

INTERVAL:

DESCRIPTION:

0' - 5.0'	Clay, Unconsolidated, Orange, Brown, Sandy
5.0' - 10.0'	Clay, Unconsolidated, Orange, Brown, Sandy
10.0' - 15.0'	Sandstone, Very Fine Grained, Highly Weathered, Reddish Orange
15.0' - 20.0'	Sandstone, Very Fine Grained, Highly Weathered, Reddish Orange
20.0' - 25.0'	Sandstone, Very Fine Grained, Highly Weathered, Reddish Orange
25.0' - 30.0'	Sandstone, Very Fine Grained, Highly Weathered, Reddish Orange
30.0' - 34.0'	Sandstone, Very Fine Grained, Highly Weathered, Reddish Orange
34.0' - 35.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
35.0' - 40.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
40.0' - 45.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
45.0' - 50.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
50.0' - 55.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
55.0' - 60.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
60.0' - 65.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
65.0' - 70.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray



Twin Pines, LLC

74 Industrial Parkway
 P.O. Box 621 Jasper, Alabama 35502
 (205) 295-0995 Office (205) 295-0799 Fax

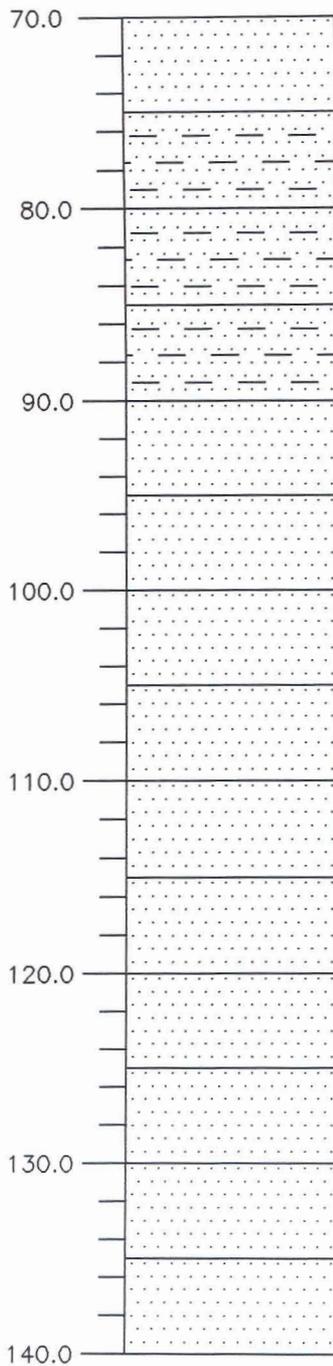
**Shannon, LLC
 Shannon Mine No. 4
 Lithologic Description
 For DH-1727**

DRAWN BY: P.T.O
 DWG. NAME: TPSM41727LD

DATE: 7-13-11

APPROVED BY: W.K.M.

SCALE: As Noted



INTERVAL:

DESCRIPTION:

70.0' - 75.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
75.0' - 80.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
80.0' - 85.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
85.0' - 90.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
90.0' - 95.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
95.0' - 100.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
100.0' - 105.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
105.0' - 110.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
110.0' - 115.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
115.0' - 120.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
120.0' - 125.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
125.0' - 130.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
130.0' - 135.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
135.0' - 140.0'	Sandstone, Very Fine Grained, Medium Hard, Gray



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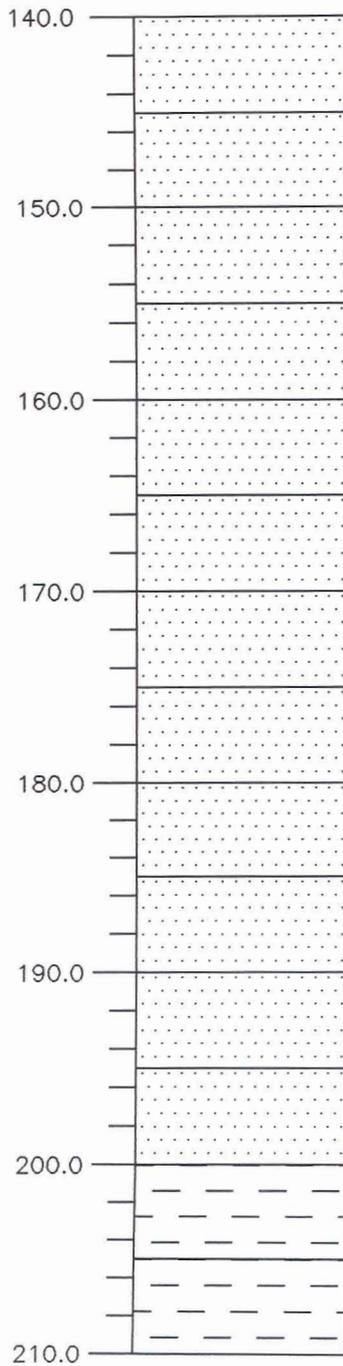
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 Shannon Mine No. 4
 Lithologic Description
 For DH-1727**

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DATE: 7-13-11

APPROVED BY: W.K.M.

SCALE: As Noted



INTERVAL:

DESCRIPTION:

140.0' – 145.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
145.0' – 150.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
150.0' – 155.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
155.0' – 160.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
160.0' – 165.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
165.0' – 170.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
170.0' – 175.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
175.0' – 180.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
180.0' – 185.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
185.0' – 190.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
190.0' – 195.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
195.0' – 200.0'	Sandstone, Very Fine Grained, Medium Hard, Gray
200.0' – 205.0'	Shale, Medium Hard, Gray
205.0' – 210.0'	Shale, Medium Hard, Gray



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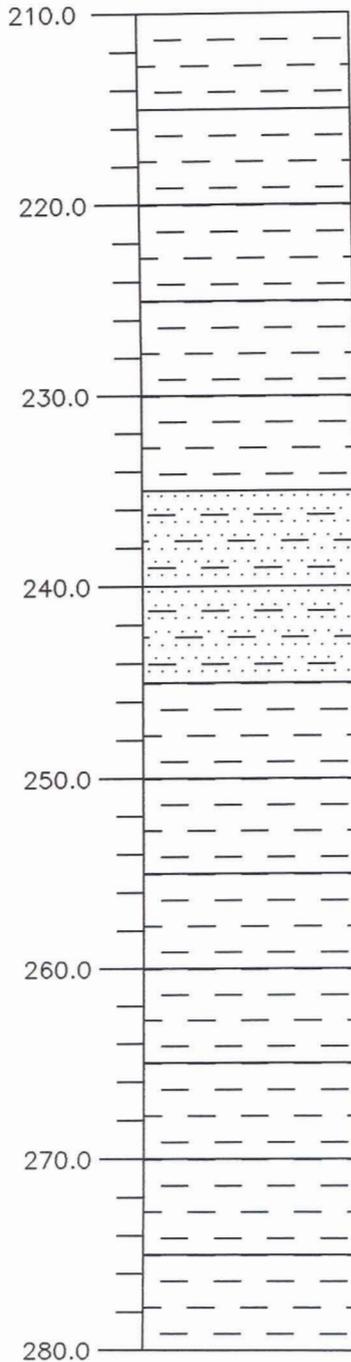
DATE: 7-13-11

APPROVED BY: W.K.M.

SCALE: As Noted

INTERVAL:

DESCRIPTION:



210.0' - 215.0'	Shale, Medium Hard, Gray
215.0' - 220.0'	Shale, Medium Hard, Gray
220.0' - 225.0'	Shale, Medium Hard, Gray
225.0' - 230.0'	Shale, Medium Hard, Gray
230.0' - 235.0'	Shale, Medium Hard, Gray
235.0' - 240.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
240.0' - 245.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
245.0' - 250.0'	Shale, Medium Hard, Dark Gray
250.0' - 255.0'	Shale, Medium Hard, Dark Gray
255.0' - 260.0'	Shale, Medium Hard, Dark Gray
260.0' - 265.0'	Shale, Medium Hard, Dark Gray
265.0' - 270.0'	Shale, Medium Hard, Dark Gray
270.0' - 275.0'	Shale, Medium Hard, Dark Gray
275.0' - 280.0'	Shale, Medium Hard, Dark Gray



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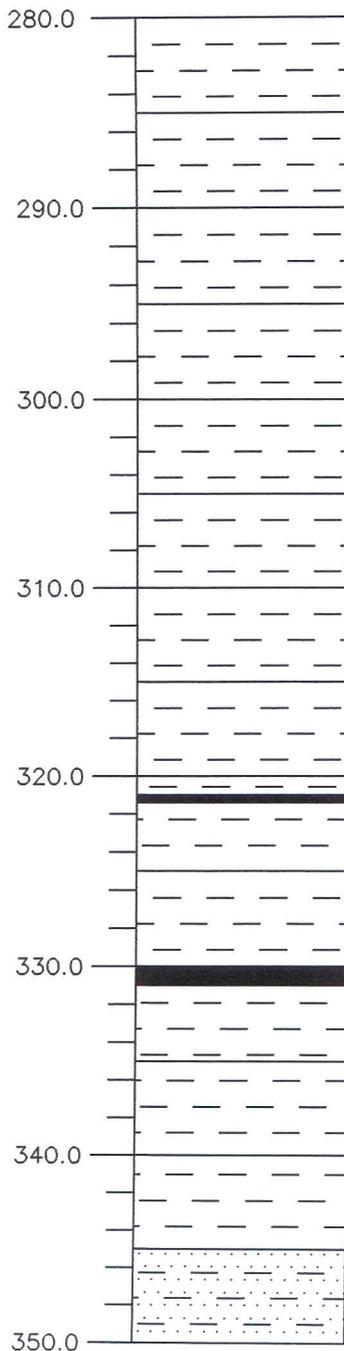
**Shannon, LLC
Shannon Mine No. 4
Lithologic Description
For DH-1727**

DRAWN BY: P.T.O
DWG. NAME: TPSM41727LD

DATE: 7-13-11

APPROVED BY: W.K.M.

SCALE: As Noted



INTERVAL:

DESCRIPTION:

280.0' - 285.0'	Shale, Medium Hard, Dark Gray
285.0' - 290.0'	Shale, Medium Hard, Dark Gray
290.0' - 295.0'	Shale, Medium Hard, Dark Gray
295.0' - 300.0'	Shale, Medium Hard, Dark Gray
300.0' - 305.0'	Shale, Medium Hard, Dark Gray
305.0' - 310.0'	Shale, Medium Hard, Dark Gray
310.0' - 315.0'	Shale, Medium Hard, Dark Gray
315.0' - 320.0'	Shale, Medium Hard, Dark Gray
320.0' - 321.0'	Shale, Medium Hard, Dark Gray
321.0' - 321.4'	Marker Seam
321.4' - 325.0'	Shale, Medium Hard, Dark Gray
325.0' - 330.0'	Shale, Medium Hard, Dark Gray
330.0' - 331.0'	Upper New Castle Coal Seam
331.0' - 335.0'	Shale, Medium Hard, Dark Gray
335.0' - 340.0'	Shale, Medium Hard, Dark Gray
340.0' - 345.0'	Shale, Medium Hard, Dark Gray
345.0' - 350.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray

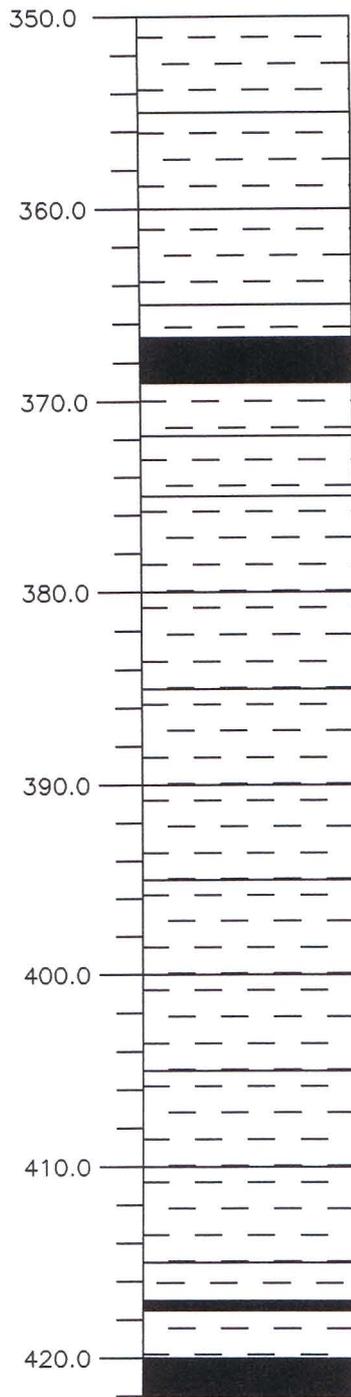


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DWG. NAME: TPSM41727LD	
APPROVED BY: W.K.M.	SCALE: As Noted



INTERVAL:

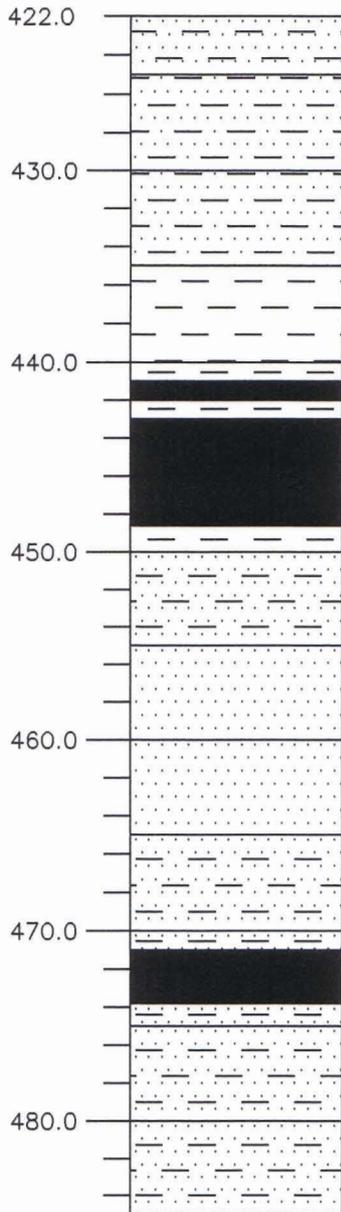
DESCRIPTION:

350.0' - 355.0'	Shale, Medium Hard, Dark Gray
355.0' - 360.0'	Shale, Medium Hard, Dark Gray
360.0' - 365.0'	Shale, Medium Hard, Dark Gray
365.0' - 366.7'	Shale, Medium Hard, Dark Gray
366.7' - 369.0'	Lower New Castle Coal Seam
369.0' - 371.8'	Shale, Medium Hard, Dark Gray
371.8' - 375.0'	Shale, Medium Hard, Dark Gray
375.0' - 380.0'	Shale, Medium Hard, Dark Gray
380.0' - 385.0'	Shale, Medium Hard, Dark Gray
385.0' - 390.0'	Shale, Medium Hard, Dark Gray
390.0' - 395.0'	Shale, Medium Hard, Dark Gray
395.0' - 400.0'	Shale, Medium Hard, Dark Gray
400.0' - 405.0'	Shale, Medium Hard, Dark Gray
405.0' - 410.0'	Shale, Medium Hard, Dark Gray
410.0' - 415.0'	Shale, Medium Hard, Dark Gray
415.0' - 417.0'	Shale, Medium Hard, Dark Gray
417.0' - 417.5'	Mary Lee Coal Seam
417.5' - 420.0'	Shale, Medium Hard, Dark Gray
420.0' - 422.0'	Mary Lee Coal Seam With Partings

 <p>Twin Pines, LLC 74 Industrial Parkway P.O. Box 621 Jasper, Alabama 35502 (205) 295-0995 Office (205) 295-0799 Fax</p>	
<p>Shannon, LLC Shannon Mine No. 4 Lithologic Description For DH-1727</p>	
DRAWN BY: P.T.O DWG. NAME: TPSM41727LD	DATE: 7-13-11
APPROVED BY: W.K.M.	SCALE: As Noted

INTERVAL:

DESCRIPTION:



B.O.H.

422.0' - 425.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
425.0' - 430.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
430.0' - 435.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
435.0' - 440.0'	Shale, Medium Hard, Dark Gray
440.0' - 441.0'	Shale, Medium Hard, Dark Gray
441.0' - 442.0'	Coal Partings
442.0' - 443.0'	Shale
443.0' - 448.6'	Blue Creek Coal Seam
448.6' - 450.0'	Shale, Medium Hard, Dark Gray, Contaminated With Coal
450.0' - 455.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
455.0' - 460.0'	Sandstone, Very Fine Grained, Hard, Dark Gray
460.0' - 465.0'	Sandstone, Very Fine Grained, Hard, Dark Gray
465.0' - 470.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
470.0' - 471.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
471.0' - 473.8'	Jagger Coal Seam
473.8' - 475.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray, Contaminated with Coal
475.0' - 480.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray
480.0' - 485.0'	Sandstone, Very Fine Grained, Medium Hard, Gray, Shale, Medium Hard, Dark Gray



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