



Commonwealth of Virginia  
 Department of Mines, Minerals, and Energy  
 Division of Gas and Oil  
 P.O. Box 1416; Abingdon, VA 24212  
 Telephone: (276) 676-5423

Tracking Number: 647  
 Company: Chesapeake Appalachia, LLC  
 File Number: BU-3289  
 Operations Name: 825808 (PPN-51) W/PL  
 Operation Type: Gas/Pipeline  
 Drilling Report Type: Original

### DRILLING REPORT (DGO-GO-14)

#### 1. Drilling Data

Date drilling commenced: 11/9/2006 Drilling Contractor: S.W. Jack Drilling  
 Date drilling completed: 12/2/2006 Rig Type:  Rotary  Cable Tool  
 Driller's Total Depth (feet): 5,287  
 Log Total Depth (feet): 5,284 Formation At Total Depth Onandoga

#### 2. Final Location Plat (as required by 4 VAC25-150-360.C.)

Permitted State Plane X 1,001,204 Final Plat State Plane X: 1,001,203  
 Permitted State Plane Y: 450,009 Final Plat State Plane Y: 450,010

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
Final Plat Well Location #825808	825808 Final Plat.pdf

#### 3. Geological Data

Fresh Water At:

Depth (in feet)	Rate	Unit of Measure
180	4	INCH
240	5	INCH
90	2	INCH

Salt Water At:

Depth (in feet)	Rate	Unit of Measure
510	1/4	INCH

**Coal Seams**

List of Attached Items:

Description	FileName
Coal Seams Well #825527	CoalBeds 825808.xls

**Gas and Oil Shows**

List of Attached Items:

Description	FileName
-------------	----------

**4. Electric Logs** (As required by 4VAC25-150-280.A.)

List all logs run: GR,CNL,DIL,Temp,Audio,AIT,PE

Did logs disclose vertical locations of a coal seam?  Yes  No

**5. Survey Results** (As required by 4VAC25-150-280.B.2)

List of Attached Items:

Description	FileName
Survey Results Wel #825808	SurveyResults 825808.xls

**6. Casing and Tubing Program**

List of Attached Items:

Description	FileName
Casing Program Well #825527	CasingProgram 825808.xls

**7. Remarks**

Use this space to note any conditions or occurrences, such as lost circulation, fishing jobs, junk left in hole, sidetracks, squeeze jobs, etc., not shown above. Include data and depth of condition/occurrence.

9 5/8" Cement Job: Job Did Not Circulate, Grouted back to surface w/ 100 sks Class A Cement

**8. Drillers Log**

Compiled By: Chad L Satterfield

List of Attached Items:

Description	FileName
Drillers Log Well #825808	DrillersLog 825808.xls

**9. Comments**

According to the inspector's report, 5" of water was encountered @ 240'

**10. Signature**

Permitee: Chesapeake Appalachia, LLC Date: 9/18/2007 (Company)

Signed By: Chad Satterfield Title: Drilling Engineer (Signature)

**INTERNAL USE ONLY**

Submit Date: 9/18/2007

Status: Inspr Approved

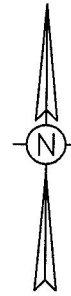
Date: 9/18/2007

Final PDF Date: 9/18/2007

8000'

Latitude 37°32'30"

Longitude 81°55'00"



8181'

MINGO CO., WVA.  
BUCHANAN CO., VA.

.ACT"  
J HEIRS (FEE)  
% OF 58.29 AC.

TU

'19'29" E  
32.99'





N °16'2 " E  
85.45

Iron  
Pin

825808  
(PPN-51)

NOTE  
WELL WAS DRILLED WITHIN  
10' OF PROPOSED COORDINATES.

LEGEND

-  Proposed Well
-  Mineral Line
-  Surface Line
-  Existing Well

NOTES:

1. PROPERTY LINES NOT SURVEYED.
2. THIS PLAT SHOWS THE WELL AND ITS COORDINATES, SURFACE & MINERAL OWNERSHIP IS BASED ON INFORMATION PROVIDED BY CHESAPEAKE APPALACHIA LLC OR ITS CONTRACTORS AND INFORMATION ON RECORD AT THE BUCHANAN COUNTY COURTHOUSE. INFORMATION IS SUBJECT TO CHANGE.

Area of Unit-58.29 Acres  
WELL LOCATION PLAT

Company	CHESAPEAKE APPALACHIA, LLC	Well Name or Number	825808 (PPN-51)
Tract No.	JULINA HARDIN HEIRS	Quadrangle	WHARNCLIFFE
District	KNOX		

Well Coordinates (Virginia State Plane) N: 450,009.95 E: 1,001,203.46

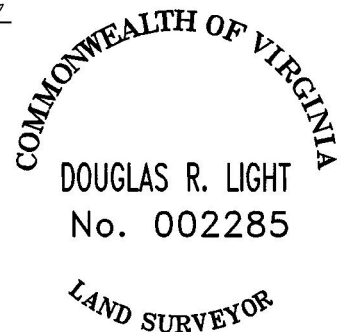
Elevation: 908.74 Method Used to Determine Elevation: Tri . Levels from GPS derived elevation.

County BUCHANAN Scale: 1" = 400' Date 1-18-07

This Plat is a new plat \_\_\_\_\_ ; an updated plat \_\_\_\_\_ ; or a final location plat X \_\_\_\_\_ ;

+ Denotes the location of a well on United States topographic maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

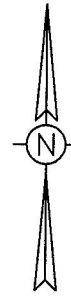
Form DGO-GO-7 Rev. 1-98 Licensed Professional, Licensed Land eyor



8000'

Latitude 37°32'30"

Longitude 81°55'00"



8181'

MINGO CO., WVA.  
BUCHANAN CO., VA.

ACT"  
J HEIRS (FEE)  
% OF 58.29 AC.

TU

'19'29" E  
32.99'





N °16'2 " E  
85.45

Iron  
Pin

825808  
(PPN-51)

NOTE  
WELL WAS DRILLED WITHIN  
10' OF PROPOSED COORDINATES.

LEGEND

-  Proposed Well
-  Mineral Line
-  Surface Line
-  Existing Well

NOTES:

1. PROPERTY LINES NOT SURVEYED.
2. THIS PLAT SHOWS THE WELL AND ITS COORDINATES, SURFACE & MINERAL OWNERSHIP IS BASED ON INFORMATION PROVIDED BY CHESAPEAKE APPALACHIA LLC OR ITS CONTRACTORS AND INFORMATION ON RECORD AT THE BUCHANAN COUNTY COURTHOUSE. INFORMATION IS SUBJECT TO CHANGE.

Area of Unit-58.29 Acres  
WELL LOCATION PLAT

Company	CHESAPEAKE APPALACHIA, LLC	Well Name or Number	825808 (PPN-51)
Tract No.	JULINA HARDIN HEIRS	Quadrangle	WHARNCLIFFE
District	KNOX		
Well Coordinates (Virginia State Plane)		N: 450,009.95	E: 1,001,203.46
Elevation: _____	908.74	Method Used to Determine Elevation:	Tri . Levels from GPS derived elevation.
County	BUCHANAN	Scale:	1" = 400'
		Date	1-18-07

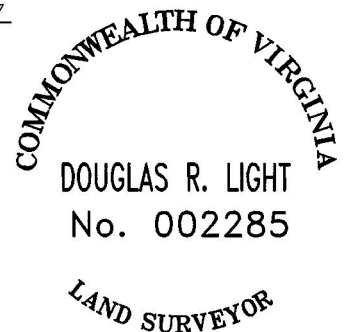
This Plat is a new plat \_\_\_\_\_ ; an updated plat \_\_\_\_\_ ; or a final location plat X \_\_\_\_\_ ;

⊕ Denotes the location of a well on United States topographic maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

Form DGO-GO-7  
Rev. 1-98

~~Licensed Professional,~~

Licensed Land  
eyor



Well 825808 COALBEDS				MINING IN AREA		
NAME	TOP	BOTTOM	THICKNESS	YES	NO	MINED OUT
NONE						

Well 825808 SURVEY RESULTS	
Depth of Survey	Direction/Distance/Degree From True Vertical
400	1/4 degree
600	1/4 degree
800	1/2 degree
1000	1/2 degree
1200	1/2 degree
1400	1/2 degree

Well 825808 CASING PROGRAM							
	Casing	Casing	Hole	Cement Used	Cemented To Surface	Date	Packers Or Bridge Plugs
Casing Type	Size	Interval	Size	In Cubic Ft.	Yes/No	Cemented	Kind/Size/Set
Surface	13-3/8"	35'KB	17-1/2"	Driven	No		
Surface	9-5/8"	304' KB	12-1/4"	266	Yes	11/13/2006	Grout basket at 88'KB
Salt Water Protection	7"	1418'KB	8-7/8"	334	Yes	11/17/2006	Grout basket at 90'KB
Production	4-1/2"	5229' KB	6-1/2"	372	No	12/3/2006	



Well 825808 DRILLER'S LOG		General		Depth	Depth		
Geologic Age	Formation	Lithology	Color	Top	Bottom	Thickness	Remarks
Penn	Lee	Siltstone & Shale/Coal		0	516	516	
Penn	Salt Sand	Sandstone		516	1145	629	
Miss	Pennington	Siltstone & Shale		1145	1232	87	
Miss	Ravenclyff	Sandstone		1232	1258	26	
Miss	Pennington	Siltstone & Shale		1258	1610	352	
Miss	Upper Maxon	Sandstone		1610	1734	124	
Miss	Pennington	Siltstone & Shale		1734	1829	95	
Miss	Lower Maxon	Sandstone		1829	1937	108	
Miss	Pennington	Siltstone & Shale		1937	2143	206	
Miss	Bradley	Sandstone		2143	2223	80	
Miss	Pennington	Siltstone & Shale		2223	2238	15	
Miss	Little Lime	Limestone		2238	2277	39	
Miss	Big Lime	Limestone		2277	2678	401	
Miss	Pocono	Shale		2678	2825	147	
Miss	Weir	Sandstone		2825	2898	73	
Miss	Pocono	Shale		2898	3245	347	
Miss	Sunbury	Shale		3245	3277	32	
Miss	Berea	Sandstone		3277	3300	23	
Devonian	Devonian Shale	Shale		3300	3556	256	
Devonian	Gordon	Sandstone		3556	3651	95	
Devonian	Devonian Shale	Shale		3651	4275	624	
Devonian	Lower Huron	Shale		4275	4649	374	
Devonian	Java	Shale		4649	4777	128	
Devonian	Angola	Shale		4777	4979	202	
Devonian	Rhinesteet	Shale		4979	5174	195	
Devonian	Marcellus	Shale		5174	5184	10	
Devonian	Onondoga	Limestone		5184	5287	103	