

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:	968
Company:	Daugherty Petroleum, Inc.
File Number:	LE-0218
Operations Name:	DPI 1771
Operation Type:	Gas
Drilling Report Type:	Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data		
Date drilling commenced:	10/10/2007	Drilling Contractor: Phoenix Drilling Inc.
Date drilling completed:	10/31/2007	Rig Type: Rotary Cable Tool
Driller's Total Depth (feet):	5,912	
Log Total Depth (feet):	5,912	Formation At Total Depth Clinton

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

Permitted State Plane X 669,293	Final Plat State Plane X: 669,293
Permitted State Plane Y: 206,203	Final Plat State Plane Y: 206,203
Plat Previously Submitted Or	

List of Attached Items:

Description	FileName
shows 1771	gas shows 1771.xls

3. Geological Data

Fresh Water At:

Salt Water At:

Depth (in feet)	Rate	Unit of Measure
2471'	1/4	INCH

Coal Seams

List of Attached Items:

Description	FileName	
1771 coal seams	coalseam 1771.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: Gamma Ray, Density, Neutron, Temperature, Audio, 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 1771	survey 1771.xls	

6. Casing and Tubing Program

List of Attached Items:

Description	FileName
casing	CasingProgram(1).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.

4395' Fish for 7" casing (10-19-07 to 10-24-07)

8. Drillers Log

Compiled By: Shannon Williams

List of Attached Items:

Description	FileName
driller's log	DrillersLog.xls

9. Comments

Received hard copy 1/3/08 data entered by Diane Davis

10. Signature					
Permitee: Dau	ugherty Petroleum, Inc.	Date:	1/4/2008		(Company)
Signed By: Sha	annon Williams	Title:	Geologist		(Signature)
INTERNAL US	E ONLY				
Submit Dat	te: <u>1/4/2008</u>				
Statu	is: Inspr Approved		Date:	1/4/2008	
Final PDF Dat	te: <u>1/9/2008</u>				

Gas and Oil Shows						
FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
Weir	4713	5030	317	Odor		
Brown Shale	5179	5589	410	Odor		
Corniferous	5589	5791	202	Odor		

Coal Seams

					Μ	INING IN AREA
NAME	ТОР	BOTTOM	THICKNESS	YES	NO	MINED OUT
Upper Mason	445	448	3		Х	

Survey Results	
Depth of Survey	Direction/Distance/Degree From True Vertical
237	1/2 degree
449	1 degree
639	3/4 degree
850	1/2 degree
1050	1/2 degree
1271	1/2 degree
1481	1/2 degree
1701	3/4 degree
1911	3/4 degree
2110	3/4 degree
2310	3/4 degree
2541	1/2 degree
2739	1 degree
2951	1/2 degree
3151	1/2 degree
3351	1/2 degree
3561	1/2 degree
3741	1/2 degree
3941	1/2 degree
4161	1/2 degree

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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	0-92	17 1/2	N/A		
Water Protection	9 5/8	0-615	12 3/8	295	Yes	10/11/2007
Coal Protection	7	0-4350	8 7/8	900	Yes	10/25/2007
Other Casing	4 1/2	0-5834	6 1/4	210	No	10/31/2007

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/Blk
	Ravencliff	Sand/Shale	Br/Gray
	Maxon	Sand/Shale	Wh/Gray
	Lower Pennington	Shale	Gray/Blk
	Little Lime	Lime	Gray/Blk
	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/DImite	Tan/Gray
Silurian	Clinton	Shale	Red/Grn

Depth	Depth		
Тор	Bottom	Thickness	Remarks
0	1656	1656	
1656	3167	1511	
3167	3568	401	
3568	3745	177	
3745	3986	241	
3986	4098	112	
4098	4237	139	
4237	4250	13	
4250	4722	472	
4722	5030	308	
5030	5122	92	
5122	5179	57	
5179	5589	410	
5589	5772	183	
5772	5912	140	LTD 5912