

MURPHY

50



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

Oil and Gas Division WELL RECORD 2

Quadrangle Big Isaac Permit No. 47-017-2449

OIL & GAS DIVISION DEFT. OF MINES

| Rotary_^ | Oil |
|-------------|--|
| Cable | Cas (E) |
| Recycling | Comb. |
| Water Flood | Storage |
| Disposal | (Kind) |
| | to the same or come the graph with another to the same of the same |

| | and the second s | and have a first contract of the contract of t | | |
|---|--|--|--|---------------------------------|
| Company Appalachian Energy, Inc. d/b/a LDR Address 728 Washington Road, Pgh, PA 15228 Farm Forest J. Swisher Acres 78 | Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu ft. (Sks.) |
| Location (waters) Spring Run Well No. 1 A-E-94 Elev. 1410 District New Milton County Doddridge | Size 20-16 Cond. | | | |
| The surface of tract is owned in fee by Lonnie J & Janice L. Bennett | 13-10" 9 5/8 | Marithian in an indiana and an india | | |
| Address Lost Creek, WV 26385 | 8 5/8 | 1441 | 1441 | 320 Cks. |
| Mineral rights are owned by Same as above | 7 | | | |
| Address | 5 1/2 | | | |
| Drilling Commenced 7/19/79 | 4 1/2 | 5821 | 5821 | 420 Sks. |
| Drilling Completed 7/28/79 | 3 | | | |
| Initial open flow25 M cu. ft bbls. | 2 | | | |
| Final production 380 M cu. ft per day bbls. | Liners Used | man en man en man en de la serie de desirie de man en | The state of the s | |
| Well open 72 hrs. before test 1480 RP. | | | | |

| Well treatment | details: | | Attach copy | of cen | enting reco | rđ. |
|----------------|----------------------|---|-------------|---------------------------------------|-------------|---------------------|
| | | | | | | Stimulation Record: |
| Date: | Interval Perforated: | From | To | Amt. | Fluid | Amt. Sand |
| | | 5531 | 5569 | 525 | BBLS | 50,000# |
| | | 5221 | 5364 | 525 | BBLS | 50,000# |
| | | 4715 | 4214 | 534 | RBLS | 40,000# |
| | | Martin et av 1980 i i i i i i i i i i i i i i i i i i i | | · · · · · · · · · · · · · · · · · · · | | |

Coal was encountered at .. Fee1_ Inches Fresh water 1730' _Feet _ _ Salt Water_ Depth 4220, 5229, 5560 Producing Sand Balltown, Benson, Alox

| Formation Color Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|------------------------------|----------|-------------|-------------------|--|
| Substructure | 0 | 5 | | na ana ana ana ana ana ana ana ana ana |
| Red Rock | 5 | 15 | | |
| Sand & Shale | 15 | 39 | | |
| Sandy Shale | 39 | 165 | | |
| Sand | 165 | 240 | | |
| Coal | 240 | 243 | | |
| Sand | 243 | 260 | , | |
| White Sand | 260 | 311 | | |
| Sand & Shale | 311 | 560 | | |
| White Sand | 560 | 590 | , | |
| Sand & Shale | 590 | 655 | | |
| Red Rock | 655 | 690 | | |
| Sand & Shale | 690 | 750 | | |
| Sand, Shale & Red Rock | 750 | 1230 | | |
| Shale | 1230 | 1277 | | |
| Sand | 1277 | 1308 | | |
| Sand & Shale | 1308 | 1463 | | |
| Sand | 1463 | 1495 | | |
| Shale | 1495 | 1720 | | |
| Sand | 1720 | 1780 | | |
| Sand & Shale | 1780 | 1845 | | * *** |
| Red Rock & Shale | 1845 | 2285 | | est. |
| Sand & Shale | 2285 | 2339 | | |
| Sand | 2339 | 2496 | | |

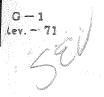
(over)

* Indicates Flectric Log tops in the remarks section.

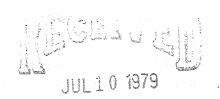
5702 5750 45 2 EXPL FT. 1980-API

| Sand S. Statle 2845 2845 2900 2903 2903 2904 2903 2903 3775 3945 4215 3946 4323 3946 4323 3947 3948 3948 4461 4523 4461 4523 4855 3946 4461 4523 4855 3946 4855 3946 4855 3946 4855 3946 4855 3946 4855 3946 4855 3946 3946 3947 3948 | Formation Color | Hard or Soft | Top Feet 2 | Bottom Feet | Oil Gus or Water Remores |
|---|---|--------------|--|--|---|
| Specialcy 3650 3679 1011 roun 4220 4246 1011 roun 4220 4745 1018 roun 4220 4220 4245 1018 roun 4220 | Sandy Shale Sand & Shale Shale Sand & Shale Shale Sand & Shale | | 2845 2900 2963 3775 3945 4215 4340 4390 4461 4523 4835 5230 5250 | 2900 2963 3775 3945 4215 4340 4390 4461 4523 4835 5230 5250 5514 5744 | Gas @ 3058' 3341', 3520' Gas @ 3837' Gas @ 4057' Gas @ 4366' Gas @ 4644' Gas @ 4923' Gas @ 5265', 5483 |
| | Ball own Bradford Benson Alexander | | 4220 4722 5218 5546 | 5230 5573 5702 | |
| | | | | | |
| | | | | | |

APPROVED Compe







Oil and Gas Division

OIL & GAS DIVISION DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

| TO THE DEPARTMENT OF MINES, | | | | and the second of the second o |
|---|--------------------------------------|------------|---|--|
| Charleston, W. Va. | DAT | E | July 2, 1979 | egide (a. 1.2. a. |
| Surface Owner Lonnie J. & Janice L. Benn | ett,et uxcom | pany_ | Appalachian En | ergy, Inc. D/B/A LDR |
| Lost Creek, WV 26385 | | | | Read, Pgh., PA 15228 |
| Mineral Owner Same as above | Farm | Fo | rest J. Swisher | Acres 78 |
| | | | (waters) Spring | |
| Coal Owner Eastern Associated Coa | 7 0 | | | Elevation 1410 |
| Address Koppers Building, Pgh., PA 1521 | ^ | | | County Doddridge |
| KXXXXXXXXXX Attention: Mike Eddy | | | Big Isaac 7½ | |
| XXXXXXX | | | | |
| THIS PERMIT MUST BE POSTED AT THE WELL SITE | | | | • |
| All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved | | | | |
| for drilling . This permit shall expire if | INSPECT | | FIED Paul Garr | ett |
| operations have not commenced by 3-11-80 | | | | |
| tel + 1 All | ADDRESS | C1 | arksburg, WV 2 | 6301 |
| Deputy Director - Oil & Gas Division | PHONE _ | (304 |) 622-3871 | |
| GENTLEMEN: | | | | |
| • | | | | |
| The undersigned well operator is entitled to drill | upon the above r | nameo | d farm or tract of lar | nd for oil and gas, having fee |
| title thereto, (or as the case may be) under grant of Swisher . Clarence W. Mut | r lease dated <u> </u> | Jury | 19, 19 | by Forest G. |
| made to | 02 | and r | ecorded on the | 13th day of June |
| 19 <u>77</u> in <u>Doddridge</u> County, Book <u>1</u> | _ | | | |
| NEW WELLDRILL DEEP | ER | RED | RILLFR | ACTURE OR STIMULATE |
| OIL AND GAS WELL ORIGINALLY I | | | | |
| | | | | |
| The enclosed plat was prepared by a registered er have been notified as of the above date. | ngineer or license | d lan | d surveyor and all o | coal owners and/or operators |
| The above would not a work and the state of | | | | |
| The above named coal owners and/or operator are to make by Section 3 of the Code, must be received | hereby notified to by, or filed with | that a | any objection they w Department of Mines | ish to make, or are required within ten (10) days. * |
| Copies of this notice and the enclosed plat were m | | | | |
| or coal owners at their above shown respective addre | essThis | | dav | before or on the |
| same day with the mailing or delivery of this copy to | the Department | of M | lines at Charleston, V | Vest Virginia. |
| DI PAGE CIMILITA CODING OF ALL | Very tru | ly yo | ours, | $\rightarrow 0$ Ω_2 |
| PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: | (Sign Na | mel | Horal | K. Karahle. |
| obot mibionii boob bindoidi 10. | (2-81-1-1 | .,, | Well Opera | ator |
| WEST VIRGINIA GEOLOGICAL AND | | | 728 Washington | Road |
| ECONOMIC SURVEY | Address | - | Street | |
| P. O. BOX 879 | of Vell Operator | | Pittchurch | |
| MEDI VINGINIA ZOJOJ | operator | | Pittsburgh City or Town | n |
| AC-304 - 292-6331 | | | - | |
| | | | Pennsylvania | 15228 |
| | | Williamsta | Pennsylvania State | 15228 |

*SECTION 3.... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

THIS IS AN ESTIMATE ONLY . ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

| PROPOSED WORK ORDER TO | X DRILL | DEEPEN FR | ACTIBE STIMIL ATE | | | |
|--|---------------------------------|--|------------------------------------|--|--|--|
| DRILLING CONTRACTOR: (If | • | RESPONSIBLE AGENT: | | | | |
| NAME S. W. Jack Drilling | | | | | | |
| ADDRESS P. O. Box 697, Indiana, PA 15701 | | ADDRESS Rt. 4, Box 444, Buckhannon, WV | | | | |
| TELEPHONE 349-6800 are | | TELEPHONE (304)47.2-0007 26201 | | | | |
| ESTIMATED DEPTH OF COMPL | ETED WELL: 5700' | | | | | |
| PROPOSED GEOLOGICAL FORM | | | | | | |
| TYPE OF WELL: OIL_ | GAS X C | OMB. STORAGE | DISPOSAL. | | | |
| | | | ODOTHER | | | |
| | | | U A 1244L | | | |
| TENTATIVE CASING PROGRAM | 1 : | | | | | |
| | | | | | | |
| CASING AND TUBING SIZE | USED FOR DRILLING | LEFT IN WELL | OR SACKS - CUBIC 1-T. | | | |
| 20 - 16 | | | - % P | | | |
| 13 - 10 | | | | | | |
| 9 - 5/8 11 3/4 | 30' | /- | 1.792 | | | |
| 8 - 5/8 | 1100' | 1100 | 250 sks | | | |
| 7 | | | | | | |
| 5 1/2 | | | | | | |
| 4 1/2 | 5700 | 5800 | | | | |
| 3 | | | Perf. Top | | | |
| 2 | | | Perf. Bottom | | | |
| Liners | | | Perf. Top | | | |
| | | | Perf. Bottom | | | |
| | | | enggyer om tog panggyan mer e | | | |
| APPROXIMATE FRESH WATER | DEPTHS 75 FEET | 150 SALT WATER _ | FEET 800' | | | |
| APPROXIMATE COAL DEPTHS | 150 | 9 | | | | |
| IS COAL BEING MINED IN THE | E AREA?NO | BY WHOM? | | | | |
| | | | | | | |
| TO DRILL: | | | | | | |
| OF PLAT. | OF OG - 1, \$100.00 PERMI | T FEE, PERFORMANCE BO | ND AND PERMANENT COPY | | | |
| or alma. | | | | | | |
| TO DRILL DEEPER OR REDRIL | | • | | | | |
| SUBMIT FIVE (5) COPIES (| OF OG - 1, SHOWING ORIGI | NAL PERMIT NUMBER ANI | PERFORMANCE BOND. ON | | | |
| WELLS DRILLED PRIOR T MUST ALSO BE SUBMITTE | TO 1929, A PERMANENT C | OPY OF THE PLAT AND T | HE ORIGINAL WELL RECORD | | | |
| | uu. | | | | | |
| TO FRACTURE - STIMULATE: | | | | | | |
| OIL AND/OR GAS WELL O | RIGINALLY DRILLED BEFO | RE JUNE 5, 1929, FIVE (5) C | OPIES OG - 1, PERFORMANCE | | | |
| BOND, PERMANENT PLAT | AND ORIGINAL WELL REC | ORD. | | | | |
| OIL AND/OR GAS WELL OI | RIGINALLY DRILLED ON A | ND/OR AFTER JUNE 5, 1929 | , FIVE COPIES OG - 1, SHOW- | | | |
| ING ORIGINAL PERMIT NU | MBER, AND PERFORMANCE | BOND. | | | | |
| Required forms must be filed | d within ninety (90) days of o | completion for bond release. | Inspector to be notified twenty- | | | |
| four (24) hours in advance. | | • | inspection to the nothing twenty- | | | |
| • | | | | | | |
| | | | | | | |
| | | | | | | |
| • | | | | | | |
| The following waiver must l | be completed by the coal ope | erator if the permit is to be is | sued within ten days of receipt | | | |
| thereoi. | | | | | | |
| WAIVER: I the undersigned, Age | nt for Eastern Associ | Coal Company, Owner | or Operator of the coal under | | | |
| | ed and place on our mine m | | | | | |
| | | | ll being drilled at this location, | | | |
| providing operator has a | complied with all rules and rem | ulations in Articles 4. 5. and 7. | Chapter 22 of the West Virginia | | | |
| Code. | with an inite and ick | | onapier 22 of the West Virginia | | | |
| · | | | 10 ₁ | | | |
| | | In while | Stole a | | | |
| | | For | Coal Company | | | |
| | | Manaser | Sloly of Coal Company | | | |
| | | | Official Titlé | | | |