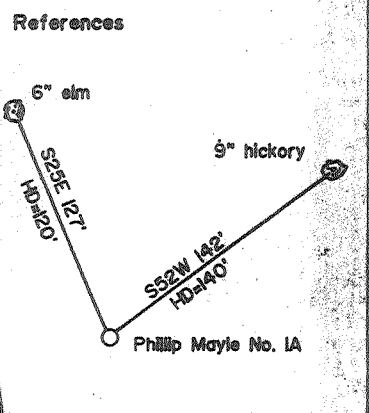


LATITUDE 39-15-00 N

Janie 3/12/90
" 9/25/92



LONGITUDE 80-50-08

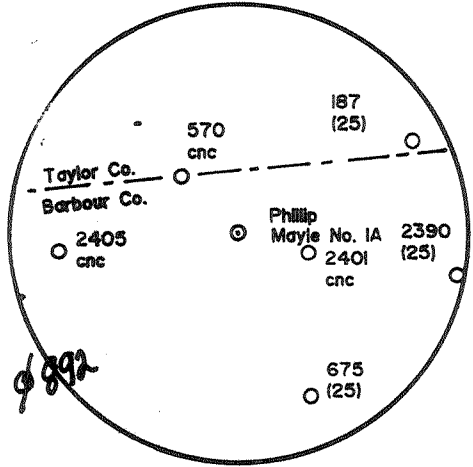
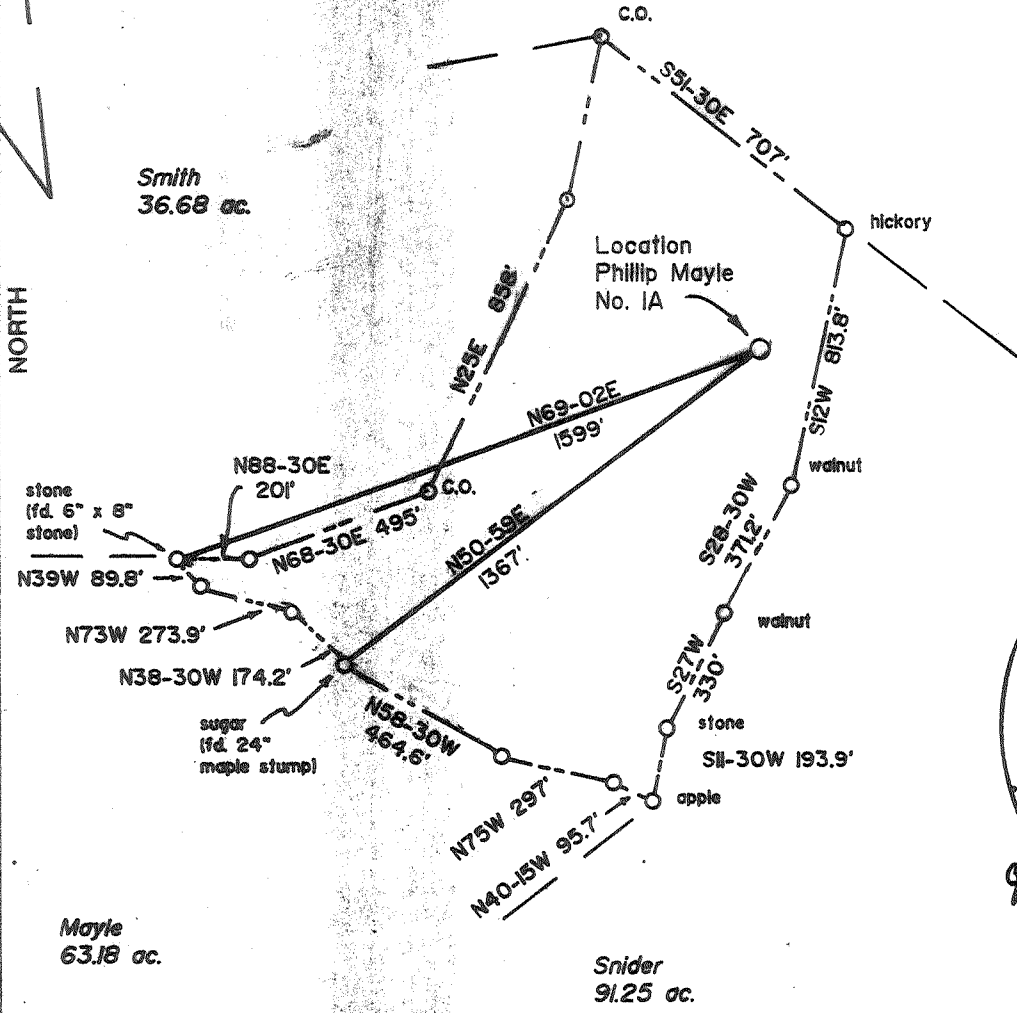
3,700'

Topo 7 1/2'

Bosley
130 ac.

Smith
36.68 ac.

Location
Phillip Mayle
No. 1A



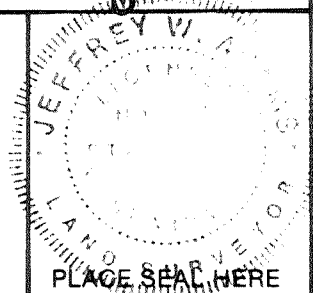
Mayle
63.18 ac.

Snider
91.25 ac.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 2
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Spot elev. 1700' NE of Location: elev. 1795

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.
 (SIGNED) Jeffrey D. Adams
 R.P.E. _____ L.L.S. 791



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE March 8 19 90
 OPERATOR'S WELL NO. Phillip Mayle No. 1A
 API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1511 WATER SHED Pleasant Creek
 DISTRICT Pleasant COUNTY Barbour
 QUADRANGLE Phillipi 7 1/2'
 SURFACE OWNER John and Linda Snider ACREAGE 35
 OIL & GAS ROYALTY OWNER Phillip Mayle LEASE ACREAGE 35

PROPOSED WORK: DRILL X 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 Benson ESTIMATED DEPTH 5000
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Steven Williams
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

COUNTY NAME BAR

PERMIT 2523 P

FORM WW-6 H.T. HALL 48673

Janie 3/12/90

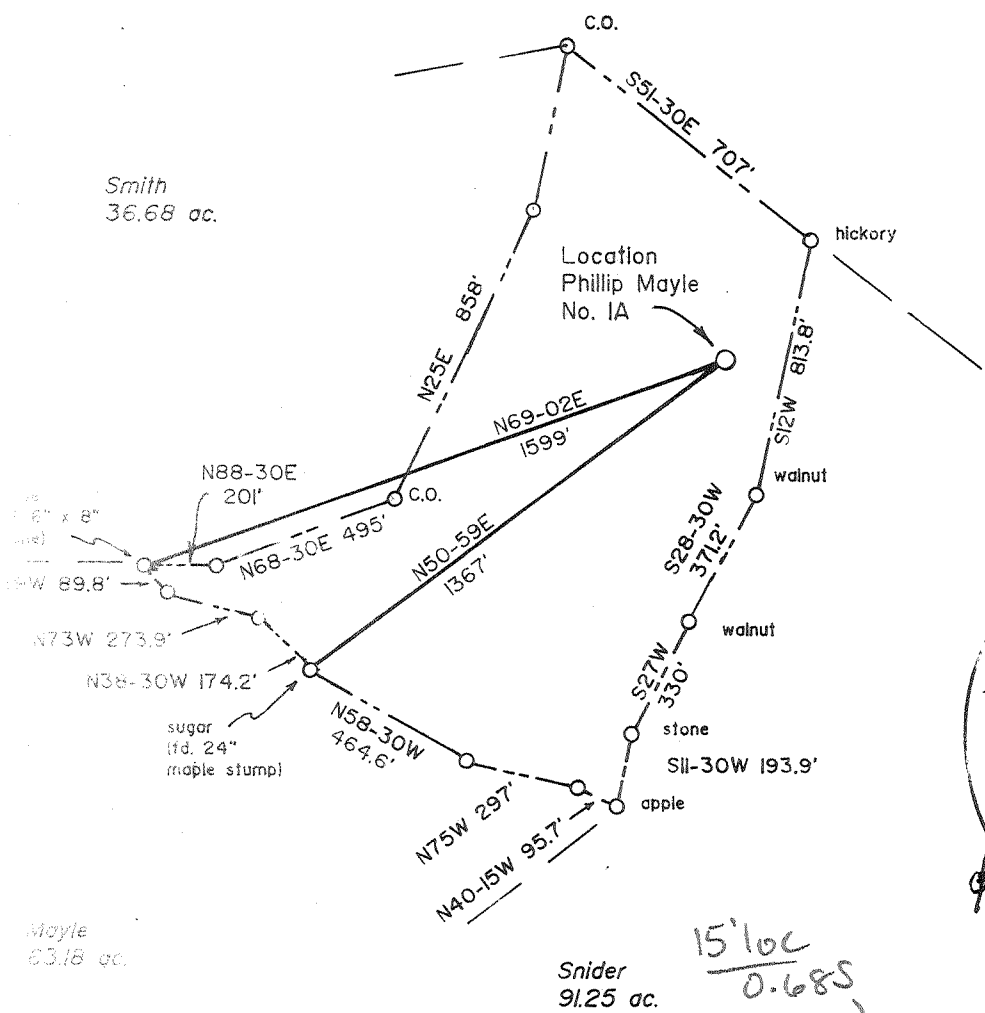
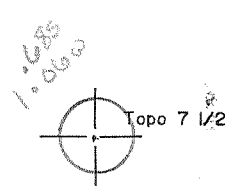
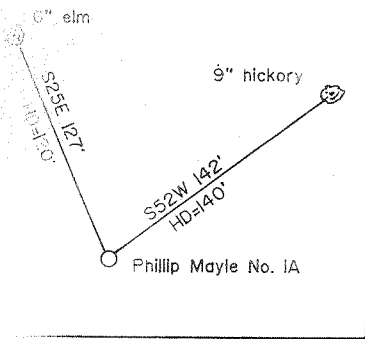
LATITUDE 39-15-00 N

5,650'

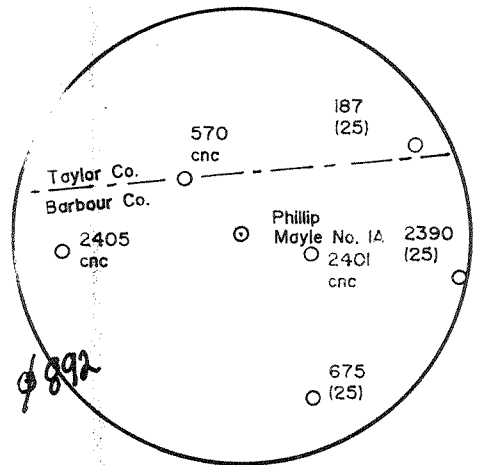
LONGITUDE 80-05-00 W

3,700'

References



Bosley 130 ac.



() DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

PLATE NO. _____
 DRAWING NO. 2
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Spot elev. 1700' NE of Location: elev. 1795

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.
 (SIGNED) Jeffrey A. Adam
 R.P.E. _____ L.L.S. 791

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE March 8, 19 90
 OPERATOR'S WELL NO. Phillip Mayle No. 1A
 API WELL NO. _____

47 001 2523
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1511 WATER SHED Pleasant Creek
 DISTRICT Pleasant COUNTY Barbour
 QUADRANGLE Phillippi 7 1/2' 415' NC
 SURFACE OWNER John and Linda Snider ACREAGE 35
 OIL & GAS ROYALTY OWNER Phillip Mayle LEASE ACREAGE 35

PROPOSED WORK: DRILL X 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 Benson ESTIMATED DEPTH 5000
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Steven Williams
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

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

Well Operator's Report of Well Work

Farm name: SNIDER, JOHN & LINDA Operator Well No.: PHIL MAYLE #1A

LOCATION: Elevation: 1511.00 Quadrangle: PHILIPPI

District: PLEASANT County: BARBOUR
Latitude: 3700 Feet South of 39 Deg. 15Min. 0 Sec.
Longitude 5650 Feet West of 80 Deg. 5 Min. 0 Sec.

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

Agent: ERIC R. STEARNS

Inspector: PHILLIP TRACY
Permit Issued: 03/12/90
Well work Commenced: 03/15/90
Well work Completed: 03/22/90
Verbal Plugging _____
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 4709'
Fresh water depths (ft) _____
312, 1300
Salt water depths (ft) _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	27'	27'	
8 5/8"	972'	972'	237 sks
4 1/2"	4672'	4672'	150 sks

Is coal being mined in area (Y/N)? No
Coal Depths (ft): 133-134; 259-262

OPEN FLOW DATA

Producing formation Riley Pay zone depth (ft) 4269.5-70.5
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow 4313.5-14.5
 Final open flow 335 MCF/d Final open flow 4370-71 Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure 1140 psig (surface pressure) after 72 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 WELLS.

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: April 12, 1990

APR 20 1990

Mayle #1a

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Riley	4(4269.5-4270.5) 4(4313.5-4314.5) 4(4370-4371)	100	600	1000	84.6

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1794	1/2" stream H2O @ 312'
Big Lime	1794	1878	Coal 133-134; 259-262
Big Injun	1878	1967	1/4" stream H2O @ 1300'
sand, shale	1967	1985	gas chk @ 1899' 2/10-2"H2O
Squaw	1985	1998	
sand, shale	1998	2176	gas chk @ 2146' 2/10-2"H2O
Gantz	2176	2198	
sand, shale	2198	2224	
50 ft	2224	2287	
sand, shale	2287	2305	gas chk @ 2302' 2/10-2"H2O
30 ft	2305	2332	
sand, shale	2332	2401	
Gordon	2401	2440	
sand, shale	2440	2656	
4th	2656	2724	
sand, shale	2724	2742	
5th	2742	2793	
sand, shale	2793	2805	
Baryard	2805	2820	
sand, shale	2820	3140	gas chk @ 2980' 2/10-2"H2O
Speechley	3140	3500	gas chk @ 3293' 2/10-2"H2O
sand, shale	3500	3550	
Balltown	3550	3879	gas chk @ 3793' 4/10-2"H2O
sand, shale	3879	3901	
Bradford	3901	3991	gas chk @ 3949' 4/10-2"H2O
sand, shale	3991	4268	
Riley	4268	4379	gas chk @ 4449' 6/10-2"H2O
sand, shale	4379	4647	gas chk @ 4542' 7/10-2"H2O
Benson	4647	4690	gas chk @ 4666' 4/10-2" H2O
sand, shale	4690	4690	
	4690	4757	Driller TD
		4709	Logger TD



001 2523
 issued 3/12/90
 expires 3/12/92 Page ___ of ___

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

- 1) Well Operator: ⁶⁸⁷ Petroleum Development Corporation 38200 16, 544
- 2) Operator's Well Number: Phillip Mayle #1A 3) Elevation: 1510'
- 4) Well type: (a) Oil ___ / or Gas XX
 (b) If Gas: Production XX Underground Storage ___ /
 Deep ___ / Shallow XX /
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 5000 feet
- 7) Approximate fresh water strata depths: 184, 514, 719 OK
- 8) Approximate salt water depths: 1357 OK
- 9) Approximate coal seam depths: 179, 389, 549, 749, 894, 939 OK
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No XX /
- 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
Conductor	11 3/4	H-40	42	30	-----	-----
Fresh Water						
Coal						
Intermediate	8 5/8	H-40	20	1025	1025	450 sks
Production	4 1/2	J-55	10.5	5000	5000	450 sks
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
 MAR 09 1990

For Division of Oil and Gas Use Only DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

Fee(s) paid: Plat WW-9 WW-2B Bond Blanket Sure WPCP Agent

16307
 0854913

RECEIVED
MAR 09 1990

- 1) Date: March 8, 1990
- 2) Operator's well number
Phillip Mayle #1A
- 3) API Well No: 47 - 001 - 2523
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

- 4) Surface Owner(s) to be served:
 - (a) Name John & Linda Snider
Address Rt. #3
Philippi, WV 26416
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name No Declaration on Record
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Phillip Tracy #2
Address Rt. 2, Box 37-A
Montrose, WV 26283
Telephone (304)- 636-8798

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
XX 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:

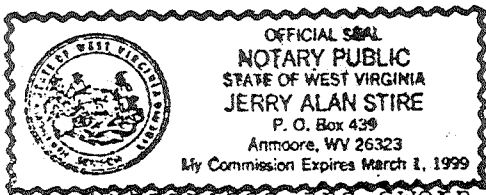
- XX Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

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 _____



Subscribed and sworn before me this 2nd day of March, 1990

My commission expires March 1, 1999 Notary Public