



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400 Feet  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION COL. GAS Well #1528  
Elev. 1015.81

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 MINES.  
 (SIGNED) James W. Lefton  
 R.P.E. \_\_\_\_\_ L.L.S. 149

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

DATE 7-6-81, 19\_\_\_\_  
 OPERATOR'S WELL NO. \_\_\_\_\_  
 API WELL NO. \_\_\_\_\_  
47 - 039 - 3779  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1284.0 WATER SHED VALLEY GROVE BR. OF ELK TWOMILE CREEK  
 DISTRICT MALDEN COUNTY KANAWHA  
 QUADRANGLE CHARLESTON EAST 7.5' 15'  
 SURFACE OWNER GILBERT WALKER ACREAGE 43.50  
 OIL & GAS ROYALTY OWNER LELIA E. GARDNER LEASE ACREAGE 200 AC  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  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 ORISKANY SD. ESTIMATED DEPTH 5340'  
 WELL OPERATOR GRUBSTAKE PRODUCTION CO. DESIGNATED AGENT BILL BENNETT  
 ADDRESS P.O. Box 8384 ADDRESS Box 2683  
ROANOKE, VA. 24014 CHARLESTON, WV. 25330

T. HALL 6-6 Elk 2004 Deep Well Campbell Creek (214)



**RECEIVED**

DEC 29 1981

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

**Oil and Gas Division**

**WELL RECORD**

Quadrangle Charleston East 7½  
Permit No. 47-039-3779

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas X  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Company Grubstake Production Co.  
Address Box 8246, Roanoke, VA 24014  
Farm Lelia Gardner Acres pt 200  
Location (waters) Valley Gr.Br/Elk Twomile  
Well No. 1 Elev. 1284'  
District Malden County Kanawha  
The surface of tract is owned in fee by \_\_\_\_\_  
Spalding Hrs.  
Address Charleston, WV  
Mineral rights are owned by Lelia Gardner  
Address Charleston, WV  
Drilling Commenced 10-14-81  
Drilling Completed 10-22-81  
Initial open flow show cu. ft. -- bbls.  
84mcf  
Final production 84mcf cu. ft. per day -- bbls.  
Well open 4 hrs. before test 550 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"	20'	20'	to surf.
9 5/8	420'	420'	to surf.
8 5/8			
7	2175'	2175'	100 sks
5 1/2			
4 1/2			
3			
2 tubing	5000'	5000'	
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well plugged back to 5000', shot w/20,000# 3000'-5000'. Well open 24 hrs prior to 24 hr shut in and test.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water 190 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Devonian Shales Depth 3000-5000'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sands & Shales			0	602		
Sands, Slts, Shales			602	1238		
Sand			1238	1490		
Lime & Shale			1490	1722		
Big Lime			1722	1941		
Injun Sand			1941	2001		
Shale & Sand			2001	2399		
Berea Sand			2399	2436		
Devonian Shale			2436	5177		
Corniferous Lime			5172	5277		
Oriskany Sand			5277	5293		
Lime <u>H&amp;L D.</u>			5293	5366	TD	

JAN 21 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks

Date 29 December 1981

APPROVED William E. Kennell Agent  
Owner

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SEP 15 1981

OIL AND GAS DIVISION  
WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE 15 September, 1981

Surface Owner Gilbert Walker  
Address 119 Dry Branch Dr, Charleston  
Mineral Owner Lelia E Gardner  
Address 3411 River Lane, Charleston, WV  
Coal Owner same  
Address same  
Coal Operator none  
Address --

Company Grubstake Production Co.  
Address Box 8246, Roanoke, Va., 24014  
Farm L.E. Gardner Acres pt 200 ac.  
Location (waters) Valley Grove Br, Elk Twomile  
Well No. 1 Elevation 1284  
District Malden County Kanawha  
Quadrangle Charleston East 7 1/2

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  
operations have not commenced by 5-30-82

INSPECTOR  
TO BE NOTIFIED Mr. Martin Nichols  
ADDRESS Box 554, Clendenin, WV 25045  
PHONE 548-6993

John B. Burnett  
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated 5-8-67 <sup>19</sup>67 by S.C. Atkins made to United Fuel (ext. to Columbia Gas to Phoenix to Grubstake) and recorded on the 31 day of May 1967 in Kanawha County, Book 166 Page 5

NEW WELL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE

OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND  
ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address  
of  
Well Operator

Very truly yours, Grubstake Production Co.  
(Sign Name) William S. Burnett Agent  
Well Operator

P.O. Box 8246  
Street  
Roanoke  
City or Town  
Virginia  
State

47-039-3779

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by William S. Burnett

BLANKET BOND

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

PROPOSED WORK ORDER TO     X     DRILL            DEEPEN            FRACTURE-STIMULATE  
 DRILLING CONTRACTOR: (If Known) unknown RESPONSIBLE AGENT: William E. Bennett  
 NAME                                  NAME                                   
 ADDRESS                              ADDRESS P.O. Box 2683, Charleston, WV  
 TELEPHONE                          TELEPHONE 345-0216  
 ESTIMATED DEPTH OF COMPLETED WELL: 5340' ROTARY     X     CABLE TOOLS             
 PROPOSED GEOLOGICAL FORMATION: Oriskany Sd.  
 TYPE OF WELL:      OIL            GAS     X     COMB.            STORAGE            DISPOSAL             
   RECYCLING            WATER FLOOD            OTHER           

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8	400'	400'	to surface
8 - 5/8			
7	2150'	900'	50 sks
5 1/2			
4 1/2	5340'	5340'	150 sks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 65' 210' FEET     --     SALT WATER     --     FEET             
 APPROXIMATE COAL DEPTHS     none      
 IS COAL BEING MINED IN THE AREA?     no     BY WHOM?     ---    

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

- NA -

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title