



LATITUDE 39° 25'

LONGITUDE 80° 57' 30"

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:2000  
 PROVEN SOURCE OF ELEVATION USGS - R135  
780' S.W. of well El. 769

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) Henri D. O'Neil  
 R.P.E. \_\_\_\_\_ L.L.S. 369

PLACE SEAL HERE

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



DATE Sept 13, 1980  
 OPERATOR'S WELL NO. ANKROM #1  
 API WELL NO. \_\_\_\_\_  
47 - 095 - 0861  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION ELEVATION 775.7 WATER SHED Sugar Creek  
 DISTRICT Meade COUNTY Tyler  
 QUADRANGLE Middlebourne, W. Va. WEST UNION WC  
 SURFACE OWNER Roy and Leona Ankrom ACREAGE 63 Ac  
 OIL & GAS ROYALTY OWNER Roy and Leona Ankrom LEASE ACREAGE 63 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 Ohio Shale ESTIMATED DEPTH 4000'  
 WELL OPERATOR L&B Oil Inc DESIGNATED AGENT Loren Bagley  
 ADDRESS 110 1/2 Washington St ADDRESS 110 1/2 Washington St.  
St. Marys, W. Va. 26170 St. Marys, W. Va 26170

86

OCT 17 1980

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date Jan. 15, 1980

FORM IV-35  
(Obverse)

Operator's  
Well No. Ankrom #1

08-78,

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47 - 095 - 086  
State County Per

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

LOCATION: Elevation: 775.7 Watershed: Sugar Creek  
District: Meade County: Tyler Quadrangle: Middlebourne

WELL OPERATOR L & B Oil Company, Inc. DESIGNATED AGENT Loren E. Bagley  
Address 108 Washington St. Address 108 Washington St.  
St. Marys, WV 26170 St. Marys, WV 26170

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

PERMIT ISSUED ON September 25, 1980

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Phil Tracy  
Address Alma  
West Virginia 26320

GEOLOGICAL TARGET FORMATION: Gordon Depth 2622-2630 feet

Depth of completed well, \_\_\_\_\_ feet Rotary  / Cable Tools

Water strata depth: Fresh, 80 feet; salt, 1300 feet.

Coal seam depths: \_\_\_\_\_ Is coal being mined in the area? No

Work was commenced October 26, 1980, and completed December 20, 1981

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	10 3/4		20	x		300.3	268	100 SK	Kinds Standard Bul
Fresh water									Pozmix
Coal									Sizes
Intermediate									
Production									Depths set
Tubing									
Liners									Perforations: 9
Casing	4 1/2		10.5	x		2820.2	2753	250 SK	2622 Top 2630 Bottom
	8 5/8		20	x		880	880		
	7		20	x		2178.8	0		

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 2622-2630 feet

Gas: Initial open flow, 100,000 Mcf/d Oil: Initial open flow, 0 Bbl/d

Final open flow, 40,000 Mcf/d Final open flow, 0 Bbl/d

Time of open flow between initial and final tests, 24 hours

Static rock pressure, 1100# psig (surface measurement) after 24 hours shut in

[If applicable due to multiple completion--]

JAN 18 1982

[08-78]

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Nine perforations between 2622 and 2630. Treated with Nitrogen Frac, 720,000 SCF. Breakdown 2400#. Treated at 2200#.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fr and salt water, coal, oil and
Clay					
Red Rock and Sand			0	20	
Red Rock			20	659	
Shale			659	730	
Sandy Shale			730	810	
Shale			810	860	
Sandy Shale			860	890	
Sand			890	940	
Shale			940	978	
Sand			978	1003	
Shale and Sand			1003	1043	
Shale			1043	1100	
Sand			1100	1125	
Shale and Sand			1125	1180	
Shale			1180	1210	
Shale and Sand			1210	1280	
Shale			1280	1325	
Salt Sand			1325	1390	
Shale			1390	1435	
Greenbrier			1435	1539	
Shale and Sand			1539	1699	
Big Injun			1699	1749	
Shale and Sand			1749	1815	
Squaw			1815	1820	
Shale and Sand			1820	1949	
Gas and Sand			1949	1979	
Shale			1979	2132	
Berea			2132	2194	
Shale and Sand			2194	2206	
Gantz			2206	2220	
Shale and Sand			2220	2313	
Thirty Foot			2313	2425	
Shale and Sand			2425	2427	
Gordon			2427	2454	
Shale and Sand			2454	2618	
Fourth Sand			2618	2634	
Shale and Sand			2634	3059	
			3059	3072	

CONTINUATION

(Attach separate sheets to complete as necessary)

L & B Oil Company, Inc.  
Well Operator

By \_\_\_\_\_  
Its President

NOTE: Regulation 2.02(i) 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."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED  
SEP 26 1980

OIL AND GAS WELL PERMIT APPLICATION OIL & GAS DIVISION  
DEPT. OF MINES

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

DATE September 25, 1980

Surface Owner Roy Ankrom  
Address Bens Run, WV

Company L & B Oil Company, Inc.  
Address 108 Washington St. St. Marys WV 26170

Mineral Owner Roy Ankrom  
Address Bens Run, WV 26135

Farm \_\_\_\_\_ Acres 63

Coal Owner \_\_\_\_\_  
Address \_\_\_\_\_

Location (waters) Sugar Creek

Well No. Ankrom 1 Elevation 775.7

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

District Meade County Tyler

Quadrangle Middlebourne

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 5-29-81

INSPECTOR  
TO BE NOTIFIED Philip Tracy

ADDRESS Alma, WV, 26320

PHONE 758 - 4573

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 APRIL 12 1980 by ROY ANKROM LEONA ANKROM made to LOREN E BAGLEY and recorded on the MAY 16 day of 1980 in TYLER County, Book 226 Page 508

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.

Very truly yours,

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

(Sign Name) \_\_\_\_\_

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

Address  
of  
Well Operator

Well Operator  
108 Washington St.  
Street  
St. Marys, WV 26170  
City or Town  
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.

47-095-0861

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 Loren E Bagley

*[Handwritten signature]*

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) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME  Loren E. Bagley   
 ADDRESS \_\_\_\_\_ ADDRESS  RD # 1, Middlebourne WV   
 TELEPHONE \_\_\_\_\_ TELEPHONE  884-9399   
 ESTIMATED DEPTH OF COMPLETED WELL:  4000  ROTARY  X  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION:  Devonian Shale   
 TYPE OF WELL: OIL  X  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			
8 - 5/8	250 ft		surface
7			
5 1/2			
4 1/2	TD		4000
3			
2			Perf. Top
Liners			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS  100  FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS  N/A   
 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