Operations Name: SARAH J STALLARD VCP3575

(Signature)

Permit #: 3155 DI-812

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

WELL TYPE: Oil Gas Coalbed Methans X or Injection well	21/2						
WELL TYPE: Oil _ Gas _ Coalbed Methane _X or Injection _ well							
Date Well Completed: 11-15-96 Total Depth of Well: LTD = 2582 DTD = 2625							
Attach the Drilling Report; if not previously submitted. In addition, submit any changes in casing or tubing that we after the Drilling Report was submitted.	e approved						
STIMULATION RECORD Zone 1: COAL SEAMS* Formation Stimulated With: 70Q FOAM W/ 33300# 12/20 SAND - 774000 SCF N2 - 750 BF  Perforated: 1652.5 to 2415.5 No. of Perforations: 18 Perforation size: .34  Formation Broke Down at: 1373 PSIG Average Injection Rate: 16.9 (56) BPM ISIP: 1431 PSIG 5 Min SIP: 1332 PSIG Average Injection Pressure: 3813  Date Stimulated: 11-15-96							
* U HORSEPEN, C-SEAM, WARCREEK, BECKLEY, L HORSEPEN, X-SEAM, POCO #5, POCO #3, POCO #2							
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: 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: Date Stimulated:							
FINAL PRODUCTION:  BOD MCFD HOURS TESTED ROCK PRESSURE HOURS  Zone (1)  Zone (2)  Zone (3)  Final Production if Gas Zones are Commingled 29 MCFD 6 Hours Tested 390 PSIG 48 Hours Tested							
* Use additional sheets with this format, if more than three (3) zones were stimulated.							
Permittee: EQUITABLE RESOURCES EXPLORATION (Company)							

Form DGO-GO-15 Rev. 9/91

Operations Name: SARAH J STALLARD VCP3575

Permit #: 3155 DI-812

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-480-05-2 KENADY District of to FEBRUARY month, 19 9	he <u>D</u>								VCP3 ay,	575 in the	
LOCATION											
County: DICKENSON Surface Elevation: 2288. 2080 FT S. of Latitude 3				Kelly Bu	shing: _2	<u>KENA</u> 2298.5 _ongitude			rangle:	CANEY RIDGE	_
Attach a final location pla	t as red	quired b	y VR 480	-05-22.1	, § 1.36						
DRILLING DATA			*								
Date Drilling Commenced Date Drilling Completed: Total Depth of Well: LTD	11-	-05-96 09-96 2 DTD=2	2625					on Drilling Cab			
GEOLOGICAL DATA											
Fresh Water at:	217	feet feet	DAMP		GPM GPM	1119	feet feet	DAME	•	GPM GPM	
Salt Water at:		feet feet			GPM GPM		feet feet			GPM GPM	
COAL SEAMS:									M	INING IN AREA	
NAME.		<u>TOP</u>		вотто	<u>M</u>	THICKN	<u>IESS</u>	YES	NO	MINED O	JΤ
M HORSEPEN BECKLEY L HORSEPEN POCO #7 POCO #5 POCO #3 POCO #2		1683 1854 1914 2148 2268 2388 2413		1685 1857 1916 2150 2270 2390 2418		2 3 2 2 2 2 5					
GAS AND OIL SHOWS:											
FORMATION	TOP	ВО	TTOM	THICK	NESS	IPF (M	CFD/B	OPD)	PRESS	URE HOUF	S TESTED

**FORMATION** 

Operations Name: SARAH J STALLARD VCP3575

Permit #: 3155 DI-812

Cuttings or samples are  $\underline{X}$  available for examination by a member of the Virginia Division of Mineral Resources have not  $\underline{X}$  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 X No

### SURVEY RESULTS

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
107	1/4°	1600	3/4°
158	1/4°	1800	1-1/4°
200	1/4°	1833	1-1/4°
265	1/4°	1857	1-1//4°
421	1/4°	1916	1-1/2
600	1/2°	1992	1-1/2
800	1/2°	2149	1-3/4°
1016	1/2°	2268	1-3/4°
1200	1/2°	2389	1-3/4°
1400	3/4°	2414	1-3/4°

#### CASING AND TUBING

	SIZE	TOP	BOTTOM	<u>LENGTH</u>	CEMENT USED (IN CU/FT)	DATE CEMENTED	PACKERS BRIDGE PI KIND SIZE	
Conductor								
Surface	11 3/4'	•	33'	23'				
Water Protection	8 5/8"		522'	512'	128(151)	11-06-96		
<u>Coal Protection</u>						,		
Other Casing and Tubing Left in Well	4 1/2" 2 3/8"		2550' 2489'	2540'	584(736)	11-10-96		
Liners								

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

OPEN MINE @ 421-424'

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

Operations Name: <u>SARAH J STALLARD VCP3575</u> Permit #: <u>3155 DI-812</u>

#### DRILLER'S LOG

Compiled by Engineering

		GENERAL		DE	PTH		
_AGE_	<b>FORMATION</b>	<b>LITHOLOGY</b>	COLOR	TOP	BOTTOM	THICKNESS	REMARKS
Pennsylvanian	SAND, SHALE &	THIN COALS		0	1683	1683	
	M HORSEPEN	TUIN COALS		1683 1685	1685 1854	2	
	SAND, SHALE & BECKLEY	THIN COALS		1854	1857	169 3	
	SAND, SHALE &	THIN COALS		1857	1914	57	
	L HORSEPEN			1914	1916	2	
	SAND, SHALE &	THIN COALS		1916	2148	232	
	POCO #7			2148	2150	2	
	SAND, SHALE &	THIN COALS		2150	2268	118	
	POCO #5	TUN COM C		2268	2270	2	
	SAND, SHALE & POCO #3	THIN COALS		2270 2388	2388 2390	118 2	
	SAND, SHALE &	THIN COALS		2390	2413	23	
	POCO #2			2413	2418	5	
	SAND, SHALE &	THIN COALS		2418	2582	164	
	Logger's Total De	epth			2582		

