

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:	1125
Company:	Daugherty Petroleum, Inc.
File Number:	LE-0216
Operations Name:	1796
Operation Type:	Gas
Drilling Report Type:	Original

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

1. Drilling Data						
Date drilling commenced:	8/23/2007	Drilling Contracto	or: Phoenix Drilling			
Date drilling completed:	9/2/2007	Rig Type:☑Rof	tary			
Driller's Total Depth (feet):	5856.00					
Log Total Depth (feet):	0.00	Formation At Total Dep	th Silurian			
2. Final Location Plat (as require	ed by 4 VAC25-	150-360.C.)				
Permitted State Plane X: 662	2626.53	Final Plat State Plane X:	662626.53			
Permitted State Plane Y: 207797.23		Final Plat State Plane Y:	207797.23			
Plat Previously Submitted Or	$\checkmark$					
List of Attached Items:						
Description		FileNam	е			

Form DGO-GO-14-E

Page 1 of 3

Rev. 1/2007

3. Geological Data			
Fresh Water At:			
Depth (in feet)	Rate	Unit of Measure	
Salt Water At:			
Depth (in feet)	Rate	Unit of Measure	
Coal Seams:			
List of Attached Items:			
Description	FileN	ame	
Gas and Oil Shows:			
List of Attached Items:			
Description	FileN	ame	
gasshows	le216	6.xls	
4. Electric Logs (As required by 4VAC25-150-28	30.A)		
List all logs run: Gamma Ray, Density, Neutr	ron, Temperature, Audio, P	E	
Did logs disclose vertical locations of a coal seam?			
5. Survery Results (As required by 4VAC25-150	-280.B.2)		
List of Attached Items:			
Description	FileN	ame	
deviation le216 deviation.xls			
6. Casing and Tubing Program			
List of Attached Items:			

Form DGO-GO-14-E

Description	FileName	
casing	LE216 casing.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.

8. Drillers Log						
Compiled By:	mpiled By: Shannon Williams					
List of Attache	ed Items:					
	Description		FileName			
	driller's log		le216 drillerslog.xls			
9. Comments						
Hard copy alre	eady approved [2/26/2008, djd]					
10. Signature						
Permitee:	Permitee: Daugherty Petroleum, Inc.		2/26/2008			
Signed By:	Signed By: Shannon Williams		Geologis			
INTERNAL	USE ONLY					
Submit	Date: 2/26/2008					
s	tatus: A		Date: <u>2/26/2008</u>			
Final PDF	Date: 2/28/2008					

## Gas and Oil Shows

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/B	OPD)	PRESSURE	HOURS TESTED
Weir	4747	4928	181	Odor			
Brown Shale	5150	5561	411	Odor			

Survey Results	D'
Depth of Survey	Direction/Distance/Degree From True Vertical
	1 degree
	3/4 degree
608	1 degree
809	3/4 degree
1009	3/4 degree
1229	3/4 degree
1449	3/4 degree
1659	3/4 degree
1869	1 degree
2049	1 degree
2249	1 degree
2449	1 degree
2709	1 degree
2909	1 degree
3109	1 degree
3309	1 degree
3509	1 degree
3709	1 degree
4049	1 degree
	1 degree
	•

Casing Program

	Casing	Casing	Hole	Cement Used	Cemented To Surface	Date
Casing Type	Size	Interval	Size	In Cubic Ft.	Yes/No	Cemented
Conductor	13 3/8	0-40	17 1/2	NA		
Water Protection	9 5/8	0-619	12 3/8	413	Υ	08/24/07
Coal Protection	7	0-4338	8 3/4	808	Υ	08/30/07
Other	4 1/2	0-4792	6 1/4	211	N	09/03/07

Packers Or Bridge Plugs Kind/Size/Set

## Driller's Log

		General	
Geologic Age	Formation	Lithology	Color
Pennsylvanian	Norton	Sand/SH/Coal	D. Gray
·	Lee Sands	Sand/SH/Coal	Gray/Blk
Mississippian	Upper Pennington	Shale	Gray
	Ravencliff	Sand/Shale	Br/Gray
	Maxon	Sand/Shale	Wh/Gray
	Lower Pennington	Shale	Gray
	Little Lime	Lime	Gray
	Pencil Cave	Shale	Grn/Gray
	Big Lime	Lime	Wh/Gray
	Weir	Sand/Siltstone	Dk Gray
	Sunbury	Shale	Black
	Berea	Siltstone/Sh	Dk Gray
	Brown Shale	Shale	Black
	Corniferous	Lime/Dlmite	Tan/Gray
Silurian	Clinton	Shale	Red/Grn
_			

Depth	Depth		
Тор	Bottom	Thickness	Remarks
0	1696	1696	
1696	3310	1614	
3310	3601	291	
3601	2808	207	
3808	4031	223	
4031	4295	265	
4295	4370	75	
4370	4384	14	
4384	4747	363	
4747	5007	260	
5007	5098	91	
5098	5150	52	
5150	5561	411	
5561	5763	202	
5763	5856	93	LTD 5856