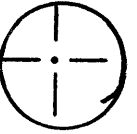


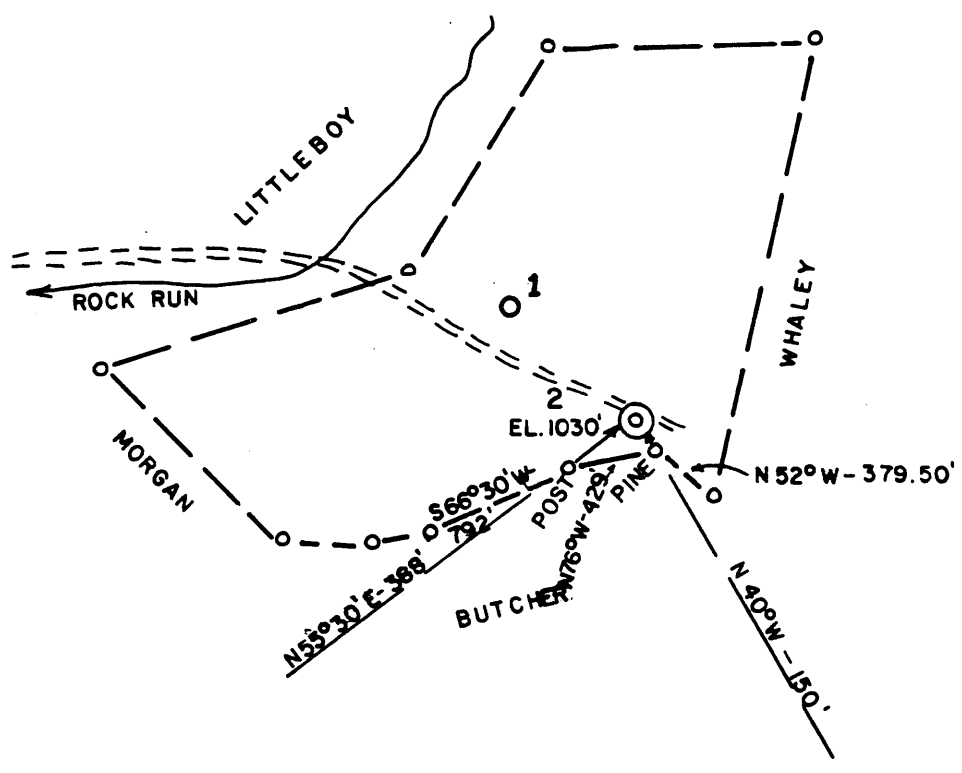
0.245  
2.50W



15 calc  
-225  
2-41W

391950  
810250

NORTH



FILE NO. 81-313  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1/200'  
 PROVEN SOURCE OF ELEVATION KNOB SOUTH (1089')

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) Chas. Waterman  
 R.P.E. 3788 L.L.S. \_\_\_\_\_



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



DATE 6/12, 1981  
 OPERATOR'S WELL NO. 2  
 API WELL NO. 47-073-1227  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1030' WATER SHED ROCK RUN  
 DISTRICT LAFAYETTE COUNTY PLEASANTS  
 QUADRANGLE ELLENBORO 7.5 St. Marys 15 SE  
 SURFACE OWNER R. LAMOTHE ACREAGE 120  
 OIL & GAS ROYALTY OWNER J. R. MORRISON LEASE ACREAGE 120  
 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 SHALE ESTIMATED DEPTH 5200'  
 WELL OPERATOR SHAHER OIL & GAS DESIGNATED AGENT IRA W. SHAHER  
 ADDRESS ST. MARYS WV ADDRESS 214 CLAY ST. ST. MARYS, WV

JUN 29 1981

WELL OPERATOR'S REPORT

DRILLING, CEMENTING, REPAIR, REWORKING, REPERFORATING, OR OTHER CHANGE

WELL TYPE: Oil  Gas  Liquid Injection  Waste Disposal   
 (If "Gas", Production  / Underground storage  Deep  Shallow

LOCATION: Elevation: 1030' Watershed: Rock Run  
 District: Lafayette County: Pleasants Quadrant: Ellenboro 7.5

WELL OPERATOR Klondike Development Corp. DESIGNATED AGENT Frank Pethtel  
 Address P.O. Box 11 Address 417 1/2 Second St.  
Middlebourne, WV St. Marys, WV 26170

PERMITTED WORK: Drill  / Convert  / Drill deeper  Re-drill  Fracture or stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON June 16, 19 81 OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED \_\_\_\_\_, 19 \_\_\_\_\_)  
 Name Phillip Tracy  
 Address Rt. 23  
Alma, WV 26320

GEOLOGICAL TARGET FORMATION: Devonian Shale Depth 5003 feet  
 Depth of completed well, 5003' feet Rotary  / Cable Tools   
 Water strata depth: Fresh, 100 feet; salt, -- feet.  
 Coal seam depths: None Is coal being mined in the area? No  
 Work was commenced June 21, 19 81, and completed June 25, 19 81

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	-								Minds
Fresh water	8 5/8"	-	20	x		920	920	300 ft. <sup>3</sup>	
Coal	-								Sizes
Intermediate	-								
Production	4 1/2"	J-55	10.5	x		4956	4956	620 ft. <sup>3</sup>	Deaths set
Tubing									
Liners									Perforations:
									Top <u>Belton</u>

OPEN FLOW DATA

Producing formation 30-Foot, Gordon-Riley Shale-Berea *Benson* 2734-4894  
 Gas: Initial open flow, 100 Mcfd Initial open flow, 0 Mcfd  
 Final open flow, 500 Mcfd Final open flow, 0 Mcfd  
 Time of open flow between initial and final tests, - hours  
 Static rock pressure, 1050 psi (surface measurement) after 12 hours shut in  
 (If applicable the following apply--)  
 Second producing formation \_\_\_\_\_ Feet below tests \_\_\_\_\_ feet  
 Gas: Initial open flow, \_\_\_\_\_ Mcfd Initial open flow, \_\_\_\_\_ Mcfd  
 Final open flow, \_\_\_\_\_ Mcfd Final open flow, \_\_\_\_\_ Mcfd  
 Time of open flow between initial and final tests, \_\_\_\_\_ hours  
 Static rock pressure, \_\_\_\_\_ psi (surface measurement) after \_\_\_\_\_ hours **MAY 3: 1982**

[08-78]

*Open hole 404*

DETAILS OF PERFORATED INTERVALS, FRACTIONATION OF STIMULATING FLUIDS, SAND, ETC.

Perforations: 2734-36', 2902'-07', 3432'-34', 3540'-42', 3580'-82', 3640'-42',  
3698'-3700', 3942'-44', 4058'-60', 4264'-66', 4372'-74', 4770'-72',  
4890'-94' Huron

Fractured 7/1/81 in 3 stages using 142,000 # of 20-40 mesh sand and  
2,000 barrels of 75 quality foam

*46 6  
49 6  
52 8*

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including Indication of All Gases and Salt Water, Coal, Oil and Sand
Sandstone		hard	0	100	
Shale		soft	100	230	
Sand & Shale		soft	230	650	
Red Rock		soft	650	700	
Sand & Shale		soft	700	1495	
Maxon		hard	1495	1540	
Shale		soft	1540	1860	
Big Injun		soft	1860	1925	gas and oil
Shale		soft	1925	2430	
Berea		hard	2430	2438	
Shale		soft	2438	2540	
Thirty Foot		soft	2540	2558	show gas
Shale		soft	2558	2710	
Gordon		soft	2710	2740	gas and oil
Shale		soft	2740	4440	gas
Riley		soft	4440	4453	gas
Shale		soft	4453	4640	gas
Benson		soft	4640	4660	gas
Shale		soft	4660	5003	Huron @ 72

*ALEX.*

*E Log  
404 2438  
813-3682  
822 4892*

*5003  
2438  
2565*

(Attach separate sheets if complete as necessary)

*Blenslike Development Corp.*  
Well Operator  
By *Frank E. Fostel*  
Vice President

NOTE: Regulation 2.011 provides as follows:

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



RECEIVED

JUN 16 1981

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

OIL & GAS DIVISION

Oil and Gas Division DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE June 11, 1981

Surface Owner Robert Lamouthe

Company Shafer Oil and Gas Corp.

Address General Highway, Annapolis, Md.

Address 214 Clay St., St. Marys, W. Va.

Mineral Owner J.R. Morrison

Farm J.R. Morrison Acres 120

Address Rt. #1, St. Marys, W. Va.

Location (waters) Rock Run 1030-7.5' topo

Coal Owner None

Well No. two (2) Elevation 1,000' KLA

Address \_\_\_\_\_

District Lafayette County Pleasants

Coal Operator \_\_\_\_\_

Quadrangle Ellenboro

Address \_\_\_\_\_

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 2-16-82.

INSPECTOR TO BE NOTIFIED Phil Tracy

ADDRESS \_\_\_\_\_

PHONE 758-4573

Fred Russell  
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 May 3 rd 1979 by J.R. Morrison made to Shafer Oil and Gas Corp. and recorded on the 4 th day of June 1979, in Pleasants County, Book 152 Page 289

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,  
(Sign Name) Ira W. Shafer  
Well Operator

Ira W. Shafer, President

Street  
214 Clay Street

City or Town  
St. Marys, West Virginia

State

\*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.

47-073-1227

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 \_\_\_\_\_

BLANKET BOND

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

PROPOSED WORK ORDER TO  X  DRILL \_\_\_\_\_ DEEPEN  X  FRACTURE-STIMULATE  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME  F W A Drilling Co.  NAME  Ira W. Shafer   
 ADDRESS  Elkview, West Virginia  ADDRESS  214 Clay St., St. Marys, W.Va.   
 TELEPHONE  (304) 965-3379  TELEPHONE  (304) 684-7566   
 ESTIMATED DEPTH OF COMPLETED WELL: \_\_\_\_\_ ROTARY \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  X  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 16"	20'	20'	
13 - 10			
9 - 5/8			
8 - 5/8 900'	900'	900'	To Surface
7			
5 1/2			
4 1/2 5000'		500'	500 sks. Pozmis 50-50
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS  150  FEET \_\_\_\_\_ SALT WATER  1000  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.

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