



### State of West Virginia 47- 17-961-3 F Division of Environmental Protection Section of Oil and Gas

017-3653-F

Well Operator's Report of Well Work

| arm | name: | MILLS, | JEFFREY | Α. | Operator         | Well     | No.    | • | ADAMS | #1_E_EE |  |
|-----|-------|--------|---------|----|------------------|----------|--------|---|-------|---------|--|
|     |       |        |         |    | a la a . a e e . | AA @ T T | 14 O - | ĕ | MUMMS | #1-E-55 |  |

LOCATION: Elevation: 1,053.33 Quadrangle: BIG ISAAC

District: GREENBRIER County: DODDRIDGE

Latitude: 6000 Feet South of 39 Deg. 15 Min. 0 Sec. Longitude 7200 Feet West of 80 Deg. 35 Min. 0 Sec.

| 0 | om | p | 2 | Π | У | 0 | E | × | p | 1 | 0 | ~ | 8 | t | i | 0 | n |   | P | a | r | tr | 8 | ~ | 8 | P | ~ | 0 | d |
|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|
|   |    |   |   |   |   |   | Þ | • | 0 | ۰ |   | 8 | 0 | × |   | 9 | 3 | 8 |   |   |   |    |   |   |   |   |   |   |   |

Bridgeport, WV 26330-1245

Agent: Louis A. Ferrari

Inspector: MIKE UNDERWOOD

Permit Issued: 07/28/97 Jell Work Commenced: <u>08/28/97</u> Well Work Completed: 09/04/97

Verbal Plugging

Permission granted on:

Rotary\_x\_ Cable\_\_\_\_ Rig

Total Depth (feet) \_\_\_\_\_ resh water depths (ft)\_\_\_

Salt water depths (ft)\_\_\_\_

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

| Casing Used in Left Ceme    | Uр                                      |
|-----------------------------|---|
| I TILL                      |   |
| Tubing Drilling in Well Cu. |   |
| Size                        | *************************************** |
| SEE ORIGINAL WR-35          |   |
| NO ADDITIONAL CASING RUN    |   |
| (STIMULATE UPPER PAYS)      |   |
|                             |   |
|                             |   |

PEN FLOW DATA

| Producing formations Speechley, Bradford, Riley Pay zone depth (ft)3462-492  |   |
|--|---|
| The state open is the state of  |   |
| The provided with the property of the property |   |
|  | f |
| Static rock pressure 150 psig (surface pressure) after 24 Hour   | • |
|  |   |
| Second producing formation Pay zone depth (ft)<br>Gas: Initial open flow MCF/d Oil: Initial Open flow Bbl/   |   |
| Gas: Initial open flow MCF/d Oil: Initial Open flow  |   |
|  |   |
| 'Ame of open line decompen intrible and final back.  | , |
|  | • |
|  |   |
| TE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE   |   |
|  |   |
| - WILLUI IS A SISIEMALLO DELALLED GEOLOGICAL RECORD DE ALL ECOMATIONS  |   |
| CLUDING COAL ENCOUNTERED BY THE WELLBORE.  |   |
|  |   |
| Casy. Donai  |   |
| For: EXPLORATION PARTNERS LIC JAN 03 1998  | - |

<u>Louis A. Ferrari</u>

Date: November 18, 1997

OF PERFORATED INTERVALS, FRACTURING, OR STIMULATING PHYSICAL CHANGE, ETC. AGE I (4546-4922) 16 HOLES, 500 GAL 15% HCL, 30,000# SAND, 345 BBL GELLED H2O. STAGE II (3462-3646) 18 HOLES, 500 GAL 15% HCL, 30,000# SAND, 335 BBL GELLED H20.

|   |       |      |    |  |     | WELL | LOG    |      |  |
|---|-------|------|----|--|-----|------|--------|------|--|
| FORMATION                                 | COLOR | HARD | OR | SOFT   | TOP | FEET | BOTTOM | FEET | REMARKS Including indication of all fresh and salt water, coal and gas |
|   |       |      |    |  | ·   |      |        |      |  |
|   |       |      |    |  |     |      |        |      |  |
|   |       |      |    |  |     |      |        |      |  |
|   |       |      |    | -  |     |      |        |      |  |
|   |       |      |    |  |     |      |        |      |  |
|   |       |      |    |  |     |      |        |      |  |
|   |       |      |    | •  |     |      |        |      |  |
|   |       |      | o. | Octamo e constitucio de la constitució de la con |     |      |        |      |  |
| er en |       |      |    | <u> (Атадранда од нада од</u>  |     |      |        |      |  |



IV-35
(Rev 8-81) ECEIVEII

OCT 24 1988

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

## Slute of Mest Wirginia

Department of Mines Wil und Vas Division

| Date 10/21/88     |        |  |  |  |  |  |  |  |
|-------------------|--------|--|--|--|--|--|--|--|
| Operator's        |        |  |  |  |  |  |  |  |
| Well No. E-55     |        |  |  |  |  |  |  |  |
| Farm ADAMS #1     |        |  |  |  |  |  |  |  |
| APT No. 047 - 017 | - 3653 |  |  |  |  |  |  |  |

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

| WELL TYPE: Oil / Gas $\chi$ / Liquid Injection (If "Gas," Production $\chi$ / Undergrou | / Waste<br>nd Storage   | e Disposa<br>e/ Deep   | l/<br>p / Sha | ullow X/)                               |
|---|-------------------------|------------------------|---------------|---|
| LOCATION: Elevation: 1053' Watershed E  |                         |                        |               | *************************************** |
| District: GREENBRIER County DODDE   |                         |                        | BIG ISA       | AAC 7½                                  |
|   |                         | j                      | ***           |   |
| COMPANY EXCEL ENERGY, INC.  |                         |                        |               |   |
| ADDRESS P.O. BOX 1020, BRIDGEPORT, WV26330  | Casing                  | Used in                | Toff          | Cerent                                  |
| DESIGNATED AGENT H.L. BARNETT   | Tubing                  | Drilling               |               | fill up<br>Cu. ft.                      |
| ADDRESS P.O. BOX 1020, BRIDGEPORT, WV26330  | Size                    | DETTING                | TIL WELL      | Cu. I.C.                                |
| SURFACE OWNER JEFFREY MILLS   | 20-16                   | 20'                    | 20'           | Sanded In                               |
| ADDRESS RT. 1, BOX 345, SALEM, WV 26426   | Cond.                   |                        |               | Panaca III                              |
| MINERAL RIGHIS OWNER J.J. ADAMS   | 13-10"                  |                        |               | -                                       |
| ADDRESS UNKNOWN 3   | 9 5/8                   | 1162'                  | 1162'         | 245 -1                                  |
| OIL AND GAS INSPECTOR FOR THIS WORK   | 8 5/8                   |                        | 1102          | 245 sks                                 |
| MIKE UNDERSOOD ADDRESS SALEM; WV 26426  | 7                       |                        |               |   |
| PERMIT ISSUED 07/14/88  | 5 1/2                   |                        |               |   |
| DRILLING COMMENCED 09/16/88   | 4_1/2                   | 5433'                  | 5433'         | 500 sks                                 |
| DRILLING COMPLETED 09/21/88   | 3                       |                        |               | _                                       |
| IF APPLICABLE: PLUGGING OF DRY HOLE ON  | 2                       |                        |               | -                                       |
| CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON        | Liners<br>used          |                        |               |   |
| GEOLOGICAL TARGET FORMATION ALEXANDER, BENSON   |                         | Dept                   | il i          | 5700 feet                               |
| Depth of campleted well 5515 feet R   | otary >                 |                        |               |   |
| Water strata depth: Fresh 173 feet;   |                         |                        |               |   |
| Coal seam depths: 717, 721  |                         | cing mine              | Yl in the     | area2No                                 |
| OPEN FLOW DATA  |                         |                        |               |   |
| Producing formation ALEXANDER   | Day                     | zovo doni              | -l. 5252.5    | 402 r .                                 |
| Gas: Initial open flow SHOW Mcf/d   | Oil. Ini                | igal open              | flor          | 403 feet                                |
| Final open flow 1300 Mcf/d  | Fin                     | al coop E              | I I OW        | BDI/G                                   |
| Time of open flow between initi   | al arvi fii             | ar open in             | 1 COM         | - BDI/d                                 |
| Static rock pressure 1550 psig(surface  |                         |                        |               |   |
| (If applicable due to multiple completion-  | i ileasu.em             | sit, arter             | - /2 hou      | rs shut in                              |
|   |                         |                        |               |   |
| Second producing formation BENSON  Gas: Initial open flow SHOW Mostle                   | Pay                     | zone dept              | n 5033-50     |   |
| Gas: Initial open flow SHOW Mcf/d   |                         |                        | <del></del>   | Bp1/q                                   |
| Final open flow 1300 Mcf/d  | Oil: Fin                | al open fl             | Low           | Bb1/d                                   |
| Time of open flow between initi<br>Static rock pressure 1550 psig(surface               | al and fir<br>measurene | nal tests<br>nt) after | 2 hc<br>72 hc | urs   1088<br>urs shut in               |
|   |                         |                        |               |   |

DETAILS OF PERFORMTED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHARGE, EIC.

STAGE I - ALEXANDER, 11 holes (5332'-5403'), 450 sks sand, 170 BBL 75Q Foam, 500 gal 15%HCL STAGE II - BENSON, 13 holes (5034'-5038'), 450 sks sand, 160 BBL 75Q Foam, 500 gal 15% HCL

### WELL LOG .

|   | •  |  | ,  |
|---|--|--|--|
| FORMATION COLOR HARD OR SOF.  | TOP FEET   | BOTTOM FEET  | REMARKS Including indication of all freshaul salt water, coal, oil and gas |
| Fill Sand, Shale (Red Rock) Coal (Solid) Sand & Shale Little Lime Shale Big Lime Big Injun Sand & Shale 50' Sand Sand (Gordon & 4th) Shale Speechley Sand & Shale Benson Shale Alexander Sand & Shale | 0<br>4<br>717<br>721<br>1954<br>1993<br>2025<br>2160<br>2206<br>2710<br>2727<br>2889<br>3440<br>3483<br>5030<br>5050<br>5315<br>5400 | 4<br>717<br>721<br>1954<br>1993,<br>2025<br>2160<br>2206<br>2710<br>2727<br>2889<br>3440<br>3483<br>5030<br>5050<br>5315<br>5400<br>5509 DTD<br>5515 LTD | Gas Show Gas Show Gas Show Gas Show  |
|   |  |  | OCT 24.1988  DIVISION OF OIL & GAS DEPARTMENT OF ENERGY                    |

(Attach separate sheets as necessary)

| EXCEL ENERGY, INC.                 |
|------------------------------------|
| Well Operator                      |
| By: Bradley W. Thomas, Consultant. |
| Date: 10/21/88                     |
|                                    |

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including of a well."

OCT 28 1988

14

017-3653 Issued 7/14/88 Experis 7/14/90 Page OF

FORM WW-2B

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

| 1)              | Well Ope   | rator:                                  | EXCEL EN  | ERGY, INC.         | 16510,          | 4, do   |                                   |  |  |  |
|-----------------|--|---|-----------|--------------------|-----------------|---|-----------------------------------|--|--|--|
| 2)              | Operator   | 's Well                                 | Number:   | Adams E-55         |                 | ,<br>3) Ele   | evation: 1053                     |  |  |  |
| 4)              | Well typ   | e: (a)                                  | oil_/     | or Gas             | ; <u>X</u> /    |   |                                   |  |  |  |
|                 | ·  | (b)                                     | If Gas:   | Production<br>Deep |                 | ound Storage<br>Shallov   |                                   |  |  |  |
| 5) I            | Proposed   | Target                                  | Formation | (s): <u>Ben</u>    | son - Alexande  | er  |                                   |  |  |  |
| 6) I            | Proposed Total Depth: 5700 feet  |   |           |                    |                 |   |                                   |  |  |  |
| 7) 2            | Approximate fresh water strata depths: 120,210   |   |           |                    |                 |   |                                   |  |  |  |
|                 | Approximate salt water depths:   |   |           |                    |                 |   |                                   |  |  |  |
| 9) 2            | Approximate coal seam depths: 120-23, 210-214, 700-03  |   |           |                    |                 |   |                                   |  |  |  |
|                 |  |   |           |                    |                 | ve mine? Ye   | es/ No_X_/                        |  |  |  |
| 11) E           | Proposed   | Well Wo                                 | rk: Dri   | ill and Stim       | ulate           |   |                                   |  |  |  |
| 12)             |  |   | CASIN     | G AND TUBI         | NG PROGRAM      |   |                                   |  |  |  |
| TYPE            | Processor and a supplication of a department of the supplication o | S                                       | PECIFICAT | IONS               | FOOTAGE IN      | TERVALS   | CEMENT                            |  |  |  |
|                 |  | Size                                    | Grade     | Weight<br>per ft.  | For<br>drilling | Left in (   | Fill-up<br>(cu. ft.)              |  |  |  |
| Conduc          | ctor   | 113/4                                   |           |                    | 20              | 20  | Sanded in                         |  |  |  |
| Fresh           | Water  |   |           |                    |                 |   | oic mily V.                       |  |  |  |
| Coal            |  | 85/8                                    |           | 23#                | 1100            | 1100  | 7138051(18-111)<br>Sitsin -11-2.Q |  |  |  |
| Intern          | nediate  |   |           |                    |                 |   | 100-0411                          |  |  |  |
| Produc          | ction  | 41/2                                    |           | 10.5#              | 5600            | 5600  | 450 sks                           |  |  |  |
| Tubing          | <b>I</b>   |   |           |                    |                 | vanna andre venak kante kente kat ka teks da ka antak ka k |                                   |  |  |  |
| Liners          | 5  |   |           |                    |                 | 101724  | PERWIPS IN                        |  |  |  |
| P <u>ACKE</u> F |  | *************************************** |           |                    |                 |   | Send A E                          |  |  |  |
| 976             | Siz<br>Dep   | es<br>ths set                           |           |                    |                 | DIVISI  | UN 2 8 1987 CON OF OIL & GAS      |  |  |  |
| 20              |  | (-)                                     |           |                    | nd Gas Use      |   | TMENT OF ENERGY                   |  |  |  |
| ДU              | Pee(s) p   | aid:                                    |           | ork Permit         |                 | amation Fund  | 170 ·                             |  |  |  |
| LAOI E          | Plat   | ≠1 WW-9                                 | WW-       | 2B 1/62 B          | sond <u>300</u> | Type)   | 1 Agent                           |  |  |  |

Page 1 of Form WW2-A (09/87) File Copy



DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

| 1) | Date:      | June 17 | 1988  |
|----|------------|---------|-------|
| 2) | Operator's | well nu | ımber |
|    |            | Adams E | 2–55  |

3) API Well No: 47 - 017 - 3653 State - County - Permit

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

|                              | NOTICE AND APPLICATION F  | OR A WELL WORK PERMIT   |
|------------------------------|---|---|
| 4)                           | Surface Owner(s) to be served: (a) Name <u>Jeffrey A. Mills</u> Address   | 5) (a) Coal Operator: Name Address  |
|                              | (b) Name  | (b) Coal Owner(s) with Declaration Name Willis G. Tetrick Address   |
|                              | (c) NameAddress   | NameAddress   |
| 6 )                          | Inspector Mike Underwood  Address Rt. 2 Box 114  Salem, WV 26426  Telephone (304) - 782-1043  | (c) Coal Lessee with Declaration Name Address   |
|                              | TO THE PERSON(S) NAMED AB   | e e   |
| $\frac{X}{Sect}$ I ha        | racts by which I hold the right to Included is the information requirion 8(d) of the Code of West Virgin I certify that as required under Cove served copies of this notice and mpanying documents pages 1 through  X Personal Service (Affidavit a Certified Mail (Postmarked po Publication (Notice of Publication)   | ed by Chapter 22B, Article 1, ia (see page 2) hapter 22B of the West Virginia Code application, a location plat, and on the above named parties, by: ttached) stal receipt attached) ation attached)  |
| fami<br>atta<br>resp<br>is t | I have read and understand Chapter he terms and conditions of any perm I certify under penalty of law that liar with the information submitted chments, and that based on my inquionsible for obtaining the information, accurate, and complete.  I am aware that there are significant to provide the possibility official seal well Operator NOTARY PUBLIC By:  NOTARY PUBLIC BY: President KELLY R. OSBORN | 22B and 38 CSR 11-18, and I agree it issued under this application. t I have personally examined and am on this application form and all ry of those individuals immediately on, I believe that the information ant penalties for submitting false of fine and imprisonment.  Excel Energy, Inc.  H. L. Barnett |
|                              | Bridgeport, W. Va. 26330  | 804) -842-6927  |
| Subs                         | cribed and sworn before me this 17  | day of June, , 19 <u>88</u>   |
| Mv c                         | ommission expires 7-16-96   | New Motary Public   |

017 - 3653- Frac.

Page \_\_\_ of\_\_\_

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

|              |          | <u>UL</u>   | WELI   |                    | IT APPLICAT       |              | <u> </u>            |                          |        |
|--------------|----------|-------------|--|--------------------|-------------------|--------------|---------------------|--------------------------|--------|
| 0 ell Ope    | rator: § | Exploration | on Partne  | SS<br>rs Producin  | € ?<br> q_Company | 14585        | 9                   | 75 <sup>2</sup>          |        |
| 2            |          | Number:     |  |                    |                   |              | evation:            | : 1053                   |        |
| well typ     | e: (a)   | Oil         | /  | or                 | (                 | Bas ×/       | Iss                 | red of                   | 128197 |
|              | (b)      | If Gas:     | Product.   | ion x/ Und<br>eep/ | lerground S1      | Torage       | , Expe              | nes 071                  | 128199 |
| ) Proposed   |          |             |  |                    | 454               |              |                     | Ar <sub>a</sub>          |        |
| ) Proposed   | Total    | Depth: 57   | 801  |                    |                   |              | En                  | VIROND DIVISION          | Ën     |
| ) Approxim   | ate fre  | sh water    | strata de  | pths: 120,         | 210               |              | I                   | vironmental Protect      | tion   |
| ) Approxim   | nate sal | t water d   | epths: N/  | Α /                |                   |              |                     | 7 1000                   | )      |
| ) Approxim   | nate coa | l seam de   | pths: 120  | -23,/210-21        | .4, 700-03        |              | " <del>"</del> C8 ( | amitting<br>of Oil & Gas |        |
| .0) Doses la | and cont | ain seams   | tributar   | y to active        | e mine? Ye        | es / No      |                     | -48                      |        |
| .1) Proposed | l Well W | ork: FRA    | C (RILEY   | , BRADFORD,        | SPEECHLEY         | )            |                     |                          |        |
| .2)          |          | J           | Motive   | o Hell             | ,                 |              |                     |                          |        |
|              |          |             |  |                    | TUBING PROGI      |              |                     |                          |        |
| TYPE         |          | SPEC        | IFICATION<br>T   | S                  | FOOTAGE IN        | TERVALS<br>T | CEMENT              |                          |        |
|              |          | Size        | Grade  | Weight<br>per ft   | For<br>Drilling   | Left in Well | l                   | ill – up<br>cu. ft)      |        |
| Conductor    |          | 11 3/4      |  |                    | 20                | 20           | S                   | anded in                 |        |
| Fresh Wate   | •        |             |  |                    |                   | 1162         | 13                  | BSRIG                    | 11.3   |
| Coal         |          | 8 5/8       |  | 23#                | 1100              | 1100         |                     | ĆTŚ                      |        |
| Intermedia   | Te       |             |  |                    | }                 | 1193         | 3                   | BOSAN                    | 11.02  |
| Production   |          | 4 1/2       |  | 10.5*              | 5600              | 5600         | 7                   | 400 SKS                  |        |
| Tubing       |          | *           |  |                    | -                 |              | 1 5                 | BORK.                    | 311.1  |
| Liners       |          | r           | Control of the contro |                    |                   |              |                     | <u> </u>                 |        |
|              |          |             |  |                    | Chi               | Jan Indi     | 10,0                | M.                       |        |
|              | izes     |             |  |                    |                   | M WW         | AUG 4               |                          |        |
| , D.         | epths se | :t          |  |                    | - 91/1            | V11 * 1      | 1                   |                          |        |

For Division of Oil and Gas Use Only

[ ] Bond \_\_\_

(Type)

] Fee(s) paid: [ ] Well Work Permit [ ] Reclamation Fund

[] Plat [] WW-9 [] WW-2B

[] WPCP [] Agent

Total Form WW2-A (10-91)

RECEIVED M Division of Environmental Protection

JUN 2 8 1996

() home 13, 1996

2) Operator's Well Number E 55 (Adams #1)

3) API Well No: 47-017-3653-F state-county-permit

Permitting Office of Oil & Gas

REFRAC

STATE OF WEST VIRGINIA

DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

### NOTICE AND APPLICATION FOR A WELL WORK PERMIT

Surface owner(s) to be served:

(a) Name Jeffrey A. Mills Address

Rt. 1 Box 345

Salem WV 26426

(b) Name

Address

(c) Name

Address

(b) Coal Owner(s) with Declaration

Name Willis G. Tetrick

5) (a) Coal Operator:

Address PO Box 267

Clarksburg WV 26302

Name Address

Name

Address

6) Inspector Mike Underwood Address Rt. 2 Box 114

Salem WV 26426

Telephone

(c) Coal Lessee with Declaration

Name Address

### 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 page 1 through 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 inquir 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 Exploration Partners Producing Co. By: Ass G. Louis A. Ferrari

Its: Vice President Address: P.O. Box 1245

Bridgeport, WV 26330

Telephone: (304) 842-8777

Subscribed and sworn before me on this 13 day of June, 1996

Ruth Ann Rigdon Suth am Knodon

My commission expires July 29, 2002

Notary Public