

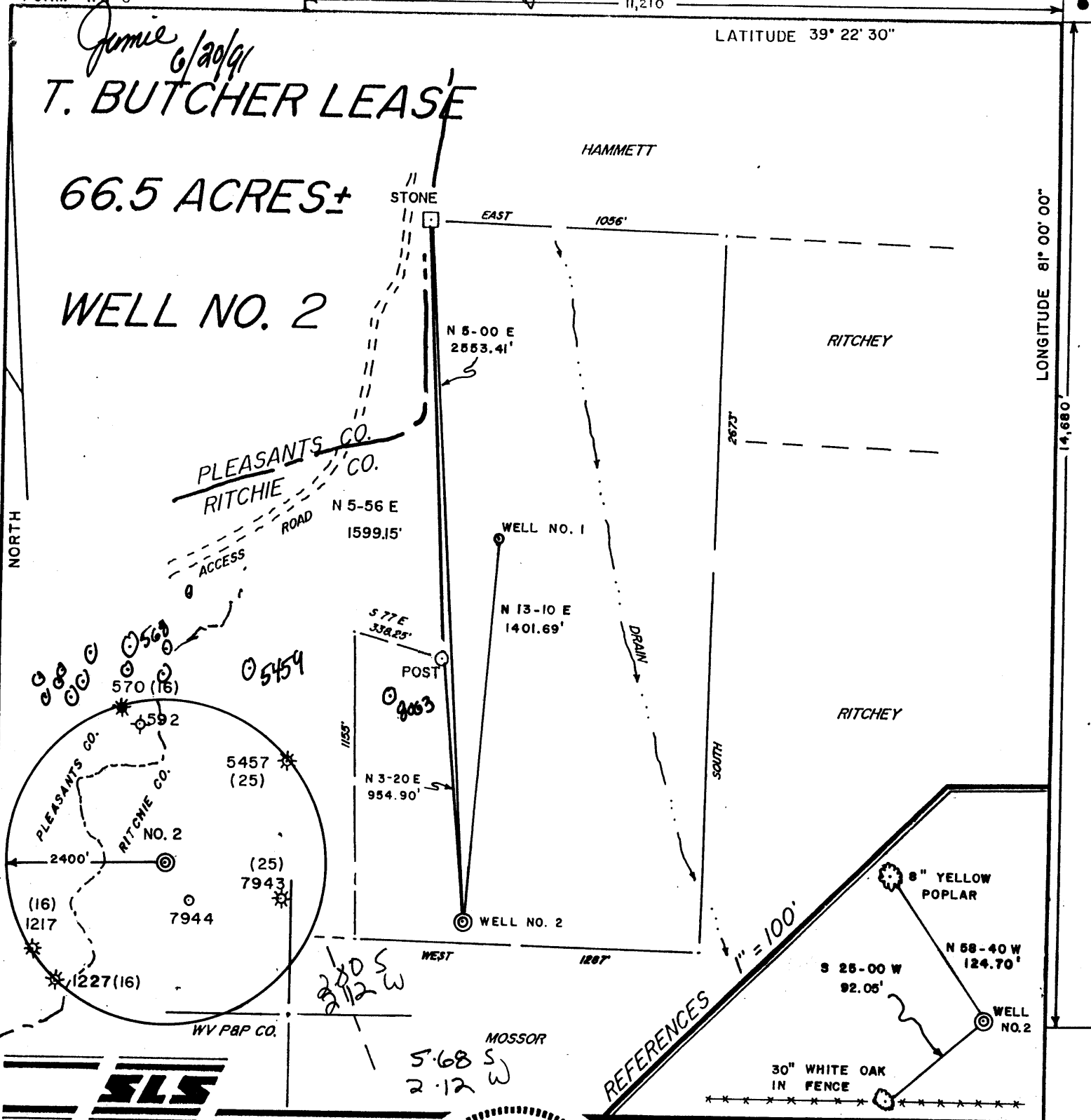
T. BUTCHER LEASE

66.5 ACRES±

WELL NO. 2

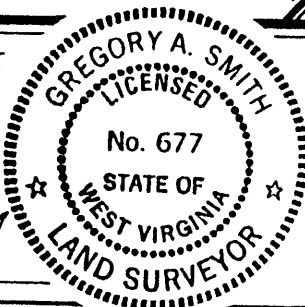
NORTH

SOUTH



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 ENERGY.

L.L.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 17, 19 91
 OPERATORS WELL NO. T. BUTCHER NO. 2
 API WELL NO. 47 - 085 - 8062
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2673 (36-32)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION IIIIO' SCALE 1" = 500'

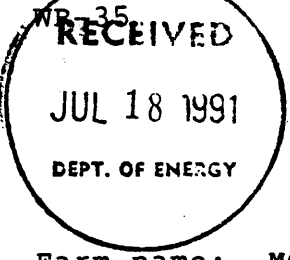
STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1028' WATERSHED BONDS CREEK
 DISTRICT CLAY COUNTY RITCHEY QUADRANGLE ELLENBORO 7.5' EC
 SURFACE OWNER KENNETH T. MOSSOR ACREAGE 66.5 St Mary
 ROYALTY OWNER T. BUTCHER HEIRS ET. AL. LEASE ACREAGE 66.5
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) ___ TARGET FORMATION ALEXANDER
 ESTIMATED DEPTH 5600'

WELL OPERATOR PARDEE GAS CO. 4568 DESIGNATED AGENT WILLIAM CARPENTER JUN 28 1991
 ADDRESS PO BOX 4119 PARKERSBURG, WV. 26101 ADDRESS PO BOX 4119 PARKERSBURG, WV. 26101

b-1 Bonds Creek (083)



State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: MOSSOR, KENNETH & LORENA Operator Well No.: T. BUTCHER #2

LOCATION: Elevation: 1028.00 Quadrangle: ELLENBORO

District: CLAY County: RITCHIE
Latitude: 14680 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 11210 Feet West of 81 Deg. 0 Min. 0 Sec.

Company: PARDEE GAS COMPANY
4001 COLLEGE PKY. P.O. BX 4119 | Casing | Used in | Left | Cement

PARKERSBURG, WV 26104-4119 | & Tubing | Drilling | in Well | Fill Up Cu. Ft.

Agent: LINDA CARPENTER

Inspector: SAMUEL HERSMAN
Permit Issued: 06/24/91
Well work Commenced: 6/27/91
Well work Completed: 7/8/91
Verbal Plugging
Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 5041
Fresh water depths (ft) 50' 90'
Salt water depths (ft) none

Table with 4 columns: Size, Drilling, in Well, Fill Up Cu. Ft.
Row 1: 8 5/8, 1063, 1063, 330 cuft
Row 2: 4 1/2, 5018, 5018, 258 cuft

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

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4906-4912
Gas: Initial open flow 700 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 100 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 700 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: [Signature] PARDEE GAS COMPANY

By: [Signature]
Date: 7-16-91

JUL 29 1991
JUL 20 1991

T. Butcher #2

Single stage, 65Q Foam Frac, Benson Formation

Shot 16 . 39 holes from 4906 to 4912 feet and broke formation down using 500 gallons of 15% FE Acid at a pressure of 1250 lbs. Ran 400 sacks of 20/40 mesh sand at an average rate of 20 BPM with an average pressure of 2300 lbs. A total volume of 322 bbls. and 355,000 scf of nitrogen was used to attain a 65 Q Foam Frac. ISIP was 550 lbs and after 5 minutes 453 lbs, 10 minutes 436 lbs.

Formation	Color	Hard/Soft	Top	Bottom	
shale	yellow	soft	10	22	
sand shale	lt. gray	med	22	31	
sand & shale	lt. gray	hard	31	75	hole damp at 50'
shale	red	soft	75	85	
shale	gray	med	85	88	
sand	lt. gray	hard	88	103	hole wet at 90'
sand shale	gray	med	103	134	
red rock	red	soft	134	163	
sand shale	gray	med	163	350	
red rock	red	soft	360	440	
sand shale	gray	med	440	935	
red rock	red	soft	935	943	
shale sand	gray	med	943	1045	
red rock	red	soft	1045	1054	
shale	gray	med	1054	1428	
shale & sand	gray	med	1428	1606	
shale	gray	med	1606	1843	
Big lime	white	hard	1843	1960	
Injun	white/gray	hard	1960	2563	
shale & sand	gray	med	2563	2873	
Gordon	gray	med	2873	2905	
shale	gray	soft	2905	3250	
sand shale	gray	med	3250	3730	
shale	gray	med	3730	4330	
Ball Town	lt. gray	med	4330	4356	
shale	gray	soft	4356	4731	
Riley	gray	med	4731	4748	
shale	gray	soft	4748	4870	
sand shale	brown	soft	4870	4890	
shale	gray	med	4890	5041	TD

12437

44-095-8062

FORM WW-2B

Page ___ of ___

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

Issued 06/24/91
Expires 06/24/93

- 1) Well Operator: 4568 Pardee Gas Company 36880 (1) 337
- 2) Operator's Well Number: T. Butcher #2 3) Elevation: 1028'
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Undergound Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 5500 feet
- 7) Approximate fresh water strata depths: 220'
- 8) Approximate salt water depths: none reported *OK*
- 9) Approximate coal seam depths: none reported
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill & Stimulate new well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor					<i>cks.</i>	<i>30CSRB-1-5</i>
Fresh Water	8 5/8	ERW	20#	1050	1050	by rule 38 CSR 18-11.2.2
Coal						
Intermediate						
Production	4 1/2	ERW	10.5#	5500	5500'	by rule 38 CSR 18.11-1
Tubing						
Liners						

RECEIVED
JUN 24 1991

PACKERS : Kind _____
Sizes _____
Depths set _____

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

For Division of Oil and Gas Use Only

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

12437

2976

RECEIVED
JUN 24 1991

- 1) Date: 6/19/91
- 2) Operator's well number
T. Butcher #1
- 3) API Well No: 47 - 085 - 8062
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|---|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Kenneth E. & Lorena D. Mosson</u>
Address <u>Rt. 83 Box 57</u>
<u>Ellenboro, WV 26346</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name _____
Address <u>N/A</u></p> <p>(b) Coal Owner(s) with Declaration
Name _____
Address _____
<u>N/A</u></p> <p>Name _____
Address _____</p> <p>(c) Coal Lessee with Declaration
Name _____
Address <u>N/A</u></p> |
| <p>6) Inspector <u>Samuel Hersman</u>
Address <u>Rt. 1 Box 240</u>
<u>Harrisville, WV 26362</u>
Telephone (304)- _____</p> | |

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

_____ 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 Pardee Gas Company
 By: [Signature]
 Its: Operations Manager
 Address P O Box 4119
Parkersburg, WV 26104
 Telephone 304-428-3471

Official Seal
 Notary Public, State of West Virginia
 Debra Ann Martin
 4001 College Parkway
 Parkersburg, WV 26101
 My commission expires May 24, 1999

Subscribed and sworn to before me this 19 day of June, 19 91

[Signature] Notary Public
 My commission expires May 24, 1999