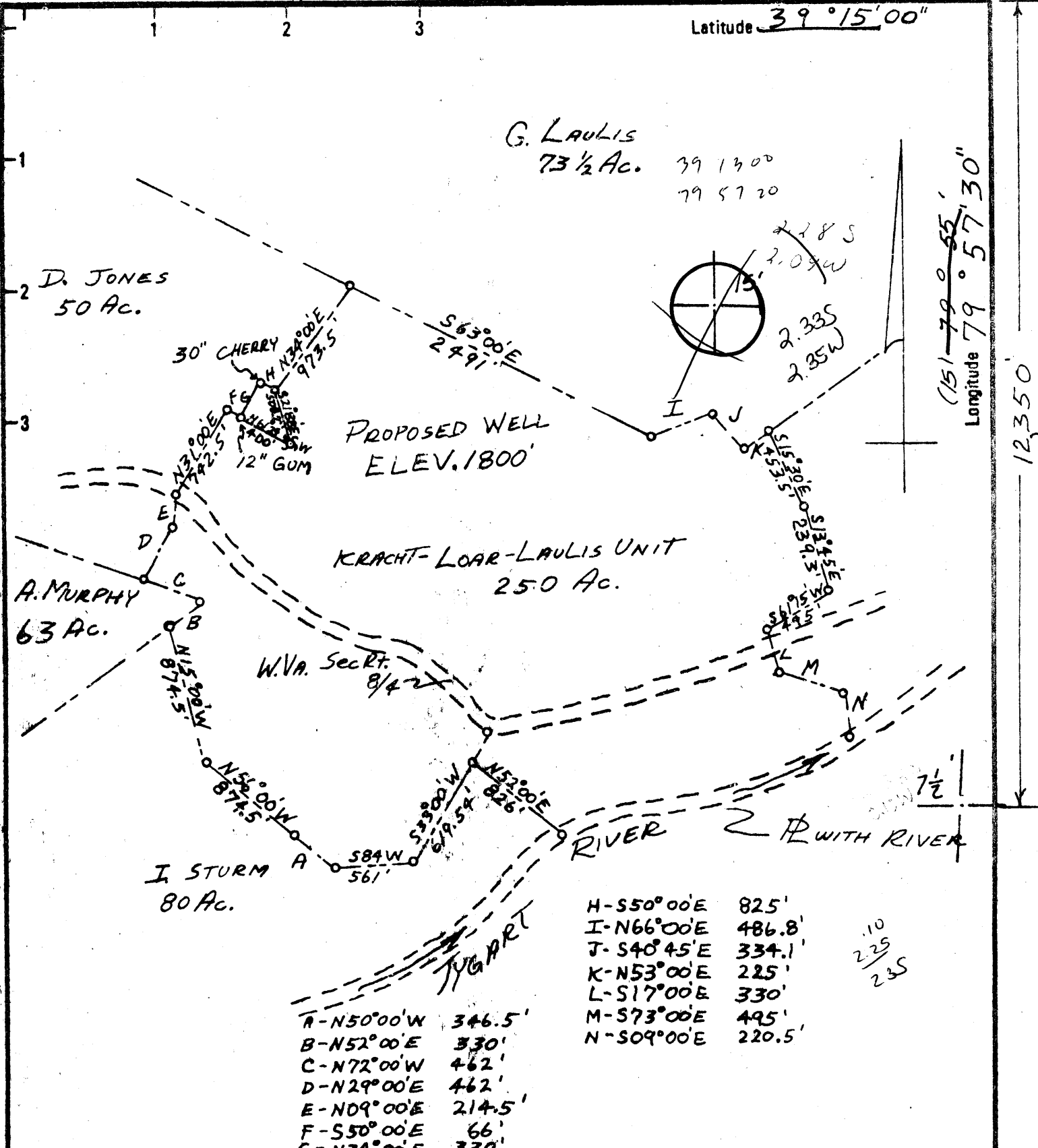


Latitude 39° 15' 00"



Longitude 79° 57' 30"

12,350

New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 IN 200
 Source of Elevation U.S.G.S. BM - MORTSVILLE 1234'
U.S.G.S. NESTORVILLE TOPOGRAPHIC QUADRANGLE
 "I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia." *Paul G. Dean*

Company PETROLEUM DEVELOPMENT CORP
 Address PO BOX 26 103 E. MAIN BRIDGEPORT W.VA.
 Farm KRACHT-LOAR-LAULIS UNIT
 Tract 1 Acres 250 Lease No. B-1326
 Well (Farm) No. LAULIS #1 Serial No. _____
 Elevation (Spirit Level) 1800' *NU*
 Quadrangle NESTORVILLE Belington 15'
 County BARBOUR District PLEASANT
 Engineer PAUL G. DEAN
 Engineer's Registration No. 1856
 File No. _____ Drawing No. _____
 Date 6/5/78 Scale 1" = 1000'

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

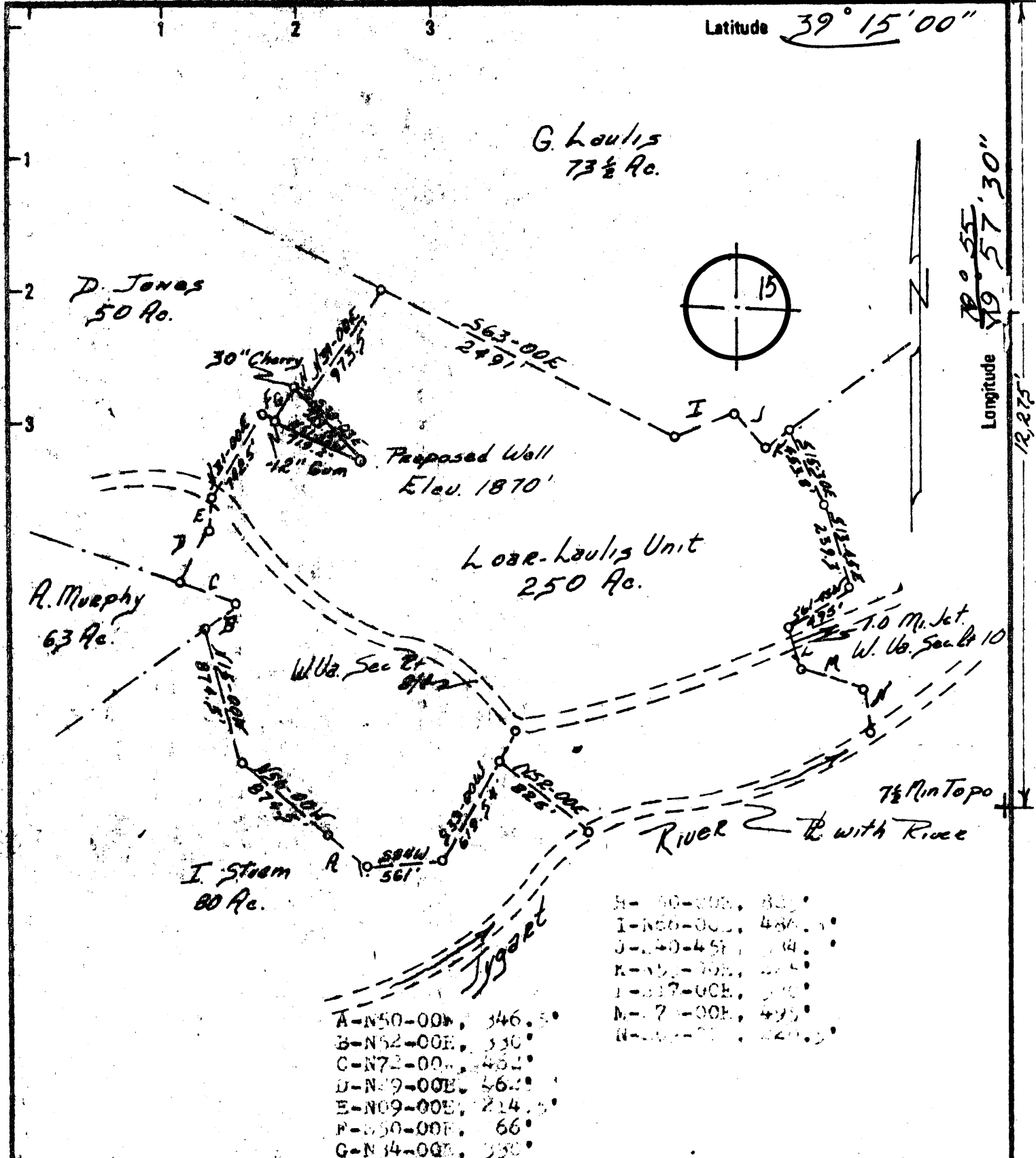
WELL LOCATION MAP
 FILE NO. BAR-989-REV

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

47-001 JUN 15 1978

LEARN' Roman 6-6 Taylor Drain (316)

Latitude 39° 15' 00"



A-N50-00E	346.50
B-N52-00E	330
C-N72-00E	462
D-N39-00E	56
E-N09-00E	214
F-N50-00E	66
G-N34-00E	330

H-N50-00E	330
I-N50-00E	486
J-N50-45E	214
K-N50-00E	214
L-N17-00E	214
M-N7-00E	495
N-N50-00E	214

New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1" in 5000'
 Source of Elevation U.S.G.S. BM - Monteville 1874'
 U.S.G.S. Nestorville Topographic Quadrangle
 "I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia." *L. R. Snyder*

Company Petroleum Development Corp
 Address 103 E. Main, Bridgeport, W. Va.
 Farm Kracht-Loar-Louis Unit
 Tract _____ Acres 250 Lease No. _____
 Well (Farm) No. Loar's # One Serial No. _____
 Elevation (Spirit Level) 1870' NW
 Quadrangle Nestorville, BELINGTON 15'
 County Barbour District Pleasant
 Engineer L. R. Snyder
 Engineer's Registration No. 300
 File No. _____ Drawing No. _____
 Date 4/16/78 Scale 1" = 100'

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

WELL LOCATION MAP
 FILE NO. BAR-989

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

47-001 JUN 7 1978
 houlis

4500' Benson

B-1326



DEC 15 1978

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Nestorville

Permit No. BAR-989

(47-001-0989)

Rotary XX Oil _____
Cable _____ Gas XX
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Petroleum Development Corporation
Address P.O. Box 26, Bridgeport, WV 26330
Farm Glendoline Laulis Acres 250
Location (waters) Tygart River
Well No. Laulis-Loar #1 Elev. 1870
District Pleasant County Barbour
The surface of tract is owned in fee by _____
Glendolin Laulis
Address Rt. 2, Moatsville, WV 26405
Mineral rights are owned by Same
Address _____
Drilling Commenced 6/06/78
Drilling Completed 6/11/78
Initial open flow _____ cu. ft. _____ bbls.
Final production 189 m cu. ft. per day _____ bbls.
Well open 48 hrs. before test 600 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10"			
9 5/8			
8 5/8	875	875	150 sks
7			
5 1/2			
4 1/2	4490	4490	400 sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Elk 360 bbls	10,000	80/100
	20,000	20/40
Benson 473 bbls	10,000	80/100
	40,000	20/40
Balltown 463 bbls	10,000	80/100
	40,000	20/40

Coal was encountered at 160, 254, 340, 375 Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Elk, Benson, Balltown Depth 4469; 4217; 3152

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	10		
Coal			160	165		
Sand & Shale			165	254		
Coal			254	258		
Sand & Shale			258	340		
Coal			340	348		
Sand & Shale			348	375		
Coal			375	379		
Sand & Shale			379	1299		
Big Lime			1300	1500		
Big Injun			1500	1600		
Shale			1600	1625		
Pocono			1625	1654		
Shale			1654	1760		
Berea			1760	1770		
Shale			1770	2120		
Gantz			2120	2140		
Sand & Shale			2140	2330		
4th			2330	2350		
Shale			2350	2455		
5th			2455	2510		
Shale			2510	2620		
Bayard			2620	2640		

(over)

* Indicates Electric Log tops in the remarks section.

DEC 28 1978

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			2640	3140		
Balltown			2140	3160		
Shale			3160	4214		
Riley			4214	4224		
Shale			4224	4460		
Benson			4462	4472		
				4606	T.D.	

Date December 13, 1978

APPROVED Petroleum Development Corporation Owner

By John C. Mone
 (Title)
 Petroleum Engineer



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
MAY - 8 1978
OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner Glendoline Laulis
Rt 2 Moatsville WV 26405
Address _____
Mineral Owner Glendoline Laulis
Rt 2 Moatsville WV 26405
Address (1) Glendoline Laulis Rt 2 Moatsville WV
(2) Hillman Coal & Coke Co
Address 1900 Grant Bldg Pitts Pa
(3) Republic Steel Corp
~~Coal Operator~~ Republic Bldg
Address Cleveland, Ohio 41404

DATE May 2, 1978
Company Petroleum Development Corporation
Address P O Box 26 Bridgeport WV 26330
Farm Glendoline Laulis Acres 250
Location (waters) Tygart River
Well No. Laulis-~~1000~~ #1 Elevation 1870'
District Pleasant County Barbour
Quadrangle Nestorville

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 9-23-78.

INSPECTOR Bob Stewart
TO BE NOTIFIED _____
ADDRESS Box 345 Jane Lew WV 26378
PHONE 884-7782

[Signature]
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 July 31st 1964 by Glendoline Laulis etvir made to Consolidated Gas Sup Corp and recorded on the 29th day of August 1964 in Barbour County, Book 51 Page 56

XX 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

Very truly yours
[Signature]
PETROLEUM DEVELOPMENT CORPORATION
(Sign Name) _____
Well Operator
P O Bx 26
Street
Bridgeport
City or Town
West Virginia 26330
State

BLANKET BOND

*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 XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Unknown _____ NAME Petroleum Development Corporation _____
 ADDRESS _____ ADDRESS P O Box 26 Bridgeport WV 26330 _____
 TELEPHONE _____ TELEPHONE 6256 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 4500' ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Benson _____
 TYPE OF WELL: OIL _____ GAS XX 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 <u>11/3/4</u>	<u>40'</u>	<u>40'</u>	<u>Surface</u>
9 - 5/8			
8 - 5/8	<u>900'</u>	<u>900'</u>	<u>Surface</u>
7			
5 1/2			
4 1/2		<u>4300'</u>	
3			<u>Perf. Top</u>
2			<u>Perf. Bottom</u>
Liners			<u>Perf. Top</u>
			<u>Perf. Bottom</u>

APPROXIMATE FRESH WATER DEPTHS 30' FEET 200' SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 500' _____
 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