Operations Name: S SMITH

Permit #: 3270-01

Well #: VA File #: DI-0831

VCP3324

Department of Mines, Minerals and Energy Division of Gas and Oil P.O. Box 1416 Abingdon, Virginia 24210 540/676-5423

## COMPLETION REPORT

WELL TYPE: Oil	Gas _	Coalbed Metha	ne <u>X</u> o	r Injection	well			
Date Well Completed: 6	/16/97	Total Dept	h of Well:	LTD - 2	2670 DTD - 2	2664		
Attach the Drilling Report; is the Drilling Report was subm	-	iously submitted. In	addition, s	ubmit any cha	anges in casing or to	ubing that v	vere approv	ed after
STIMULATION RECORD					ž.			
Zone 1:	AND THE RESERVE AND ADDRESS OF THE RESERVE AND A	SEAMS*	Formatio	n Stimulated	With:	70Q FOA	AM W/	
40600# 12/20 SAND - 1,090		N2						
Particular Account of the Control of	1867.5	to:	2311.5		Perforations:	12	Size:	0.34"
Formation Broke Down at:	1071	PSIG	1922		age Injection Rate:	6.4 (21.4)		[
ISIP:	1581	PSIG 5 Min SIP:	1570	PSIG	Average Injection	Pressure	3270	
Date Stimulated:	6/16/97							
* WARCREEK, L HORSEP	EN, POC	O #9, POCO #5						
Zone 1:			Formation	n Stimulated	With:			
Perforated:		to:		No of	Perforations:		Size:	
Formation Broke Down at:		PSIG			age Injection Rate:		- 0120.	
ISIP:		PSIG 5 Min SIP:			Average Injection	Pressure		
Date Stimulated:					gg			
			-					
Zone 3:			Formation	n Stimulated	With:			
			Formation				a:	
Perforated:		to:	Formation	No. of I	Perforations:		Size:	
Perforated: Formation Broke Down at:		PSIG	Formation	No. of I	Perforations: age Injection Rate:		Size:	
Perforated: Formation Broke Down at: ISIP:			Formation	No. of I	Perforations:	Pressure	Size:	
Perforated: Formation Broke Down at:		PSIG	Formation	No. of I	Perforations: age Injection Rate:	Pressure	Size:	
Perforated: Formation Broke Down at: ISIP: Date Stimulated:		PSIG PSIG 5 Min SIP:	-	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection		Size:	
Perforated: Formation Broke Down at: ISIP:		PSIG 5 Min SIP:  Natura	1	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection  After Stimulation			ESTED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION:		PSIG PSIG 5 Min SIP:	1	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection		Size:	ESTED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1)		PSIG 5 Min SIP:  Natura	1	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection  After Stimulation			ESTED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2)		PSIG 5 Min SIP:  Natura	1	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection  After Stimulation			ESTED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3)		PSIG 5 Min SIP:  Natura	1	No. of I Avera PSIG	Perforations: age Injection Rate: Average Injection  After Stimulation			ESTED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3) Final Production if Gas	19	PSIG PSIG 5 Min SIP:  Natura BOD MCFI	HOUR	No. of I Avera PSIG  X RS TESTED	Perforations: age Injection Rate: Average Injection  After Stimulation  ROCK PRESSI	URE	HOURS TI	ESTED S Tested
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3)	19	PSIG 5 Min SIP:  Natura  BOD MCFI	1	No. of I Avera PSIG  X RS TESTED	Perforations: age Injection Rate: Average Injection  After Stimulation	URE	HOURS TI	
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3) Final Production if Gas		PSIG PSIG 5 Min SIP:  Natura BOD MCFI  MCFI  MCFI  MCFD 6	Hours 1	No. of I Avera PSIG  X STESTED	Perforations: age Injection Rate: Average Injection  After Stimulation  ROCK PRESSI	URE	HOURS TI	
Perforated: Formation Broke Down at: ISIP: Date Stimulated:  FINAL PRODUCTION:  Zone (1) Zone (2) Zone (3) Final Production if Gas Zones are Commingled  *Use additional sheets with the		PSIG PSIG 5 Min SIP:  Natura BOD MCFI  MCFI  MCFI  MCFD 6	Hours 1	No. of I Avera PSIG  X  RS TESTED  Tested ere stimulated	Perforations: age Injection Rate: Average Injection  After Stimulation  ROCK PRESSI	URE	HOURS TI	
Perforated: Formation Broke Down at: ISIP: Date Stimulated:  FINAL PRODUCTION:  Zone (1) Zone (2) Zone (3) Final Production if Gas Zones are Commingled  *Use additional sheets with the	his format	PSIG PSIG 5 Min SIP:  Natura BOD MCFI  MCFI  MCFD 6  L if more than three	Hours 1	No. of I Avera PSIG  X  RS TESTED  Tested ere stimulated	Perforations: age Injection Rate: Average Injection  After Stimulation  ROCK PRESSI  440 I	PSIG	HOURS TI	
Perforated: Formation Broke Down at: ISIP: Date Stimulated:  FINAL PRODUCTION:  Zone (1) Zone (2) Zone (3) Final Production if Gas Zones are Commingled  *Use additional sheets with the	his format	PSIG PSIG 5 Min SIP:  Natura BOD MCFI  MCFI  MCFD 6  L if more than three	Hours 1	No. of I Avera PSIG  X  RS TESTED  Tested ere stimulated	Perforations: age Injection Rate: Average Injection  After Stimulation  ROCK PRESSI  440 I	URE PSIG	HOURS TI	

Form DGO-GO-15 Rev. 9/91

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### DRILLING REPORT

_ NORTH CONTROL OF SHOW	The state of the s	signed Permittee su NCKENSON	bmits this report on County, Virginia		in the day,
LOCATION					
	KENSON	District:	ERVINTON		
Surface Elevation: 2328 7390 Ft. S	of Latitude Elev of 37 05		338.4 Quadrar and	ngle: CANEY RIDGE 1375 Ft. W of Longitud	e 82 22 30
DRILLING DATA					
Date Drilling Commenced	: 6/5/97	Drilling Con	tractor: UNION	DRILLING	
Date Drilling Completed:	6/8/97	Rig Type:	X	Rotary	Cable Tool
Total Depth of Well:	LTD - 2670	DTD - 2	2664		
GEOLOGICAL DATA					
Fresh Water at:	feet		GPM	feet	GPM
	feet		GPM	feet	GPM
Salt Water at:	feet feet		GPM GPM	feet feet	GPM GPM
Sait Water at.	feet		GPM	feet	GPM
	feet		GPM	feet	GPM
COAL SEAMS:				MINING IN A	
NAME JAWBONE		<u>THIOM</u> THIO		YES NO	MINED OUT
WARCREEK		1864	2 3		
L HORSEPEN		1988	2		
POCO #9		2064	3		
POCO #5	2310	2312	2		
GAS AND OIL SHOWS:					
FORMATION	TOP BOTTOM	THICKNESS	IPF (MCFD/BC	OPD) PRESSURE	HOURS TESTED

Form DGO-GO-14

Rev. 9/91

Operations Name: S SMITH Permit #: 3270-01

Well #:

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Cuttings or samples Cuttings or samples

are have

are not have not

available for examination by a member of the Virginia Division of Mineral Resources been furnished to the Virginia Division of Mineral Resources

## ELECTRIC LOGS AND SURVEYS

List logs run on wellbore:

GR/ DEN/TMP

Did log disclose vertical location of a coal seam?

Yes X No

# SURVEY RESULTS

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
200	1/2°	1865	1 1/4°
400	3/40	1882	1 1/2°
600	3/40	1983	1 ½°
800	3/40	2056	1 ½°
1000	1°	2118	1 1/4°
1200	1°	2200	1 1/4°
1400	1°	2305	1°
1478	1°	2400	3/40
1650	1°	2456	3/40
1717	1°		

#### CASING AND TUBING

	SIZE	TOP	BOTTOM	LENGTH	CEMENT USED IN CU/FT	DATE CEMENTED	ACKERS UDGE PI SIZE	
Conductor	11 3/4		48	38	GROUTED			
Surface								
Water Protection  Coal Protection	8 5/8		316	306	150(177)	6/6/97		
Other Casing and Tubing Left in Well	4 ½ 2 3/8		2627 2449.35	2617	570(735)	6/8/97		

# Liners

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

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DRILLER'S LOG

Compiled by: ENGINEERING

	GENERAL		D	EPTH		
AGE	FORMATION LITHOLOGY	COLOR	TOP	<b>BOTTOM</b>	THICKNESS	REMARKS
PENN	SAND, SHALE & THIN COALS		0	1112	1112	
	JAWBONE		1112	1114	2	
	SAND, SHALE & THIN COALS		1114	1861	747	
	WARCREEK		1861	1864	3	
	SAND, SHALE & THIN COALS		1864	1986	122	
	L HORSEPEN		1986	1988	2	
	SAND, SHALE & THIN COALS		1988	2061	73	
	POCO #9		2061	2064	3	
	SAND, SHALE & THIN COALS		2064	2310	246	
	POCO #5		2310	2312	2	
	SAND, SHALE & THIN COALS		2312	2670	358	

LOGGER'S TOTAL DEPTH

2670

Permittee:

EQUITABLE RESOURCES ENERGY COMPANY

(Company)

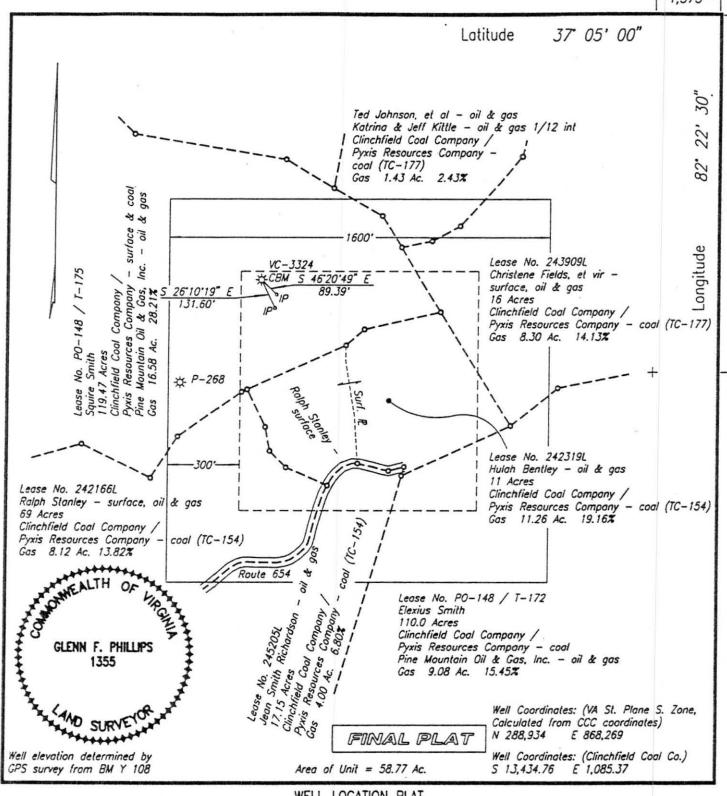
By:

(Signature)

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### WELL LOCATION PLAT

COMPANY Equitable Resources Energy Company WELL NAME AND NUMBER VC-3324
TRACT NO. T-175 ELEVATION 2326.74 QUADRANGLE Coney Ridge
COUNTY <u>Dickenson</u> DISTRICT <u>Ervinton</u> SCALE 1" = 400' DATE 6-06-1997
This Plot is a new plat; an updated plat; or a final location plat _x
+ 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.
24,000, latitude and longitude lines being represented by border lines as shown.
Me Idillin

Licensed Professional Engineer or Licensed Land Surveyor