

## State of West Virginia SEP 01 1994 ivision of Environmental Protection Section of Oil and Gas

WV Division of Well Operator's Report of Well Work Environmental Protection

GEORGIA-PACIFIC CO. Farm name:

Operator Well No.: Y & O 223

LOCATION:

Elevation: 2608.00

Quadrangle: MCGRAWS

District:

SLAB FORK County: RALEIGH 13125 Feet South of 37 Deg. 45Min. 0 Sec. 2000 Feet West of 81 Deg. 22 Min. 30 Sec. Latitude: Longitude

Company: SONAT EXPLORATION CO. P. O. BOX 1513

HOUSTON, TX 77251-1513

Agent: DANA R. BLACKSHIRE

Inspector: RODNEY G. DILLON 03/30/92 4/21/92 Permit Issued: Well work Commenced: 5/30/92 Well work Completed: Verbal Plugging Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 3766
Fresh water depths (ft) 1625 3766' 1625'

Salt water depths (ft) 2125'

Is coal being mined in area (Y/N)? Coal Depths (ft):

| Casing | Used in     | Left  Cement  <br>  Fill Up |
|--------|-------------|-----------------------------|
| Tubing | Drilling    | in Well Cu. Ft.             |
| Size   |             |                             |
| 13 3/8 | 42 '        | Surf.                       |
|        |             |                             |
| 8 5/8  | 1763'       | Surf.                       |
| 4 1/2  | <br>  2943' |                             |
| 1 1/2  | 2778'       |                             |
|        |             |                             |
|        | I           |                             |

## OPEN FLOW DATA

| Producing formation Middle Maxon Gas: Initial open flow 83 MCF/d Oil: | Pay zone depth (ft)2789-2828   |
|---|--------------------------------|
| Final open flow 84 MCF/d  | Final open flow Bbl/d          |
| Time of open flow between initial                                     | and final tosts                |
| alatia wash Busanuna 2/8 main / swa                                   | and final tests 24 Hours       |
| Static rock Pressure 248 psig (surf                                   | ace pressure) after 26 xHoxxxx |
|   | days                           |
| Second producing formation  | Pay zone depth (ft)            |
| Gas: Initial open flow MCF/d Oil:                                     | Initial open flow Bbl/d        |
| Final open flow MCF/d   | Final open flow Bbl/d          |
| Time of open flow between initial                                     | and final tests Hours          |
| Static rock Pressurepsig (surf  | ace pressure) after Hours      |

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

SONAT EXPLORATION

Bruce Heath

Date: September 1, 1992

SEP 2 1994 1. Details of Perforated Intervals, Fracturing or Stimulating, Physical Change, etc.

Middle Maxon
Perforated 2789-2828'. Dumped 500 gals 15% FE acid w/additives.
Pumped 43,000 scf N2. Pumped 1000 gals methanol @ 5 BPM. Foam
frac'd w/1856 bbls 75Q foam including 94,000# 20/40 mesh sand.

2. Geological record of all formations.

| Formation   | Top Feet | Bottom Feet |  |
|-------------|----------|-------------|--|
|             |          | •           |  |
| Coal        | 24       | 27          |  |
| Coal        | 104      | 107         |  |
| Coal        | 125      | 132         |  |
| Coal        | 675      | 678         |  |
| Coal        | 1021     | 1026        |  |
| Coal        | 1140     | 1150        |  |
| Coal        | 1653     | 1659        |  |
| Coal        | 1707     | 1711        |  |
| Coal        | 1750     | 1756        |  |
| Princeton   | 2090     | 2130        |  |
| Ravencliff  | 2270     | 2320        |  |
| Avis        | 2322     | 2362        |  |
| Maxon       | 2788     | 2840        |  |
| Little Lime | 3180     | 3350        |  |
| Big Lime    | 3394     | 3710        |  |

FORM WW-2B

47-08/ -934 Issued 3130/92

STATE OF WEST VIRGINIA CYPUL 3 30 94

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

|               |   |               |                   | <u> </u>                           |              |                   |  |
|---------------|---|---------------|-------------------|------------------------------------|--------------|-------------------|--|
| 1) Well Op    | erator:_  | Sonat Ex      | ploration Co      | mpany 466                          | 00 5         | 464               |  |
| 2) Operato    | Operator's Well Number: Y & O Coal No. 223 3) Elevation: 2608 |               |                   |                                    |              |                   |  |
|               |   |               | or Ga:            |                                    |              |                   |  |
|               | (b)   | If Gas:       | Production<br>Dee | n <u>X</u> / Underg<br>P <u></u> / | round Storac |                   |  |
| 5) Propose    | Proposed Target Formation(s): Big Lime                        |               |                   |                                    |              |                   |  |
| 6) Propose    | Proposed Total Depth: 3763 feet                               |               |                   |                                    |              |                   |  |
| 7) Approxi    | Approximate fresh water strata depths: 1625                   |               |                   |                                    |              |                   |  |
| 8) Approxi    | mate salt   | water de      | epths:            | 21:                                | 25 N         |                   |  |
| 9) Approxi    | mate coal   | seam de       | pths:             | 179                                | <i>UI</i> \  |                   |  |
|               |   |               |                   |                                    |              | /es/ No_X_/       |  |
|               |   |               |                   | and Stimulat                       |              |                   |  |
| 12)           |   | New I         | Formation         |                                    | Velva        |                   |  |
|               |   | CASI          | NG AND TUB        | NG PROGRAM                         |              |                   |  |
| TYPE          | 1   | PECIFICAT     | rions             | FOOTAGE IN                         | NTERVALS     | CEMENT            |  |
|               | Size  | Grade         | Weight per ft.    | For<br>drilling                    | Left in well | Fill-up (cu. ft.) |  |
| Conductor     | 13 3/8"   | H-40          | 48                | 30                                 | 30           | 38CSG1011         |  |
| Fresh Water   | 8 5/8"  | J <b>-</b> 55 | 24                | 1824                               | 1824         | C.T.S.<br>75-100  |  |
| Coal          | 8 5/8"  | J <b>-</b> 55 | 24                | 1824                               | 1824         | C.T.S.<br>75-100  |  |
| Intermediate  |   |               |                   |                                    |              | 385918/1.2        |  |
| Production    | 4 1/2"  | J <b>-</b> 55 | 10.5              | 3763                               | 3763         | 500 - 600         |  |
| Tubing        |   |               |                   |                                    |              | 3865RB-11.1       |  |
| Liners        |   |               |                   |                                    |              |                   |  |
| PACKERS : Kir |   |               |                   | Rule 15.05                         |              |                   |  |
| : V           | Sizes Or as required  Depths set By Rule 15.01                |               |                   |                                    |              |                   |  |
|               | F   | r Diviso      | n of Oil a        | nd Gas Use                         | Only         |                   |  |
| Fee(s) g      | aid:  |               | ork Permit        | 16.                                | amation Fund | d WPCP            |  |
| Flat C        | WW-9  | WW-           | /K.               | ond Blows                          | bet sine     | Agent             |  |
|               | en                              |               |                   |                                    | Type)        | - Agent           |  |

|       |            | /                                     | RECHIVED                              |             |            |  |
|-------|------------|---------------------------------------|---------------------------------------|-------------|------------|--|
| Page  | 1 of       | - 7 T                                 | <b>, (</b>                            | 1)          | Date:      | March 9, 1992  |
|       | WW2-A      | , , , , , , , , , , , , , , , , , , , | MAR 12 REC'D                          | , ·         |            | 's well number                                       |
|       | 7)         | 4 <b>[</b>                            |                                       |             |            | Y & O Coal No. 223                                   |
|       |            | 1                                     | DEPT. OF ENERGY                       | 3)          | API Well   | No: 47 - <u>081</u> - <u>0934</u>                    |
|       |            | /                                     |                                       |             |            | State - County - Permit                              |
|       |            |                                       |                                       |             |            |  |
|       |            | DED 3 D m)                            |                                       |             | VIRGINIA   |  |
|       |            | DEPART                                | TENT OF ENE                           | RGY, DI     | VISION OF  | OIL AND GAS  |
|       |            | NOTICE                                | AND APPLIC                            | ATTON F     | OR A WELL  | WORK PERMIT  |
|       |            |                                       |                                       |             |            |  |
| 4)    |            |                                       | to be serv                            |             | 5) (a) C   | oal Operator:  |
|       | (a) Name _ | Georgi                                | a-Pacific Co<br>Box 105605            | rp.         | Name       |  |
|       | Address    | P. O.                                 | Box 105605                            |             | Address    |  |
|       |            | Atlant                                | a. GA 30348                           |             |            |  |
|       | (b) Name _ |                                       |                                       |             |            | Owner(s) with Declaration                            |
|       | Address    |                                       |                                       |             | Name       | Youghiogheny & Ohio Coal Co.                         |
|       | (C) Namo   |                                       |                                       |             | Address    | P. O. Box 1000                                       |
|       | Addrace    |                                       |                                       |             | Name       | St. Clairsville, Ohio 43950<br>Bellemead Coal Co.    |
|       | Address    |                                       | · · · · · · · · · · · · · · · · · · · |             | Address    | c/o Trust Dept./Charleston Nat'l                     |
|       |            |                                       |                                       | <del></del> | Charlestor | Nat'l Plaza, Box 1113, Charleston                    |
| 6)    | Inspector  | Rodnev                                | Dillon                                |             | (c) Coal   | Lessee with Declaration V                            |
| ·     |            |                                       | Box 1526                              |             | Name       | Ranger Fuel Corp. 25                                 |
|       |            | Sophia                                | . WV 25921                            |             | Address    | P. O. Box 966  |
|       | Telephone  | (304)-                                | 683-3989                              |             |            | Beckley, WV 25801                                    |
|       |            |                                       |                                       |             |            | ntinuing contract or                                 |
|       |            |                                       |                                       |             |            | il and gas <u>OR</u>                                 |
| X     | Included i | is the i                              | information                           | require     | ed by Cha  | pter 22B, Article 1,                                 |
| Secti | on 8(d) of | the Co                                | ode of West                           | Virgin      | ia (see p  | age 2)   |
| T h   | certify    | that as                               | s required                            | under Cl    | hapter 22  | B of the West Virginia Code                          |
| 1 nav | e served d | copies o                              | or this not                           | ice and     | applicat   | ion, a location plat, and e above named parties, by: |
| accon |            |                                       | vice (Affi                            |             |            | e above named parties, by:                           |
|       |            |                                       |                                       |             |            | ipt attached)  |
|       |            |                                       | (Notice of                            |             |            |  |
|       |            |                                       |                                       |             |            |  |
|       | I have rea | ad and t                              | understand                            | Chapter     | 22B and    | 38 CSR 11-18, and I agree                            |
| to th | e terms ar | nd condi                              | itions of a                           | ny perm:    | it issued  | under this application.                              |
|       | I certify  | under p                               | penalty of                            | law that    | t I have   | personally examined and am                           |
| famil | iar with t | the info                              | ormation su                           | bmitted     | on this    | application form and all                             |
| attac | hments, ar | id that                               | based on m                            | y inqui     | ry of tho  | se individuals immediately                           |
| respo | nsible for | : obtain                              | ling the in                           | formation   | on, I bel  | ieve that the information                            |
|       |            |                                       | d complete.                           |             |            | ties for submitting false                            |
| infor | mation ir  | : that t                              | the nossi                             | hility      | ant penar  | nd imprisonment.                                     |
|       |            |                                       |                                       |             |            | cloration Company                                    |
|       |            |                                       | _                                     | _           |            | 3 Thomas In Myers                                    |
|       |            |                                       | Its:                                  |             | Operations |  |
|       |            |                                       | Address                               |             |            |  |
|       |            | ,                                     |                                       |             |            |  |
| G., - | _:         |                                       | Telepho                               |             |            | Marah  |
| Subsc | riced and  | sworn b                               | pefore me t                           | nis yth     | _ day of   | March , 19 <u>92</u>                                 |

Tammy Lea Hovatter / mmi/ Zea Hovatter

My commission expires June 7, 1993

\_\_\_\_\_Notary Public