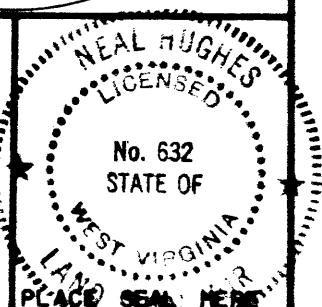


FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION ED INTER 1088'

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 MINES.
 (SIGNED) Neal Hughes
 R.P.E. _____ L.L.S. 632



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)



Department of Mines
 Oil & Gas Division

DATE JULY 8, 1985, 19
 OPERATOR'S WELL NO. PETER 2A
 API WELL NO. 47-073-1965
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION STORAGE _____ DEEP _____ SHALLOW _____
 LOCATION: ELEVATION 655' WATER SHED MIDDLE ISLAND CK.
 DISTRICT MCKIM 4 COUNTY PLEASANTS
 QUADRANGLE BENS RUN 241 116 Cs
 SURFACE OWNER DOROTHY PETER ACREAGE 54
 OIL & GAS ROYALTY OWNER DOROTHY PETER LEASE ACREAGE 54
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 5000'
 WELL OPERATOR PETHTEL OIL & GAS DESIGNATED AGENT ZEDACK PETHTEL
 ADDRESS PO. BOX 21 ADDRESS PO. BOX 21
681 ST. MARYS, WV 26170 ST. MARYS, WV 26170

AUG 26 1985

RECEIVED
DEPARTMENT OF ENERGY
OIL AND GAS



IV-35
(Rev 8-81)

Date Jan. 22, 1986
Operator's
Well No. D. Peter #2A
Farm Dorothy Peter
API No. 47 - 073 - 1965

MAR 28 1986

State of West Virginia
Department of Mines
Oil and Gas Division

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

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

LOCATION: Elevation: 655 Watershed Middle Island Creek
District: McKim County Pleasants Quadrangle Bens Run 7.5

COMPANY Pethtel Oil & Gas
ADDRESS P. O. Box 21, St. Marys, WV 26170
DESIGNATED AGENT Zedack Pethtel
ADDRESS P. O. Box 21, St. Marys, WV 26170
SURFACE OWNER Dorothy Peter
ADDRESS Lafayette Ave., St. Marys, WV 26170
MINERAL RIGHTS OWNER Same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther ADDRESS General Delivery Middlebourne, WV 26149
PERMIT ISSUED August 19, 1985
DRILLING COMMENCED Sept. 19, 1985
DRILLING COMPLETED Sept. 26, 1985
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
<u>XX-10"</u>	<u>253</u>	<u>253</u>	<u>surface 159.3 cuft</u>
<u>9 5/8</u>			
<u>8 5/8</u>			
<u>7</u>	<u>1697</u>	<u>1697</u>	<u>141.6 cuft</u>
<u>5 1/2</u>			
<u>4 1/2</u>	<u>4306</u>	<u>4306</u>	<u>363 cuft.</u>
<u>3</u>			
<u>2</u>			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander-Devonian shale Depth 5002 feet
Depth of completed well 4306 feet Rotary XX / Cable Tools
Water strata depth: Fresh 85 feet; Salt 0 feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3442-4240 feet
Gas: Initial open flow 650 Mcf/d Oil: Initial open flow 76 Bbl/d
Final open flow (240) Mcf/d Final open flow (38) Bbl/d
Time of open flow between initial and final tests 48 hours
Static rock pressure 960 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: 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.
The Peter #2A was frac'd in three stages. Each stage consisted of approximately 800,000 scf Nitrogen with treated HCL acid used for break down. The first stage ran from 4033 to 4240 feet with 24 perfs. The second stage ran from 3567 to 3844 with 23 perfs. The third stage ran from 3442 to 3526 with 23 perfs.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
clay sandstone	red&gray	shale	0	1350	
Maxon	gray	hard	1351	1376	
Lime	brown	hard	1376	1420	
Shale	gray	soft	1420	1457	
Big Injun	gray	hard	1458	1620	
Shale	gray	soft	1621	1730	
Weir	gray	hard	1731	1796	
Shale	gray	soft	1797	1926	
Santz	gray	hard	1927	1938	
Coffee shale	brown	soft	1939	1964	
Beria	gray	hard	1965	1978	
Shale	gray	soft	1979	2082	
50ft. breaks	gray	h & s	2082	2135	
Shale	gray	soft	2136	2168	
30ft breaks	gray	h & s	2169	2240	
Gordon stray	gray	hard	2241	2256	oil show 2243 - 2256
Shale	gray	soft	2257	2276	
Gordon	gray	h & s	2277	2312	oil show 2278 - 2310
Shale	gray	soft	2313	2355	
4th sand br.	gray	h & s	2356	2406	oil show 2356 - 2406
Shale	gray	soft	2406	3258	
Speechly	gray-brown	h & s	3259	3348	oil show 3259 - 3348
Shale	gray	soft	3349	3404	
Balltown	gray-brown	h & s	3405	3451	oil show 3405 - 3451 gas
Shale	gray	soft	3451	3555	
Shaffield	gray-brown	h & s	3556	3668	oil show 3556 - 3668
Shale	gray	soft	3669	4180	
Kane	brown	hard	4180	4200	oil show 4180 - 4200 gas
Shale	gray-brown	soft	4201	5000T.D.	

from nearby wells:
top thickness
1978 1240
3218 1100
4318 200
4518 260
4778

(Attach separate sheets as necessary)

Pethtel Oil & Gas

Well Operator

By: Jack Pethtel

Date: January 22, 1986

Note: 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."



AUG 16 1985

1) Date: August 7, 1985

2) Operator's Well No. D. Peter #2A

3) API Well No. 47 -073-1965
State County Permit

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

- 4) WELL TYPE: A Oil XX / Gas XX /
B (If "Gas", Production XX / Underground storage _____ / Deep _____ / Shallow XX /)
- 5) LOCATION: Elevation: 655 / Watershed: Middle Island Creek
District: McKim / County: Pleasants / Quadrangle: Bens Run
- 6) WELL OPERATOR Pethtel Oil & Gas CODE: 37850 7) DESIGNATED AGENT Zedack Pethtel
Address P.O. Box 21 (681) / Address P.O. Box 21
St. Marys, WV 26170 / St. Marys, WV 26170
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther
Address General Delivery
Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name C. T. Drilling Corp.
Address Route #1, Box 55J
Marietta, OH 45750
- 10) PROPOSED WELL WORK: Drill XX / Drill deeper _____ / Redrill _____ / Stimulate X /
Plug off old formation _____ / Perforate new formation _____
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Marcellus (401)
- 12) Estimated depth of completed well, 5000' feet
- 13) Approximate strata depths: Fresh, 45' feet; salt, 1500' feet.
- 14) Approximate coal seam depths: None Is coal being mined in the area? Yes _____ / No XX /

15) 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	13 3/8	H40	50	XX		30'			
Fresh water	9 5/8	H40	36	XX		250'	250'	80 sacks	94.4 cu ft.
Coal									
Intermediate	7	J55	20	XX			1675'	50 sacks	59 cu ft.
Production	4 1/2	J55	10.5	XX			5000'	210 sacks	354 cu ft.
Tubing									
Liners									
									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-073-1965

August 19 1985
Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires August 19, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	<u>ALB</u>	<u>MU</u>	<u>MU</u>	<u>1021</u>			

[Signature]
Director, Division of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.