

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**RECEIVED**

JUL 15 2011

## Sundry Notices and Reports on Wells

1. Type of Well  
GAS

2. Name of Operator  
**BURLINGTON**  
RESOURCES OIL & GAS COMPANY LP

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

Surface: Unit M (SWSW), 563' FSL & 1024' FWL, Sec. 23, T32N, R14W, NMPM

BHL: Unit O (SWSE), 710' FSL & 1500' FEL, Sec. 23, T32N, R14W, NMPM

5. Lease Number  
I-22-IND-2772  
6. If Indian, All. or  
Tribe Name  
Ute Mountain Ute Tribe  
7. Unit Agreement Name

8. Well Name & Number  
Ute Mountain Ute 107

9. API Well No.

30-045- 35307

10. Field and Pool  
Ute Dome Paradox

11. County and State  
San Juan Co., NM

**12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission	Type of Action					
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input checked="" type="checkbox"/> Change of Plans	<input checked="" type="checkbox"/> Other –	<input type="checkbox"/> Drilling plans changed		
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/>	<input type="checkbox"/> P/L material changed		
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging	<input type="checkbox"/> Non-Routine Fracturing				
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off				
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection				

**13. Describe Proposed or Completed Operations**

Burlington Resources Oil & Gas Co., LP (BR) is proposing the following changes be made the drilling plan for the subject well. A new Technical plan is attached along with a revised BOP schematic:

1. Pressure Control Equipment – changed to 3000 psi WP BOPE stack
2. Surface and Intermediate hole size change and cement volumes adjusted

BR also proposes to change the type of pipeline to be used from steel line to Fiberspar line. We plan on using 4" Fiberspar for the gas line and 2-3" for the water line. Fiberspar is more effective at resisting corrosion than conventional lines and the installation is less evasive than conventional methods. Attached are the Product Data Sheets for this line. The 2 – 3" Fiberspar water line in the same trench as the gas line. In the future we will try to hook up all the new wells to water gathering system and setting this line at the same time as we set the gas line with eliminate future surface disturbance. The water gathering system will help eliminate truck traffic and spills in the future.

Also Attached is a revised H2S contingency Plan since the H2S concentrations should be greater than 100 ppm.

**14. I hereby certify that the foregoing is true and correct.**

Signed Fatma Chughtai Title Sr. Regulatory Specialist Date 7/14/11

(This space for Federal or State Office use)

APPROVED BY D. J. P. Title AMSC Date 8/8/2011

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**WOOD**

## Ute Mountain Ute #107

### Technical Plan

#### 1. Geologic Tops

Surface bedrock formation is Menefee

Formation	Top		Fluid
	MD (FT)	TVD (FT)	
MANCOS	609.00	609.00	No Fluids
GREENHORN	2,418.50	2,372.00	No Fluids
GRANEROS	2,477.20	2,427.00	No Fluids
MORRISON	2,802.70	2,732.00	Water
BLUFF	3,387.50	3,280.00	Water
ENTRADA	3,795.10	3,662.00	Water
CHINLE	4,328.70	4,162.00	No Fluids
SHINARUMP	4,957.30	4,751.00	Water
MOENKOPI	5,106.70	4,891.00	No Fluids
DE CHELLY	5,251.80	5,027.00	Water
CUTLER	5,379.80	5,147.00	Water
RICO	7,111.80	6,770.00	Water
HONAKER TRAIL	7,343.40	6,987.00	Water/Gas
ISMAY	8,293.20	7,877.00	Gas
DESERT CREEK	8,484.20	8,056.00	Gas
AKAH	8,645.30	8,207.00	Sour Gas
BARKER CREEK	8,874.80	8,422.00	Sour Gas
ALKALI GULCH	9,141.60	8,672.00	Sour Gas

#### 2. Pressure control equipment – See attached diagram

- Total Depth = 8,927 ft TVD.
- Original Bottom Hole Pressure = 3,791 psi (estimated by reservoir engineer). Current estimated BHP = 2200 psi due to depletion.
- Minimum BOP Working Pressure = 3,791 psi – (3,791 ft \* 0.23 psi/ft) = 2,924 psi
- Well will be drilled with 3,000 psi BOPE stack.

#### 3. Complete information on the drilling equipment, casing and cementing program

Proposed Casing And Cementing Program				
Size of Hole	Size of Casing	Wt./Foot	Setting Depth (MD)	Quantity of Cement
(Surface) 17-1/2"	13 3/8"	48#, H-40, ST&C, New	0' - 800'	Cement to surface with 870 cu.ft, volume includes 50% excess in open hole, to consist of 870 cu.ft (696 sks) Type III cement + 0.25 lbs/sack Cello Flake + 58.9% Fresh Water mixed at 15.20 ppg. Compressive strength is

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				1200 psi after 8 hours.
(Intermediate) 11"	8 5/8"	32#, J-55, LT&C, New	0' - 5358' Stage Tool +/- 2143'	<p>Cement to surface in two stages, in the <b>first stage</b>, pump 995 cu.ft volume includes 20% excess in open hole, to consist of a <b>Scavenger</b>: 76 cu.ft (25 sks) Premium Lite High Strength FM + 0.3% bwoc CD-32 + 0.25 lbs/sack Cello Flake + 6.25 lbs/sack LCM-1 + 1% bwoc FL-52 + 177.9% Fresh Water mixed at 11.00 ppg. <b>Lead slurry</b>: 633 cu.ft (320 sks) of Premium Lite High Strength FM + 0.3% bwoc CD-32 + 0.25 lbs/sack Cello Flake + 6.25 lbs/sack LCM-1 + 1% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg. <b>Tail slurry</b>: 286 cu.ft (207 sks) of Type III cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52 + 58.9% Fresh Water mixed at 14.60 ppg. Slurries are extended to achieve stated densities and may include various additives to control seepage. TOC for tail: near 4,286' MD to ensure good cement above both casing exits. <b>Second stage</b>, (20% excess in open hole) pump 76 cu.ft (25 sks) of <b>Scavenger</b>, Premium Lite High Strength FM + 0.3% bwoc CD-32 + 0.25 lbs/sack Cello Flake + 6.25 lbs/sack LCM-1 + 1% bwoc FL-52 + 177.9% Fresh Water mixed at 11.0 ppg, then 715 cu.ft (361 sks) of <b>Lead slurry</b> (volume includes 20% excess in open hole) Premium Lite High Strength FM + 0.3% bwoc CD-32 + 0.25 lbs/sack Cello Flake + 6.25 lbs/sack LCM-1 + 1% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg</p>
(Production) 7-7/8"	5-1/2'	17#, L-80, LTC/BTC, New	0'-9414' Stage Tool +/- 7700'	<p>Cement to 200' inside the previous 8-5/8" casing in two stages, in the <b>first stage</b>, pump 362 cu.ft volume, includes 20% excess in open hole, to consist of a <b>Scavenger</b>: 52 cu.ft (17 sks) Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 180.6% Fresh Water mixed at 11.00 ppg. <b>Lead slurry</b>: 124 cu.ft (63 sks) Premium Lite High Strength FM + 0.25</p>

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				lbs/sack Cello Flake + 0.3% bwco CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg. <b>Tail slurry:</b> 186 cu.ft (136 sks) of Type III cement + 0.2% bwoc R-3 + 0.2% bwoc CD-32 + 0.4% bwoc FL-52 + 58.9% Fresh Water mixed at 14.60 ppg. Slurries are extended to achieve stated densities and may include various additives to control seepage. TOC for tail: near 8,375' MD to ensure good cement around production zone. <b>Second stage,</b> (20% excess in open hole) <b>Scavenger:</b> 52 cu.ft (17 sks) Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 180.6% Fresh Water mixed at 11.00 ppg. <b>Lead:</b> pump 470 cu.ft (237 sks) of Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg
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### 4. Information on Mud System

Mud Program				
Interval	Mud Type	Weight (ppg)	Water/Fluid Loss	Additives
Surface	Gel/Water	Air or 8.3 – 9.2	No Control	Gel
Intermediate	LSND or Gel system	8.4 – 9.2	Some control	Polymer and gel as required
Production	LSND	8.4-10	Some control	Polymer and LCM as required.

### 5. Testing, Logging, Coring -

- Logs at intermediate section: Triple Combo logs in open hole will be run to cover disposal zones - log from intermediate TD to surface casing.
- Logs at production section: Platform Express (triple combo) from TD to intermediate casing.
- MWD (directional only) from under surface shoe to TD.
- Mudlogging: from 100' above Greenhorn (2318 ft MD & 2272 ft TVD) to final TD at 9,414 ft MD (8,927 ft TVD).
- Coring: No coring is planned

## **Ute Mountain Ute #107**

### **6. Expected BHP, abnormal temperatures and pressures, and hazards –**

- No over-pressured intervals expected
- Require H2S contingent drilling plan. (Attached H2S Contingency Plan)
- No expecting lost circulation. The offset wells (Ute Mountain Ute #50 and Ute Mountain Ute #51) do not have lost circulation trouble reported. Attached are the operation summaries for these wells.

## **UTE MOUNTAIN UTE #50**

Surface Location: 1800 FNL; 1850 FWL.

Drilled on March, 1998

Ground Elevation: 6,231 ft

RT Elevation: 6,231 ft

Rig Elevation: 14 ft

Mud Drill

Surface Shoe: 385 ft

Production Shoe: 8690 ft

Big A 54 drilled 12 ¼" surface hole to 389 ft. Ran 8 5/8" 24#/ft, K-55 casing to 385 ft. Cemented w/ 57.3 bbls of class B Lead cement, returns 8 bbls of cement to surface. No problem reported. Drilled production hole w/ 7 7/8" insert bit from 389' to 3475'. POOH to change bit and found lost cone in hole. It fished cone with magnet and junk sub. Continued drilling (Mud logger comments only Barker Dome well that has been this gassy in cutler, no new formation tops in last 24 hrs). POOH to change bit. Drilled to 7815 ft. POOH for new bit. Continued drilling to TD at 8692 ft. Attempt to run open hole log. Hit tight spot at 2524 ft and 2533, had to work tools free. POOH and R/D loggers. TIH w/clean assy, worked through bridges, raised vis to 80. finished TIH to cond mud. Ran open hole. TIH to clean hole. Ran 5 ½" 17#/ft, L-80, LTC casing and set shoe at 8690 ft. No losses reported. Cemented In two stages, circulated 20 bbls in first stage and 195 bbls in second stage.

**Note:** There were two trips to clean hole due to logs tools hit tight spot at 2479' in first trip, 2524' second trip and stuck it at 2533' for reactive shale from 2400 ft to 2600 ft. No lost circulation trouble reported.

## **UTE MOUNTAIN UTE #51**

Surface Location: 1,500 FSL; 2,270 FWL.

Drilled on May, 1998

Ground Elevation: 6,884 ft

RT Elevation: 6,898 ft

Rig Elevation: 14 ft

Mud Drill

Surface Shoe: 8 5/8" at 1,436 ft

Production Shoe: 5 ½" at 9,601 ft

Big A 54 drilled 12 ¼" surface hole to 1447 ft. Ran 8 5/8" 24#/ft, K-55 casing to 1436 ft. Cemented w/ 229 bbls of class G lead cement, returns 100 bbls of cement to surface. No problem reported. Drilled production hole w/ 7 7/8" insert bit from 1436' to 2301'. POOH for plugged bit. Continued drilling 4115'. POOH to change bit. Drilled to 6038 ft. POOH for new bit. Continued drilling to 7904 ft. POOH twice more for new bit and continued drilling to TD at 9602 ft. Attempt to run open hole log and stuck at 9447'. Recover all logging tool. TIH w/clean assy. Ran 5 ½" 17#/ft, L-80, LTC casing and set shoe at 9601 ft. No losses reported. Cemented in two stages. Circulated 60 bbls in first stage and 93 bbls in second stage.

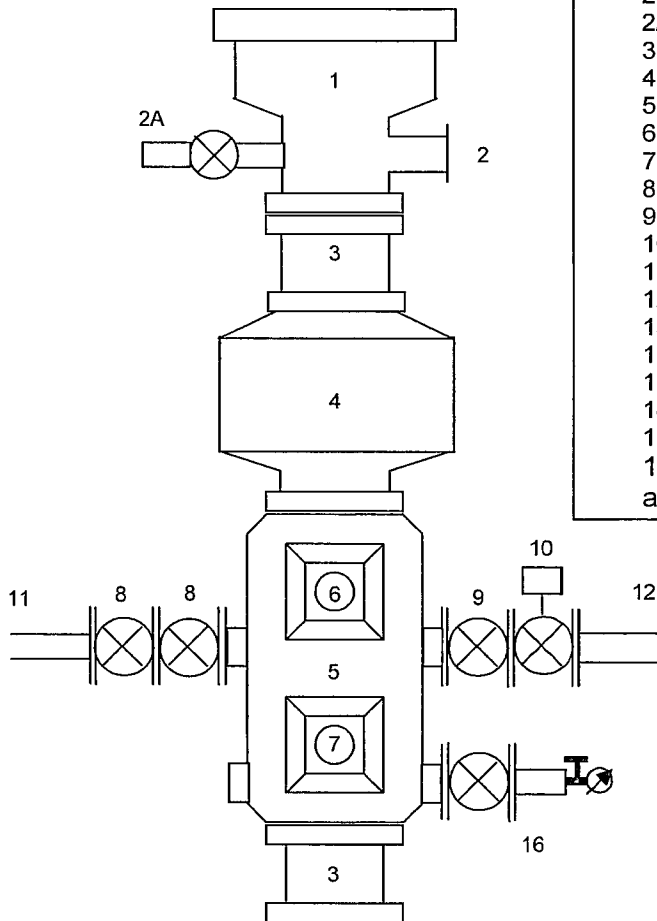
### **7. Other information –**

## **Ute Mountain Ute #107**

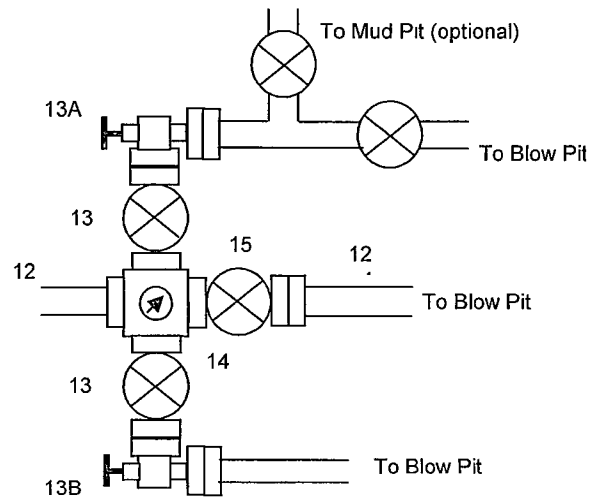
This well will be drill vertical to 1,000 ft (KOP), and then directional drilling to intermediate shoe point at 5,358' MD (5,127' TVD) with 2 degree of build rate to achieve 20.43 degrees inclination at 2021 ft and continue drilling with this inclination to intermediate TD. Run open hole logs from intermediate TD to surface shoe. Run 8 5/8" intermediate casing and cement. The production section will be directional drill holding 20.43 degrees of inclination to TD at 9,414 ft. Open hole logs will be run from TD to intermediate casing shoe. Run 5 1/2" production casing and cement in two stages.

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

3000 psi WP equipment



1. Rotating Head
2. Flow line
- 2A. Fill up line and valve
3. Spacer Spools (as needed)
4. 11" 3M Annular Preventer
5. 11" 3M Double Ram Preventer
6. Blind Rams
7. Pipe Rams
8. 3M Gate Valves (2")
9. 3M gate Valve (3")
10. 3M HCR Valve (3")
11. Kill Line Connection
12. Choke Line (3" Hardline or Co-Flex)
13. 3M Valve (2")
- 13A. 3M Adjustable Choke (2")
- 13B. 3M Adjustable or Fixed Choke (2")
14. 3M Studded Cross & Manifold gauge
15. 3M Panic Line Valve (3")
16. Secondary outlet with valve, bull plug, needle valve, and pressure gauge





## FS LP 4" 750 (E)

4 Inch Nominal, 750 Series Fiberspar LinePipe w/HDPE Pressure Barrier & HDPE External Wear Layer

### Product Data Sheet (Imperial Units)

ASTM 2996 Designation:

RTRP-11HZ1-4112

Physical Properties:\*

Fiberspar s/n:

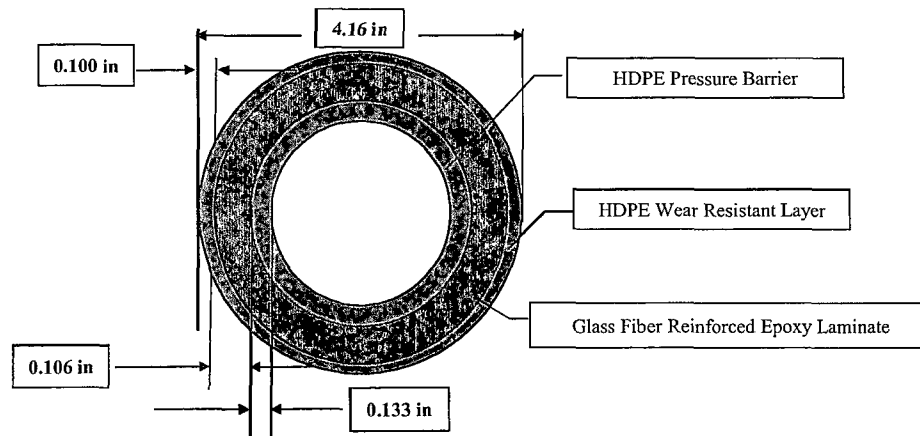
FECN040025

Geometry		Tensile Modulus	
Outside Diameter (in)	4.16	Axial (psi)	7.95E+05
Inside Diameter (in)	3.48	Hoop (psi)	1.02E+06
Inside Flow Area (in <sup>2</sup> )	9.50	<b>Poisson's Ratio</b>	
Total Wall Thickness (in)	0.34	Major	0.49
C/S Area (in <sup>2</sup> )	4.07	Minor	0.63
Linear Weight		Thermal Exp. Coeff.	
Linear Weight - Air (lb/ft)	2.26	Axial (in/in -°F)	1.35E-05
Linear Weight - Water (lb/ft)	0.49	Hoop (in/in -°F)	7.88E-06
Net Density (lb/in <sup>3</sup> )	0.046	Thermal Conductivity	
Flow Coefficients		(BTU/hour/ft <sup>2</sup> - in/°F)	1.92
Hazen - William's	150	Resin T <sub>g</sub>	
Darcy-Wiesbach	0.0004	(°C)	125°
Manning	0.009	(°F)	257°

\* properties listed are valid for entire temperature range of the product unless otherwise specified

### Mechanical Performance:

Maximum Operating Temperature	140 °F		
Minimum Operating Temperature	-29 °F		
		78 °F	140 °F
Max Recommended Operating Pressure (psi)		750	750
Nominal Ultimate Burst Pressure (psi)		3,800	3,200
Maximum Recommended Tensile Load (lbs)		7,960	6,400
Nominal Ultimate Tensile Load (lbs)		19,900	15,900
Nominal Ultimate Compressive Load (lbs)		-21,600	-17,500
Nominal Ultimate Collapse Pressure (psi)		150	150
Minimum Operating Bend Radius (in)		99	99
Minimum Spooling Diameter (in)		114	114







## FS LP 3" 750 (E)

3 Inch Nominal, 750 Series Fiberspar LinePipe w/HDPE Pressure Barrier & HDPE External Wear Layer

### Product Data Sheet (Imperial Units)

ASTM 2996 Designation:

RTRP-11HZ1-4112

#### Physical Properties:\*

Fiberspar s/n:

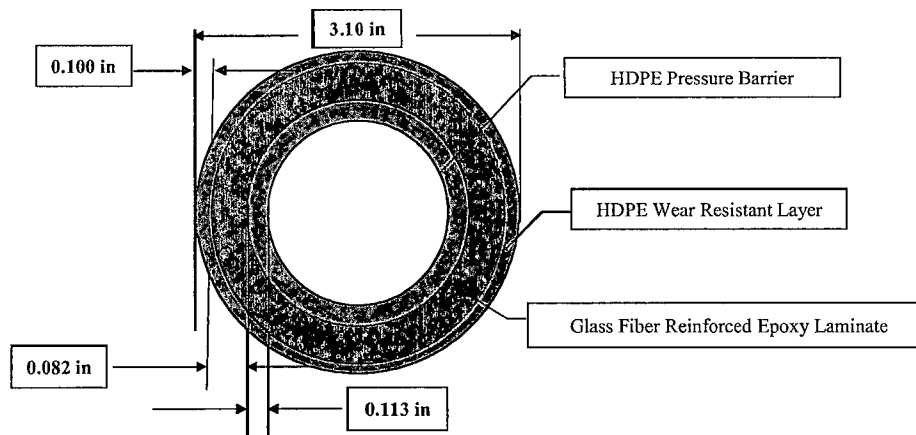
FECN030025

Geometry		Tensile Modulus	
Outside Diameter (in)	3.10	Axial (psi)	7.57E+05
Inside Diameter (in)	2.51	Hoop (psi)	9.74E+05
Inside Flow Area (in <sup>2</sup> )	4.94	Poisson's Ratio	
Total Wall Thickness (in)	0.29	Major	0.49
C/S Area (in <sup>2</sup> )	2.60	Minor	0.63
Linear Weight		Thermal Exp. Coeff.	
Linear Weight - Air (lb/ft)	1.40	Axial (in/in -°F)	1.40E-05
Linear Weight - Water (lb/ft)	0.27	Hoop (in/in -°F)	8.21E-06
Net Density (lb/in <sup>3</sup> )	0.045	Thermal Conductivity	
Flow Coefficients		(BTU/hour/ft <sup>2</sup> - in/°F)	1.92
Hazen - William's	150	Resin T <sub>g</sub>	
Darcy-Wiesbach	0.0004	(°C)	125°
Manning	0.009	(°F)	257°

\* properties listed are valid for entire temperature range of the product unless otherwise specified

#### Mechanical Performance:

Maximum Operating Temperature	140 °F		
Minimum Operating Temperature	-29 °F	78 °F	140 °F
Max. Recommended Operating Pressure (psi)	750	750	750
Nominal Ultimate Burst Pressure (psi)	4,000	3,400	3,400
Maximum Recommended Tensile Load (lbs)	4,480	3,600	3,600
Nominal Ultimate Tensile Load (lbs)	11,200	8,900	8,900
Nominal Ultimate Compressive Load (lbs)	-12,100	-9,800	-9,800
Nominal Ultimate Collapse Pressure (psi)	200	200	200
Minimum Operating Bend Radius (in)	72	72	72
Minimum Spooling Diameter (in)	96	96	96





## FS LP 2 1/2" 750 (E)

2 1/2 Inch Nominal, 750 Series Fiberspar LinePipe w/HDPE Pressure Barrier & HDPE External Wear Layer

### Product Data Sheet (Imperial Units)

ASTM 2996 Designation:

RTRP-11HZ1-4112

#### Physical Properties:\*

Fiberspar s/n:

FECN025025

Geometry		Tensile Modulus	
Outside Diameter (in)	2.54	Axial (psi)	8.29E+05
Inside Diameter (in)	2.00	Hoop (psi)	1.07E+06
Inside Flow Area (in <sup>2</sup> )	3.15	Poisson's Ratio	
Total Wall Thickness (in)	0.27	Major	0.49
C/S Area (in <sup>2</sup> )	1.93	Minor	0.63
Linear Weight		Thermal Exp. Coeff.	
Linear Weight - Air (lb/ft)	1.05	Axial (in/in -°F)	1.31E-05
Linear Weight - Water (lb/ft)	0.21	Hoop (in/in -°F)	7.61E-06
Net Density (lb/in <sup>3</sup> )	0.045	Thermal Conductivity	
Flow Coefficients		(BTU/hour/ft <sup>2</sup> - in/°F)	1.92
Hazen - William's	150	Resin T <sub>g</sub>	
Darcy-Wiesbach	0.0004	(°C)	125°
Manning	0.009	(°F)	257°

\* properties listed are valid for entire temperature range of the product unless otherwise specified

#### Mechanical Performance:

Maximum Operating Temperature	140 °F		
Minimum Operating Temperature	-29 °F		
		78 °F	140 °F
Max. Recommended Operating Pressure (psi)		750	750
Nominal Ultimate Burst Pressure (psi)		4,800	4,100
Maximum Recommended Tensile Load (lbs)		3,480	2,800
Nominal Ultimate Tensile Load (lbs)		8,700	6,900
Nominal Ultimate Compressive Load (lbs)		-9,400	-7,600
Nominal Ultimate Collapse Pressure (psi)		400	400
Minimum Operating Bend Radius (in)		59	59
Minimum Spooling Diameter (in)		78	78

