09:09

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

Operations Name: B. R. Ringley VP2714 Permit #: 2609

Department of Hines, Minerals and Energy Division of Gas and Oil P. O. Box 1416 Abingdon, Virginia 24210

WELL TYPE: Oil Gas X Coelbed Methane or Injection well
Date Well Completed: 6-3-94 Total Depth of Well: LTD=6120 DTD=6125
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: Berea Formation Stimulated With: 75 Q Foam
w/ 63000# 20/40 sand - 921320 SCF N2 - 1941 BF Perforated: 5846 TO 5967 No. of Perforations: 25 Perforation Size: .34"
Formation Broke Down at: Hydrostatic PSIG Average Injection Rate: 16.7 BPM (55 DH)
ISIP 1564 PSIG 5 MIN SIP 1251 PSIG Average Injection Pressure 3055 PS
Date Stimulated 6-3-94
Zone 2:Formation Stimulated With:
Residence of the second of the
Perforated: TO No. of Perforations: Perforation Size: Formation Broke Down at: PSIG Average Injection Rate:
ISIPPSIGMIN SIPPSIG Average Injection PressurePS
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 PS
Date Stimulated
FINAL PRODUCTION: Natural X After Stimulation
BOD MCFD HOURS TESTED ROCK PRESSURE SOME TESTED
Zone (1) Berea 1328 6 635 4.75 days
Zone (2)
Zone (3)
Final Production if Gas Zones are Commingled MCFD Hours Tested PSIG Hours Test
tuse additional sheets with this format, if more than three (3) zones were stimulated.
Permittee: EQUITABLE RESOURCES EXPLORATION (Company)
By: Suga O Follo (Signature)

Department of Hines, Hinerals and Energy Division of Gas and Dil

Operations	Name:	B. R.	Ringley	VP2714	
		Permit	#: 2609		

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

DRILLING REPORT

					report on Well VP27	
			Wise		County, Virginia on _	19th d
August	month, 19	94.				
OCATION						
ounty: Wise				ict: Lipps		
urface Elevation:	2776.54	Elevation	n of Kelly Bush	ing: 2/86.54	auadrangle: Coebur	000012011
14786	FT. S. of L	stitude3	7°00'00"	and 10423 F	r. W. of Langitude 8	2-22-30"
ittach a final loca	stion plat	as required	by VR 480-05-22	.1, § 1.36.		
RILLING DATA						
ate Drilling Comme				_ Drilling Contra	ector: Union Dri	lling
ate Drilling Compl	ered: _5-	27-94		Rig Type: X	Rotary Cable To	ool
otal Depth of Well	: _LTD-6	120 DTD:	-6125	_		
EOLOGICAL DATA						
resh Water at:	71 F	eet Damp	.07%	2050 Feet	Damp ***	
2010		eet 1/4" st			/4" stream	
alt Water at:		eet		Feet		
	-	eet			GPM	
DAL SEAMS:					MINIM	IN AREA
AME	,	OP	ROTTON	THICKNESS		
ANS	_	<u>op</u> 75	378	3	YES NO	HINED OUT
	3	86	388	2		
	4	28	438	10		X
	26	80	2684	4		
	-					
AS AND OIL SHOWS:						
ORMATION	TOP		THICKNESS) PRESSURE	HOURS TESTED
		4438		158 MCFD		
	`		96/5869	60 MCFD		
		6024		84 MCFD		
		6125		133 MCFD		

Form 0G0-G0-14

1 of 3

Rev. 9/91

Department of Mines, Minerals and Energy Division of Gas and Oil Operations Name: B. R. Ringley VP2714

Permit #: 2609

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

CUDUEY OCCUP TO

List logs run on wellbore: GR/CDL/SNL/DIL/TLT (Conventional)

GR/SLD/TLT (Coals)*

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

SURVEY KESULIS	2		
DEPTH	DIRECTION/DISTANCE/DEGREES	DEPTH	DIRECTION/DISTANCE/DEGREES
OF SURVEY	FROM TRUE VERTICAL	OF SURVEY	FROM TRUE VERTICAL
250	1°	1600	1°
380	1°	1800	1 1/2°
403	1°	2000	1°
600_	1°	2200	1°
800	1,0	2400	1°
1000	1 1/4°	2600	1°
1200_	_1/2°	2682	1°
1400	1 •	2800	1/2°

CASING AND TUBING

		SIZE	ТОР	воттом	LENGTH	(IN CU/FT)	DATE CEMENTED	PACKERS OR BRIDGE PLUGS KIND SIZE SET AT
Conductor		16"		22'				
Surface	1 3	3/4"		483'	473'	250(295)	5-18-94	
Water Protection	8 5	5/8"		2923'	2913'	548(883)	5-23-94	
Coal Protection							* ,	
Other Casing and Tubing Left in Well		1/2" 3/8"		6075' 5922'	6065'	300(432)	5-27-94	

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: B. R. Ringley VP2714

Permit #: 2609

DRILLER'S LOG

compiled by Geology

GEOLOGIC		GENERAL		DE	нте		
AGE	FORMATION	LITHOLOGY	COLOR	TOP	HOTTON	THICKNESS	REHARKS
nnsylvanian	Wise & Nort	ton FM		0	1600	1600	
	Lee FM			1600	2545	945	
	Pocahontas			2545	2940	395	
1.5	Sand & Shall	Le		2940	3430	490	
ssissippian	Ravencliff			3430	3602	172	
	Avis			3602	3658	56	
	Sand & Shall	Le		3658	4152	494	
	Maxon Sands	6		4152	4244	92	
	Sand & Shall	Le		4244	4512	268	
***	Little Lime	9		4512	4582	70	
***	Big Lime			4582	5272	690	
	Weir			5272	5758	486	
	Coffee Shall	Le		5758	5838	80	
	Berea			5838	5970	132	
vonian	Shale			5970	6121	151	
	Logger's To	otal Depth			6121		

Parmittee: EQUITABLE RESOURCES EXPLORATION (Company)

(Signature)