

RECEIVED
Division of Energy

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

AUG 12 1991 Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CORP. Operator Well No.: A-10-S-133641

LOCATION: Elevation: 1841.42 Quadrangle: MAJESTIC

District: MAGNOLIA County: MINGO
Latitude: 750 Feet South of 37 Deg. 37Min. 30 Sec.
Longitude 10590 Feet West of 82 Deg. 5 Min. 0 Sec.

Company: ASHLAND EXPLORATION, INC.
P.O. BOX 391, A1-6
ASHLAND, KY 41114-0391

Agent: FORREST BURKETT

Inspector: TIM BENNETT
Permit Issued: 03/04/91
Well work Commenced: 5/24/91
Well work Completed: 7/23/91
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 5654
Fresh water depths (ft) 110'

approximately 1041'
Salt water depths (ft) 1391'
1" stream @ 2800' (Maxton)

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 535-537, 725-727, 757-761,
738-741

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 16" | 37 | 37 | 6.0 |
| 8 5/8" | 2969 | 2969 | 1464 |
| 5 1/2" | 5634 | 5634 | 403 |
| 2 3/8" | @ 5526' KB | | |

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 4102-5561
Gas: Initial open flow 91/1070 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1028/1379 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 760 psig (surface pressure) after 72 Hours

Second producing formation Big Lime Pay zone depth (ft) 3262-3284
Gas: Initial open flow 979 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 351 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 30 psig (surface pressure) after 72 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.

For: ASHLAND EXPLORATION, INC.

By: James L. Stephens James L. Stephens, Engr. Tech.
Date: 8/7/91

AUG 16 1991

| <u>FORMATION OR ROCK TYPE</u> | <u>TOP</u> | <u>BASE</u> |
|-------------------------------|------------|-------------|
| Breathitt Formation | 0 | 1456 |
| Lee Formation | 1456 | 2362 |
| Pennington Formation | 2362 | 3014 |
| U. Maxton 2799-2885 | | |
| L. Maxton 2964-2983 | | |
| Little Lime | 3014 | 3072 |
| Big Lime | 3072 | 3303 |
| Borden Formation | 3303 | 3912 |
| Sunbury Shale | 3912 | 3960 |
| Berea | 3960 | 4000 |
| Devonian Shale | 4000 | 5643 |
| Onondaga LS | 5643 | TD |

LTD 5656
 DTD 5649

WELL TREATMENT

Perf Rhinestreet 17H/5425-5561. N₂ frac using 500 gal 7 1/2% Fe inh acid, 805,000 SCF N₂ @ 91,000 SCF/min. BD @ 2800#, nTP 4300#, MTP 4520#, ISIP 3200#, & 15 min. 1720#.

Perf Huron 22H/4783=5221. N₂ frac using 500 gal 7 1/2% inh Fe acid, 808,000 SCF N₂ @ 98,000 SCF/min. BD @ 2100#, ATP 3400#, MTP 3470#, ISIP 2200# & 15 min 1460#.

Perf Chagrin 18H/4102-4333. N₂ frac using 800 gal 7 1/2% inh Fe acid, 802,000 SCF N₂ @ 98,000 SCF/min. BD @ 2340#, ATP 3600#, MTO 3660#, ISIP 2300# & 15 min 1140#.

The Big Lime will be produced up the 8 5/8" x 5 1/2" annulus natural w/IP of 351 MCF/D @ 80#.

11862

RECEIVED
 FEB 14 1991
 DEPT. OF ENERGY

059-1146
 Issued 3/4/91
 Expires 3/4/93
 Page 1 of 1

FORM WW-2B

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
 WELL WORK PERMIT APPLICATION

- 1) Well Operator: Ashland Exploration, Inc. 2750 (S) 452
 Red Jacket Coal Corp.
- 2) Operator's Well Number: A-10, Serial #133641 3) Elevation: 1841.42
- 4) Well type: (a) Oil / or Gas X/
 (b) If Gas: Production X/ Underground Storage /
 Deep / Shallow X/
 4111
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 5715'KB feet
- 7) Approximate fresh water strata depths: 1091'KB (Map WV-12)
- 8) Approximate salt water depths: 1391'KB (Map WV-12)
- 9) Approximate coal seam depths: Winifred - Elev. 1741' Mined Out
Upper Cedar Grove - 1010' Mined Out
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

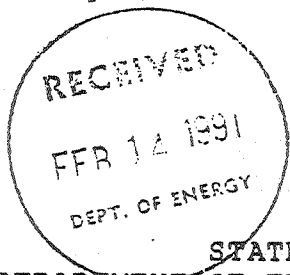
CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | | FOOTAGE INTERVALS | | | CEMENT |
|--------------|----------------|-------|-------------------|--------------|--------------|---------------------------|
| | Size | Grade | Weight per ft. | For drilling | Left in well | |
| Conductor | 16 | LS | 42.0 | 30 | 30 | CTS |
| Fresh Water | | | | | | 38CSR18-11.3 |
| Coal | 11 3/4 | H40 | 42.0 | 891 | 891 | 38CSR18-11.2.2 CTS |
| Intermediate | 8 5/8 | J55 | 24.0 | 2991 | 2991 | CTS |
| Production | 5 1/2 | J55 | 15.5 | 5715 | 5715 | 38CSR18-11.1 As Needed |
| Tubing | 1.9 | J55 | 2.76 | - | 5665 | Siphon |
| Liners | | | | | | |

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Surety Blanket Agent
 (Type)



1) Date: February 12, 1991
2) Operator's well number
Red Jacket Coal Corp. #A-10, Serial #133641
3) API Well No: 47 - 059 - 1146
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Georgia-Pacific Corp.
Address Jerry Crouse
Wyoming, WV 24898
(b) Name _____
Address _____
(c) Name _____
Address _____

5) (a) Coal Operator:
Name Island Creek Coal Company
Address P.O. Box 840
Holden, WV 25625
(b) Coal Owner(s) with Declaration
Name Georgia-Pacific Corp.
Address Same as No. 4(a)
Name _____
Address _____

6) Inspector Tim Bennett
Address Route 2, Box 61-B
Chapmanville, WV 25508
Telephone (304)-855-7705

(c) Coal Lessee with Declaration
Name Island Creek Coal Company
Address Same as No. 5(a)

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 2 on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Ashland Exploration, Inc.
By: J. T. Mellinger
Its: Vice President
Address P.O. Box 391
Ashland, KY 41114
Telephone 606-329-5450

Subscribed and sworn before me this 12th day of February, 1991

Thibe W. Nonta
My commission expires November 23, 1994 Notary Public

Schlumberger

LITHO DENSITY / TEMPERATURE

COUNTY MINGO
 FIELD MAGNOLIA DISTRICT
 LOCATION 750' SOUTH OF
 WELL RED JACKET COAL A-10
 COMPANY ASHLAND EXPLORATION, INC.

COMPANY ASHLAND EXPLORATION, INC.
 WELL RED JACKET COAL A-10
 FIELD MAGNOLIA DISTRICT
 COUNTY MINGO STATE WEST VIRGINIA

| | | | | |
|----------------|----------------|-------------|---|--|
| LOGATION | 750' SOUTH OF | 37° 37' 30" | Other Services: LDT TEMP DIL GR | |
| | 10590' WEST OF | 82° 05' 00" | | |
| API SERIAL NO. | SECT. | TWP. | RANGE | |
| 47-59-1146 | - | - | - | |

| | | | | |
|------------------------|---------------|--------|-------------------|---------------------|
| Permanent Datum | GROUND LEVEL | Elev. | 1841.0 F | Elev.: K.B.1851.0 F |
| Log Measured From | KELLY BUSHING | 10.0 F | above Perm. Datum | D.F.1850.0 F |
| Drilling Measured From | KELLY BUSHING | | | G.L.1841.0 F |

| | | | |
|---------------------|-------------------|--------------|-------------|
| Date | 30-MAY-1991 | | |
| Run No. | ONE | | |
| Depth Driller | 5655.0 F | | |
| Depth Logger (Schl) | 5656.0 F | | |
| Btm. Log Interval | 5649.0 F | | |
| Top Log Interval | 2980.0 F | | |
| Casing-Driller | 8 5/8" | @2979.0 F | ⊙ |
| Casing-Logger | 2980.0 F | | |
| Bit Size | 7 7/8" | | |
| Type Fluid in Hole | AIR/GAS | | |
| Dens. | Visc. | 0.0 LB/G | |
| pH | Fld. Loss | | |
| Source of Sample | | | |
| Rm @ Meas. Temp. | | | ⊙ |
| Rmf @ Meas. Temp. | | | ⊙ |
| Rmc @ Meas. Temp. | | | ⊙ |
| Source: Rmf | Rmc | | |
| Rm @ Meas. Temp. | | | ⊙ 112.0 DEG |
| TIME | Circulation Ended | 4:15 MAY 30 | |
| | Logger on Bottom | 12:45 MAY 30 | |
| Max. Rec. Temp. | 112. DEG F | | |
| Equip. | Location | 8291 | PAINTSVILLE |
| Recorded By | WICHMANN | | |
| Witnessed By | S. RHOADES | | |

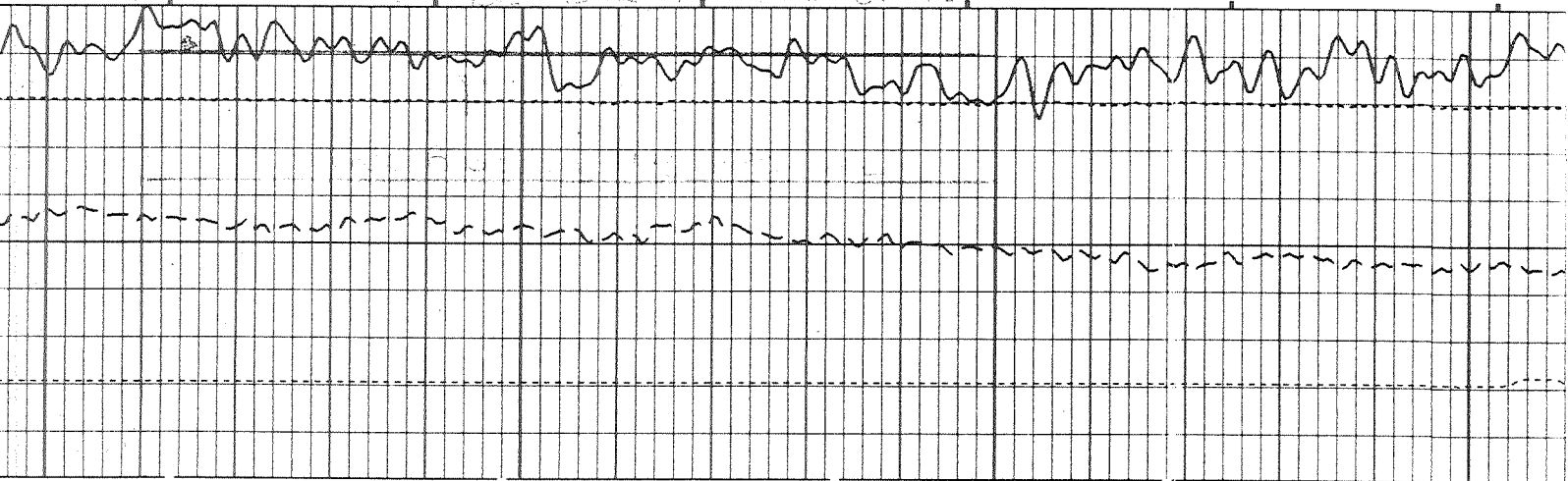
The well name, location and borehole reference data were furnished by the customer.

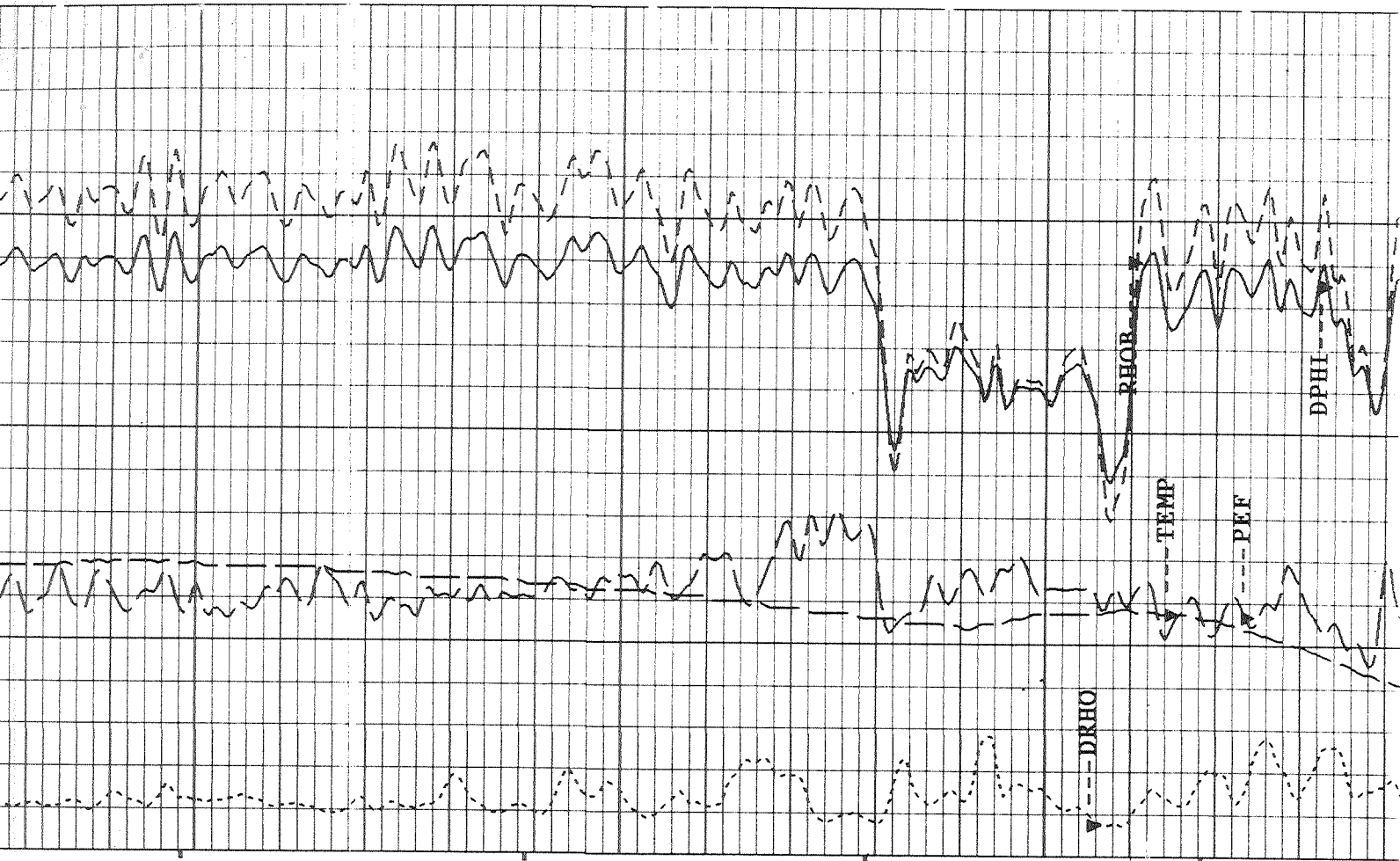


3800

3900

Spine D - Lead PL 400.000





3900

