nd Intermediate	1	Tail: VersaCem H	Tail: 1,198	Tail: 14.5	5,405' – 7,200'
	2	Lead: NeoCem IL2 Tail: VersaCem H	Lead: 486 Tail: 200	Lead: 11.5 Tail: 14.5	3,750' – 5,405'
	3	Lead: EconoCem HLC Tail: HalCem C	Lead: 1,497 Tail: 200	Lead: 12.5 Tail: 14.5	0' – 3,750'
3rd Intermediate	1	Lead: NeoCem PL2 Tail: VersaCem H	Lead: 1035 Tail: 332	Lead: 11.5 Tail: 14.5	7,300' – 13,650'
	2	Lead: EconoCem HLC Tail: VersaCem H	Lead: 2,586 Tail: 154	Lead: 12.5 Tail: 14.5	0' – 7,300'
Production	1	Lead: NeoCem PT2 Tail: LockCem	Lead: 44 Tail: 44	Lead: 13.2 Tail: 15.3	13,900' – 16,477'
	2	Tail: NeoCem PT	Tail: 1,704	Lead: 13.2	0'-13,900'

Independence AGI #2 Cementing Plan - Requested Changes via this Sundry (Changes Highlighted)

Casing String	Stage #	Cement Type	# Sacks	Density (#/gallon)	Coverage Interval (MD)
Conductor	1	Redimix	-	-	0' – 122'
Surface	1	Lead: HalCem Tail: HalCem	Lead: 646 Tail: 347	Lead: 13.5 Tail: 14.8	0' – 1,230'
1st Intermediate	1	Lead: HalCem Tail: HalCem	Lead: 1,657 Tail: 207	Lead: 13.5 Tail: 14.8	0' – 3,500'
2nd Intermediate	1	**Lead: NeoCem IL2 Tail: VersaCem H**	**Lead: 523 Tail: 200**	**Lead: 11.5 Tail: 14.8**	**3,750' – 5,481'**
	2	**Lead: EconoCem HLC Tail: VersaCem H**	**Lead: 1,497 Tail: 200**	**Lead: 12.5 Tail: 14.5**	**0' -- 3,750'**
	(3)				
3rd Intermediate	1	Lead: NeoCem PL2 Tail: VersaCem H	**Lead: 873 Tail: 332**	Lead: 11.5 Tail: 14.5	**7,300' – 11,350'**
	2	Lead: EconoCem HLC Tail: VersaCem H	**Lead: 2,596 Tail: 154**	Lead: 12.5 Tail: 14.5	0' – 7,300'
Production	1	Lead: NeoCem PT2 Tail: LockCem	Lead: 44 Tail: 44	Lead: 13.2 Tail: 15.3	13,900' – 16,477'
	2	Tail: NeoCem PT	Tail: 1,704	Lead: 13.2	0'-13,900'

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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 102880

CONDITIONS

Operator: Pinon Midstream LLC 465 W. NM Highway 128 Jal, NM 88252	OGRID: 330718
	Action Number: 102880
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pgoetze	None	5/9/2022