

OWNERSHIP

No coal
 Fee ownership is vested in
 Norman & Jacqueline Todd,
 R-1, Box 102 B, Friendly, W. Va.

No more data avail.
 from Chas on @ 615.6/15/90
 PJ

Minimum Error of Closure 1 in 200'
 Source of Elevation USGS B.M. at Little Bridge = 672'

- 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: Mushter
 Squares: N S E W

Map No.

Company Lauderman Oil & Gas Co.
 Address P.O. Box 266, Paden City, W. Va.
 Farm Norman & Jacqueline L. Todd
 Tract _____ Acres 672 Lease No. _____
 Well (Farm) No. One Serial No. _____
 Elevation (Spirit Level) 807'
 Quadrangle Beas Run 7 1/2, St. Marys 15' NE
 County Tyler District Union
 Engineer Mushter
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date Dec. 22, 1979 Scale 1" =

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

WELL LOCATION MAP
 FILE NO. **47-095-0760**

+ Denotes location of well on United States Topographic Maps, scale 1 to $\frac{25,000}{62,500}$ latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

Tool #1

FORM IV-35
(Obverse)

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

Date February 12, 1980

[08-78,

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

Operator's

Well No. 1

API Well No. 47-008-78

State Court # 5

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

LOCATION: Elevation: 807 Watershed: Middle Island Creek

District: Union County: Tyler Quadrangle: Bens Run 7 1/2

WELL OPERATOR Caltek Minerals Corporation
Address P. O. Box 49
Buckhannon, WV 26201

DESIGNATED AGENT R. Steven Shaver
Address P. O. Box 49
Buckhannon, WV 26201

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

PERMIT ISSUED ON January 9, 1980

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED _____, 19__

OIL & GAS INSPECTOR FOR THIS WORK:

Name Phillip Tracy

Address 173 Dodd Street

Middlebourne, WV

GEOLOGICAL TARGET FORMATION: Gordon

Depth of completed well, 2800 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 80 feet; salt, 1550 feet.

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

Work was commenced February 2, 1980, and completed February 17, 1980

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	8 5/8	H-55	20	X		260	260	150 sacks	Kinds
Fresh water									
Cal									
Intermediate									Sizes
Production	4 1/2	K-55	10.5	X			2780	275 sacks	Depth set
Sting									
Lines									
									2490

WELL FLOW DATA

Producing formation Gordon Pay zone depth 2860

Gas: Initial open flow, 30 Mcf/d Oil: Initial open flow, 0 Bbl/d

Final open flow, 30 Mcf/d Final open flow, 1 Bbl/d

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

Static rock pressure, 710 psig (surface measurement) after 24 hours shut in

[If applicable due to multiple completion--]

Second producing formation _____ Pay zone depth _____

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 measurement) after _____ hours shut in

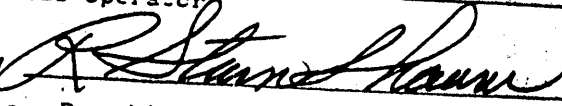
DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

LL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale	Brown	Soft	0	20	
Sand	Gray	Soft	20	45	
Lime	Gray	Soft	45	155	
Slate	Gray	Soft	155	170	
Shale	Black	Soft	170	215	
Lime	Gray		215	280	
Sand	White		280	295	
Slate	Black	Soft	295	355	
Lime	Gray	Soft	355	410	
Rock	Red	Soft	410	430	
Sand	Gray	Soft	430	565	
Lime	White	Soft	565	700	
Rock	Red	Soft	700	810	
Sand	White	Soft	810	830	
Slate	Gray	Soft	830	920	
Slate	Blue	Soft	920	1010	
Shell	Gray	Soft	1010	1195	
Salt Sand I		Soft	1195	1250	
Sand	White	Soft	1250	1280	
Shell	Black	Soft	1280	1290	
Salt Sand II			1290	1350	
Salt Sand III			1350	1375	
Shale	Gray	Soft	1375	1450	
Maxon Sand		Soft	1450	1490	
Lime	Gray	Soft	1490	1580	
Kenner Sand		Soft	1580	1620	
Big Injun Sand		Soft	1620	1675	
Shale	Gray	Soft	1675	1895	
Shale	Blue		1895	1975	
Sandy Shell	Gray		1975	2135	
Weir Sand			2135	2165	
Shell	Gray		2165	2225	
Shell	Brown		2225	2240	
Berea Sand			2240	2245	
Shell	Gray		2245	2490	
Gordon Stray Sand			2490	2510	
Shell	Gray		2510	2660	
Gordon Sand			2660	2670	
Shell	Gray		2670	2800	

(Attach separate sheets to complete as necessary)

Caltex Minerals Corporation
Well Operator

By 
Its President

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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. 1

API Well No. 47 - 095 0760
State County Permit

WELL TYPE: Oil X / GAS X

(If "Gas", Production / Underground storage / Deep / Shallow X /)

LOCATION: Elevation: 807 Watershed: Middle Island Creek

District: Union County: Tyler Quadrangle: Bens Run 7 1/2

WELL OPERATOR Lauderman Oil & Gas
Address 311 S. 4th Avenue
Paden City, W.Va.

DESIGNATED AGENT Phillip Morgan
Address Same

OIL & GAS
ROYALTY OWNER Norman & Jacqueline Todd
Address Friendly, RFD 1
W.Va. 26146

COAL OPERATOR Same
Address

Acreage 67.2

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Norman & Jacqueline Todd
Address Same as above

Name
Address

Acreage 67.2

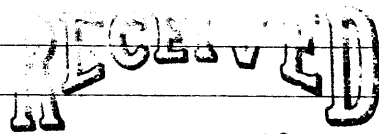
Name
Address

FIELD SALE (IF MADE) TO:
Name
Address

COAL LESSEE WITH DECLARATION ON RECORD:

Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Phillip Tracy
Address



JAN - 9 1980

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 1-2-, 19 79, to the undersigned well operator from

[If said deed, lease, or other contract has been recorded:]

Recorded on , 19 , in the office of the Clerk of the County Commission of Tyler County, West Virginia, in Book 219 at page 94. A permit is requested as follows:

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 objection 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 PHYSICAL LOSS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
401 WASHINGTON STREET EAST
CHARLESTON, WV 25311

Lauderman Oil & Gas Company
Well Operator
By Phillip Morgan
Its Land Agent

BLANKET BOND

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-3, UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) _____

Address _____

GEOLOGICAL TARGET FORMATION, Ohio Shales

Estimated depth of completed well, 3900 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 110 feet; salt, _____ feet.

Approximate coal seam depths: None 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)	PACKER	
	Size	Grade	Weight per ft	New	Used	For drilling		Left in well	
Conductor									Kinds
Fresh water									
Coal									Lines
Intermediate	8 5/8			X		260'	Yes		Btm. to surface
Production	4 1/2			X		TD of well	Yes		Thru Pay Zone
Tubing									Depths set
Liners									Perforations:
									Top Bottom

NOTE - Regulations 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 15, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-3, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 12, (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 § 22-4-9a from the owner of any water well or holding 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 on such on the Form IV-2. **THIS PERMIT MUST BE POSTED AT THE WELL SITE** 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 9-11-80.

Robert A. [Signature]
Deputy Director - Oil & Gas Division

The following declaration must be completed by the coal operator and by any well 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 _____