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

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| Operations I | Name: | J M COLLEY | VCP3566 |
|--------------|-------|------------|---------|
| Permit #: | 3067 | DI-793 | |

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: 8-28-96

Total Depth of Well: LTD = 2699 DTD = 2700

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/24200# 12/20 SAND - 775000 SCF N2 - 645 BF Perforated: 1857 No. of Perforations: 16 to 2320.5 Formation Broke Down at: 1410 PSIG Average Injection Rate: 37 (DH) BPM ISIP: 1360 PSIG 5 Min SIP: 1300 PSIG Average Injection Pressure: 3608 Date Stimulated: 8-28-96 * C-SEAM, UNNAMED "C", BECKLEY, L HORSEPEN, X-SEAM, POCO #6 Zone 2: Formation Stimulated With: Perforated: No. of Perforations: Perforation size: to Formation Broke Down at: PSIG Average Injection Rate: ISIP: Min SIP: PSIG Average Injection Pressure: PSIG Date Stimulated: Zone 3: Formation Stimulated With: Perforated: No. of Perforations: Perforation size: to Formation Broke Down at: PSIG Average Injection Rate: ISIP: Min SIP: PSIG Average Injection Pressure: PSIG Date Stimulated: After Stimulation FINAL PRODUCTION: Natural HOURS TESTED ROCK PRESSURE HOURS TESTED BOD MCFD Zone (1) Zone (2) Zone (3) Final Production if Gas Zones are Commingled <u>19 MCFD 6</u> Hours Tested <u>215</u> PSIG <u>48</u> Hours Tested

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

Permittee: EQUITABLE RESOURCES EXPLORATION (Company) (Signature)

Form DGO-GO-15 Rev. 9/91 Department of Mines, Minerals and Energy Division of Gas and Oil

Department of Mines, Minerals and Energy Division of Gas and Oil P. O. Box 1410 Abingdon, Virginia 24210 703/676-5423

DRILLING REPORT

LOCATION

1.14

 County:
 DICKENSON
 District:
 ERVINTON

 Surface Elevation:
 2311.0
 Elevation of Kelly Bushing:
 2321.0
 Quadrangle:
 NORA

 7800
 FT S. of Latitude
 37° 05' 00"
 and
 9400
 FT W. of Longitude
 82° 17' 30"

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

DRILLING DATA

| Date Drilling Commenced: 08-15-96 | Drilling Contractor: Union Drilling |
|----------------------------------------|-------------------------------------|
| Date Drilling Completed: 08-20-96 | Rig Type: X Rotary Cable Tool |
| Total Depth of Well: LTD=2699 DTD=2700 | |

GEOLOGICAL DATA

| Fresh Water at: | 238 feet DAMP | GPM | feet | GPM |
|-----------------|---------------|-----|------|-----|
| | feet | GPM | feet | GPM |
| Salt Water at: | feet | GPM | feet | GPM |
| | feet | GPM | feet | GPM |

COAL SEAMS:

MINING IN AREA

| NAME | TOP | BOTTOM | THICKNESS | YES | NO | MINED OUT |
|----------------------------------------------------|------------------------------|------------------------------|-------------------|-----|----|-----------|
| C-SEAM L HORSEPEN POCO #6 (SPLIT) POCO #2 | 1857 2015 2313 2542 | 1859 2017 2331 2544 | 2 2 18 2 | | | |

GAS AND OIL SHOWS:

| FORMATION | TOP | BOTTOM | THICKNESS | IPF (MCFD/BOPD) | PRESSURE | HOURS TESTED |
|-----------|-----|--------|-----------|-----------------|----------|--------------|
| | | 2699 | | ODOR | | |

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

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

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| DEPTH OF SURVEY | DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL | DEPTH OF SURVEY | DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL |
|--------------------|--------------------------------------------------|--------------------|--------------------------------------------------|
| 200 | 1/2° | 1600 | 3/4° |
| 336 | 1/2° | 1800 | 1/2° |
| 400 | 1/4° | 1858 | 1/2° |
| 600 | 1/4° | 2000 | 1/2° |
| 800 | 3/4° | 2200 | 1/2° |
| 864 | 3/4° | 2383 | 3/4° |
| 1000 | 1° | 2400 | 3/4° |
| 1200 | 1° | 2503 | 1 3/4° |
| 1400 | 3/4° | 2542 | 2° |

CASING AND TUBING

| | <u>SIZE</u> | TOP | BOTTOM | LENGTH | CEMENT USED (IN CU/FT) | DATE <u>CEMENTED</u> | PACKERS OR BRIDGE PLUGS KIND SIZE SET AT |
|-----------------------------------------|------------------|-----|----------------|--------|------------------------------|-------------------------|------------------------------------------------|
| Conductor | | | | | | | |
| Surface | 11 3/4" | | 35' | | | | |
| Water Protection | 8 5/8" | | 319' | 309' | 80(94) | 08-16-96 | |
| Coal Protection | | | | | | | |
| Other Casing and Tubing Left in Well | 4 1/2" 1 1/2" | | 2661' 2433' | 2651 | 330(416) | 08-20-96 | |

Liners

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc. FISHED OUT FLAT BTM BIT @ 238' ON 8/16/96

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

Operations Name: J M COLLEY VCP3566 Permit #: 3067 DI-793

DRILLER'S LOG

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Compiled by Engineering

| | | GENERAL | | DE | PTH | | |
|---------------|-------------------|-----------|-------|------|--------|-----------|---------|
| AGE | FORMATION | LITHOLOGY | COLOR | TOP | BOTTOM | THICKNESS | REMARKS |
| Pennsylvanian | Sand, Shale & Thi | n Coals | | 0 | 1857 | 1857 | |
| | C-SEAM | | | 1857 | 1859 | 2 | |
| | Sand, Shale & Thi | n Coals | | 1859 | 2015 | 156 | |
| | L HORSEPEN | | | 2015 | 2017 | 2 | |
| | Sand, Shale & Thi | n Coals | | 2017 | 2313 | 296 | |
| | POCO #6 (SPLIT) | | | 2313 | 2331 | 18 | |
| | Sand, Shale & Thi | n Coals | | 2331 | 2542 | 211 | |
| | POCO #2 | | | 2542 | 2544 | 2 | |
| | Sand, Shale & Thi | n Coals | | 2544 | 2699 | 155 | |
| | Loggodo Total Dor | | | | 2600 | | |

Logger's Total Depth

2699

Permittee: EQUITABLE RESOURCES EXPLORATION (Company) By: (Signature)

