

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: 823

Chesapeake Appalachia, LLC Company:

BU-3394 File Number:

Operations Name: 826290 (HY-147) W/PL

Operation Type: Gas/Pipeline

Drilling Report Type: Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data							
Date drilling commenced: Date drilling completed: Driller's Total Depth (feet): Log Total Depth (feet):	6/11/2007 6/25/2007 6,083 6,094	Drilling Contractor: Rig Type: Formation At Total De	S.W. Jack Drilling Rotary Cable Tool epth Onandoga				
2. Final Location Plat (as rec	uired by 4 VAC25-1	50-360.C.)					
Permitted State Plane X 923,347 Final Plat State Plane X: 923,346							
Permitted State Plane Y: 320	0,437	Final Plat State Plane Y: 320,436					
☐ Plat Previously Submitted	Or						
List of Attached Items:							
Descrip	Description FileName						
Final Plat Wo	II #826200	Final Plat 926200 ndf					

Description	Filename
Final Plat Well #826290	Final Plat 826290.pdf

3. Geological Data

Fresh Water At:

Depth (in feet)	Rate	Unit of Measure
115	5	INCH
36	Damp	
395	2	INCH
56	2	INCH

Salt Water At:

Depth (in feet)	Rate	Unit of Measure
740	Damp	

Form DGO-GO-14-E

Rev. 1/2007

Coal Seams

List of Attached Items:

Description	FileName				
Coal Seams Well #826290	CoalBeds 826290xls.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,LDT,SIB,TEMP,AUDIO

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 Well #826290	CoalBeds 826290xls.xls			

6. Casing and Tubing Program

List of Attached Items:

Description	FileName			
Casing Program Well # 826290	Casing Program 826209.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" Job: Job did not circulate, grouted back to surface w/ 20 sks Class A cement ; 7" Job: Cement circulated but fell back, grouted to surface w/10sks Class A cement

8. Drillers Log

Compiled By: Chad L Satterfield

List of Attached Items:

Description	FileName		
Drillers Log Well # 826290	DrillersLog 826290.xls		

9. Comments

10. Signature

Permitee: Chesapeake Appalachia, LLC Date: 11/14/2007 (Company)

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

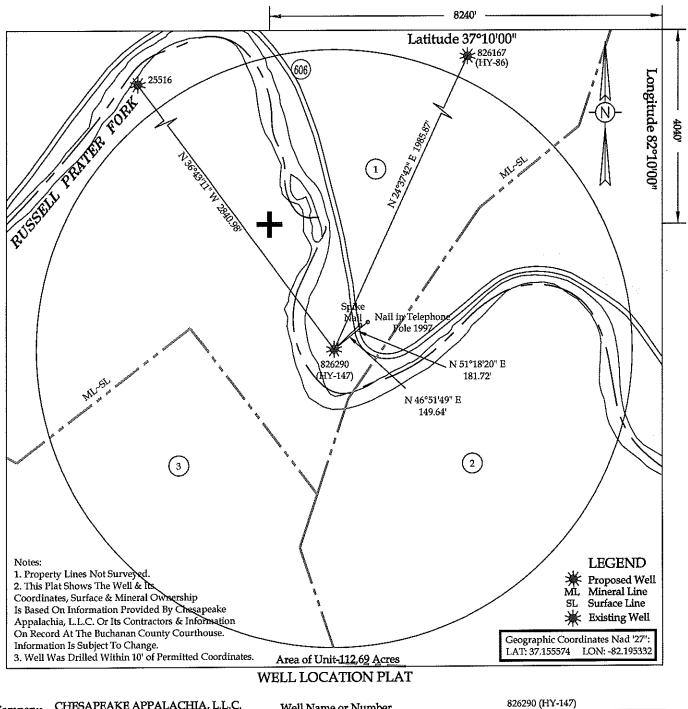
INTERNAL USE ONLY

Submit Date: 11/14/2007

Status: Inspr Approved Date: 11/15/2007

Final PDF Date: 11/15/2007

Form DGO-GO-14-E



Company _	CHESAPEAKE APP	ALACHIA, L.L.C.	Well N	Jame or Number	er 826290 (HY-147)	
	INE MOUNTAIN OIL	& GAS, INC. (1200 Ac.	Tract)	Quadrangle	PRATER	
District	PRATER					_
Well Coordi	nates (Virginia State	Plane)	N: 320,435.77	E: 923,345.96		
Elevation: _	1362.29	Method Used to	Determine	Elevation:	Trig. Levels from GPS derived elevation.	
County	BUCHANAN	Scale:		1" = 400'	Date; cation plat; 1 to 24,000,	ا الرام الرام
This Plat is	a new plat	; an updated pla	nt	_; or a final loc	cation plat X;	A T
Den latit	otes the location of a ude and longitude li	a well on United Stat ines being represente \(\frac{\frac{1}{\text{\chi_0}}}{\text{\chi_0}}\)	es topographed by border	nic maps, scale 1 lines as shown.		
Form DGO-0	GO-7	TTCSHBCG-LAOU	essionai, eng	meeror License	ed Land Burveyor	
Rev. 1-98					AND SURVEYOR	

DGO-7 Supplement WELL UNIT PROPERTY OWNER INDEX Chesapeake Appalachia, L.L.C. 826290 (HY-147) with pipeline

(1)
Drill Tract
Surface:
Heartwood Forestland Fund IV, LP
Oil & Gas:
Pine Mountain Oil & Gas
(1200 Acre Tract)
51.03 Ac. ~ 45.28% of 112.69 Ac.

(2)
Pine Mountain Oil & Gas
(170.58 Acre Tract)
41.15 Ac. ~ 36.52% of 112.69 Ac.

(3)
Pine Mountain Oil & Gas
(147.95 Acre Tract)
20.51 Ac. ~ 18.20% of 112.69 Ac.

Well 826290 COALBEDS				MINING IN AREA		
NAME	TOP	BOTTOM	THICKNESS	YES	NO	MINED OUT
Unknown	360	362	2		Χ	NO
Unknown	886	887	1		Χ	NO
Unknown	922	924	2		Χ	NO
Unknown	1122	1124	2		Χ	NO

Well 826290 COALBEDS				MINING IN AREA		
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Unknown	360	362	2		Χ	NO
Unknown	886	887	1		Χ	NO
Unknown	922	924	2		Χ	NO
Unknown	1122	1124	2		Χ	NO

Well 826290 CA	SING PF	ROGRAM						
	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	
Driven	13 3/8"	36' KB	17 1/2"	Driven	No			
Surface	9-5/8"	275' KB	12-1/4"	200.6	Yes	6/13/2007	Grout basket at 98'	
Coal Protection	7"	1693'KB	8-3/4"	305.65	Yes	6/20/2007	Grout basket at 318'	
Production	4-1/2"	6072'KB	6-1/4"	352.8	No	6/25/2007		

Well 826290 DRILLER'S LOG		General		Depth	Depth		
Geologic Age	Formation	Lithology	Color	Тор	Bottom	Thickness	Remarks
Penn	Lee	Siltstone & Shale/Coal		0	580	580	
Penn	Salt Sand	Sandstone		580	1416	836	
Miss	Pennington	Siltstone & Shale		1416	1510	94	
Miss	Ravencliff	Sandstone		1510	1578	68	
Miss	Pennington	Siltstone & Shale		1578	1818	240	
Miss	Upper Maxon	Sandstone		1818	2022	204	
Miss	Pennington	Siltstone & Shale		2022	2188	166	
Miss	Middle Maxon	Sandstone		2188	2226	38	
Miss	Pennington	Siltstone & Shale		2226	2533	307	
Miss	Lower Maxon	Sandstone		2533	2794	261	
Miss	Pennington	Siltstone & Shale		2794	3058	264	
Miss	Little Lime	Limestone		3058	3100	42	
Miss	Big Lime	Limestone		3100	3776	676	
Miss	Pocono	Shale		3776	3980	204	
Miss	Weir	Sandstone		3980	4068	88	
Miss	Pocono	Shale		4068	4495	427	
Miss	Sunbury	Shale		4495	4520	25	
Miss	Berea	Sandstone		4520	4558	38	
Devonian	Devonian	Shale		4558	5342	784	
Devonian	Lower Huron	Shale		5342	5562	220	
Devonian	Java	Shale		5562	5705	143	
Devonian	Angola	Shale	•	5705	5809	104	
Devonian	Rhinestreet	Shale	•	5809	5989	180	
Devonian	Marcellus	Shale	•	5989	5999	10	
Devonian	Onondoga	Limestone	•	5999	6094	95	