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

Operations Name: F MULLINS Permit #: 3292

Well #:

VCP3632

VA File #: DI-0834



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

SEP 1997 RECEIVED DIVISION OF GAS & OIL

COMPLETION REPORT

WELL TYPE: Oil	Gas Coalbed M	ethane X or	Injection	well			
Date Well Completed: 7	/28/97 Total	Depth of Well:	LTD - 2837	DTD -	2825		
Attach the Drilling Report; it the Drilling Report was subm	-	d. In addition, sub	bmit any changes i	in casing or	tubing that w	ere approved	after
STIMULATION RECORD Zone 1: 17000# 12/20 SAND - 82200	COAL SEAMS*	Formation	Stimulated With:		70Q FOA	M W/	
	1929.5 to:	2649.5	No. of Perfor	ations:	12	Size: 0.	34"
Formation Broke Down at:	2073 PSIG	2047.5		jection Rate		48) BPM	
ISIP:	1784 PSIG 5 Min S	SIP: 1726	PSIG Avera			3752	
Date Stimulated:	7/28/97	M. 1720		ge injection	Tressure -	3732	
* C-SEAM, UNNAMED "C		EPEN POCO #2					
C-SEAM, OMMANIED	, DECKLET, L'HORSI	LI LI1, 1 OCO #2					
Zone 2:		Formation	Stimulated With:				
Perforated:	to:		No. of Perfor	ations:		Size:	
Formation Broke Down at:	PSIG			jection Rate	. ———		
ISIP:	PSIG 5 Min S	CIP-	PSIG Avera	· · · · · · · · · · · · · · · · · · ·			
Date Stimulated:	131G 3 Willi S		ISIO Avaa	ge injection	. Tressure -		
Date Stillulated.							
Zone 3:		Formation	Stimulated With:		19		
Zone 3:		Formation	Stimulated With:				
	to:	Formation		ations:		Size:	
Perforated:	to:	Formation	No. of Perfora			Size:	
Perforated: Formation Broke Down at:	PSIG		No. of Performance Average Inj	ection Rate		Size:	
Perforated: Formation Broke Down at: ISIP:			No. of Perfora	ection Rate		Size:	
Perforated: Formation Broke Down at:	PSIG		No. of Performance Average Inj	ection Rate		Size:	
Perforated: Formation Broke Down at: ISIP: Date Stimulated:	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average	ection Rate ge Injection	Pressure	Size:	
Perforated: Formation Broke Down at: ISIP:	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After	ection Rate ge Injection or Stimulation	Pressure		TED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION:	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After	ection Rate ge Injection	Pressure	Size:	TED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1)	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After	ection Rate ge Injection or Stimulation	Pressure		TED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2)	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After	ection Rate ge Injection or Stimulation	Pressure		TED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3)	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After	ection Rate ge Injection or Stimulation	Pressure		TED
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3) Final Production if Gas	PSIG PSIG 5 Min S BOD No	atural HOURS	No. of Perform Average Inj PSIG Average X After STESTED RO	ection Rate ge Injection r Stimulatio	Pressure on SURE	HOURS TES	
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3)	PSIG PSIG 5 Min S	SIP:	No. of Perform Average Inj PSIG Average X After STESTED RO	ection Rate ge Injection r Stimulatio	Pressure on SURE		
Perforated: Formation Broke Down at: ISIP: Date Stimulated: FINAL PRODUCTION: Zone (1) Zone (2) Zone (3) Final Production if Gas	PSIG PSIG 5 Min S Na Na BOD Na	atural ACFD HOURS	No. of Perform Average Inj PSIG Average X After STESTED Reserved	ection Rate ge Injection r Stimulatio	Pressure on SURE	HOURS TES	
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 S No BOD M 39 MCFD his format, if more than to	atural 4CFD HOURS 6 Hours To	No. of Perform Average Inj PSIG Average X After STESTED Reserved	jection Rate ge Injection er Stimulatio OCK PRES	Pressure on SURE	HOURS TES	
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 S No BOD M 39 MCFD his format, if more than to	atural 4CFD HOURS 6 Hours To	No. of Performance Average Inj PSIG Average X After STESTED Reserved ested re stimulated.	er Stimulation OCK PRES	Pressure on SURE PSIG 4	HOURS TES	
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 S No BOD M 39 MCFD his format, if more than to	atural 4CFD HOURS 6 Hours To	No. of Performance Average Inj PSIG Average X After STESTED Reserved ested re stimulated.	er Stimulation OCK PRES	Pressure on SURE PSIG 4	HOURS TES	

Form DGO-GO-15

Rev. 9/91

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DRILLING REPORT

		rsigned Permittee s DICKENSON		report on Well , Virginia on	VCP3632 18 TH	in the day,
LOCATION						
Surface Elevation: 2374	KENSON Elev of Latitude 37 0	District:		ON Quadrangle: 4000	NORA Ft. W of Longitud	le 82 17 30
DRILLING DATA	of Lautade 570	7 00	_ and	4000	Tt. W Of Longitud	32 17 30
Date Drilling Commenced Date Drilling Completed: Total Depth of Well:	7/2/97 7/12/97 LTD - 283	Drilling Co Rig Type: DTD -	ontractor:	UNION DRILI X Rot		Cable Tool
GEOLOGICAL DATA						
Fresh Water at:	739 feet feet	DAMP	GPM GPM		feet feet	GPM GPM
Salt Water at:	feet feet feet feet		GPM GPM GPM GPM		feet feet feet feet	GPM GPM GPM GPM
COAL SEAMS:	TOD D			1000	MINING IN A	
NAME AILY	922	924	IICKNESS 2	YES	NO	MINED OUT
UNNAMED "C" BECKLEY	1980 2008	1984 2010	4 2			
POCO #2	2647	2650	3			
GAS AND OIL SHOWS:						
FORMATION	TOP BOTTOM	THICKNESS	IPF (N	MCFD/BOPD)	PRESSURE	HOURS TESTED

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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	1/4°	1634	1/2°			
347	1/2°	1667	1/2°			
451	1°	1860	1°			
557	1°	2060	1 ½°			
750	3/40	2119	1 3/4°			
950	3/40	2163	2 1/4°			
1002	3/40	2363	1 3/4°			
1202	3/40	2455	1 3/4°			
1402	1/4°	2597	1 1/2°			
1602	1/2°	2638	1 1/2°			

CASING AND TUBING

	SIZE	<u>TOP</u>	воттом	LENGTH	CEMENT USED IN CU/FT	DATE CEMENTED	ACKER: RIDGE P SIZE	
Conductor	11 3/4		24	17	GROUTED			
Surface								
Water Protection Coal Protection	8 5/8		319	309	90(106)	7/9/97		
Other Casing and Tubing Left in Well	4 ½ 2 3/8		2808 2734.45	2798	538(734)	7/13/97		

Liners

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

Form DGO-GO-14

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DRILLER'S LOG

Compiled by: ENGINEERING

		GENERAL		D	EPTH		
AGE	FORMATION	LITHOLOGY	COLOR	TOP	BOTTOM	THICKNESS	REMARKS
PENN	SAND, SHALE &	THIN COALS		0	922	922	
	AILY			922	924	2	
	SAND, SHALE &	THIN COALS		924	1980	1056	
	UNNAMED "C"			1980	1984	4	
	SAND, SHALE &	THIN COALS		1984	2008	24	
	BECKLEY			2008	2010	2	
	SAND, SHALE &	THIN COALS		2010	2647	637	
	POCO #2			2647	2650	3	
	SAND, SHALE &	THIN COALS		2650	2837	187	

LOGGER'S TOTAL DEPTH

2837

Permittee:

EQUITABLE RESOURCES ENERGY COMPANY

(Company)

By:

(Signature)

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