

Janice 7/18/88

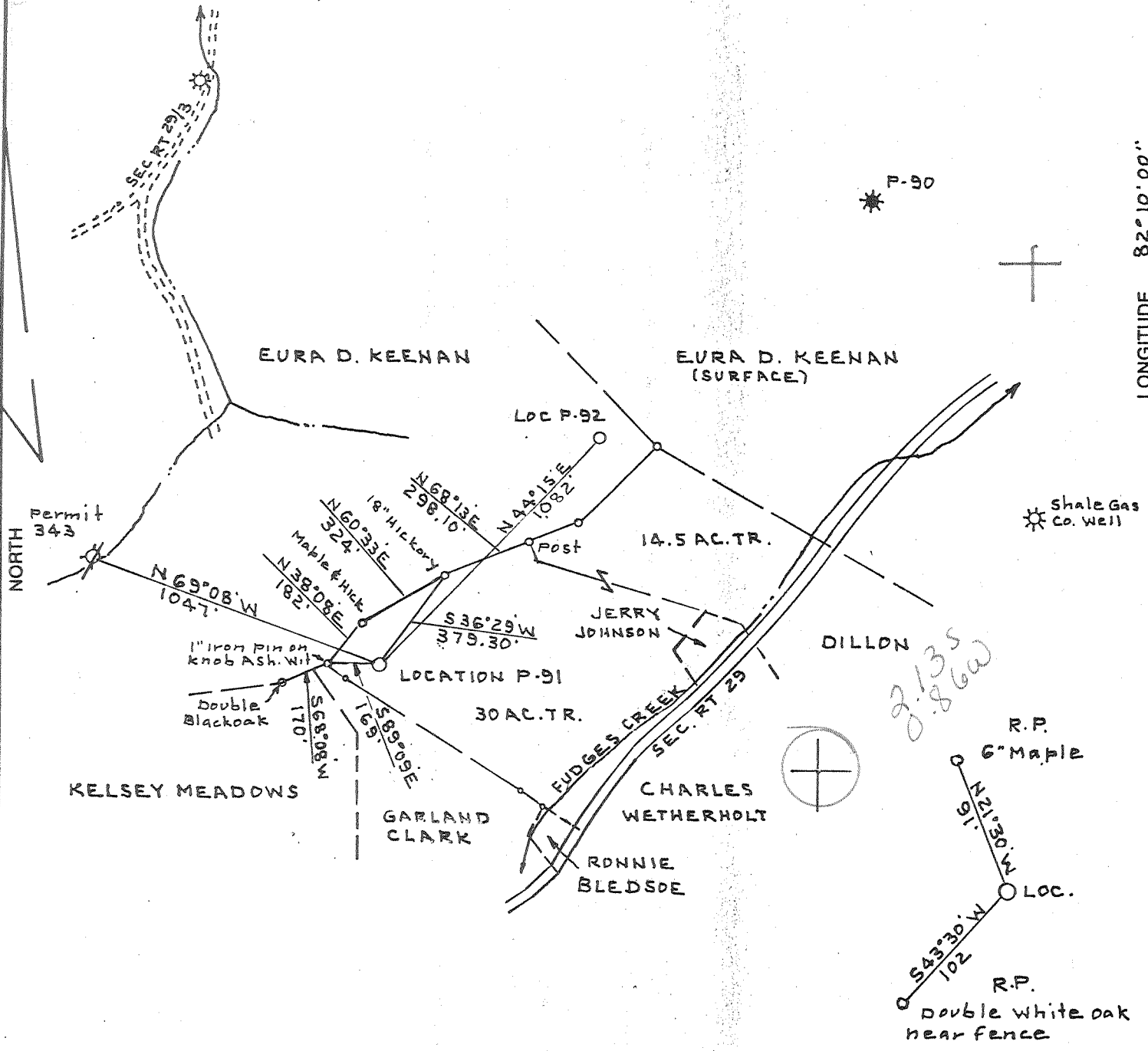
4600'

LATITUDE 38°25'00"

P-99
0820

LONGITUDE 82°10'00"

11,400'



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

FILE NO. BK 112 PG 30
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:2500'
 PROVEN SOURCE OF ELEVATION USGS BM 149 JJS
EL. 676

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) C. J. Talley Jr.
 R.P.E. J.L. 92

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE JULY 2, 19 88
 OPERATOR'S WELL NO. P-91
 API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 958.12 WATERSHED FUDGES CREEK OF MUD RIVER
 DISTRICT GRANT 3 COUNTY CABELL
 QUADRANGLE MILTON 476 0814 +15'WC
 SURFACE OWNER CLEDITH C. BLEDSOE ACREAGE 30
 OIL & GAS ROYALTY OWNER CLEDITH C. BLEDSOE LEASE ACREAGE 30
 LEASE NO. 2643

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 BEREA ESTIMATED DEPTH 2700'
 WELL OPERATOR SOUTHEASTERN GAS CO DESIGNATED AGENT FRED RADFORD
 ADDRESS P.O. BOX 2347 ADDRESS P.O. BOX 2347
CHARLESTON WV 25328 CHARLESTON WV 25328

COUNTY NAME PERMIT

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

API # 47- 11-00828

Well Operator's Report of Well Work

Farm name: BLEDSOE, CLEDITH C. Operator Well No.: P-91

LOCATION: Elevation: 958.12 Quadrangle: MILTON

District: GRANT County: CARELL
 Latitude: 11400 Feet South of 38 Deg. 25Min. 0 Sec.
 Longitude 4600 Feet West of 82 Deg. 10 Min. 0 Sec.

Company: SOUTHEASTERN GAS CO.
 P. O. BOX 2347
 CHARLESTON, WV

Asent: FRED A. RADFORD

Inspector: JERRY TERPHAROCK
 Permit Issued: 07/19/88
 Well work Commenced: 10-28-88
 Well work Completed: 11-02-88
 Verbal Pluggins
 Permission granted on: 7-19-88
 Rotary Cable Ris
 Total Depth (feet) 2741'
 Fresh water depths (ft) 326'
 Salt water depths (ft) 1510'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement (Fill Up) Cu. Ft.
8-5/8"	924'	924'	250 sks.
4-1/2"	2736'	2736'	200 sks.
2-3/8"		2636'	---

RECEIVED
 FEB 02 1989

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation: Berea Sand Pay zone depth (ft) 2610'-2620'
 Gas: Initial open flow show MCF/d Oil: Initial open flow show Bbl/d
 Final open flow 10 MCF/d Final open flow 15 Bbl/d
 Time of open flow between initial and final tests 24 Hours
 Static rock Pressure 250 psig (surface pressure) after 48 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: Fred A. Radford, Vice President
 SOUTHEASTERN GAS CO.
 By: *Fred A. Radford*
 Date: 2-1-89
 FEB 14 1989

Perforate Berea from 2610'-2618' (9 holes) and 2619'-2620' (2 holes).

Stimulation - 75Q Foam Frac - Broke down with 500 gals. acid and N² at 3.067 psi.

Inj. Rate	=	6.3 bpm	I.S.I.P.	=	1688#
Avg. Pressure	=	2900 psi	5 Min.	=	1468#
Min. Sand Con.	=	2#/gal.	10 Min.	=	1387#
Max. Sand Con.	=	8#/gal.	15 Min.	=	1340#
Total Fluid	=	269 bbl.			
Total Sand	=	40,000 # (20/40)			

Formation	Top	Bottom	Remarks
Topsoil	0'	7'	
Sand & Shale	7'	120'	
Sand	120'	185'	
Sand & Shale	185'	340'	Fresh Water @ 326'
Shale	340'	529'	
Sand	529'	692'	
Shale	692'	835'	
Sand	835'	860'	
Sand & Shale	860'	942'	
Sand	942'	1060'	
Shale	1060'	1245'	
Sand & Shale	1245'	1472'	
Salt Sand	1472'	1681'	Salt Water @ 1510'
Shale	1681'	1714'	
Sand	1714'	1735'	
Shale	1735'	1796'	
Big Lime	1796'	2016'	
Shale	2016'	2059'	
Injun Sand	2059'	2153'	
Weir Shale	2153'	2563'	
Sunbury Shale	2563'	2608'	
Berea Sand	2608'	2621'	Show of Oil @ 2612'
Devonian Shale	2621'	2741'	

T.D. 2741' (D.T.D.)
T.D. 2734' (L.T.D.)

RECEIVED
FEB 02 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

7396

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

- 1) Well Operator: Southeastern Gas Company **46400, 3, 476**
- 2) Operator's Well Number: P-91 3) Elevation: 958.12
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Berea Sandstone
- 6) Proposed Total Depth: 2700 feet
- 7) Approximate fresh water strata depths: 392', 960', 908'
- 8) Approximate salt water depths: 1510'
- 9) Approximate coal seam depths: 701'
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill 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						38CSR18-11.3
Fresh Water	9-5/8	J	32.3	990'	990'	Cement to Surface 38CSR18-11.2.2
Coal						
Intermediate						
Production	4-1/2	J	10.5	2700'	2700'	38CSR18-11.1 175
Tubing	2-3/8	J	4.6	2700'	2700'	
Liners						

RECEIVED
 JUL 13 1988

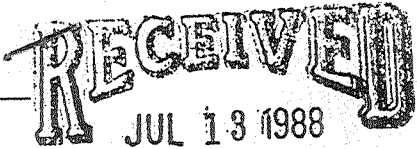
PACKERS : Kind _____
 Sizes _____
 Depths set _____

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

7396

For Division of Oil and Gas Use Only

Fee(s) paid: Plat WW-9 WW-2B Bond 50 Blanket WPCP Agent



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: July 11, 1988
2) Operator's well number P-91
3) API Well No: 47 - 011 - 0828
State - County - Permit

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 Cledith C. Bledsoe
Address Rt. 1, Box 1119, Fudges Ck Rd
Barboursville, WV 25504
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name (Coal not operated)
Address _____
 - (b) Coal Owner(s) with Declaration
Name Cledith C. Bledsoe
Address Rt. 1, Box 1119, Fudges Ck Rd
Barboursville, WV 25504
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name (Coal not leased)
Address _____
- 6) Inspector Jerry Tephabock
Address Rt. 1, Box 101-A
Ripley, WV 25271
Telephone (304)- 372-6805

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

X 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:

- X 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 Southeastern Gas Company
By: Fred A. Radford *Fred A. Radford*
Its: Vice President
Address P O Box 2347
Charleston, WV 25328
Telephone 304-343-9566

Subscribed and sworn before me this 11th day of July, 1988

Sandra K. Urban *Sandra K. Urban* Notary Public
My commission expires May 24, 1993