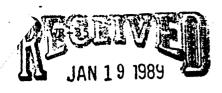


28-APR-88 API # 47- 61-00845



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

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

| - IIII IIIII. | KIDENOUK, WILLARD & CAR | OL Operato | r Well No.: | RIDENOUR | . 2 | | |
|--|--------------------------|----------------|--------------|--------------|---------------|--|--|
| LOCATION: | Elevation: 1130.00 | uadrangle: | MORGANTOLBI | NODTU | | | |
| | District: UNION | | County: MON | | | | |
| | Latitude: 12700 Feet S | South of 39 | Dec 45Ms | ONGALIA | | | |
| | Longitude: 8400 Feet W | Vest of 70 | Deg. 45M1 | n. U Sec | • | | |
| | -ongrede. Odoo reel w | est of /9 | Deg. 32M1 | n. 30 Sec | • | | |
| COMPANY: NO | UMENON CORPORATION, a WV | | | | | | |
| P. | 0. Box 842 | | Used in | ! left | Cement | | |
| Mo | rgantown, WV 26507-0842 | | | | Fill Up | | |
| | • | | Drilling | i in Well | terr ob! | | |
| AGENT: STE | PHAN K. SHUMAN | ! | | , IN WEIL | Cu. Ft.; | | |
| | • | Size | į | | | | |
| Inspector: | DONALD ELLIS | ! | 1 | 1 1 | i i | | |
| | ed: 09/14/87 | 11 3/4" | ! ! 40! | ' ' 40' | i i | | |
| | ommenced: 09/14/87 | ! | 1 40 | 1 40 | i | | |
| Well Work C | ompleted: 09/24/87 | | 1 | 1 | ; | | |
| Verbal Plug | | ! ! 8 5/8!! | 1076' | i ! 1076! | i i | | |
| | granted on:n/a | 1 | 1076 | 10/6 | ; cts ; | | |
| Rotary x C | able Rig | | | | ; | | |
| | (feet) 2703' | 4 1/2" | ! ! | | i 215 sks | | |
| | depths (ft) 965 | ! | , | 2234 | ;213 sks; | | |
| | | | | | ; | | |
| Salt water | depths (ft)n/a | | 1 1 | | | | |
| | | ! | i | i | j | | |
| Is coal bein | ng mined in area (y/n)?n | | ! | | i | | |
| Coal Depths | (ft): 415,600,673 | - ! | <u> </u> | i I | i ! | | |
| | | - ! | | · | i | | |
| OPEN FLOW DA | ATE | • | | | | | |
| Product | ing Formation_Squaw | | Pay zone | depth (f | Fr) 1615! | | |
| Gas: In | nitial open flow 35 MG | CF/d Oil: Ir | nitial open | flow | Rb1/4 | | |
| F | inal open flow 40 Mo | CF/d Fi | nal open fl | OW | Bb1/d | | |
| T | ime of open flow between | initial and | i final test | e 48 | Цония | | |
| Static | rock Pressure 340 ps | sig (surface | pressure) | after 12 | Hours | | |
| | | | | | | | |
| Second | producing Formation Big | Injun | Pay zone | depth (f | t) 1490 | | |
| Second producing Formation Big Injun Pay zone depth (ft) 1490 Gas: Initial open flow MCF/d Oil: Initial open flow Bb1/d | | | | | | | |
| Fi | inal open flowM(| CF/d Fi | nal open fl | ow | Bb1/d | | |
| Ti | ime of open flow between | initial and | final test | .s | Hours | | |
| Static | rock Pressureps | sig (surface | pressure) | after | Hours | | |
| Note: | Above information is a | composite of | both pay z | ones. | | | |
| MOME ON T | | | • | | | | |
| NOTE: ON BA | ACK OF THIS FORM PUT THE | FOLLOWING: | 1). DETA | ILS OF PE | RFORATED | | |
| THERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE ETC. 2) THE UELL | | | | | | | |
| LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS | | | | | | | |
| INCLUDING COAL ENCOUNTERED BY THE WELLBORE. | | | | | | | |
| | P 110111 | | | | | | |
| | | ON CORPORAT | | _ | | | |
| By: | | | | | | | |
| Data. Ta // 1200 | | | | | | | |
| | Date:_ | - AN 16, | 1989 | | _ | | |

| Shale | 1993 | : | 2026 ! | |
|--------------|------|---|--------|--------------------|
| Thirty Foot | 2026 | Ì | 2071 | |
| Shale | 2071 | ì | 2160 | |
| Gordon | 2160 | į | 2180 | Strong Show of Gas |
| Shale | 2180 | i | 2258 ! | oriong blow of Gas |
| Fourth | 2258 | i | 2267 | |
| Shale | 2267 | i | 2382 | |
| Fifth "A" | 2382 | i | 2407 | |
| Shale | 2407 | i | 2426 | |
| Fifth | 2426 | i | 2472 | |
| Shale | 2472 | i | 2510 | |
| Bayard | 2510 | i | 2525 | |
| Shale | 2525 | i | 2540 | |
| Elizabeth | 2540 | i | 2558 | |
| Base of Sand | 2558 | i | | |
| TD (Logger) | 2690 | į | i | |



DIVISION OF OIL & GAS DEPARTMENT OF ENERGY





| 1) | Date:Sep | , 87 | | |
|----|------------------------|-------|---------|--------|
| 2) | Operator's Well No. | Riden | our No. | 2 |
| 3) | API Well No. | 47 | 061 | 0845 |
| • | | State | County | Permit |

DIVISION OF OIL & GAS DEPARTMENT OF ENERBY

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

APPLICATION FOR A WELL WORK PERMIT

| | | | | | | | | | |
|--------------------|--------------|--------------|--|--|------------|--|---|---------------------------------------|--|
| 4) WELL TY | PE: A C | oil | / G | as <u> </u> | | | | | X |
| | B (1 | If "Gas", | Productio | _ | | | storage | | _/ Shallow/)/ |
| 5) LOCATIO | | evation: _ | | | | | | | gahela River 🧚 |
| | | | Unio | | | | Monongalia | <i>Olo</i> Quadrangle: M | lorgantown, WV 1 |
| 6) WELL OP | | | | | _ COI | DE: <u>3/47/0</u> | 7) DESIGNATED | AGENT Steph | en K. Shuman-Pi |
| Address | | | ox 84 | | | | Address | 256 High | Street |
| | M | organ | town. | WV | 2650 | 5 | | _ Morgantow | n, WV 26505 |
| 8) OIL & GA | S INSPEC | TOR TO | BE NOTI | FIED | | | 9) DRILLING CO | ONTRACTOR: | |
| Name | Dona | ald E | llis | | | · | Name | Putnam Dr | illing |
| Addres | s 261 | 04 Cr | ahapp | le I | ane | | Address | _P. O. Box | 465 |
| | Fa | irmon | t, WV | 265 | 54 | | • | _Marietta, | Ohio 45750 |
| 10) PROPOSE | ED WELL | WORK: | Drill | X | / Drill | deeper | / Redrill | / Stimulate | |
| · | | | Plug of | ff old f | ormatio | n/ Perfor | ate new formation | / | |
| | | | Other p | hysical | change i | n well (specify) | | | |
| 11) GEOLOG | ICAL TAR | GET FOR | MATION | ! | Baya | rd Sand 🛩 | 2 | | |
| 12) Estima | | | | | | feet | | | |
| 13) Appro | | | | 7 0 0 | | feet; salt | | feet. | |
| 14) Appro | oximate coa | ıl seam der | oths: | . 60 | 0 | Is co | al being mined in the | area? Yes | / No/ |
| 15) CASING | AND TUB | ING PRO | GRAM | | | | - | | |
| CASING OR | H | SPEC | CIFICATION | s | , | FOOTAGE! | INTERVALS | 1 CEMENT FILLUP | l packers |
| TUBING TYPE | Size | Grade | Weight per ft. | New | Used | For drilling | Left in well | OR SACKS (Cubic feet) | , |
| Conductor | 11 3 | t | 42 | X | D360 | 30' | | (Cabic reet) | Kinds |
| Fresh water | #==- | 1 | 1 34 | | | | ` | | Killys |
| Coal | 1 | | | | | | *************************************** | | Sizes |
| | 0 5 // | J- | 55 23 | | | 1035' | 1035' | CTS KK | 200.5010-113 |
| Intermediate | | 7 | $\frac{15}{5}$ $\frac{23}{10}$ | F | | 1033. | | | Deptits 4 (SR 18-11.2. |
| Production | #4_1/ | 4" K= | 72 10 | 1 5 X | | | 2700' | 1500' | 20000 L |
| Tubing | # | | | | | | | | 3000K/3~111 |
| Liners | | | | } | | | | | Perforations: |
| | # | | + | | | | | | Top Bottom |
| | - | ļ | | | | | | 1 | |
| | Д | l | J | <u>!</u> | Í | | | И | |
| | / | | | , | | | | | |
| | | | | | | OFFICE USE | ONIT W | · · · · · · · · · · · · · · · · · · · | |
| | | | | - | | | | · · · · · · · · · · · · · · · · · · · | |
| | | | | | | DRILLING PE | JKIVII I | | <u></u> |
| Permit number_ | 47-0 | 61-084 | <u>.5</u> | | | | | September | 14 19 87 |
| | | | | | | | | Dat | e |
| This permit cove | ering the w | ell operate | or and we | l locatio | n show | below is evidence | of permission grante | ed to drill in accordan | ce with the pertinent legal re- |
| quirements subj | ect to the c | onditions | contained | herein a | ind on th | ie reverse hereof No | lification must be given the w | ven to the District Oil | and Gas Inspector, (Refer to tractor shall notify the proper |
| district oil and g | as inspecto | or 24 hour | s before a | ons and ctual pe | rmitted v | any permitted work, work has commence | d.) | en operator or his con | tractor snan notify the proper |
| The permitted w | ork is as d | ecoribed in | the Notic | e and A | nnlicatio | on plat and reclam | ation plan subject t | o any modifications a | nd conditions specified on the |
| reverse hereof. | OIK IS AS U | escribed ii | i the Notic | c and A | ррпсан | on, plat, and reclaim | ation plan, subject t | o any mounications a | nd conditions specified on the |
| Permit expires | Sept | ember | 14, 19 | 89 | | unless wel | work is commenced | prior to that date and | prosecuted with due diligence. |
| | | | | | | | | | |
| | | | | <u> </u> | | | | | • |
| Bond: | Agent | · N | lat: | Casi | ng | Fee WWF | \\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Other | 1 |
| | | () | (X) 1 | W. | Ø | \mathcal{D} | I Upor L | | 0 1 |
| <u> </u> | | | | 70 | <u> </u> | 302 | 1/ | -// 11/ | |
| | | · | | U | 10 | , = = - | 1/2/1 | to the | to |
| NOTE: Keep o | one copy of | f this pern | nit posted | at the d | rilling lo | cation. | irector, Div | ision of Oil | and Gas |
| • | | - | | | | D | LICELOW, DIV | 1010101 011 | File |

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

6/201