

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

Operations Name: PVRC VP2325
Permit #: 2803

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

WS-295

CONFIDENTIAL
to 2/8/95

COMPLETION REPORT

WELL TYPE: Oil Gas Coalbed Methane or Injection well

Date Well Completed: 11-8-94 Total Depth of Well: LTD=4692 DTD=4680

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/928000 SCF N₂
Perforated: 4388 TO 4570 No. of Perforations: 20 Perforation Size: 3 1/8" HSC
Formation Broke Down at: N/A PSIG Average Injection Rate: 78600 SCFM
ISIP 1827 PSIG 5 MIN SIP 1656 PSIG Average Injection Pressure 3568 PSIG
Date Stimulated 10-26-94

Zone 2: Berea/Cleveland Shale Formation Stimulated With: N₂ Gas
w/ 909500 SCF N₂ - 500 gal 15% FE Acid
Perforated: 3810 TO 3906 No. of Perforations: 19 Perforation Size: .34"
Formation Broke Down at: N/A PSIG Average Injection Rate: 81420 SCFM
ISIP 1251 PSIG 5 MIN SIP 1089 PSIG Average Injection Pressure 3484 PSIG
Date Stimulated 10-26-94

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 1639 MCFD 6 Hours Tested 540 PSIG 48 Hours Tested

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

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)
By: *[Signature]* (Signature)

Cuttings or samples are X are not ___ 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: CDL/TEMP/GR

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

SURVEY RESULTS

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
200	1 1/4°		
261	1°		
402	1 1/4°		
602	1 3/4°		
802	1 3/4°		

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>	11 3/4"		43'	33'			
<u>Surface</u>							
<u>Water Protection</u>	8 5/8"		843'	833'	220(260)	10-15-94	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	4 1/2" 2 3/8"		4644' 4501'	4634'	260(335)	10-20-94	

Liners

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

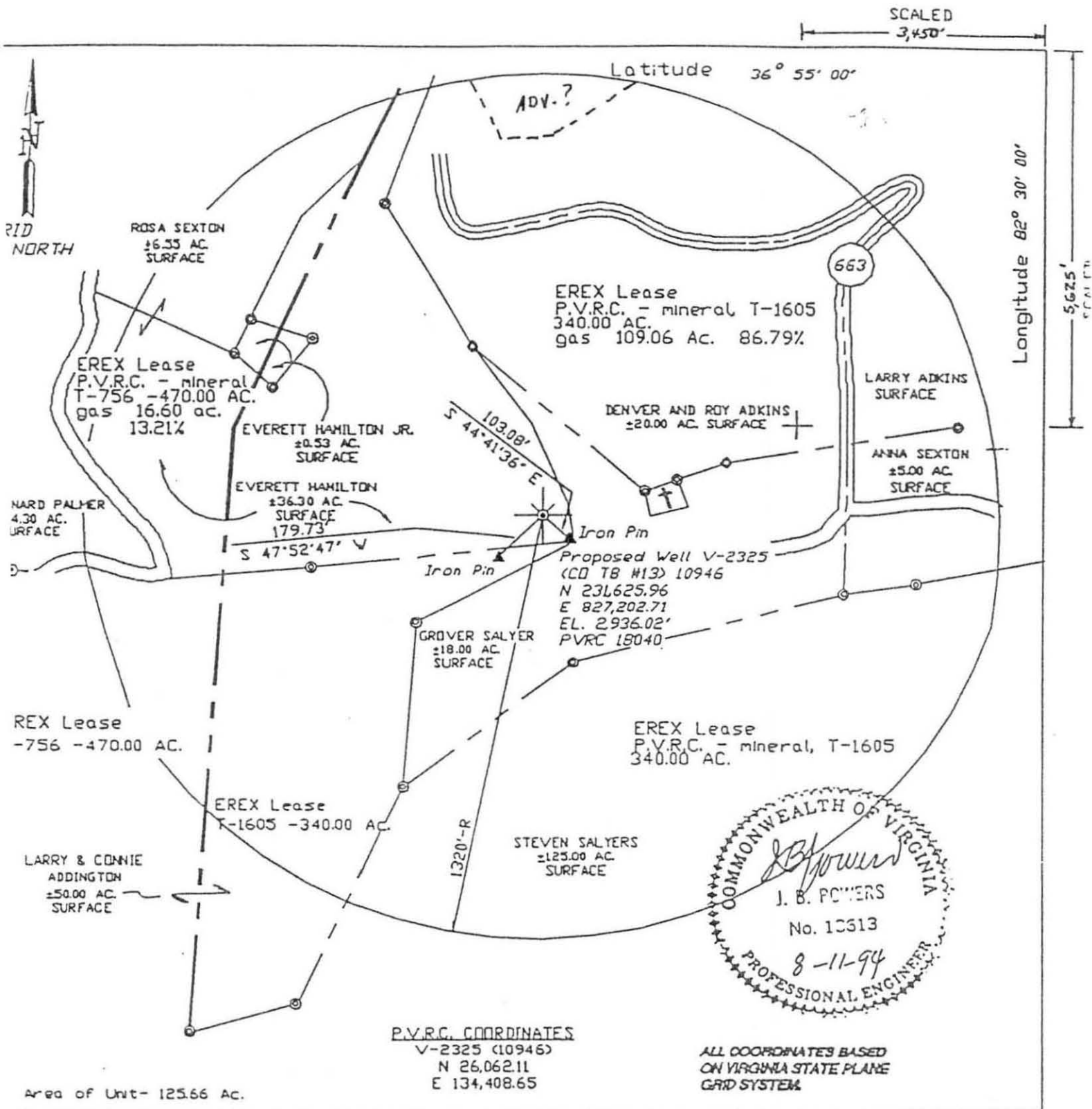
DRILLER'S LOG

Compiled by Geology

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
Pennsylvanian	Sand, Shale & Lee FM			0	473	473	
	Bluestone FM			473	1128	655	
	Pride SH			1128	1353	225	
Mississippian	Ravencliff			1353	1538	185	
	Sand & Shale			1538	1878	340	
	Maxon Sand			1878	2162	284	
	Sand & Shale			2162	2457	295	
	Little Lime			2457	2517	60	
	Big Lime			2517	3210	693	
	Weir			3210	3677	467	
Devonian	Coffee Shale			3677	3750	73	
	Berea			3750	3830	80	
	Shale			3830	4370	540	
	Lower Huron			4370	4570	200	
	White Slate			4570	4692	122	
	Logger's Total Depth				4692		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: *M.P. Pugh* (Signature)



WELL LOCATION PLAT

1-E-7-1

Company Equitable Resources Exploration Well Name and Number V-2325 (CD TB #18 10946)

Tract No. 1605 Elevation 2,936.02' Quadrangle WISE

County Wise District Lpps Scale: 1 = 400' Date 02-03-92 / UPDATED 08-08-94

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.

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

Operations Name: PVRC VP2325
Permit #: 2803

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

WS-495

CONFIDENTIAL
to 2/8/95

COMPLETION REPORT

WELL TYPE: Oil Gas Coalbed Methane or Injection well

Date Well Completed: 11-8-94 Total Depth of Well: LTD=4692 DTD=4680

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/928000 SCF N₂

Perforated: 4388 TO 4570 No. of Perforations: 20 Perforation Size: 3 1/8" HSC
Formation Broke Down at: N/A PSIG Average Injection Rate: 78600 SCFM
ISIP 1827 PSIG 5 MIN SIP 1656 PSIG Average Injection Pressure 3568 PSIG
Date Stimulated 10-26-94

Zone 2: Berea/Cleveland Shale Formation Stimulated With: N₂ Gas
w/ 909500 SCF N₂ - 500 gal 15% FE Acid

Perforated: 3810 TO 3906 No. of Perforations: 19 Perforation Size: .34"
Formation Broke Down at: N/A PSIG Average Injection Rate: 81420 SCFM
ISIP 1251 PSIG 5 MIN SIP 1089 PSIG Average Injection Pressure 3484 PSIG
Date Stimulated 10-26-94

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 1639 MCFD 6 Hours Tested 540 PSIG 48 Hours Tested

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

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)
By: *[Signature]* (Signature)

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

Operations Name: PVRC VP2325
Permit #: 2803

Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1416
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 VP2325 in the Lipps District of the Wise County, Virginia on 21st day, NOVEMBER month, 19 94.

LOCATION

County: Wise District: Lipps
Surface Elevation: 2936.02 Elevation of Kelly Bushing: 2946.02 Quadrangle: Wise
5625 FT. S. of Latitude 36°55'00" and 3450 FT. W. of Longitude 82°30'00"

36° 54' 41.38"
82° 30' 42.48"

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

DRILLING DATA

Date Drilling Commenced: 10-14-94 Drilling Contractor: Union Drilling
Date Drilling Completed: 10-20-94 Rig Type: Rotary Cable Tool
Total Depth of Well: LTD=4692 DTD=4680

GEOLOGICAL DATA

Fresh Water at: 48 Feet 1/2" stream ~~GPM~~ 462 Feet 1-1/2" stream ~~GPM~~
71 Feet 1 1/2-2" stream ~~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
	258	261	3			

GAS AND OIL SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
		3402		ODOR		
		4680		15 MCFD		

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

Operations Name: PVRC VP2325
Permit #: 2803

Cuttings or samples are X are not ___ 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: CDL/TEMP/GR

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

SURVEY RESULTS

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
200	1 1/4°		
261	1°		
402	1 1/4°		
602	1 3/4°		
802	1 3/4°		

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>	11 3/4"		43'	33'			
<u>Surface</u>							
<u>Water Protection</u>	8 5/8"		843'	833'	220(260)	10-15-94	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	4 1/2" 2 3/8"		4644' 4501'	4634'	260(335)	10-20-94	

Liners

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

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

Operations Name: PVRC VP2325
Permit #: 2803

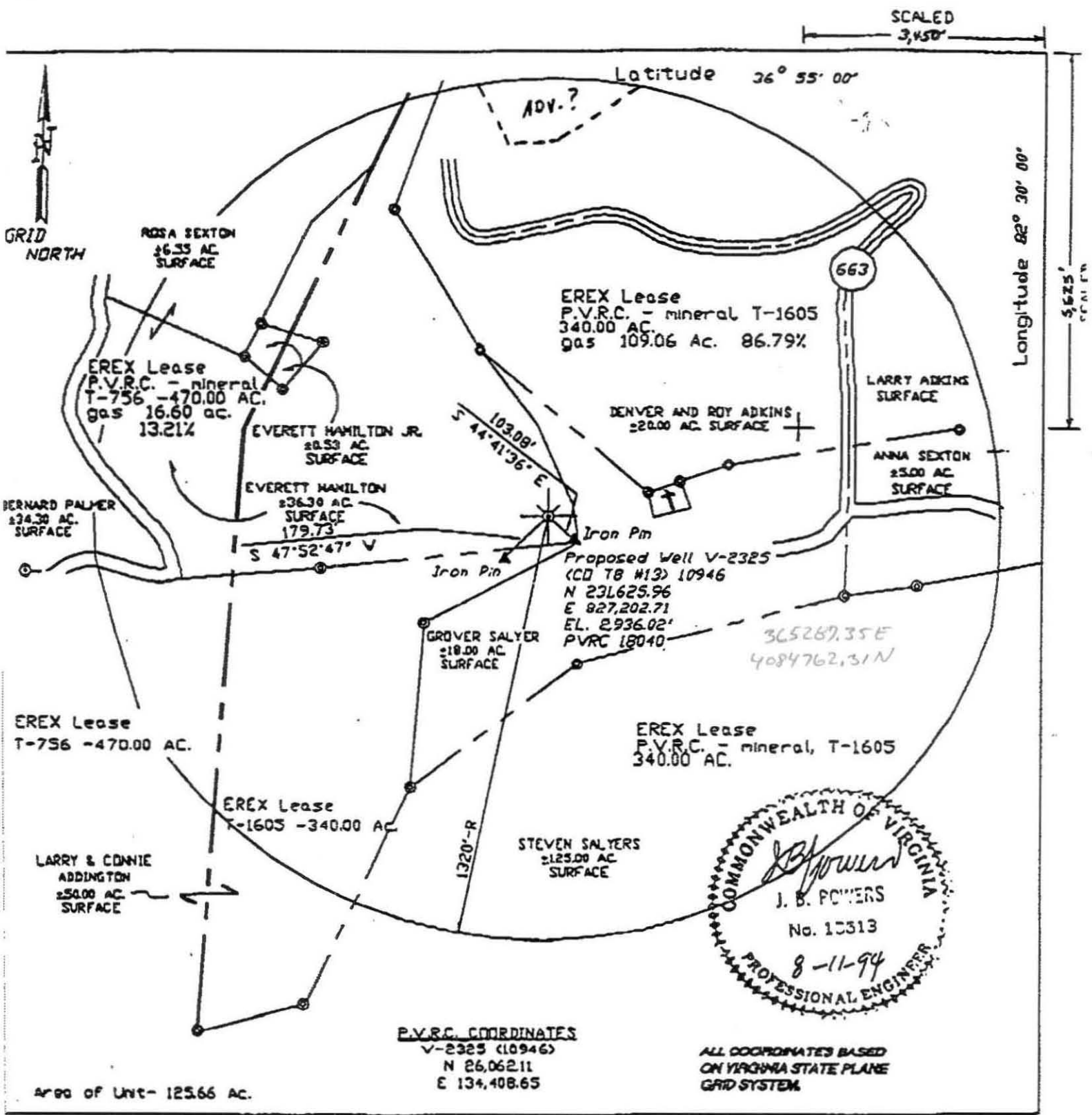
DRILLER'S LOG

Compiled by Geology

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
Pennsylvanian	Sand, Shale & Lee FM			0	473	473	
	Bluestone FM			473	1128	655	
	Pride SH			1128	1353	225	
Mississippian	Ravencliff			1353	1538	185	
	Sand & Shale			1538	1878	340	
	Maxon Sand			1878	2162	284	
	Sand & Shale			2162	2457	295	
	Little Lime			2457	2517	60	
	Big Lime			2517	3210	693	
	Weir		-274	3210	3677	467	
	Coffee Shale			3677	3750	73	
	Berea		-804	3750	3830	80	
Devonian	Shale			3830	4370	540	
	Lower Huron			4370	4570	200	
	White Slate			4570	4692	122	
	Logger's Total Depth				4692		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: M.P. Paster (Signature)



WELL LOCATION PLAT

1-E-01

Company Equitable Resources Exploration Well Name and Number V-2325 (CD TB #18 10946)

Tract No. 1605 Elevation 2,936.02' Quadrangle WISE

County Vibe District Lbps Scale: 1 = 400' Date 02-03-92 / UPDATED 08-08-94

This plat is a new plat ; 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