

Department of Mines, Minerals and Energy  
Division of Gas and Oil  
P.O. Box 1416  
Abingdon, Virginia 24210  
703/676-5423



COMPLETION REPORT

WELL TYPE: Oil  Gas  Coalbed Methane  or Injection  well

Date Well Completed: 10-31-96 Total Depth of Well: LTD = 2507 DTD = 2505

Attach the Drilling Report; if not previously submitted. In addition, submit any changes in casing or tubing that were approved after the Drilling Report was submitted.

STIMULATION RECORD

Zone 1: COAL SEAMS\* Formation Stimulated With: 70Q FOAM  
W/25568# 12/20 SAND - 722100 SCF N2 - 529 BF  
Perforated: 1644.5 to 2344.5 No. of Perforations: 17 Perforation size: .34  
Formation Broke Down at: 1868 PSIG Average Injection Rate: 17.8 BPM  
ISIP: 1274 PSIG 5 Min SIP: 1185 PSIG Average Injection Pressure: 3719  
Date Stimulated: 10-31-96

\* M HORSEPEN, UNNAMED "C", BECKLEY, L HORSEPEN, X-SEAM, POCO #5, POCO #3

Zone 2: Formation Stimulated With:  
Perforated: to No. of Perforations: Perforation size:  
Formation Broke Down at: PSIG Average Injection Rate:  
ISIP: PSIG Min SIP: PSIG Average Injection Pressure:  
Date Stimulated:

Zone 3: Formation Stimulated With:  
Perforated: to No. of Perforations: Perforation size:  
Formation Broke Down at: PSIG Average Injection Rate:  
ISIP: PSIG Min SIP: PSIG Average Injection Pressure:  
Date Stimulated:

FINAL PRODUCTION:      Natural   X   After Stimulation  
BOD MCFD HOURS TESTED ROCK PRESSURE HOURS TESTED

Zone (1)  
Zone (2)  
Zone (3)  
Final Production if Gas Zones are Commingled   36   MCFD   6   Hours Tested  362  PSIG  48  Hours Tested

\* Use additional sheets with this format, if more than three (3) zones were stimulated.

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. Long (Signature)

Department of Mines, Minerals and Energy  
 Division of Gas and Oil  
 P. O. Box 1410  
 Abingdon, Virginia 24210  
 703/676-5423

DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well VCP3619 in the KENADY District of the DICKENSON County, Virginia on 27TH day, JANUARY month, 19 97.

LOCATION

County: DICKENSON District: KENADY  
 Surface Elevation: 2216.3 Elevation of Kelly Bushing: 2226.3 Quadrangle: NORA  
6380 FT S. of Latitude 37° 05' 00" and 6780 FT W. of Longitude 82° 20' 00"

Attach a final location plat as required by VR 480-05-22.1, § 1.36.

DRILLING DATA

Date Drilling Commenced: 10-21-96 Drilling Contractor: Union Drilling  
 Date Drilling Completed: 10-24-96 Rig Type:  Rotary  Cable Tool  
 Total Depth of Well: LTD=2507 DTD=2505

GEOLOGICAL DATA

Fresh Water at:	187	feet	DAMP	GPM	feet	GPM
		feet		GPM	feet	GPM
Salt Water at:		feet		GPM	feet	GPM
		feet		GPM	feet	GPM

COAL SEAMS:

<u>NAME</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>YES</u>	<u>MINING IN AREA</u>	
					<u>NO</u>	<u>MINED OUT</u>
L HORSEPEN	1892	1894	2			
POCO #5	2200	2202	2			

GAS AND OIL SHOWS:

<u>FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>IPF (MCFD/BOPD)</u>	<u>PRESSURE</u>	<u>HOURS TESTED</u>
	1715/1786/1810/2000/2198/2505			ODOR		

Cuttings or samples are  are not  available for examination by a member of the Virginia Division of Mineral Resources  
 Cuttings or samples have  have not  been furnished to the Virginia Division of Mineral Resources

ELECTRIC LOGS AND SURVEYS

List logs run on wellbore: DEN/TMP/GR

Did log disclose vertical location of a coal seam? Yes  No

SURVEY RESULTS

<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>	<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>
200	1/4°	1786	3/4°
269	1/2°	1810	3/4°
400	3/4°	2000	3/4°
585	1°	2198	3/4°
785	3/4°	2350	1°
985	3/4°		
1180	3/4°		
1530	3/4°		
1715	3/4°		

CASING AND TUBING

	<u>SIZE</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>LENGTH</u>	<u>CEMENT USED (IN CU/FT)</u>	<u>DATE CEMENTED</u>	<u>PACKERS OR BRIDGE PLUGS KIND SIZE SET AT</u>
<u>Conductor</u>							
<u>Surface</u>	11 3/4"		33'	23'			
<u>Water Protection</u>	8 5/8"		318'	308'	85(100)	10-22-96	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	4 1/2" 2 3/8"		2487' 2420'	2477'	325(410)	10-24-96	
<u>Liners</u>							

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc.

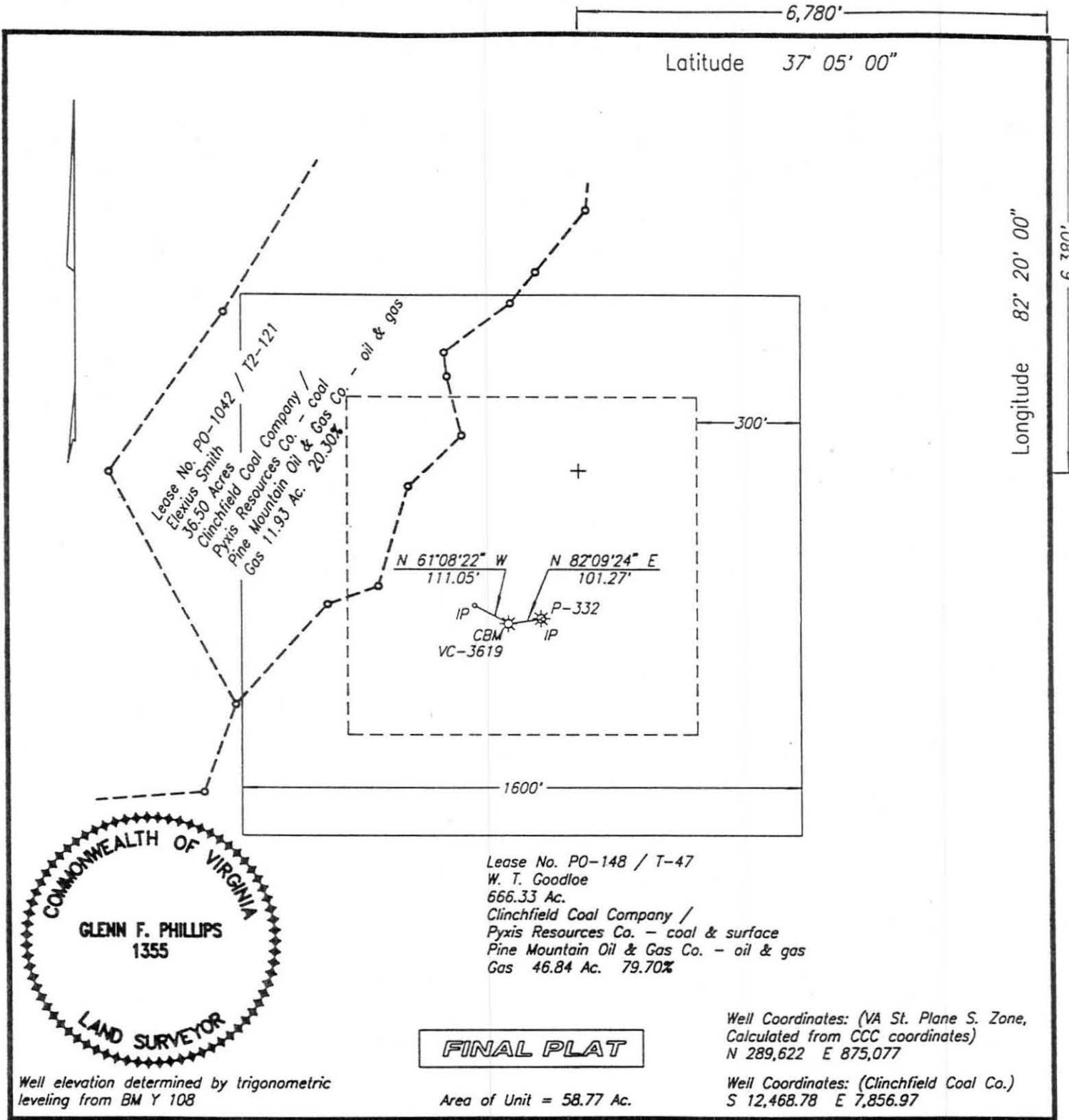
DRILLER'S LOG

Compiled by Engineering

<u>AGE</u>	<u>FORMATION</u>	<u>GENERAL LITHOLOGY</u>	<u>COLOR</u>	<u>DEPTH</u>		<u>THICKNESS</u>	<u>REMARKS</u>
				<u>TOP</u>	<u>BOTTOM</u>		
Pennsylvanian	Sand, Shale & Thin Coals L HORSEPEN	Sand, Shale & Thin Coals POCO #5		0	1892	1892	
				1892	1894	2	
				1894	2200	306	
				2200	2202	2	
	Sand, Shale & Thin Coals			2202	2507	305	
	Logger's Total Depth				2507		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph P. Long (Signature)



Lease No. PO-148 / T-47  
 W. T. Goodloe  
 666.33 Ac.  
 Clinchfield Coal Company /  
 Pyxis Resources Co. - coal & surface  
 Pine Mountain Oil & Gas Co. - oil & gas  
 Gas 46.84 Ac. 79.70%

**FINAL PLAT**

Well Coordinates: (VA St. Plane S. Zone,  
 Calculated from CCC coordinates)  
 N 289,622 E 875,077

Well Coordinates: (Clinchfield Coal Co.)  
 S 12,468.78 E 7,856.97

Well elevation determined by trigonometric leveling from BM Y 108

Area of Unit = 58.77 Ac.

WELL LOCATION PLAT

9-G-86

COMPANY Equitable Resources Exploration WELL NAME AND NUMBER VC-3619  
 TRACT NO. T-47 ELEVATION 2219.64 QUADRANGLE Nora  
 COUNTY Dickenson DISTRICT Kenady SCALE 1" = 400' DATE 12-18-1996

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.

Glenn F. Phillips  
 Licensed Professional Engineer or Licensed Land Surveyor