

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: 10-1-96 Total Depth of Well: LTD = 2825 DTD = 2825

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/25500# 12/20 SAND - 636300 SCF N2 - 525 BF

Perforated: 1791.5 to 2076 No. of Perforations: 17 Perforation size: .34  
Formation Broke Down at: 1712 PSIG Average Injection Rate: 17 (57 DH) BPM  
ISIP: 971 PSIG 5 Min SIP: 934 PSIG Average Injection Pressure: 3758  
Date Stimulated: 10-1-96

\* U HORSEPEN, M HORSEPEN, C-SEAM, WARCREEK, UNNAMED "C", BECKLEY, L HORSEPEN

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 122 MCFD 6 Hours Tested 300 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. Kelly (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 VCP3590 in the ERVINTON District of the DICKENSON County, Virginia on 16TH day, JANUARY month, 19 97.

LOCATION

County: DICKENSON District: ERVINTON  
 Surface Elevation: 2454.1 Elevation of Kelly Bushing: 2464.1 Quadrangle: NORA  
5703 FT S. of Latitude 37° 05' 00" and 12807 FT W. of Longitude 82° 17' 30"

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

DRILLING DATA

Date Drilling Commenced: 09-20-96 Drilling Contractor: Union Drilling  
 Date Drilling Completed: 09-25-96 Rig Type:  Rotary  Cable Tool  
 Total Depth of Well: LTD=2825 DTD=2825

GEOLOGICAL DATA

Fresh Water at:	420	feet	DAMP	GPM	2288	feet	DAMP	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>MINING IN AREA</u>		
				<u>YES</u>	<u>NO</u>	<u>MINED OUT</u>
L HORSEPEN	2074	2077	3			

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>
		2825		ODOR		

Cuttings or samples are are not X available for examination by a member of the Virginia Division of Mineral Resources  
Cuttings or samples have have not X 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 X No

SURVEY RESULTS

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
200	1/4°	1750	1°
400	1/4°	1950	3/4°
484	1/4°	2003	3/4°
600	1/2°	2203	1°
750	1/2°	2380	1°
950	1/2°	2408	1°
1150	1°	2665	1-1/2°
1350	1°	2825	1-1/4°
1550	1°		

CASING AND TUBING

	SIZE	TOP	BOTTOM	LENGTH	CEMENT USED (IN CU/FT)	DATE CEMENTED	PACKERS OR BRIDGE PLUGS KIND SIZE SET AT
<u>Conductor</u>							
<u>Surface</u>	11 3/4"		30'	20'			
<u>Water Protection</u>	8 5/8"		629'	619'	153(181)	09-21-96	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	4 1/2"		2798'	2788'	385(485)	09-25-96	
	2 3/8"		2230'				
<u>Liners</u>							

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

DRILLER'S LOG

Compiled by Engineering

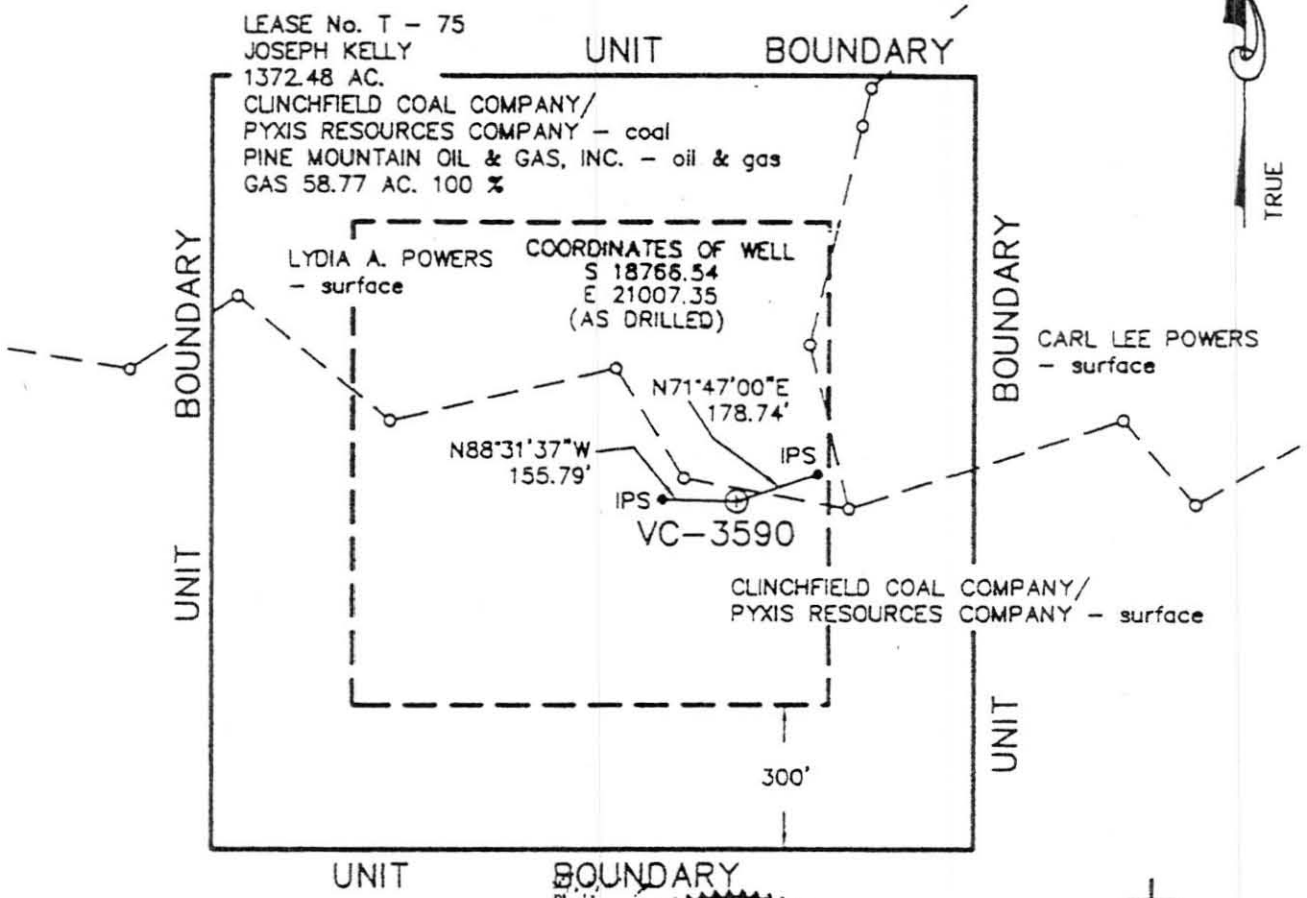
<u>AGE</u>	<u>FORMATION</u>	<u>GENERAL LITHOLOGY</u>	<u>COLOR</u>	<u>DEPTH</u>		<u>THICKNESS</u>	<u>REMARKS</u>
				<u>TOP</u>	<u>BOTTOM</u>		
Pennsylvanian	Sand, Shale & Thin Coals L HORSEPEN Sand, Shale & Thin Coals			0	2074	2074	
				2074	2077	3	
				2077	2825	748	
	Logger's Total Depth				2825		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: Joseph A. Dwyer (Signature)

LATITUDE 37°05'00"

TOTAL UNIT AREA  
= 58.77 ACRES



LEASE No. T - 75  
 JOSEPH KELLY  
 1372.48 AC.  
 CLINCHFIELD COAL COMPANY/  
 PYXIS RESOURCES COMPANY - coal  
 PINE MOUNTAIN OIL & GAS, INC. - oil & gas  
 GAS 58.77 AC. 100 %

LYDIA A. POWERS  
 - surface

COORDINATES OF WELL  
 S 18766.54  
 E 21007.35  
 (AS DRILLED)

N71°47'00"E  
 178.74'  
 N88°31'37"W  
 155.79'  
 IPS  
 VC-3590

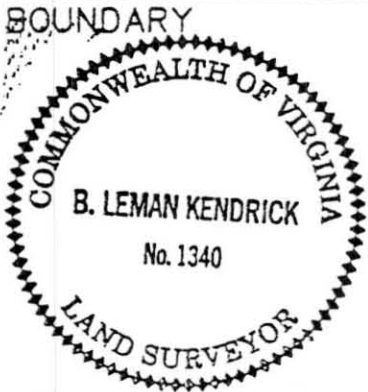
CLINCHFIELD COAL COMPANY/  
 PYXIS RESOURCES COMPANY - surface

CARL LEE POWERS  
 - surface



LONGITUDE 82°17'30"

NOTE !!!  
 WELL COORDINATES ARE BASED ON CLINCHFIELD COAL COMPANY'S MINE COORDINATE SYSTEM  
 STATE PLANE WELL COORDINATES ARE CALCULATED FROM CLINCHFIELD COAL COMPANY COORDINATES.  
 PROPERTY INFORMATION PROVIDED BY EQUITABLE RESOURCES ENERGY COMPANY.  
 ELEVATIONS ARE BASED ON DECIMETER ACCURACY GPS DATA OBTAINED NEAR WELL SITE



STATE PLANE COORDINATES OF WELL VC-3590  
 N 282785.11  
 E 887967.44

WELL LOCATION PLAT

14-G-89

COMPANY Equitable Resources Energy Co. WELL NAME AND NUMBER VC - 3590  
 TRACT No. T - 75 ELEVATION 2452.87 (GPS) QUADRANGLE NORA  
 COUNTY DICKENSON DISTRICT ERVINTON SCALE: 1" = 400' DATE SEPT. 24, 1996  
 THIS PLAT IS A NEW PLAT   ; AN UPDATED PLAT   ; OR A FINAL LOCATION PLAT X  
 PROPOSED TOTAL DEPTH OF WELL =                     

+ 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.

B. Lemman Kendrick 10/2/96 (AFFIX SEAL)  
 LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR