

NOTES: LATITUDE, LONGITUDE AND WELL TIES FROM DGPS SUBMETER SURVEY. CORNER TIES FROM MY PLAT DATED 10/19/88 FOR WELL 47-017-03682. SURFACE, BOUNDARY AND ADJOINER INFORMATION TAKEN FROM COURT HOUSE.

NAD 27 WV NORTH SPC:

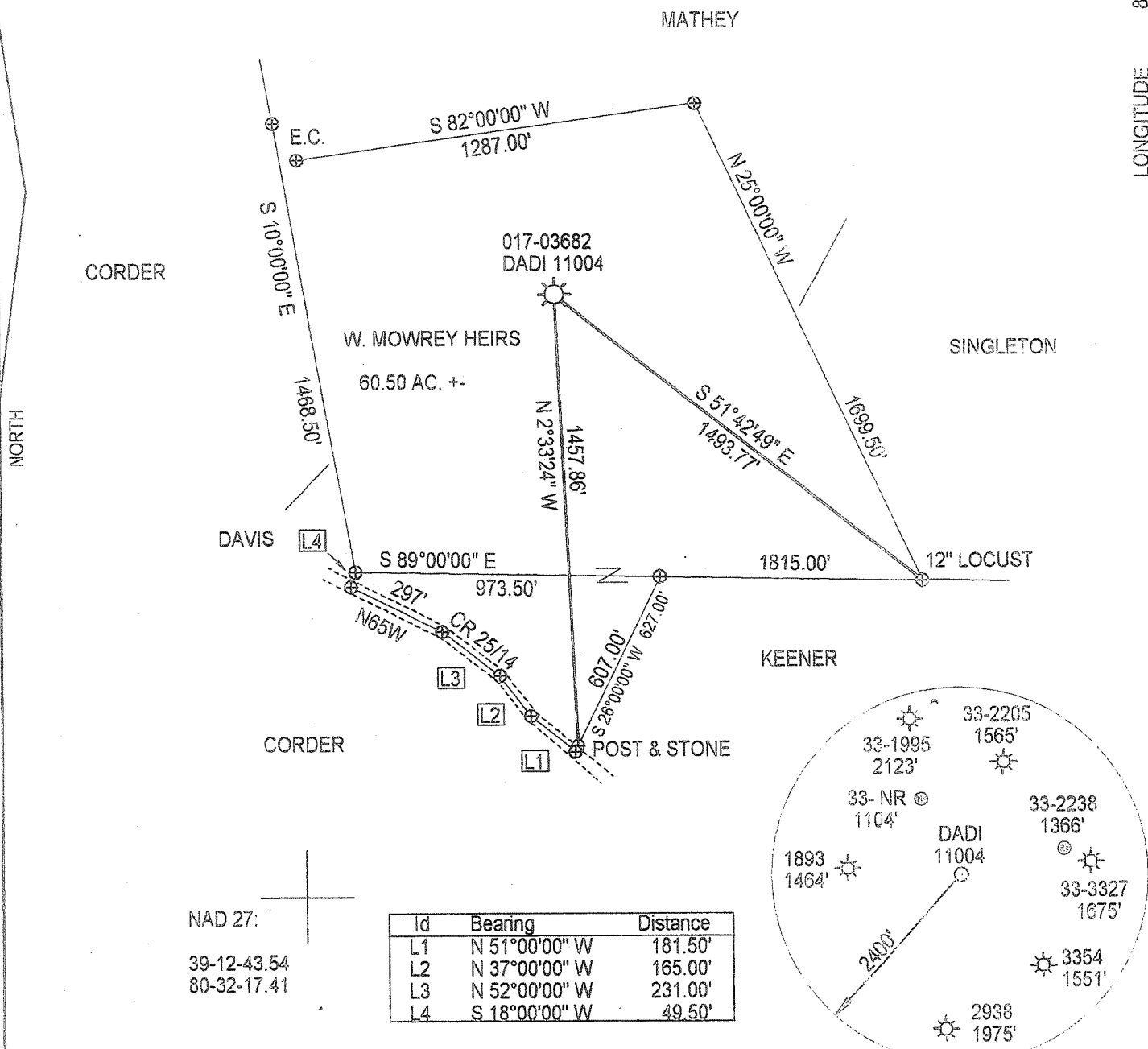
LATITUDE 39-15-00

DADI 11004 = 261,059.16'  
1,705,836.50'

SCALED COOR.:

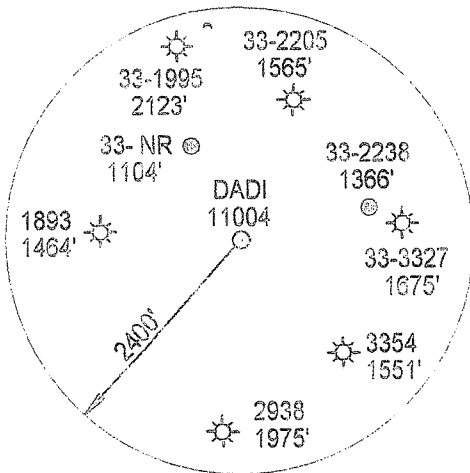
13,680' SOUTH  
10,970' WEST

LONGITUDE 80-30-00



NAD 27:  
39-12-43.54  
80-32-17.41

| Id | Bearing       | Distance |
|----|---------------|----------|
| L1 | N 51°00'00" W | 181.50'  |
| L2 | N 37°00'00" W | 165.00'  |
| L3 | N 52°00'00" W | 231.00'  |
| L4 | S 18°00'00" W | 49.50'   |



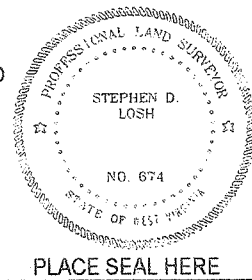
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER: \_\_\_\_\_  
 DRAWING NUMBER: DADI11004.1.PCS  
 SCALE: 1" = 500'  
 MINIMUM DEGREE OF ACCURACY: SUBMETER  
 PROVEN SOURCE OF ELEVATION: DGPS SURVEY  
SUBMETER SURVEY

I THE UNDERSIGNED, HEREBY STATE THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) \_\_\_\_\_

STEPHEN D. LOSH, P.S. #674



STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS  
 #10 McJUNKIN ROAD  
 NITRO, WV 25143-2508

LAND SURVEYING SERVICES  
 21 CEDAR LANE, BRIDGEPORT, WV 26330  
 PHONE: 304-842-2018 OR 842-5762

DATE: APRIL 29, 2009

OPERATORS WELL NO.: DADI 11004

API WELL NO. \_\_\_\_\_

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  CBM   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW  STATE 47 COUNTY 017 PERMIT 03682 F

LOCATION: ELEVATION 1212.95' WATERSHED LAUREL RUN

DISTRICT GREENBRIER COUNTY DODDRIDGE

QUADRANGLE BIG ISAAC LEASE NUMBER \_\_\_\_\_

SURFACE OWNER THELMA J. KEENER ACREAGE 59.50 (12-02)

OIL & GAS ROYALTY OWNER WILLIAM MOWREY HEIRS LEASE ACREAGE 60.50

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE (SPECIFY) \_\_\_\_\_

PLUG & ABANDON  CLEAN OUT & REPLUG

TARGET FORMATION Gordon, Lower Maxton ESTIMATED DEPTH 2670

WELL OPERATOR DOMINION EXPLORATION & PRODUCTION, INC. DESIGNATED AGENT RODNEY BIGGS

ADDRESS P. O. BOX 1248 JANE LEW, WV 26378 ADDRESS P. O. BOX 1248 JANE LEW, WV 26378

COUNTY NAME PERMIT

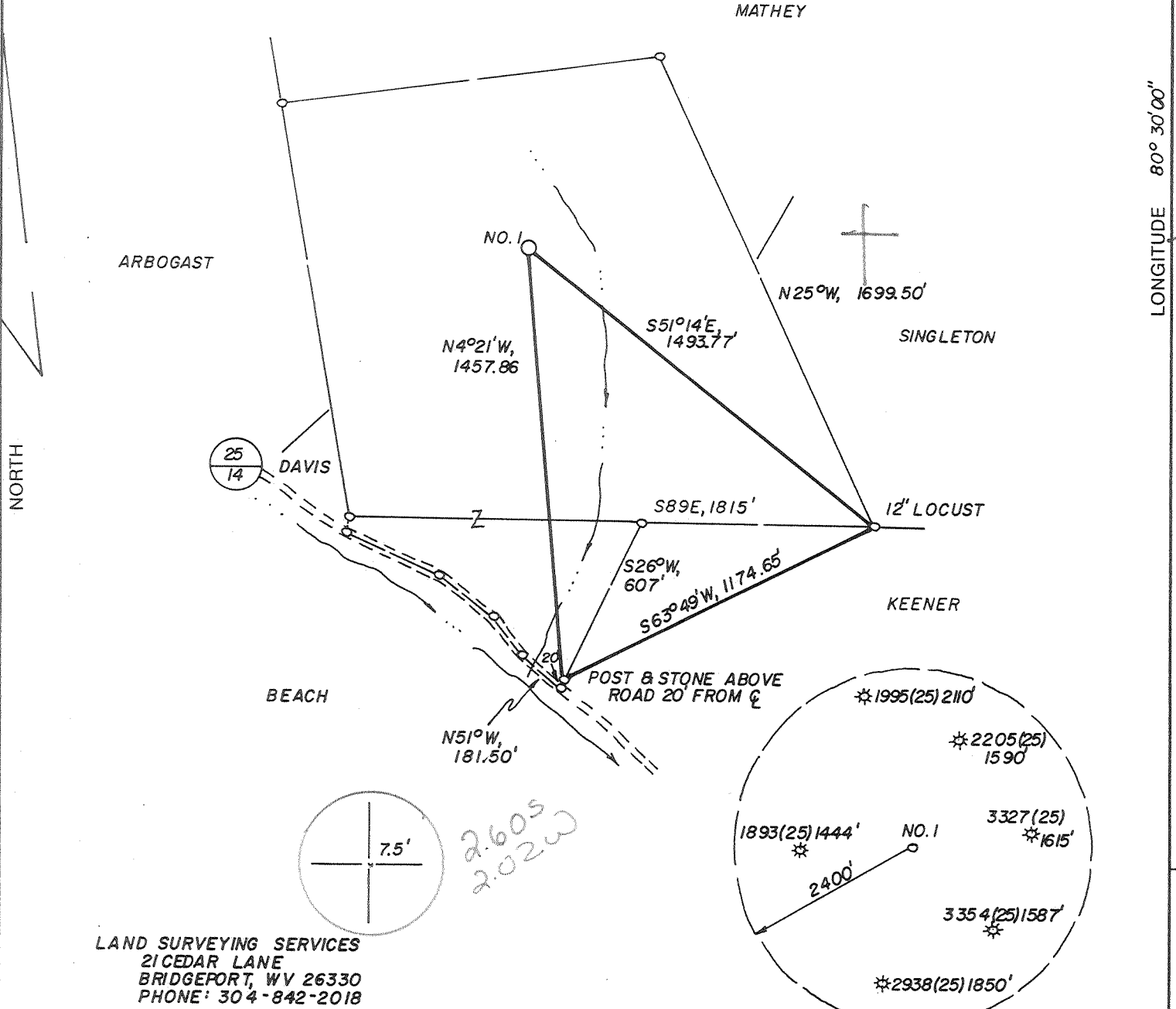
Dodd 3082 F

Big Isaac 6-6

JUL 17 2009

WELL REFERENCES:  
S11°E, 161' TO 16" ELM  
N44°W, 155' TO 8" HICKORY

*Janice 11/28/88*



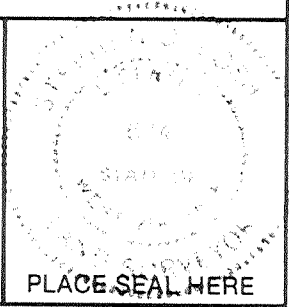
LAND SURVEYING SERVICES  
21 CEDAR LANE  
BRIDGEPORT, WV 26330  
PHONE: 304-842-2018

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1 IN 200  
PROVEN SOURCE OF ELEVATION B.M. 3030' SE OF LOC.  
AT ELEV. 1016'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) \_\_\_\_\_  
R.P.E. \_\_\_\_\_ L.L.S. NO. 674  
STEPHEN D. LOSH



PLACE SEAL HERE

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE OCT. 19, 19 88  
OPERATOR'S WELL NO. MOWREY 1  
API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X

LOCATION: ELEVATION 1200' WATER SHED LAUREL RUN  
DISTRICT GREENBRIER 4 COUNTY DODDRIDGE

QUADRANGLE BIG ISAAC 7.5' 252 123 3 VADIS NE  
SURFACE OWNER WM. J. KEENER ACREAGE 54.

OIL & GAS ROYALTY OWNER WM. MOWREY HEIRS LEASE ACREAGE 60.50  
LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5450'

WELL OPERATOR STONEWALL GAS CO. DESIGNATED AGENT CHARLES CANFIELD  
ADDRESS P.O. DRAWER R ADDRESS P.O. DRAWER R  
JANE LEW, WV 26378-0080 845 JANE LEW, WV 26378-0080

DEC 2 1988

LONGITUDE 80° 30' 00"

13780'

COUNTY NAME

PERMIT

FORM WW-6  
H.T. HALL 48673

*6-6 Big Isaac (147)*

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: Dec 08 2009  
API No: 47-017-03682F  
Lease No:

Farm Name: KEENER, WILLIAM J. Operator Well No. 11004 (Mowrey 1-392-S)  
Rework

LOCATION: Elevation: 1212.95' Quadrangle: Big Isaac

District: Greenbrier County: Doddridge

Latitude: 13,680 Feet South of: 39 Deg. 15 Min. 00 Sec.  
Longitude: 10,970 Feet West of: 80 Deg. 30 Min. 00 Sec.

Company: Dominion Appalachian Development, Inc.

|  | Casing and Tubing | Used in drilling | Left in well       | Cement fill up Cu. Ft. |
|--|-------------------|------------------|--------------------|------------------------|
| Address: <u>P.O. Box 1248</u><br><u>Jane Lew, WV 26378</u>   |                   |                  |                    |                        |
| Agent: <u>Rodney J. Biggs</u>  |                   |                  |                    |                        |
| Inspector: <u>Dave Scranage</u>  |                   |                  |                    |                        |
| Date Permit Issued: <u>7/14/2009</u>   |                   |                  |                    |                        |
| Date Well Work Commenced: <u>9/17/2009</u>   |                   |                  |                    |                        |
| Date Well Work Completed: <u>9/21/2009</u>   |                   |                  |                    |                        |
| Verbal Plugging:   |                   | <u>See</u>       | <u>Previous</u>    | <u>WR-35 for</u>       |
| Date Permission granted on:  |                   | <u>existing</u>  | <u>Casing prog</u> |                        |
| Rotary <input type="checkbox"/> Cable <input checked="" type="checkbox"/> X Rig <input type="checkbox"/> |                   |                  |                    |                        |
| Total Depth (feet):  |                   |                  |                    |                        |
| Fresh Water Depth (ft.): <u>N/A</u>  |                   |                  |                    |                        |
| Salt Water Depth (ft.): <u>N/A</u>   |                   |                  |                    |                        |
| Is coal being mined in area (N/Y)?: <u>No</u>  |                   |                  |                    |                        |
| Coal Depths (ft.): <u>N/A</u>  |                   |                  |                    |                        |
| Oil Depths (ft.): <u>N/A</u>   |                   |                  |                    |                        |

OPEN FLOW DATA

| Producing formation                               | MAXTON                                   | 1893'-1923'                           |
|---|--|---------------------------------------|
| Gas: Initial open flow                            | <u>vapor</u> MCF/d                       | Oil: Initial open flow <u>0</u> Bbl/d |
| Final open flow                                   | <u>17</u> MCF/d                          | Final open flow <u>0</u> Bbl/d        |
| Time of open flow between initial and final tests |  | <u>12</u> Hours                       |
| Static rock Pressure                              | <u>150</u> psig (surface pressure) after | <u>12</u> Hours                       |

| Second Producing formation                                  | Pay zone depth (ft)                   |
|---|---------------------------------------|
| Gas: Initial open flow <u>*</u> MCF/d                       | Oil: Initial open flow <u>*</u> Bbl/d |
| Final open flow <u>*</u> MCF/d                              | Final open flow <u>*</u> Bbl/d        |
| Time of open flow between initial and final tests <u>*</u>  |                                       |
| Static rock Pressure <u>*</u> psig (surface pressure) after |                                       |

\* **COMMINGLED WITH PREVIOUS FORMATIONS**

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 COALS ENCOUNTERED BY THE WELLBORE.

Signed: \_\_\_\_\_  
By: Rodney J. Biggs  
Date: \_\_\_\_\_

**RECEIVED**  
Office of Oil & Gas  
DEC 9 2009  
WV Department of  
Environmental Protection

WR-35

Rev (5-01)

Page 2 of 2

**WELL: 11004 (Mowrey 1-392-S) Rework DADI**

9/21/2009 GORDON, 2684'-2730', 16 HOLES, BD 1775#, AVG RATE 18 BPM, AVG PRESS 1860#,  
280 BBLs, TOT SAND 17,000#, ISIP 1750#, FG 1.07 PSIF/FT  
MAXTON, 1893'-1923', 40 HOLES, BD - N/A, AVG RATE 9.5 BPM, AVG PRESS 3015#,  
296 BBLs, TOT SAND 15,000#, ISIP 1860#, FG 1.39 PSIF/FT

01/08/2010

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

Well Operator's Report of Well Work

Farm name: KEENER, WILLIAM J. Operator Well No.: MOWREY 1-392-S

LOCATION: Elevation: 1200.00 Quadrange: BIG ISAAC

District: GREENBRIER County: DODDRIDGE  
Latitude: 13780 Feet South of 39 Deg. 15Min. 0 Sec.  
Longitude 10790 Feet West of 80 Deg. 30 Min. 0 Sec.

Company: STONEWALL GAS CO.

P. O. BOX 1575  
RICHMOND, VA

Asent: CHARLES W. CANFIELD

Inspector: MIKE UNDERWOOD

Permit Issued: 12/01/88

Well work Commenced: 03-03-89

Well work Completed: 03-08-89

Verbal Plussings

Permission granted on: \_\_\_\_\_

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

Total Depth (feet) \_\_\_\_\_

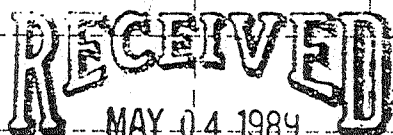
Fresh water depths (ft) 70'

Salt water depths (ft) 1520'

Is coal being mined in area (Y/N)? N

Coal Depths (ft): N/A

| Size   | Casing & Tubing | Used in Drillings | Left in Well | Cement Fill Up (Cu. Ft.) |
|--------|-----------------|-------------------|--------------|--------------------------|
| 11 3/4 |                 | 218'              | 218'         | 105 Sks                  |
| 8 5/8  |                 | 1662'             | 1662'        | 360 Sks                  |
| 4 1/2  |                 | 5412'             | 5412'        | 480 Sks                  |



OPEN FLOW DATA

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Producing formation: Alexander Pay zone depth (ft) 5260'

Gas: Initial open flow 41 MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 1,100M MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests 1 Hours

Static rock Pressure 1,600 psig (surface pressure) after 48 Hours

Second producing formation: Benson Pay zone depth (ft) 4920'

Gas: Initial open flow 41 MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 1,100M MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests 1 Hours

Static rock Pressure 1,600 psig (surface pressure) after 48 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.

MAY 5 1989

For: STONEWALL GAS CO.

By: *Brian A. Hunt* PRESIDENT

Date: May 2, 1989

FRAC DATE

STAGES

| PERFS                  | HOLE | BBL | SAND    | BD    | ISIP  |
|------------------------|------|-----|---------|-------|-------|
| ALEX<br>5262' to 70'   | 16   | 700 | 60,000# | 2188# | 1629# |
| BENSON<br>4912' to 26' | 20   | 800 | 70,000# | 2672# | 1799# |

| FORMATION      | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS                                   |
|----------------|-------|--------------|----------|-------------|---|
| File           | Red   | Soft         | 0'       | 25'         | Hole Damp 70'                             |
| Shale          | Red   | Soft         | 25'      | 180'        | 1 1/2" Stream H <sub>2</sub> O 200'       |
| Red Rock/Shale | Red   | Soft         | 180'     | 580'        | Hole Damp 680'                            |
| Sand/Shale     | Gray  | Soft         | 580'     | 1,340'      |   |
| R. R. Sand     | Red   | Soft         | 1,340'   | 1,940'      | Gas @ 2,986'<br>No Show                   |
| Big Lime       | Gray  | Hard         | 1,940'   | 2,020'      |   |
| Big Injun      | Gray  | Hard         | 2,020'   | 2,100'      | Gas @ 3,849'<br>6/10 1" H <sub>2</sub> O  |
| Shale          | Gray  | Soft         | 2,100'   | 2,560'      |   |
| Gordon         | Gray  | Soft         | 2,560'   | 2,720'      | Gas @ 4,525'<br>4/10 1" H <sub>2</sub> O  |
| Sand/Shale     | Gray  | Soft         | 2,720'   | 2,870'      |   |
| 5th Sand       | Gray  | Soft         | 2,870'   | 2,920'      | Gas @ 5,450'<br>12/10 1" H <sub>2</sub> O |
| Shale          | Gray  | Soft         | 2,920'   | 3,420'      |   |
| Speechley      | Gray  | Soft         | 3,420'   | 3,600'      | Gas @ TD 6/10<br>1" H <sub>2</sub> O      |
| Shale          | Gray  | Soft         | 3,600'   | 3,700'      |   |
| Balltown       | Gray  | Soft         | 3,700'   | 3,870'      |   |
| Shale          | Gray  | Soft         | 3,870'   | 4,880'      |   |
| Benson         | Brown | Soft         | 4,880'   | 4,940'      |   |
| Shale          | Gray  | Soft         | 4,940'   | 5,130'      |   |
| Alexander      | Brown | Soft         | 5,130'   | 5,300'      |   |
|                |       |              | TD       | 5,450'      |   |

**RECEIVED**  
MAY 04 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

MAY 5 1989

*Handwritten initials*

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

- 1) Well Operator: STONEWALL GAS COMPANY *47850, 4252*
- 2) Operator's Well Number: MOWREY #1 (392-S) 3) Elevation: 1200'
- 4) Well type: (a) Oil \_\_\_ / or Gas X /  
(b) If Gas: Production X / Underground Storage \_\_\_ /  
Deep \_\_\_ / Shallow X /
- 5) Proposed Target Formation(s): ALEXANDER
- 6) Proposed Total Depth: 5450 feet
- 7) Approximate fresh water strata depths: 175', 273'
- 8) Approximate salt water depths: 1580'
- 9) Approximate coal seam depths: 921'-925', 1103'-1106', 323'-325', 380-385', 650'-653', 738'-741'
- 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 | Fill-up (cu. ft.)          |
| Conductor    | 11 3/4         | ERW   | 42#               | 200          | 200          | 38 CSR<br>18-11.3          |
| Fresh Water  |                |       |                   |              |              | 38 CSR 18-11.2.2<br>M.O. 1 |
| Coal         |                |       |                   |              |              |                            |
| Intermediate | 8 5/8          | ERW   | 23#               | 1650         | 1650         | 38 CSR<br>18-11.3          |
| Production   | 4 1/2          | ERW   | 10.5#             | 5450         | 5450         | 38 CSR<br>18-11.1          |
| Tubing       |                |       |                   |              |              |                            |
| Liners       |                |       |                   |              |              |                            |

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

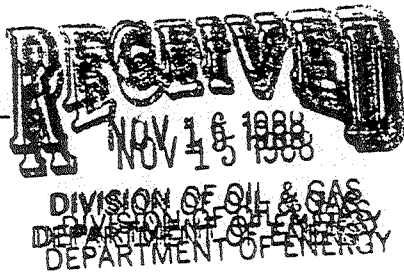
**RECEIVED**  
 NOV 15 1988

For Division of Oil and Gas Use Only  
 DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

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

Plat *[Signature]* WW-9 *[Signature]* WW-2B *[Signature]* Bond *50 Blanket* *[Signature]* Agent *[Signature]*

(Type)



1) Date: NOVEMBER 4, 1988  
2) Operator's well number  
MOWREY #1 392-S  
3) API Well No: 47 - 017 - 3682  
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 WILLIAM J. KEENER  
Address RT 3, BOX 83  
SALEM, WV 26426

(b) Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_

(b) Coal Owner(s) with Declaration  
Name EASTERN ASSOCIATED CORP.  
Address ONE PPG PLACE  
PITTSBURGH, PA 15222

Name \_\_\_\_\_  
Address \_\_\_\_\_

6) Inspector MIKE UNDERWOOD  
Address RT 2, BOX 135  
SALEM, WV 26426  
Telephone (304)- 782-1043

(c) Coal Lessee with Declaration  
Name NA  
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 pages 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 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 STONEWALL GAS COMPANY  
By: [Signature]  
Its: PRESIDENT  
Address PO DRAWER R  
JANE LEW, WV 26378-0080  
Telephone 304-884-7881

Subscribed and sworn before me this 7 day of NOVEMBER, 19 88

[Signature]

My commission expires OCTOBER 14, 1993

~~XXXXXXXXXXXX~~  
COMMISSIONER