

cont.  
3-11-93

D1-664

Department of Mines, Minerals and Energy  
Division of Gas and Oil

Operations Name: G.M. BLAIR TR. VCP2599  
Permit #: 2106

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

**ENTERED**  
COMPLETION REPORT



WELL TYPE: Oil  Gas  Coalbed Methane  or Injection  well

Date Well Completed: 12-10-92 Total Depth of Well: LTD=2596 DTD=2550

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: 70 Q FOAM/LE  
W/17000# 12/20 SAND - 1010900 SCF N2 - 770 BF

Perforated: 1731 TO 2275 No. of Perforations: 12 Perforation Size: .37"  
Formation Broke Down at: 1420 PSIG Average Injection Rate: 16.5 BPM  
ISIP 2150 PSIG 5 MIN SIP 1850 PSIG Average Injection Pressure 3725 PSIG  
Date Stimulated 12-10-92

\*M. HORSEPEN, C-SEAM, WARCREEK, BECKLEY, L. HORSEPEN, POCO#9, POCO#7, POCO#6, POCO#5  
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 \_\_\_\_\_ PSIG  
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 \_\_\_\_\_ PSIG  
Date Stimulated \_\_\_\_\_

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

Zone (1) \_\_\_\_\_  
Zone (2) \_\_\_\_\_  
Zone (3) \_\_\_\_\_

Final Production if Gas Zones are Commingled 70 MCFD 6 Hours Tested 73 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. Army (Signature)

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DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well VCP2599 in the ERVINTON District of the DICKENSON County, Virginia on 06TH day, JANUARY month, 19 93.

LOCATION

County: DICKENSON District: ERVINTON  
 Surface Elevation: 2306.29' Elevation of Kelly Bushing: 2316.29' Quadrangle: NORA  
9780 FT. S. of Latitude 37° 07' 30" and 12480 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: 11-25-92 Drilling Contractor: UNION DRILLING  
 Date Drilling Completed: 12-1-92 Rig Type: X Rotary      Cable Tool  
 Total Depth of Well: LTD=2536 DTD=2550

GEOLOGICAL DATA

Fresh Water at:	<u>250</u>	Feet	<u>DAMP</u>	<u>GPM</u>	<u>300</u>	Feet	<u>DAMP</u>	<u>GPM</u>
	<u>1314</u>	Feet	<u>DAMP</u>	<u>GPM</u>	<u>    </u>	Feet	<u>    </u>	<u>GPM</u>
Salt Water at:	<u>    </u>	Feet	<u>    </u>	<u>GPM</u>	<u>    </u>	Feet	<u>    </u>	<u>GPM</u>
	<u>    </u>	Feet	<u>    </u>	<u>GPM</u>	<u>    </u>	Feet	<u>    </u>	<u>GPM</u>

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA		
				YES	NO	MINED OUT
M. HORSEPEN	1731	1733	2			
WARCREEK	1838	1840	2			
POCO #6	2255	2257	2			
POCO #5	2274	2276	2			

GAS AND OIL SHOWS: NONE REPORTED

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED

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: SLD/TEMP/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
<u>205</u>	<u>1/2°</u>	<u>1840</u>	<u>3/4°</u>
<u>447</u>	<u>3/4°</u>	<u>2067</u>	<u>2 1/2°</u>
<u>664</u>	<u>1/2°</u>	<u>2191</u>	<u>2 3/4°</u>
<u>852</u>	<u>1°</u>	<u>2254</u>	<u>2°</u>
<u>1060</u>	<u>1°</u>	<u>2347</u>	<u>2 1/2°</u>
<u>1258</u>	<u>1/2°</u>	<u>  </u>	<u>  </u>
<u>1445</u>	<u>1/2°</u>	<u>  </u>	<u>  </u>
<u>1631</u>	<u>1/4°</u>	<u>  </u>	<u>  </u>

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>	13 3/8"		41'	31'			
<u>Surface</u>	8 5/8"		325'	315'	125(148)	11-28-92	
<u>Water Protection</u>	4 1/2"		2422'	2412'	517(667)	12-1-92	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	2 3/8"		2314'				

Liners

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

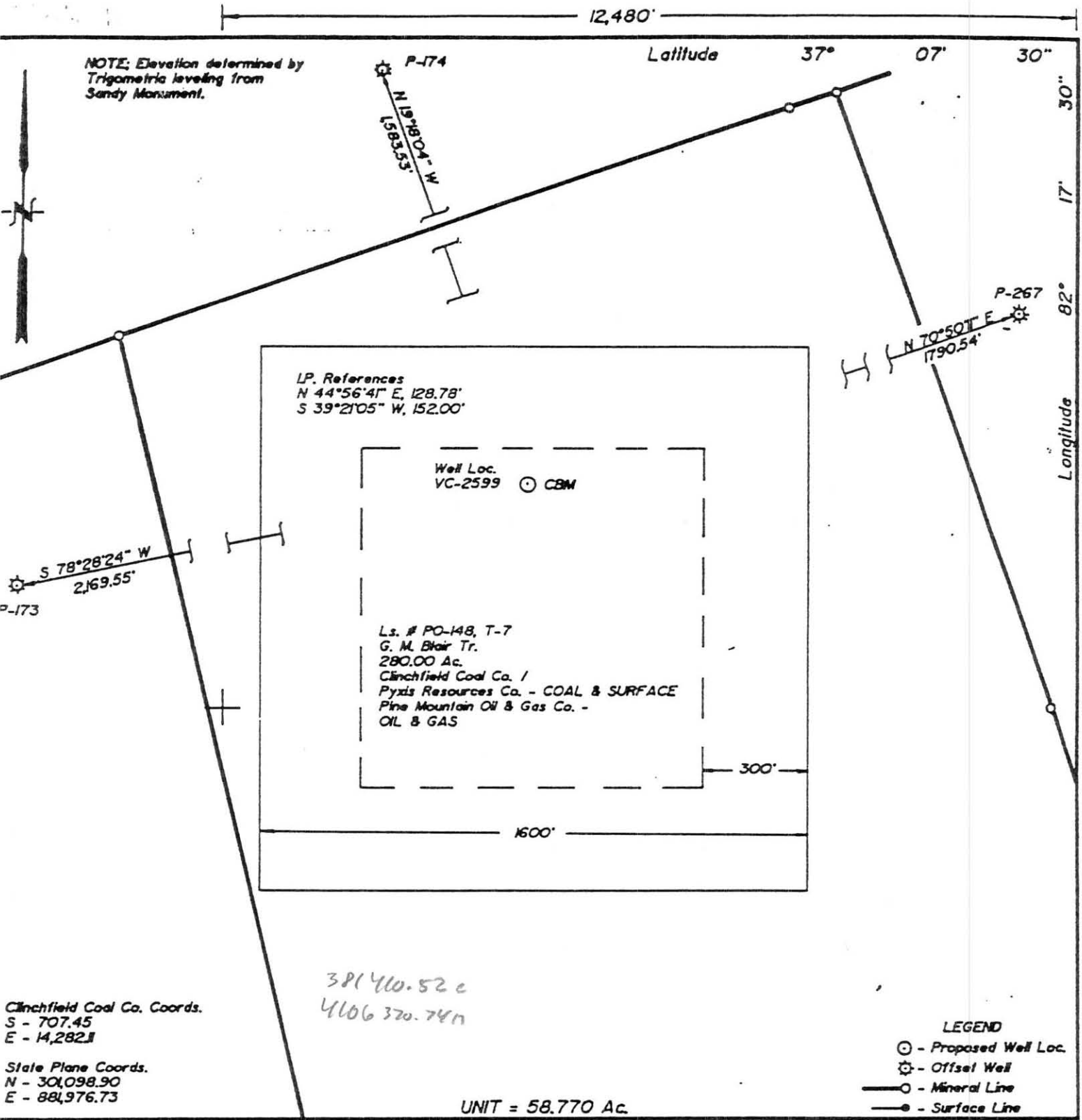
DRILLER'S LOG

Compiled by ENGINEERING

GEOLOGIC AGE	GENERAL FORMATION	LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
ENNSYLVANIAN	SAND, SHALE & THIN COALS			0	1731	1731	
	MIDDLE HORSEPEN COAL			1731	1733	2	
	SAND, SHALE & THIN COALS			1733	1838	105	
	WARCREEK COAL			1838	1840	2	
	SAND, SHALE & THIN COALS			1840	2255	415	
	POCO #6 COAL			2255	2257	2	
	SAND, SHALE & THIN COALS			2257	2274	17	
	POCO #5 COAL			2274	2276	2	
MISSISSIPPIAN	SAND, SHALE & THIN COALS			2276	2530	254	
	RED ROCK			2530	2536	6	
	LOGGER'S TOTAL DEPTH				2536		



Permittee: EQUITABLE RESOURCES EXPLORATION (Company)  
 By: Joseph R. Perry (Signature)



NOTE: Elevation determined by  
Trigonometric leveling from  
Sandy Monument.

LP. References  
N 44° 56' 41" E, 128.78'  
S 39° 21' 05" W, 152.00'

Well Loc.  
VC-2599 ○ CBM

Ls. # PO-148, T-7  
G. M. Blair Tr.  
280.00 Ac.  
Cinchfield Coal Co. /  
Pyxis Resources Co. - COAL & SURFACE  
Pine Mountain Oil & Gas Co. -  
OIL & GAS

Cinchfield Coal Co. Coords.  
S - 707.45  
E - 14,282.11

State Plane Coords.  
N - 30,098.90  
E - 88,976.73

381460.52 c  
4606370.74 n

UNIT = 58.770 Ac.

LEGEND  
○ - Proposed Well Loc.  
⊙ - Offset Well  
—○— - Mineral Line  
—●— - Surface Line

DWG # 3129

WELL LOCATION PLAT

Company Equitable Resources Exploration Well Name and Number VC-2599  
 Fract No. T-7 Elevation 2306.29 Quadrangle Nora  
 County Dickenson District Ervinton Scale 1" = 400' Date 07/31/92

This Plat is a new plat X; 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.

H. P. Baldrige  
 Licensed Professional Engineer or Licensed Professional Surveyor  
 CERTIFICATE NO. 6992  
 (Affix Seal)