



4.025
0.79W
+

39 26 30
81 00 55

Minimum Error of Closure $\frac{5000}{*}$

Source of Elevation *St. Marys 15' Quad map U.S. G.S.*

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

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.

Signed: *J. Herbert Higginbotham* P.E.
Squares: N 6 E W

Map No.

Company *Gerald Landerman Oil & Gas*
 Address *308 1/2 S. 3rd Ave. Eden City W.Va. 26150*
 Farm *R. E. Witzel*
 Tract _____ Acres *18* Lease No. _____
 Well (Farm) No. *1* Serial No. _____
 Elevation (Spirit Level) *662+*
 Quadrangle *St. Marys NE*
 County *Tyler* District *Union*
 Engineer *J. Herbert Higginbotham* P.E.
 Engineer's Registration No. *71*
 File No. _____ Drawing No. _____
 Date *Aug 1, 1972* Scale *1" = 100'*

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

WELL LOCATION MAP
FILE NO. *TYL-451*

+ 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.



RECEIVED

NOV - 1 1978

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD 22

Quadrangle UNION DIST
Permit No. Tyler 451

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

Company Lauderman Oil & Gas Co
Address 311 S. 4TH AVE, PHOENIX CITY
Farm R.E. WETZEL Acres 3
Location (waters) Middle Island
Well No. J Elev. 660
District UNION County Tyler
The surface of tract is owned in fee by WETZEL
Address Same
Mineral rights are owned by WETZEL
Same Address
Drilling Commenced OCTOBER 1972
Drilling Completed JUN 6, 1974
Initial open flow 19,000 cu. ft. bbls.
Final production 10,000 cu. ft. per day bbls.
Well open 24 hrs. before test RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"	15	15	8 5/8 cement to Bottom to Top
9 5/8			
8 5/8	189	189	4 1/2 cement to Bottom 160
7	477	477	To 1050
5 1/2			
4 1/2	1682	1682	
3			
2	1659	1659	
Liners Used			

Well treatment details:

Test 1582 to 1592
Water 40,000 + SAND

Attach copy of cementing record.

Fracked with 1000 Bbls

Well did not show ANY INCREASE

Coal was encountered at _____ Feet _____ Inches
Fresh water 60 Feet _____ Salt Water _____ Feet
Producing Sand Big Injun Depth 1580 - 1659

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	15		
Lime Shell			15	20		
Shale			20	25		
Red Rock			25	40		
Sand. (Hurry up)			40	90		
Shale			90	105		
Sand			105	135		
Shale			135	140		
Shale & Lime Shells			140	400		
Red Rock (Big Red)			400	470		
Shale			470	565		
Shale			565	620		
Shale			620	680		
Sand			680	697		
Shale			697	720		
Sand & shells			720	750		
Shale			750	770		
Sand			770	780		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet ^{2.2}	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			780	810		
Sandy Shale			810	860		
Shale			860	870		
SAND			870	890		
Shale			890	904		
SAND			904	980		
Shale	Broken Shells		980	1075		* Bond log shows Top cement outside 4 1/2 AT 1050
SAND			1075	1130		
Shale			1130	1150		
SAND			1150	1172		
Shale			1172	1185		
SAND			1185	1215		
Shale			1215	1220		
SAND			1220	1270		
Shale			1270	1300		
SAND			1300	1360		
Shale			1360	1390		
SAND			1390	1424		
Shale			1424	1428		
SAND			1428	1450		
Linne			1450	1528		
SAND			1528	1560		
Shale			1560	1580		
SAND	B.I.		1580	1682		TD

Date 10/31/78, 19____
 APPROVED Phillip Morgan Owner
 By Agent (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED
SEP 21 1972
OIL & GAS DIVISION
DEPT. OF MINES

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

Surface Owner R. E. Metzger
Address 146 5th Ave, Paden City, W.V.A.
Mineral Owner R. E. Metzger
Address Same
Coal Owner No Coal
Address _____
Coal Operator _____
Address _____

DATE Sept 19, 1972
Company Lauderman Oil & Gas
Address 308 1/2 S. 3rd Ave, Paden City, W.V.A.
Farm R. E. Metzger Acres 18
Location (waters) Middle Island Creek
Well No. 1 Elevation 666
District UNION County Tyler
Quadrangle _____

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 1-21-73.

Robert S. Bell
Deputy Director - Oil & Gas Division

Inspector to be notified Arthur Null
Hundred, W.Va. PH: 775-5611

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 Sept 1, 1972 by R. E. Metzger made to Gerald W. Lauderman and recorded on the 7th day of Sept 1972, in Tyler County, Book 194 Page 779.
 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,
(Sign Name) Gerald W. Lauderman
Well Operator

Address of Well Operator 308 1/2 S. 3rd Ave Street
Paden City City or Town
W. Va. 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.

Sec 1
BOND DRILL

TYLER-451

PERMIT NUMBER

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

PROPOSED WORK ORDER TO Drill DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME CARDERMAN OIL & GAS NAME RAY CARDERMAN
 ADDRESS 308 W. 5th Ave, Padon City, W. Va. ADDRESS 308 W. 5th Ave, Padon City, W. Va.
 TELEPHONE 304-331-9355 TELEPHONE 304-331-9355
 ESTIMATED DEPTH OF COMPLETED WELL: 3300 ROTARY _____ CABLE TOOLS
 PROPOSED GEOLOGICAL FORMATION Speckley
 TYPE OF WELL: OIL GAS 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	150	150	90
7	900		
5 1/2	1700		
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 60 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS No Coal _____
 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