

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 X Coalbed Methane \_\_\_ or Injection \_\_\_ well

Date Well Completed: 7-31-96 Total Depth of Well: LTD = 4473 DTD = 4460

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: 75Q FOAM

W/ 43500# 20/40 SAND - 469400 SCF N2 - 326 BF

Perforated: 4178 to 4314 No. of Perforations: 19 Perforation size: .34"

Formation Broke Down at: N/A PSIG Average Injection Rate: 55 BPM (DH)

ISIP: 1450 PSIG 5 Min SIP: 1350 PSIG Average Injection Pressure: 3606

Date Stimulated: 7-19-96

Zone 2: CLEVELAND SHALE Formation Stimulated With: 75Q FOAM

W/ 46500# 20/40 SAND - 402100 SCF - 386 BF

Perforated: 3609 to 3850 No. of Perforations: 24 Perforation size: .34

Formation Broke Down at: N/A PSIG Average Injection Rate: 60 BPM (DH)

ISIP: 1050 PSIG 5 Min SIP: 1007 PSIG Average Injection Pressure: 2542

Date Stimulated: 7-19-96

Zone 3: \_\_\_\_\_ Formation Stimulated With: \_\_\_\_\_

Perforated: \_\_\_\_\_ to \_\_\_\_\_ No. of Perforations: \_\_\_\_\_ Perforation size: \_\_\_\_\_

Formation Broke Down at: \_\_\_\_\_ PSIG Average Injection Rate: \_\_\_\_\_

ISIP: \_\_\_\_\_ PSIG 5 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 325 MCFD 6 Hours Tested 440 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  
P.O. Box 1416  
Abingdon, Virginia 24210  
703/676-5423



COMPLETION REPORT

WELL TYPE: Oil  Gas  Coalbed Methane  or Injection  well

Date Well Completed: 7-31-96 Total Depth of Well: LTD = 4473 DTD = 4460

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: 75Q FOAM

W/ 43500# 20/40 SAND - 469400 SCF N2 - 326 BF

Perforated: 4178 to 4314 No. of Perforations: 19 Perforation size: .34"

Formation Broke Down at: N/A PSIG Average Injection Rate: 55 BPM (DH)

ISIP: 1450 PSIG 5 Min SIP: 1350 PSIG Average Injection Pressure: 3606

Date Stimulated: 7-19-96

Zone 2: CLEVELAND SHALE Formation Stimulated With: 75Q FOAM

W/ 46500# 20/40 SAND - 402100 SCF - 386 BF

Perforated: 3609 to 3850 No. of Perforations: 24 Perforation size: .34

Formation Broke Down at: N/A PSIG Average Injection Rate: 60 BPM (DH)

ISIP: 1050 PSIG 5 Min SIP: 1007 PSIG Average Injection Pressure: 2542

Date Stimulated: 7-19-96

Zone 3: \_\_\_\_\_ Formation Stimulated With: \_\_\_\_\_

Perforated: \_\_\_\_\_ to \_\_\_\_\_ No. of Perforations: \_\_\_\_\_ Perforation size: \_\_\_\_\_

Formation Broke Down at: \_\_\_\_\_ PSIG Average Injection Rate: \_\_\_\_\_

ISIP: \_\_\_\_\_ PSIG 5 Min SIP: \_\_\_\_\_ PSIG Average Injection Pressure: \_\_\_\_\_

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 325 MCFD 6 Hours Tested 440 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  
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 VP2731 in the FLOYD District of the SCOTT County, Virginia on 20TH day, SEPTEMBER month, 1996.

LOCATION

County: SCOTT District: FLOYD  
Surface Elevation: 2991.46 Elevation of Kelly Bushing: 3001.5 Quadrangle: WISE  
12500 FT S. of Latitude 36° 55' 00" and 25 FT W. of Longitude 82° 32' 30"

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

DRILLING DATA

Date Drilling Commenced: 7-01-96 Drilling Contractor: UNION DRILLING  
Date Drilling Completed: 7-11-96 Rig Type:  Rotary  Cable Tool  
Total Depth of Well: LTD = 4473 DTD = 4460

GEOLOGICAL DATA

Fresh Water at:	<u>70</u> feet <u>¼" STREAM</u> GPM	<u>250</u> feet <u>½" STREAM</u> GPM
	_____ feet _____ GPM	_____ feet _____ GPM
	_____ feet _____ GPM	_____ feet _____ GPM
Salt Water at:	_____ feet _____ GPM	_____ feet _____ GPM

COAL SEAMS: MINING IN AREA

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<u>NAME</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>YES</u>	<u>NO</u>	<u>MINED OUT</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>3550/3632</u>		<u>ODOR</u>		
		<u>4460</u>		<u>193 MCFD</u>		

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 \_\_\_ No X

SURVEY RESULTS

<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>	<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>
200	1°		
400	1°		
600	1 1/2°		

CASING AND TUBING

	<u>SIZE</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>LENGTH</u>	<u>CEMENT USED (IN CU/FT)</u>	<u>DATE CEMENTED</u>	<u>PACKERS OR BRIDGE PLUGS KIND SIZE SET AT</u>
<u>Conductor</u>							
<u>Surface</u>	13 3/8"		35'				
<u>Water Protection</u>							
<u>Coal Protection</u>	8 5/8"		754'	744'	250(295)	7-02-96	
<u>Other Casing and Tubing Left in Well</u>	4 1/2"		4419'	4409'	260(328)	7-11-96	
	1 1/2"		4220'				

Liners

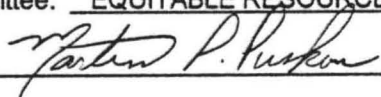
REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc.

DRILLER'S LOG

Compiled by GEOLOGY

<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			0	1220	1220	
MISSISSIPPI	RAVENCLIFF			1220	1358	138	
	SAND & SHALE			1358	1846	488	
	MAXON SANDS			1846	2002	156	
	SAND & SHALE			2002	2298	296	
	LITTLE LIME			2298	2380	82	
	BIG LIME			2380	3071	691	
	BORDEN (WEIR)			3071	3476	405	
	COFFEE SHALE			3476	3566	90	
	BEREA			3566	3604	38	
DEVONIAN	SHALE			3604	4322	718	
	WHITE SLATE			4322	4473	151	
	LOGGER'S TOTAL DEPTH				4473		

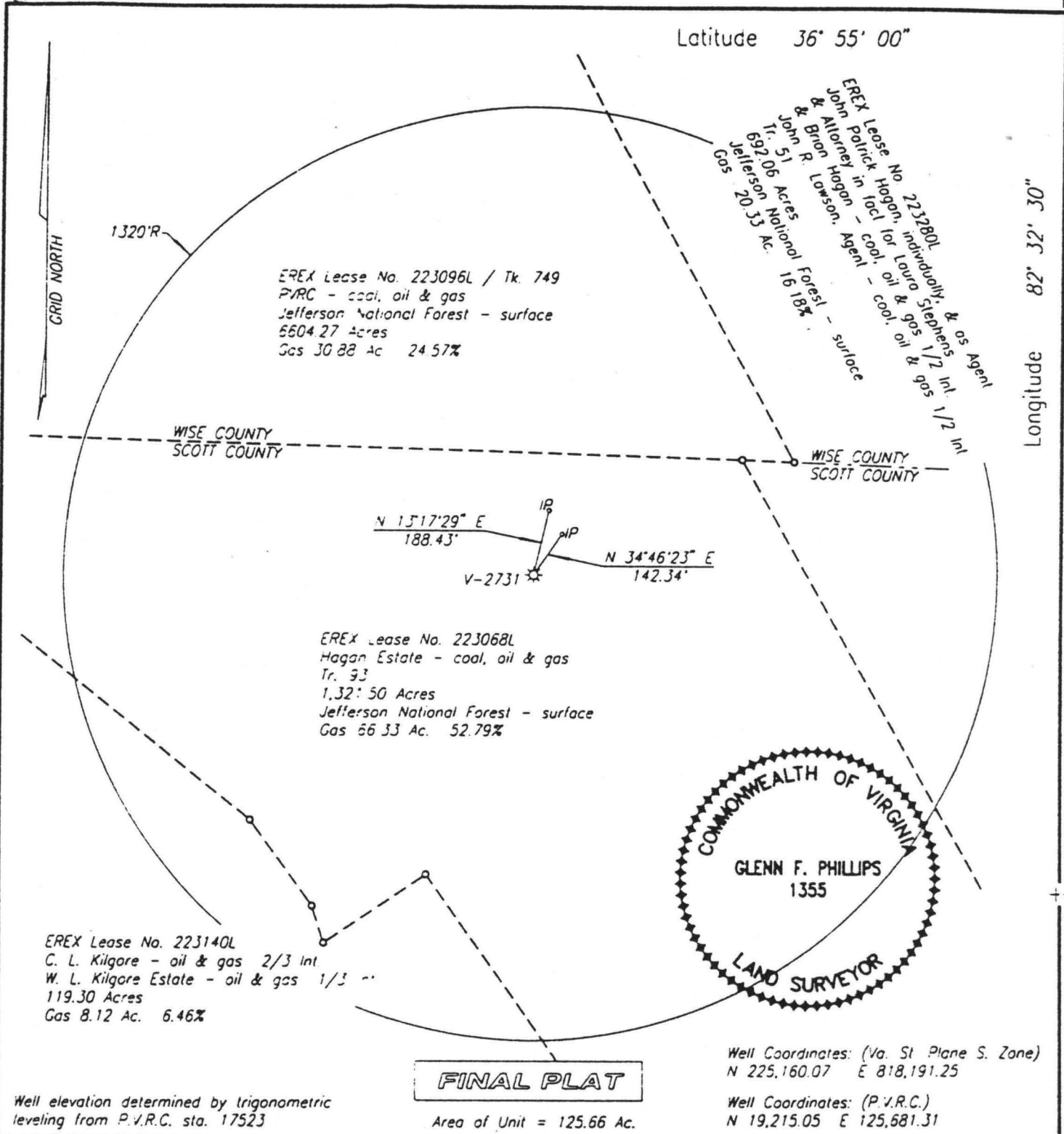
Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

By:  (Signature)

Latitude 36° 55' 00"

Longitude 82° 32' 30"

12,500'



**FINAL PLAT**

Area of Unit = 125.66 Ac.

**WELL LOCATION PLAT**

COMPANY Equitable Resources Exploration WELL NAME AND NUMBER V-2731  
 TRACT NO. Tr. 93 ELEVATION 2991.16 QUADRANGLE Wise  
 COUNTY Scott DISTRICT Floyd SCALE 1" = 400' DATE 7-19-1996

This Plat is a new plat ; or 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.

*Glenn F. Phillips*

Licensed Professional Engineer or Licensed Land Surveyor