

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:	250
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Chesapeake Appalachia, LLC Company:

BU-3201 File Number:

Operations Name: 825524 (HY-108) W/PL

Operation Type: Gas/Pipeline **Drilling Report Type:** Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data							
Date drilling commenced:	12/16/2006	Drilling Contractor:	S. W. Jack Drilling Co.				
Date drilling completed:	1/6/2007	Rig Type: 🗸 Rotary 🔲 Cable Tool					
Driller's Total Depth (feet):	5,420						
Log Total Depth (feet):	5,420	Formation At Total Depth Onandoga					
2. Final Location Plat (as req	uired by 4 VAC25	5-150-360.C.)					
Permitted State Plane X 934	1,669	Final Plat State Plar	ne X: <u>934,671</u>				
Permitted State Plane Y: 391	,198	Final Plat State Plar	ne Y: 391,193				
☐ Plat Previously Submitted	Or						
List of Attached Items:							
Descrip	tion		FileName				
825524 Fir	nal Plat	82	25524 Final Plat.pdf				
3. Geological Data							
Fresh Water At:							
Depth	(in feet)	Rate	Unit of Measure				
	81	Damp					
Salt Water At:							
	(in feet)	Rate	Unit of Measure				

Form DGO-GO-14-E Rev. 1/2007

Coal Seams

List of Attached Items:

Description	FileName			
825524 Coal Seams	CoalBeds 825524.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, LDT, CNL, AIT, PE, Audio, & Temp.

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			
825524 Survey Results	Copy of SurveyResults 824731.xls			

6. Casing and Tubing Program

List of Attached Items:

Description	FileName		
825524 Casing Program	Casing Program 825524.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/occurence.

9 5/8" cement did not circulate to surface, grouted back side with 90 sks of class A cement.

8. Drillers Log

Compiled By: Aaron Casto

List of Attached Items:

Description	FileName			
825524 Drillers Log	DrillersLog 825524.xls			

9. Comments

10. Signature

Permitee: Chesapeake Appalachia, LLC Date: 8/15/2007 (Company)

Signed By: Aaron Casto Title: Drilling Engineer (Signature)

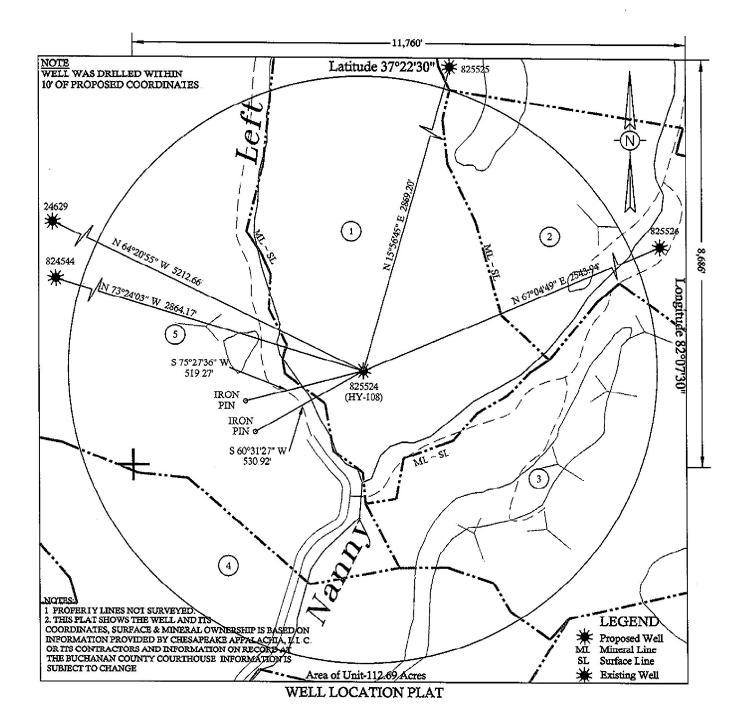
INTERNAL USE ONLY

Submit Date: 8/15/2007

Status: Inspr Approved Date: 8/22/2007

Final PDF Date: 8/22/2007

Form DGO-GO-14-E



CHESAPEAKE APPALACHIA, L.L.C. _ Well Name or Number 825524 (HY-108) Company Tract No BUCHANAN GAS CO. HARMAN Quadrangle ROCKLICK District N: 391,193.33 E: 934,670.90 Well Coordinates (Virginia State Plane) Method Used to Determine Elevation: Trig. Levels from GPS derived elevation. 1232.04 Elevation: BUCHANAN 1'' = 400'1-18-07 County ___ _ Scale: This Plat is a new plat _ __ ; an updated plat __ ____; or a final location plat 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 DOUGLAS R. LIGHT No. 002285 Licensed Professional; Engineer or Licensed Land Surveyor Form DGO-GO-7 Rev. 1-98

DGO-7 Supplement WELL UNIT PROPERTY OWNER INDEX

Chesapeake Appalachia, L.L.C. 825524 (HY-108) with pipeline

(1)
Drill Tract
Surface & Coal:
Wellmore Coal Co.
Gas:

Buchanan Gas Co. 32.10 Ac. ~ 28.49% of 112.69 Ac.

(2) Mildred Tackett, et al 11.55 Ac ~ 10.25% of 112.69 Ac.

(3) Geneva B. Hines, et al 20.66 Ac. ~ 18.33% of 112.69 Ac.

(4) Minnie Mae Hackney Estate 15 37 Ac. ~ 13.64% of 112.69 Ac.

(5)
Buchanan Gas Co.
33.01 Ac. ~ 29.29% of 112.69 Ac.

Well 825524 COALBEDS					MINING IN AREA			
NAME	TOP	BOTTOM	THICKNESS	YES	NO	MINED OUT		
Unknown	23	24	1		Χ	NO		
Unknown	289	292	3		Χ	NO		

Well 824731 Survey Results	
Depth of Survey	Direction/Distance/Degree From True Vertical
200	1/4 degree
392	1/4 degree
601	1/4 degree
828	1/4 degree
1017	1/4 degree
1203	1/4 degree
1410	1/2 degree
1681	1/2 degree
1807	1/2 degree

Well 825524 CA	Vell 825524 CASING PROGRAM						
	Casing Casing Hole Cement Used Cemented To S		Cemented To Surface	Date	Packers Or Bridge Plugs		
Casing Type	Size	Interval	Size	In Cubic Ft.	Yes/No	Cemented	Kind/Size/Set
Conductor	13 3/8"	42' KB	17 1/2"	Driven	No		
Surface	9-5/8"	334'KB	12-3/8"	271	Yes	12/17/2006	Grout basket at 88'
Coal Protection	7"	1694'KB	8-7/8"	396	Yes	12/19/2006	Grout basket at 88'
Production	4-1/2"	5410'KB	6-1/4"	364	No	1/7/2007	

Well 825524 DRILLER'S LOG		General		Depth	Depth		
Geologic Age	Formation	Lithology	Color	Тор	Bottom	Thickness	Remarks
Penn	Lee	Siltstone & Shale/Coal		0	748	748	
Penn	Salt Sand	Sandstone		748	1622	874	
Miss	Pennington	Siltstone & Shale		1622	1726	104	
Miss	Ravencliff	Sandstone		1726	1751	25	
Miss	Pennington	Siltstone & Shale		1751	1953	202	
Miss	Upper Maxon	Sandstone		1953	2078	125	
Miss	Pennington	Siltstone & Shale		2078	2220	142	
Miss	Middle Maxon	Sandstone		2220	2288	68	
Miss	Pennington	Siltstone & Shale		2288	2396	108	
Miss	Lower Maxon	Sandstone		2396	2558	162	
Miss	Pennington	Siltstone & Shale		2558	2578	20	
Miss	Bradley	Sandstone		2578	2602	24	
Miss	Pennington	Siltstone & Shale		2602	2645	43	
Miss	Little Lime	Limestone		2645	2686	41	
Miss	Big Lime	Limestone		2686	3106	420	
Miss	Pocono	Shale		3106	3245	139	
Miss	Weir	Sandstone		3245	3422	177	
Miss	Pocono	Shale		3422	3773	351	
Miss	Sunbury	Shale		3773	3792	19	
Miss	Berea	Sandstone		3792	3800	8	
Devonian	Devonian	Shale		3800	3966	166	
Devonian	Gordon	Sandstone		3966	4016	50	
Devonian	Devonian	Shale		4016	4637	621	
Devonian	Lower Huron	Shale		4637	4885	248	
Devonian	Java	Shale		4885	4999	114	
Devonian	Angola	Shale		4999	5082	83	
Devonian	Rhinestreet	Shale		5082	5313	231	
Devonian	Marcellus	Shale		5313	5321	8	
Devonian	Onondoga	Limestone		5321	5420	99	