



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: 644
 Company: Chesapeake Appalachia, LLC
 File Number: BU-3288
 Operations Name: 825681 (PPN-40) W/PL
 Operation Type: Gas/Pipeline
 Drilling Report Type: Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data

Date drilling commenced: 11/29/2006 Drilling Contractor: S.W. Jack Drilling
 Date drilling completed: 12/21/2006 Rig Type: Rotary Cable Tool
 Driller's Total Depth (feet): 5,312
 Log Total Depth (feet): 5,313 Formation At Total Depth Onandoga

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

Permitted State Plane X 1,000,200 Final Plat State Plane X: 1,000,197
 Permitted State Plane Y: 447,770 Final Plat State Plane Y: 447,774

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
Final Plat #825681	825681 Final Plat.pdf

3. Geological Data

Fresh Water At:

Depth (in feet)	Rate	Unit of Measure
167	2.5	INCH
207	Damp	
225	3-3.5	INCH
250	1.5	INCH
72	1.5	INCH

Salt Water At:

Depth (in feet)	Rate	Unit of Measure
-----------------	------	-----------------

Coal Seams

List of Attached Items:

Description	FileName
Coal Seams 825681	CoalBeds 825681.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 825681	Survey Results 825681.xls

6. Casing and Tubing Program

List of Attached Items:

Description	FileName
Casing Program 825681	Casing Program 825681.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.

13 3/8" Job: Cement did not hold, recement w/ 75sks class A cement; 9 5/8" Job: Did not circulate, grout w/300 sks Class A cement; Water Problems while drilling 8 7/8" hole: Squeezed H2O of w/ Class A cement on 12/8/06, 12/9/06, 12/11/06

8. Drillers Log

Compiled By: Chad L Satterfield

List of Attached Items:

Description	FileName
Drillers Log 825681	DrillersLog 825681.xls

9. Comments

According to the inspector's report water was encountered at the following depths: 1 1/2 @ 72' 2 1/2 @ 167', damp @ 207', 3-31/2@ 225' and 1 1/2 @ 250'

10. Signature

Permitee: Chesapeake Appalachia, LLC Date: 9/10/2007 (Company)

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

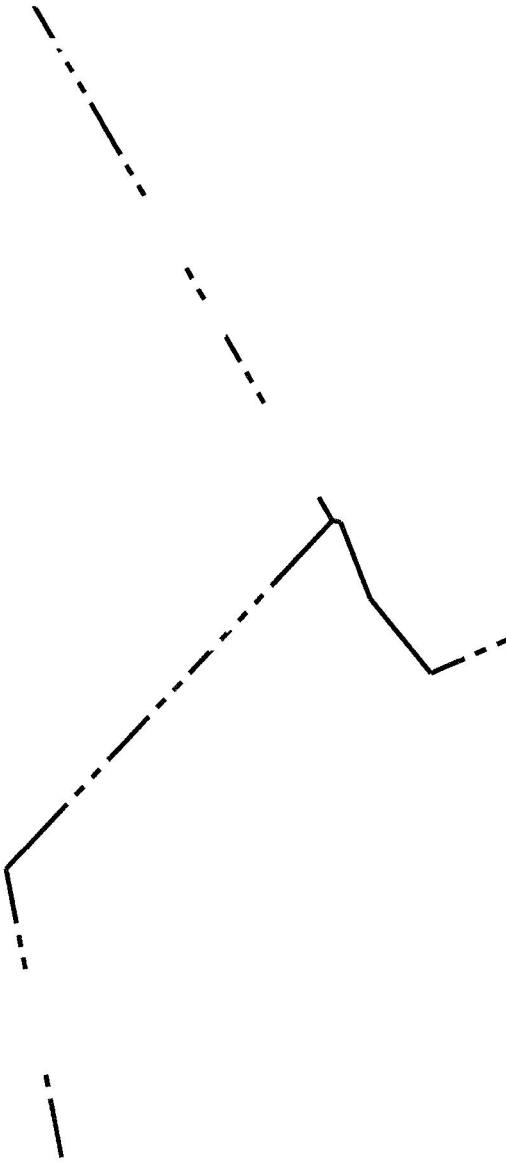
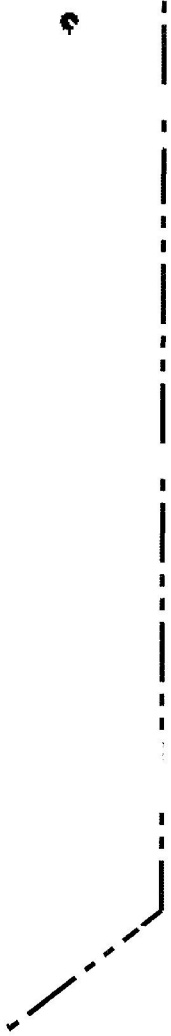
INTERNAL USE ONLY

Submit Date: 9/10/2007

Status: Inspr Approved

Date: 9/10/2007

Final PDF Date: 9/10/2007



DGO-7 SUPPLEMENT
WELL UNIT PROPERTY OWNER INDEX
825681 (PPN-40)

(1)

Buchanan Energy Co., LLC (Fee)
Tract 99
53.62 Ac. ~ 50.52% of 106.13 Acres

(2)

Buchanan Energy Co., LLC (Fee)
Tract 96 (Part 1)
6.47 Ac. ~ 6.10% of 106.13 Acres

(3)

Buchanan Energy Co., LLC (Fee)
Tract 98
3.00 Ac. ~ 2.83% of 106.13 Acres

(4)

Buchanan Energy Co., LLC (Fee)
Tract 116
4.55 Ac. ~ 4.29% of 106.13 Acres

(5)

Buchanan Energy Co., LLC (Fee)
Tract 95
29.70 Ac. ~ 27.98% of 106.13 Acres

(6)

Buchanan Energy Co., LLC (Fee)
Tract 96 (Part 2)
8.79 Ac. ~ 8.28% of 106.13 Acres

Well 825681 COALBEDS				MINING IN AREA		
NAME	TOP	BOTTOM	THICKNESS	YES	NO	MINED OUT
NONE					X	NO

Well 825681 SURVEY RESULTS	
Depth of Survey	Direction/Distance/Degree From True Vertical
200	1/4 degree
400	1/4 degree
598	1/4 degree
816	1/4 degree
1016	1/4 degree
1200	1/4 degree
1409	1/4 degree

Well 825681 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
Conductor	20"	38'KB	24"	Driven	No		
Surface	13 3/8"	88' KB	17 1/2"	89	Yes	12/4/2006	
Surface	9-5/8"	217'KB	12-1/4"	95	Yes	12/6/2006	Grout basket at 86'
Coal Protection	7"	1450'KB	8-7/8"	300	Yes	12/15/2006	Grout basket at 88'KB
Production	4-1/2"	5268'KB	6 1/4"	394	No	12/21/2006	

Well 825681 DRILLER'S LOG							
Geologic Age	Formation	General Lithology	Color	Depth Top	Depth Bottom	Thickness	Remarks
Penn	Lee	Siltstone & Shale/Coal		0	568	568	
Penn	Salt Sand	Sandstone		568	1143	575	
Miss	Pennington	Siltstone & Shale		1143	1240	97	
Miss	Ravenclyff1	Sandstone		1240	1272	32	
Miss	Pennington	Siltstone & Shale		1272	1615	343	
Miss	Upper Maxon	Sandstone		1615	1738	123	
Miss	Pennington	Siltstone & Shale		1738	1866	128	
Miss	Lower Maxon	Sandstone		1866	1904	38	
Miss	Pennington	Siltstone & Shale		1904	2160	256	
Miss	Bradley	Sandstone		2160	2242	82	
Miss	Pennington	Siltstone & Shale		2242	2265	23	
Miss	Little Lime	Limestone		2265	2308	43	
Miss	Big Lime	Limestone		2308	2693	385	
Miss	Pennington	Siltstone & Shale		2693	2845	152	
Miss	Weir	Sandstone		2845	2920	75	
Miss	Pocono	Shale		2920	3281	361	
Miss	Sunbury	Shale		3281	3291	10	
Miss	Berea	Sandstone		3291	3307	16	
Devonian	Upper Devonian	Shale		3307	3590	283	
Devonian	Gordon	Sandstone		3590	3644	54	
Devonian	Lower Devonian	Shale		3644	4301	657	
Devonian	Lower Huron	Shale		4301	4675	374	
Devonian	Java	Shale		4675	4807	132	
Devonian	Angola	Shale		4807	5002	195	
Devonian	Rhinestreet	Shale		5002	5208	206	
Devonian	Marcellus	Shale		5208	5216	8	
Devonian	Onondoga	Limestone		5216	5313	97	