Operations Name: <u>SARAH J STALLARD VC2939</u> Permit #: 3156 DI-813

## 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 X or Injection well

Date Well Completed: <u>11-15-96</u> Total Depth of Well: <u>LTD = 2594 DTD = 2605</u>

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: COAL SEAMS\*
 Formation Stimulated With: 70Q FOAM

 W/ 28900# 12/20 SAND - 746000 SCF N2 - 622 BF

 Perforated: 1758
 to 2412.5

 No. of Perforations: 18
 Perforation size: .34

 Formation Broke Down at: 1374
 PSIG Average Injection Rate: 19.6

 ISIP: 1341
 PSIG 5

 Min SIP: 1250
 PSIG Average Injection Pressure: 3724

 Date Stimulated: 11-15-96

\* 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:
 PSIG
 PSIG Average Injection Pressure:

Zone 3:

 Perforated:
 to
 No. of Perforations:
 Perforation size:

 Formation Broke Down at:
 PSIG Average Injection Rate:
 PSIG Average Injection Pressure:

 ISIP:
 PSIG Min SIP:
 PSIG Average Injection Pressure:

 Date Stimulated:
 PSIG Average Injection Pressure:

 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
 28\_MCFD
 6\_
 Hours Tested
 440\_
 PSIG
 48\_
 Hours Tested

Formation Stimulated With:

\* Use additional sheets with this format, if more than three (3) zones were stimulated.

Permittee:	EQUITABLE RESOURCES EXPLORATION	(Company)
By:	Joseph Q. Chum	(Signature)

Form DGO-GO-15 Rev. 9/91

# 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 VC2939 in the KENADY District of the DICKENSON County, Virginia on 5TH day,

 FEBRUARY month, 19 97

## LOCATION

 County:
 DICKENSON
 District:
 KENADY

 Surface Elevation:
 2269.39
 Elevation of Kelly Bushing:
 2279.36
 Quadrangle:
 CANEY RIDGE

 2670
 FT S. of Latitude 37° 02' 30"
 and
 3250
 FT W. of Longitude 82° 25' 00"

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

1909

2409

## DRILLING DATA

Date Drilling Commenced: 10-29-96	Drilling Contractor: Union Drilling
Date Drilling Completed: 11-04-96	Rig Type: X Rotary Cable Tool
Total Depth of Well: LTD=2594 DTD=2605	

1911

2413

## GEOLOGICAL DATA

Fresh Water at: Salt Water at:	200	feet feet feet feet	DAMP	GPM GPM GPM GPM	1160	feet feet feet feet	DAMF	0	SPM SPM SPM SPM	
COAL SEAMS:								MIN	ING IN AREA	
NAME		TOP	Ē	BOTTOM	THICK	NESS	YES	NO	MINED OUT	
BECKLEY		1849	1	851	2					

2

4

#### GAS AND OIL SHOWS:

L HORSEPEN

POCO #2

FORMATION TOP BOTTOM THICKNESS IPF (MCFD/BOPD) PRESSU	IRE HOURS TESTED
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# Operations Name: <u>SARAH J STALLARD VC2939</u> Permit #: <u>3156 DI-813</u>

Cuttings or samples are x are not X available for examination by a member of the Virginia Division of Mineral Resources 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 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°	1600	3/4°
232	1/4°	1800	1°
263	1/4°	1843	1°
400	1/4°	2043	3/4°
600	1/2°	2200	1°
800	1/2°	2263	1°
1000	1/2°	2379	1°
1200	1/2°	2409	1°
1400	3/4°		

## CASING AND TUBING

¥.	SIZE	BOTTOM	<u>LENGTH</u>	CEMENT USED (IN CU/FT)	DATE <u>CEMENTED</u>	PACKERS OR BRIDGE PLUGS KIND SIZE SET AT
Conductor						
Surface	11 3/4"	31'	21'			
Water Protection	8 5/8"	450'	440'	114(135)	10-31-96	
Coal Protection						
Other Casing and Tubing Left in Well	4 1/2" 2 3/8"	2456' 2426'	2446'	342(431)	11-04-96	
Liners						

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

#### Operations Name: <u>SARAH J STALLARD VC2939</u> Permit #: 3156 DI-813

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COAL SEAMS:								MINING IN AF	REA	

NAME	TOP	BOTTOM	THICKNESS YES NO MINED OU	т
BECKLEY L HORSEPEN	1849 1909	1851 1911	2	
POCO #2	2409	2413	4	

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED

Operations I	Name:	SARAH J STALLARD	VC2939
Permit #:	3156	DI-813	

2594

# DRILLER'S LOG

Compiled by Engineering

	GENERAL			DEPTH			
AGE	FORMATION	LITHOLOGY	COLOR	TOP	BOTTOM	THICKNESS	REMARKS
Pennsylvanian		THIN COALS THIN COALS THIN COALS		0 1849 1851 1909 1911 2409 2413	1849 1851 1909 1911 2409 2413 2594	1849 2 58 2 498 4 181	

Logger's Total Depth

 Permittee:
 EQUITABLE RESOURCES EXPLORATION (Company)

 By:
 Jorfeph A. Mung (Signature)

