

105-28 WS-246

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

Operations Name: JEFFERSON NAT'L FOREST VP2341
Permit #: 1094-01

High Knob

ENTERED
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: 9-30-93 Total Depth of Well: LTD=4509' DTD=4500'

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: LOWER HURON Formation Stimulated With: N2 GAS
W/876260 SCF N2
Perforated: 4184 TO 4333 No. of Perforations: 20 Perforation Size: .34"
Formation Broke Down at: N/A PSIG Average Injection Rate: EST. 80000 SCFM
ISIP 1992 PSIG 5 MIN SIP 1325 PSIG Average Injection Pressure 3988 PSIG
Date Stimulated 9-16-93

Zone 2: CLEVELAND SHALE Formation Stimulated With: N2 GAS
W/901000 SCF N2
Perforated: 3604 TO 3720 No. of Perforations: 20 Perforation Size: .34"
Formation Broke Down at: 1483 PSIG Average Injection Rate: 82500 SCFM
ISIP 1207 PSIG 5 MIN SIP 1014 PSIG Average Injection Pressure 3660 PSIG
Date Stimulated 9-16-93

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 869 MCFD 6 Hours Tested 545 PSIG 48 Hours Tested

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

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)
By: *Justin P. Puckoe* (Signature)



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DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well VP2341 in the GLADEVILLE District of the WISE County, Virginia on 7TH day, OCTOBER month, 19 93.

LOCATION

County: WISE District: GLADEVILLE
Surface Elevation: 3061.80' Elevation of Kelly Bushing: 3071.8' Quadrangle: WISE
10500 FT. S. of Latitude 36° 55' 00" and 10375 FT. W. of Longitude 82° 30' 00"

36° 53' 15.42"
82° 32' 07.98"
363164.03c 4083303.35h
B20116.28c 227025196h

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

DRILLING DATA

Date Drilling Commenced: 9-3-93 Drilling Contractor: UNION DRILLING
Date Drilling Completed: 9-9-93 Rig Type: Rotary Cable Tool
Total Depth of Well: LTD=4509 DTD=4500

GEOLOGICAL DATA

Fresh Water at:	<u>190</u>	Feet	<u>1/2"STREAM</u>	GPM	Feet	GPM
	<u>411</u>	Feet	<u>1/2"STREAM</u>	GPM	Feet	GPM
Salt Water at:		Feet		GPM	Feet	GPM
		Feet		GPM	Feet	GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA		
				YES	NO	MINED OUT
	<u>250</u>	<u>254</u>	<u>4</u>			
	<u>535</u>	<u>540</u>	<u>5</u>			

GAS AND OIL SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOFPD)	PRESSURE	HOURS TESTED
		<u>3715</u>		<u>60 MCFD</u>		
		<u>4500</u>		<u>26 MCFD</u>		

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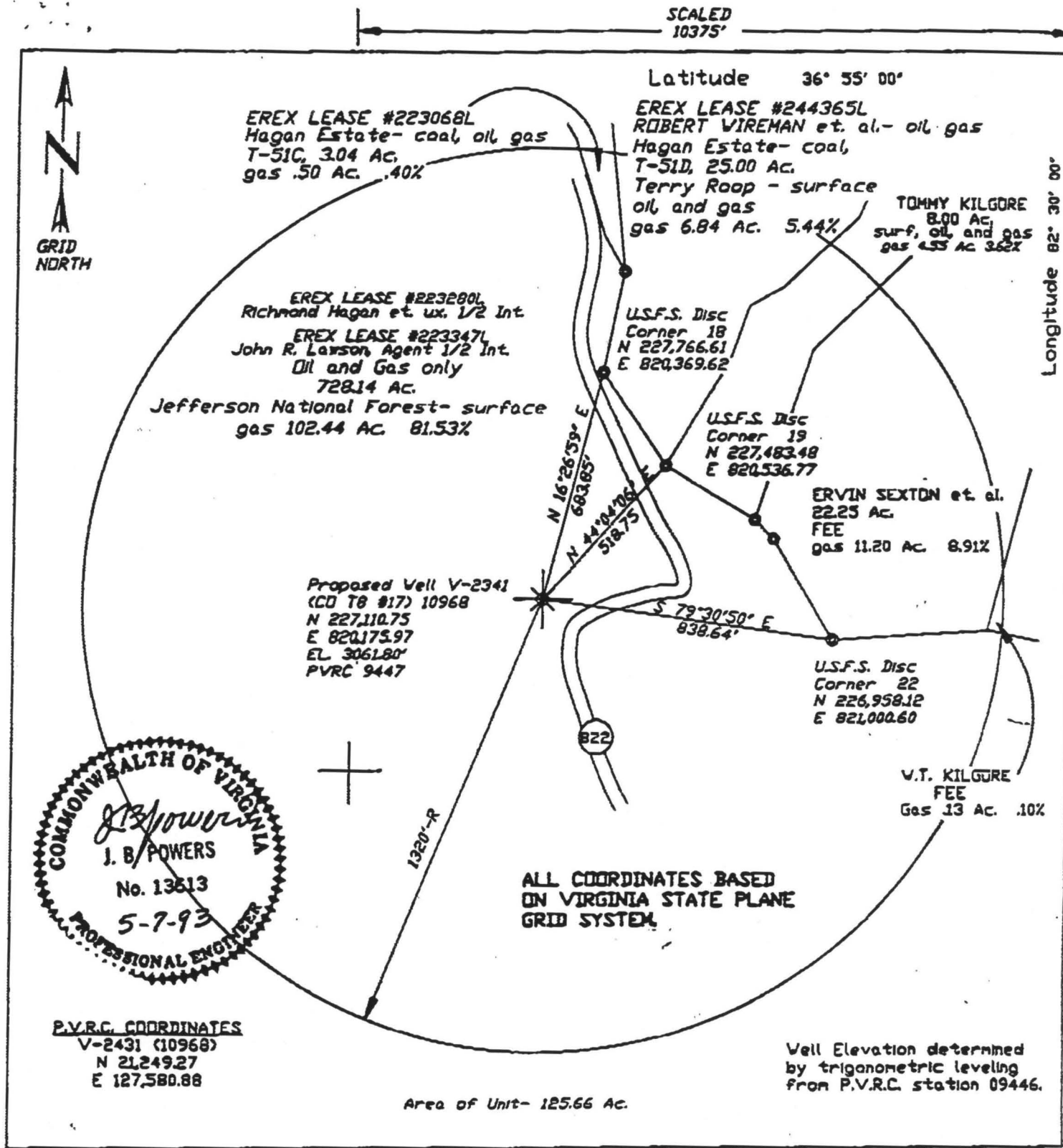
DRILLER'S LOG

Compiled by GEOLOGY

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
PENNSYLVANIAN	SAND, SHALE & LEE SANDS			0	584	584	
	SAND & SHALE			584	1202	618	
MISSISSIPPIAN	RAVENCLIFF			1202	1358	156	
	SAND & SHALE			1358	1608	250	
	MAXON SANDS			1608	1724	116	
	SAND & SHALE			1724	1860	136	
	MAXON SANDS			1860	1990	130	
	SAND & SHALE			1990	8294	304	
	LITTLE LIME			2294	2367	73	
	BIG LIME			2367	3052	685	
	WEIR			3052	3476	424	
	COFFEE SHALE			3476	3566	90	
DEVONIAN	BEREA			3566	3630	64	
	SHALE			3630	4509	879	
LOGGER'S TOTAL DEPTH					4509		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: *Martin P. Puskar* (Signature)



WELL LOCATION PLAT

8-E-84

Company Equitable Resources Exploration Well Name and Number V-2341 (CO TB #17) 10968
 Tract No. 223347 Elevation 3061.80' Quadrangle Vise
 County Vise District Gladeville Scale: 1 = 400' Date 5-07-93

This plat is a new plat X an updated plat X 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.

I R POWERS

(Affix Seal)