



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: 574  
 Company: Daugherty Petroleum, Inc.  
 File Number: LE-0209  
 Operations Name: 1774  
 Operation Type: Gas  
 Drilling Report Type: Original

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

#### 1. Drilling Data

Date drilling commenced: 3/28/2007 Drilling Contractor: PHOENIX DRILLING, INC  
 Date drilling completed: 4/19/2007 Rig Type:  Rotary  Cable Tool  
 Driller's Total Depth (feet): 5,814  
 Log Total Depth (feet): 0 Formation At Total Depth Brown Shale

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

Permitted State Plane X 680,003 Final Plat State Plane X: 680,003  
 Permitted State Plane Y: 208,671 Final Plat State Plane Y: 208,671

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
1774 PLAT	1774PLAT.pdf

#### 3. Geological Data

*Fresh Water At:*

Depth (in feet)	Rate	Unit of Measure
240	3	INCH
360	2	INCH

*Salt Water At:*

Depth (in feet)	Rate	Unit of Measure
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**Coal Seams**

List of Attached Items:

Description	FileName
1774 SEAMS	1774SEAMS.pdf

**Gas and Oil Shows**

List of Attached Items:

Description	FileName
1774 SHOWS	1774SHOWS.pdf

**4. Electric Logs** (As required by 4VAC25-150-280.A.)

List all logs run: GR/DEN/NEU/TEMP/AUD/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
1774 SURVEY	1774SURVEY.pdf

**6. Casing and Tubing Program**

List of Attached Items:

Description	FileName
1774 CASING	1774CASING.pdf

**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.

**8. Drillers Log**

Compiled By: SHANNON WILLIAMS

List of Attached Items:

Description	FileName
1774 DRILL	1774DRILL.pdf

**9. Comments**

PREVIOUSLY APPROVED BY DGO M. DEERING ON 6/26/07.

**10. Signature**

Permitee: Daugherty Petroleum, Inc. Date: 7/30/2007 (Company)

Signed By: SHANNO WILLIAMS Title: GEOLOGIST (Signature)

**INTERNAL USE ONLY**

Submit Date: 7/30/2007

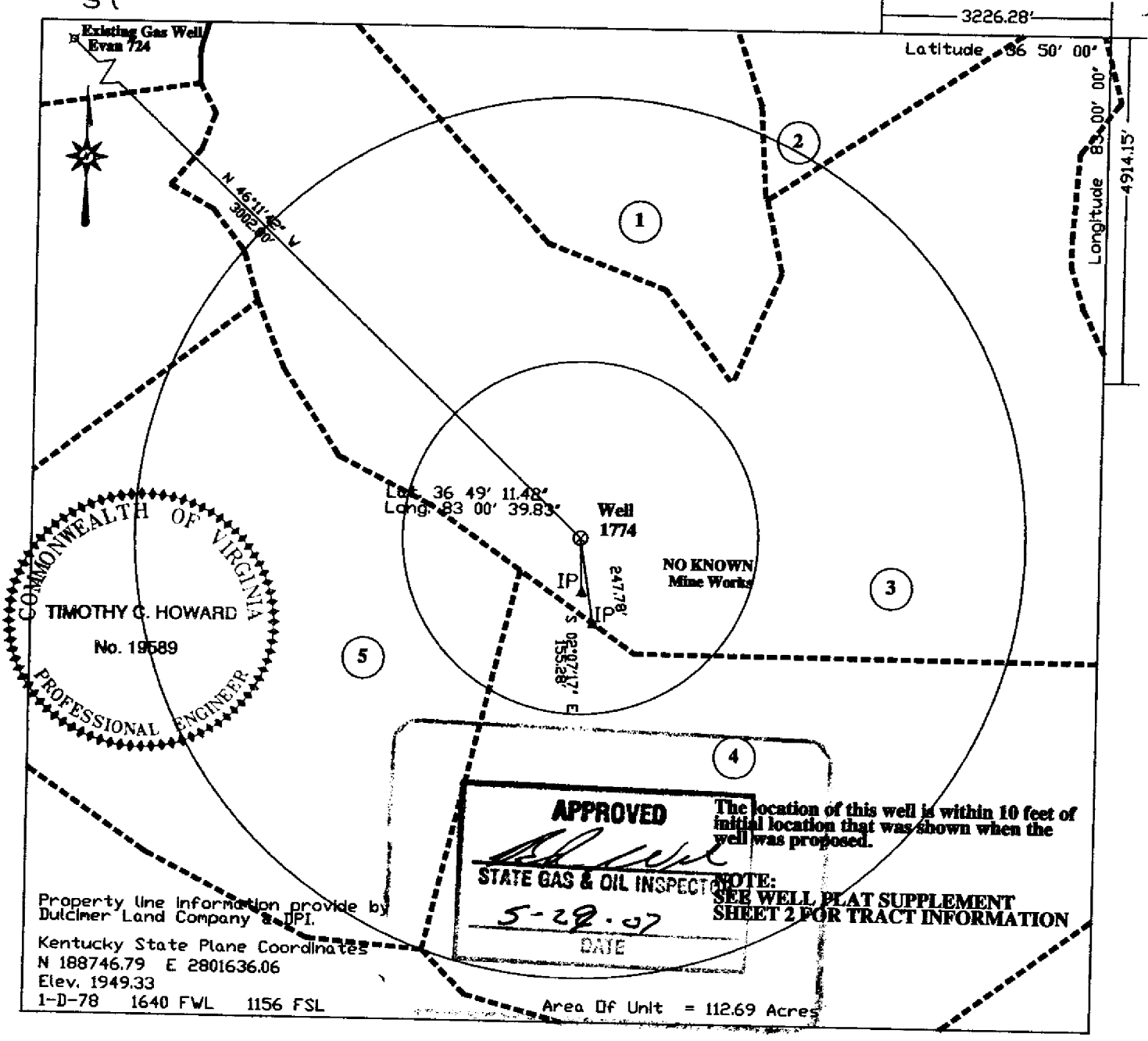
Status: Inspr Approved

Date: 9/10/2007

Final PDF Date: 9/10/2007

MOJ  
5/21/07

LE-20'  
MD



WELL LOCATION PLAT

COMPANY: DAUGHERTY PETROLEUM, INC. WELL NAME OR NUMBER 1774  
 TRACT NUMBER LOVIA LEE WRIGHT  
 DISTRICT Rocky Station QUADRANGLE Pennington Gap  
 WELL COORDINATES ( VIRGINIA STATE PLANE): N 200671.20 E 600003.17  
 ELVATION 1949.33 METHOD USED TO DETERMINE ELEVATION: GPS survey from well 1755 control point.  
 COUNTY Lee SCALE- 1" = 400' DATE: May 10, 2007

THIS PLAT IS A NEW PLAT \_\_\_\_\_ ; AN UPDATED PLAT \_\_\_\_\_ ; OR A FINAL LOCATION PLAT X

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. (optional)

*Timothy C. Howard*  
 Licensed Professional Engineer or Licensed Land Surveyor (Affix Seal)



Coal Seams

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA		MINED OUT
				YES	NO	
None reported						

Gas and Oil Shows

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
Big Lime	4078'	4481'	403'	Odor		
Weir	4481'	4800'	319'	Odor		
Brown Shale	4946'	5482'	536'	Odor		

Form DGO-GO-14  
Rev. 1/98

SURVEY RESULTS

Depth Of Survey	Direction/Distance/ Degrees From True Vertical	Depth Of Survey	Direction/Distance Degrees From True Vertical
500'	1/4 deg		
700'	1/4 deg		
900'	3/4 deg		
1100'	1 deg		
1300'	3/4 deg		
1506'	3/4 deg		
1716'	3/4 deg		
1916'	3/4 deg		
2116'	3/4 deg		
2316'	3/4 deg		
2400'	1/2 deg		
2646'	1/2 deg		
2856'	1/2 deg		
3036'	3/4 deg		
3236'	3/4 deg		
3436'	3/4 deg		

Use additional sheets as necessary





DRILLER'S LOG

Compiled by: Shannon Williams

Geologic Age	Formation	General Lithology	Color	Depth		Thickness	Remarks
				Top	Bottom		
Pennsylvanian	Norton	Sand/SH/Coal	D. Gray	0'	1512'	1512'	
	Lee Sands	Sand/SH/Coal	Gray/Blk	1512'	2908'	1396'	
Mississippian	Upper Pennington	Shale	Gray	2908'	3559'	651'	
	Ravencruff	Sand/Shale	Br/Gray	3559'	3624'	65'	
	Maxon	Sand/Shale	Wh/Gray	3624'	3810'	184'	
	Lower Pennington	Shale	Gray	3810'	4002'	192'	
	Little Lime	Lime	Gray	4002'	4068'	66'	
	Pencil Cave	Shale	Grn/Gray	4068'	4078'	10'	
	Big Lime	Lime	Wh/Gray	4078'	4480'	402'	
	Weir	Sand/Siltstone	Dk Gray	4480'	4800'	320'	
	Sunbury	Shale	Black	4800'	4894'	94'	
	Berea	Siltstone/Sh	Dk Gray	4894'	4946'	52'	
Silurian	Brown Shale	Shale	Black	4946'	5482'	536'	
	Corniferous	Lime/Dlomite.	Tan/Gray	5482'	5682'	200'	
	Clinton	Shale	Red/Grn.	5682'	5814'	132'	LTD: 5814'

Permittee: Daugherty Petroleum, Inc. (Company)By: Shannon Williams, Geologist  (Signature)Form DGO-GO-14  
Rev. 1/98