

380
273

New Location <input checked="" type="checkbox"/> Drill Deeper <input type="checkbox"/> Abandonment <input type="checkbox"/>	Minimum Error of Closure <u>1' IN 200'</u> Source of Elevation <u>B.M. 1026' NEAR INT. B&O R.R. AND RT. 17</u> <u>U.S.S. TOPOGRAPHIC QUADRANGLE - 7 1/2 MIN.</u> "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." <i>Thomas F. Weaver, Jr.</i>
---	--

Company PETROLEUM DEVELOPMENT CORP.
 Address PO BOX 26 103 E. MAIN BRIDGEPORT W. VA.
 Farm ORAL LAKE FISHING CLUB
 Tract 1 Acres 66 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1180'
 Quadrangle ROSEMONT, FAIRMONT 15'
 County HARRISON District SIMPSON
 Engineer THOMAS F. WEAVER, JR.
 Engineer's Registration No. L.L.S. 410
 File No. PDC 1 - P9 51 Drawing No. 1
 Date 11/10/1979 Scale 1" = 600'

687

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

WELL LOCATION MAP
 FILE NO. 47-033-2183-Frac.
 FORMERLY 47-033-2022

+ 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.

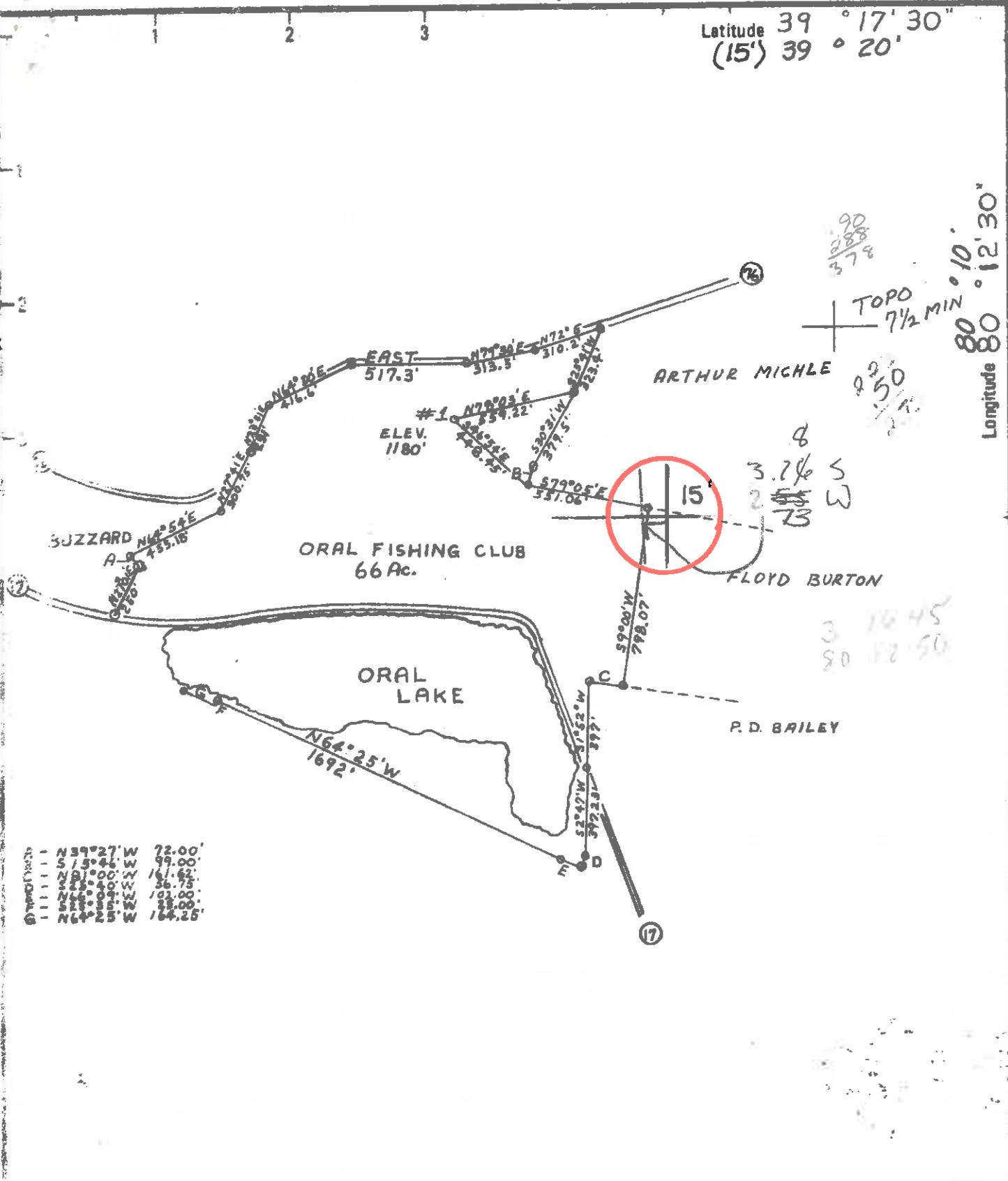
SEP 1 1993

(AND PLATTED) SURVEYED BY PAUL G. DEAN II GRADUATE C.E. UNDER THE SUPERVISION OF THOMAS F. WEAVER L.L.S. 410

Latitude 39° 17' 30"
(15') 39° 20'

4,850'

Longitude 80° 12' 30"
80° 10'



BY HAND	N 39° 27' W	72.00'
	S 75° 46' W	99.00'
	N 81° 00' W	161.62'
	S 25° 40' W	36.75'
	N 44° 09' W	131.00'
	S 11° 35' W	32.00'
	N 64° 25' W	164.25'

Well Location
 Drill Deeps
 Abandonment

Minimum Error of Closure 1' IN 200'
 Source of Elevation B.M. 1026' NEAR INT. B&O R.R. AND RT. 17

U.S.S. TOPOGRAPHIC QUADRANGLE - 7 1/2 MIN.
 "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." *Thomas F. Weaver, Jr.*

Company PETROLEUM DEVELOPMENT CORP
 Address 20 BOX 26 103 E. MAIN BRIDGEPORT W.VA.
ORAL LAKE FISHING CLUB
 Acres 66 Lease No. _____
 Well No. _____ Serial No. _____
 Elevation (Spot Level) 1180' SW
 Quadrangle ROSEMONT, FAIRMONT 15'
 Town FAIRMONT District SIMPSON
 Surveyor THOMAS F. WEAVER, JR.
 Registration No. 2.25 410
 File No. 222-2951 Drawing No. 1
 Date 10/19/79 Scale 1" = 600'

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

WELL LOCATION MAP
 FILE NO. 47-033-2183
 FORMERLY 47-033-2022

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- Denotes one inch spaces on border line of original tracing.

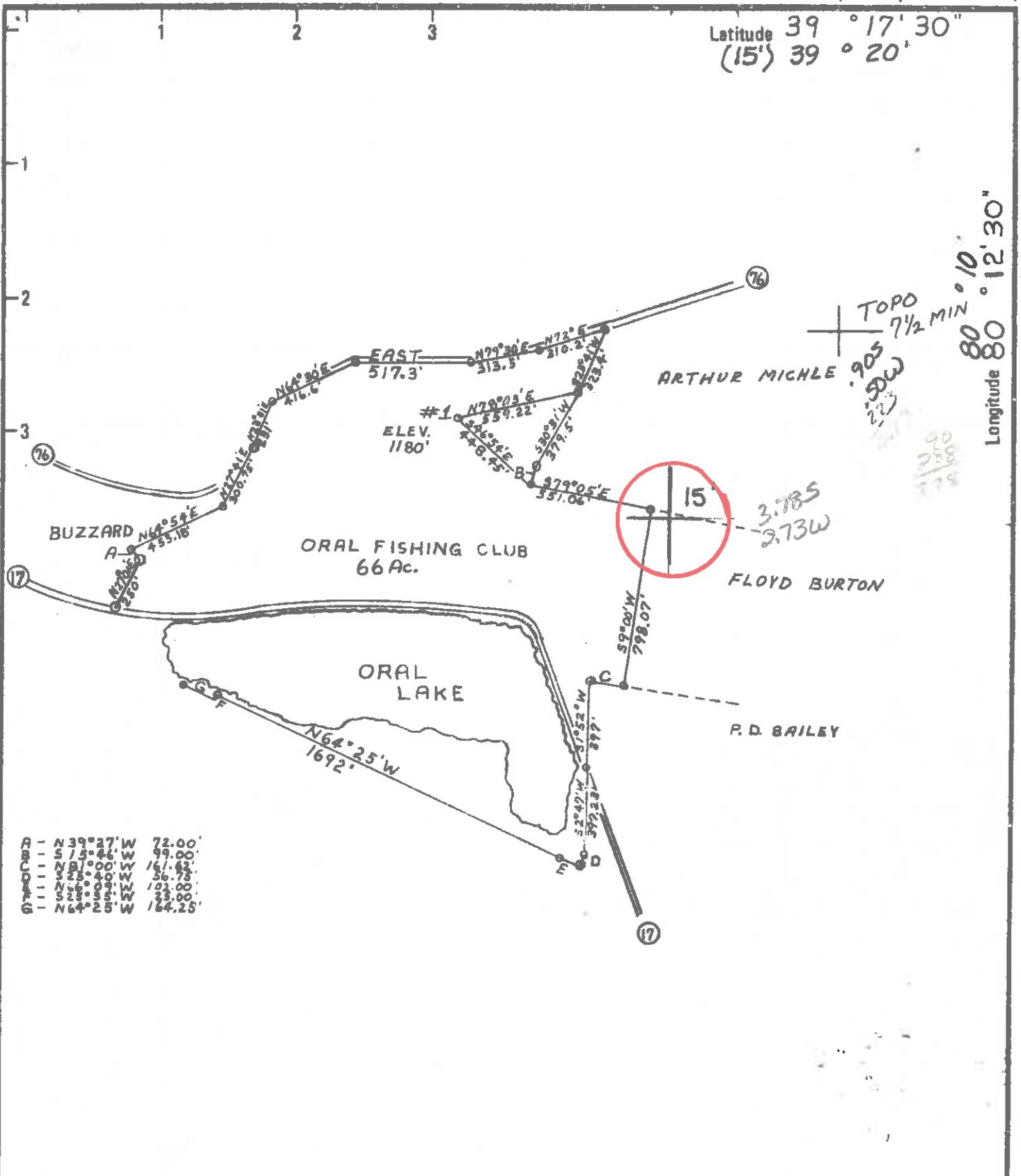
OCT 9 1979

2,600'

Latitude 39° 17' 30"
(15') 39° 20'

4,850'

Longitude 80° 12' 30"



A	N 39° 27' W	72.00'
B	S 73° 46' W	99.00'
C	N 87° 00' W	161.63'
D	S 25° 40' W	36.73'
E	N 6° 09' W	103.00'
F	S 23° 35' W	143.00'
G	N 64° 25' W	164.25'

New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure . 1' IN 200'
 Source of Elevation B.M. 1026' NEAR INT. B&O R.R. AND RT. 17
 U.S.G.S. TOPOGRAPHIC QUADRANGLE - 7 1/2 MIN.
 "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." *Thomas F. Weaver, Jr.*

Company PETROLEUM DEVELOPMENT CORP.
 Address PO BOX 26 103 E. MAIN BRIDGEPORT, W.VA.
 Farm ORAL LAKE Fishing Club
 Tract 1 Acres 66 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1180' SW
 Quadrangle ROSEMONT, FAIRMONT 15'
 County HARRISON District SIMPSON
 Engineer THOMAS F. WEAVER, JR.
 Engineer's Registration No. L.L.S. 410
 File No. PDC 1 - P 9 51 Drawing No. 1
 Date 1/10/1979 Scale 1" = 600'

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

WELL LOCATION MAP
 FILE NO. 47-033-2022

32183

+ 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.

FEB 6 1979

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Permitting
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: ORAL LAKE FISHING CLUB Operator Well No.: ORAL LAKE #1

LOCATION: Elevation: 1,180.00 Quadrangle: ROSEMONT

District: SIMPSON County: HARRISON
Latitude: 4850 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude 2600 Feet West of 80 Deg. 12 Min. 30 Sec.

Company: PETROLEUM DEVELOPMENT COR
P. O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: TIM BENNETT
Permit Issued: 09/07/93
Well work Commenced: 10/18/93
Well work Completed: 10/30/93
Verbal Plugging
Permission granted on: _____
Rotary Cable Rig
Total Depth (feet) _____
Fresh water depths (ft) _____

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	813'	803'	250 sks
4 1/2"	4382'	4351'	620 sks

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth (ft) 1409-1413
Gas: Initial open flow n/a MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 518 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests n/a Hours
Static rock Pressure n/a psig (surface pressure) after 24 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: January 10, 1997

1997

Big Injun

Perfs: 17(1409'-1413') 5000# 80/100 sand 40,000# 20/40 sand

All other information on original WR-35 received Mar. 15, 1980.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECORDED

MAR 13 1980

Oil and Gas Division

OIL & GAS DIVISION

WELL RECORD DEPT. OF MINES

Rosemont

Har-2183

033-2183

Case No. _____
County _____
Water Right _____
Type _____
(Kind)

Operator Petroleum Development Corporation
103 East Main St., Bridgeport, WV 26330
Oral Lake Fishing Club Acres 66
Location (waters) Simpson Creek
Well No. #1 Elev. 1180'
District Simpson County Harrison
The surface of tract is owned in fee by
Oral Lake Fishing Club, 504 Johnson Ave.,
Address Bridgeport, WV 26330
Mineral rights are owned by _____
Address _____

Drilling Commenced 10/16/79
Drilling Completed 10/21/79
Initial open flow 47 m cu. ft. bbls.
Final production 1,501 m cu. ft. per day bbls.
Well open 48 hrs. before test 2000# RP.

Well treatment details:

Benson 460 BBL 15,000# 80/100

Casing and Tubing	Used in Drilling	Test in Well	Current (11/79) (Cu. Ft. (515))
Size 20-16			
Cond. 11 3/4"	31'	-0-	
9 5/8"			
8 5/8"	813'	803'	250 sks.
7"			
5 1/2"			
4 1/2"	4382'	4351'	620 sks.
3"			
2"			
Liners Used			

Attach copy of cementing record.
45,000# 20/40 500 gal. 15% acid

Coal was encountered at 301 Feet
Fresh water 1/2" @ 300 Feet
Producing Sand Benson Salt Water Depth 4295' Feet

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
KB-GL shale			0	12		
shale & red rock			12	30		
coal			30	301	fresh H ₂ O 1/2" @ 300'	
sand, shale & R.R.			301	305		
sand, red rock			305	330		
sand, shale			330	431		
red rock			431	534		
sand, shale			534	547		
red rock			547	989		
sand, shale & R.R.			989	1041		
big lime			1041	1262		
big injun			1262	1384		
sand, shale			1384	1440		
gantz sand			1440	1770	gas check @ 1481'	30/10-1" w. H
sand, shale			1770	1809		
4th sand			1809	2122		
sand, shale			2122	2146		
5th sand			2146	2206		
sand, shale			2206	2263		
speechley			2263	2993	gas check @ 2764'	4/10-1" w. H
sand, shale			2993	3008		
<u>benson sand</u>			3008	4268		
sand, shale			4268	4304		
			4304	4382 TD	gas check @ 4326'	20/10-1" w. H

(over)

MAR 31 1980

033-2183-F
 issued 09/07/93
 Page of
 Expires 09/07/95

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
 WELL WORK PERMIT APPLICATION

17923

- 1) Well Operator: Petroleum Development Corporation 38200 588
- 2) Operator's Well Number: Oral Lake #1 47-033-2183 3) Elevation: 1180'
- 1) Well type: (a) Oil___/ or Gas XX
 (b) If Gas: Production XX Underground Storage___/ Deep___/ Shallow XX
- 5) Proposed Target Formation(s): Big Injun 371
- 6) Proposed Total Depth: 1415 feet
- 7) Approximate fresh water strata depths: 300
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 301
- 10) Does land contain coal seams tributary to active mine? Yes___/ No XX/
- 11) Proposed Well Work: Pull 1 1/2" tubing; perforate the Big Injun; set fra plug below Big Injun; stimulate Big Injun with a gelled water treatment. Clear up well and run 1 1/2" tubing with a set down packer below Big Injun. CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4			31'	----	
Fresh Water						
Coal						
Intermediate	8 5/8			813'	803'	250 sks
Production	4 1/2			4351	4351	620 sks
Tubing	1 1/2				4262	
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

004173
 17

Fee(s) paid: Well Work Permit Reclamation Fund WPCF
 Plat WW-9 WW-2B Bond _____ Agent
 (Type)

SEP 03 93
Permitting
Office of Oil & Gas

1) Date: August 20, 1993
2) Operator's well number
Oral Lake #1
3) API Well No: 47 - 033 - 2183-FRAC
State - County - Permit

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Oral Lake Fishing Club
Address 222 Ridgeway Drive
Bridgeport, WV 26330
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Tim Bennett
Address 737 Karl Street
Weston, WV 26452
Telephone (304)-269-6167

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name No Declaration
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
XXXX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:
_____ Personal Service (Affidavit attached)
_____ Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

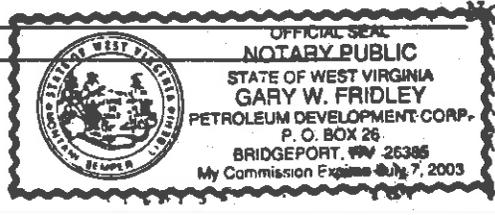
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator PETROLEUM DEVELOPMENT CORPORATION
By: [Signature]
Its: _____ Geologist
Address _____ P O Box 26
Bridgeport, WV 26330
Telephone _____ 304-842-6256

Subscribed and sworn before me this 20 day of August, 1993

[Signature]
My commission expires July 7, 2003



Notary Public



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JAN 16 1979

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE January 12, 1979

Surface Owner Oral Fishing Club

Company Petroleum Development Corporation

Address 504 Johnson Ave. Bridgeport, WV

Address P.O. Box 26 Bridgeport, WV 26330

Mineral Owner Same

Farm Oral Lake Fishing Club Acres 66

Address _____

Location (waters) Simpson Creek

Coal Owner Same

Well No. One Elevation 1180'

Address _____

District Simpson County Harrison

Coal Operator _____

Quadrangle Rosemont

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 9-17-79.

INSPECTOR
TO BE NOTIFIED Paul Garrett

ADDRESS Clarksburg, West Virginia 26301

PHONE 622-3871

[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 September 21st 19 78 by Oral Fishing Club made to Petroleum Development Corp. and recorded on the 29th day of September 19 78 in Harrison County, Book 1071 Page 704

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,
PETROLEUM DEVELOPMENT CORPORATION
(Sign Name) *[Signature]*
Well Operator

P. O. BOX 26
Street
BRIDGEPORT
City or Town
WEST VIRGINIA 26330
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.

BLANKET BOND

47-033-2022 → 2183 PERMIT NUMBER

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 842-6256
 ESTIMATED DEPTH OF COMPLETED WELL: 4700' 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			
15 - 10 11 3/4	40'	40'	Surface
9 - 5/8			
8 - 5/8	40'	850'	Surface
7			
5 1/2			
4 1/2		4650'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40' FEET 100' SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 200' 550'
 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

Operator's Well No. One
API Well No. 47 - 033 - 2183
State County Per

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas X /
(If "Gas", Production X / Underground storage / Deep / Shallow /)
LOCATION: Elevation: 1180' Watershed: Simpson Creek
District: Simpson County: Harrison Quadrangle: Rosemont

WELL OPERATOR Petroleum Development Corporation DESIGNATED AGENT same as operator
Address P.O. Box 26 Address
Bridgeport, W. Va. 26330

OIL & GAS ROYALTY OWNER same as above COAL OPERATOR
Address Address

ACREAGE 66 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER Oral Fishing Club Name same as surface owner
Address 504 Johnson Ave. Address
Bridgeport, W. Va. 26330 Name

FIELD SALE (IF MADE) TO:
Name Paul Garrett Address
Address Clarksburg, W. Va. 26301 COAL LESSEE WITH DECLARATION ON RECORD:
Name Address
phone-622-3871

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Address
Address

OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated September 21st 1978, by the undersigned well operator from Petroleum Development Corporation

[If said deed, lease, or other contract has been recorded:]
Recorded on September 29th 1978, in the office of the Clerk of the County Commission of Harrison County, West Virginia, in Deed Book 1071 at page 704. A permit is requested to allow

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify)

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any operation they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS
CONSERVATION COMMISSION
211 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

Petroleum Development Corporation
Well Operator
By John C. Moore

RECORDED
SEP 14 1979

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) unknown

Address _____

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 4700 feet Rotary X / Cable tools _____

Approximate water strata depths: Fresh, 40'-100' feet; salt, _____ feet.

Approximate coal seam depths: 200'-550' Is coal being mined in the area? Yes _____ No X

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	11 3/4"		26#	X		40'	yes	surface	Kiris
Fresh water									
Coal	8 5/8"	K	20#	X		850'	yes	surface	Sizes
Intermediate									
Production	4 1/2"		9.5#	X			4550'	---	Deaths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 5-18-80.

[Signature]
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator _____ / owner _____ / lessee _____ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19 _____

By _____
Its _____