

WS 437

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

Operations Name: Greater Wise VP2759
Permit #: 2727

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: 11-3-94 Total Depth of Well: LTD=5590 DTD=5575

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 Shale Formation Stimulated With: N₂ Gas
w/956450 SCF N₂
Perforated: 5202 TO 5384 No. of Perforations: 26 Perforation Size: .34"
Formation Broke Down at: 3877 PSIG Average Injection Rate: 74527 SCFM
ISIP 1902 PSIG 5 MIN SIP 1754 PSIG Average Injection Pressure 3343 PSIG
Date Stimulated 10-24-94

Zone 2: Cleveland Shale Formation Stimulated With: N₂ Gas
w/959640 SCF N₂ - 500 gal 15% FE Acid
Perforated: 4729 TO 4934 No. of Perforations: 18 Perforation Size: .34"
Formation Broke Down at: 4155 PSIG Average Injection Rate: 67887 SCFM
ISIP 1917 PSIG 5 MIN SIP 1655 PSIG Average Injection Pressure 3478 PSIG
Date Stimulated 10-24-94

Zone 3: Weir Formation Stimulated With: 75 Q Foam
w/50200# 20/40 sand - 595340 SCF N₂ - 1524 BF
Perforated: 4322 TO 4474 No. of Perforations: 19 Perforation Size: .34"
Formation Broke Down at: Hydrostatic PSIG Average Injection Rate: 17.96 BPM (72 DH)
ISIP 1313 PSIG 5 MIN SIP 1059 PSIG Average Injection Pressure 3088 PSIG
Date Stimulated 10-24-94

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 2196 MCFD 6 Hours Tested 760 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)

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STIMULATION RECORD

Zone 4: Big Lime Formation Stimulated With: 50 Q Foamed Acid
w/ 4000 gal 15% FE Acid - 371330 SCF N₂ - 755 BF
Perforated: 4212 TO 4219 No. of Perforations: 8 Perforation Size: 3 1/8 HSC
Formation Broke Down at: 3145 PSIG Average Injection Rate: 5.91 BPM 6551 SCFM
ISIP 1124 PSIG 5 MIN SIP 796 PSIG Average Injection Pressure 1891 PSIG
Date Stimulated 10-24-94

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 _____ MCFD _____ Hours Tested _____ PSIG _____ Hours Tested

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DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well VP2759 in the Gladeville District of the Wise County, Virginia on 11th day, November month, 1994.

LOCATION

County: Wise District: Gladeville
Surface Elevation: 2540.64 Elevation of Kelly Bushing: 2550.64 Quadrangle: Norton
8980 FT. S. of Latitude 37°00'00" and 5025 FT. W. of Longitude 82°40'00"

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

DRILLING DATA

Date Drilling Commenced: 10-3-94 Drilling Contractor: Union Drilling
Date Drilling Completed: 10-13-94 Rig Type: Rotary Cable Tool
Total Depth of Well: LTD=5590 DTD=5575

GEOLOGICAL DATA

Fresh Water at:	<u>194</u> Feet	<u>Damp</u>	<u>GPM</u>	<u>1238</u> Feet	<u>Damp</u>	<u>GPM</u>
	<u>621</u> Feet	<u>5" stream</u>	<u>GPM</u>			<u>GPM</u>
Salt Water at:			<u>GPM</u>			<u>GPM</u>
			<u>GPM</u>			<u>GPM</u>

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>
	<u>337/1634</u>	<u>339/1636</u>	<u>2</u>			
	<u>516</u>	<u>522</u>	<u>6</u>			
	<u>618/1407/1764</u>	<u>621/1410/1767</u>	<u>3</u>			
	<u>892</u>	<u>899</u>	<u>2</u>			
	<u>2022/2278</u>	<u>2026/2282</u>	<u>4</u>			
	<u>2214</u>	<u>2221</u>	<u>7</u>			
	<u>2348</u>	<u>2351</u>	<u>3</u>			

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>
		<u>4308</u>		<u>158 MCFD</u>		
		<u>4496</u>		<u>169 MCFD</u>		
		<u>4651</u>		<u>158 MCFD</u>		
		<u>4902</u>		<u>158 MCFD</u>		

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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: SLD/TEMP/GR & CDL/SNL/DIL/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°	1636	1 1/2°
339	1 1/4°	1825	1 3/4°
532	1 1/2°	2042	2°
804	1 3/4°	2221	3°
844	1 3/4°	2282	3°
1004	2°	2351	2 3/4°
1204	1 3/4°		
1426	2°		

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>	16"		50'						
<u>Surface</u>	11 3/4"		689'	679'	116(137)	10-5-94			
<u>Water Protection</u>									
<u>Coal Protection</u>	8 5/8"		2384'	2374'	342(578) 125(148)	10-9-94 10-9-94			
<u>Other Casing and Tubing Left in Well</u>	4 1/2" 2 3/8"		5460' 5306'	5450'	438(565)	10-13-94			

Liners

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

Lost Circulation at 628'

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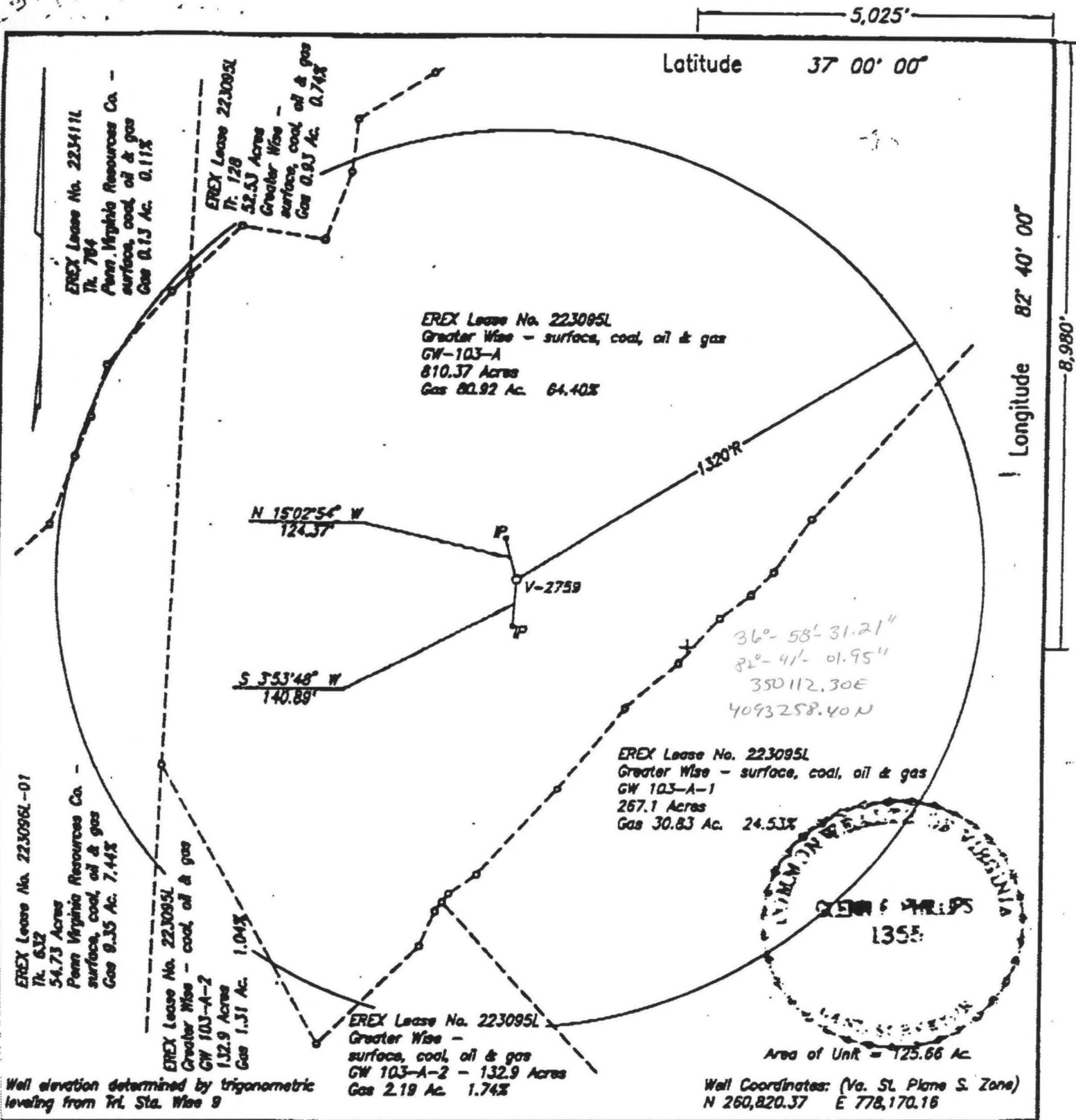
DRILLER'S LOG

Compiled by Geology

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS
				TOP	BOTTOM		
Pennsylvanian	Sand, Shale & Lee FM			0	2658	2658	
	Bluestone FM			2658	3138	480	
Mississippian	Ravencliff			3138	3200	62	
	Sand & Shale			3200	3365	165	
	Maxon Sands			3365	3605	240	
	Sand & Shale			3605	3820	215	
	Big Lime			3820	4315	495	
	Weir		-1274	4315	4630	315	
	Coffee Shale			4630	4695	65	
Devonian	Berea		-2194	4695	4750	55	
	Shale			4750	5175	425	
	Lower Huron			5175	5390	215	
	White Slate			5390	5590	200	
Logger's Total Depth					5590		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By: *Walter P. Purser* (Signature)



WELL LOCATION PLAT

COMPANY Equitable Resources Exploration WELL NAME AND NUMBER V-2759
 TRACT NO. 223095L / GW-103-A ELEVATION 2540.64 QUADRANGLE Norton
 COUNTY Wise DISTRICT Gladeville SCALE 1" = 400' DATE 5-16-1994

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.

John F. Phillips
 Licensed Professional Engineer - or - Licensed Land Surveyor