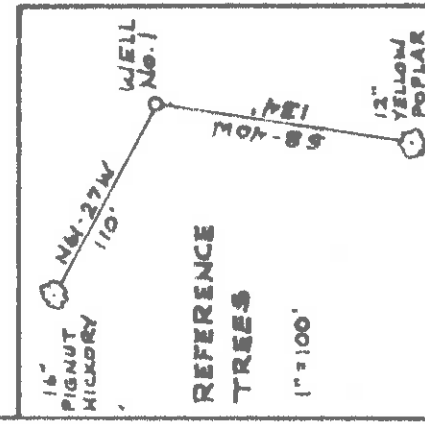
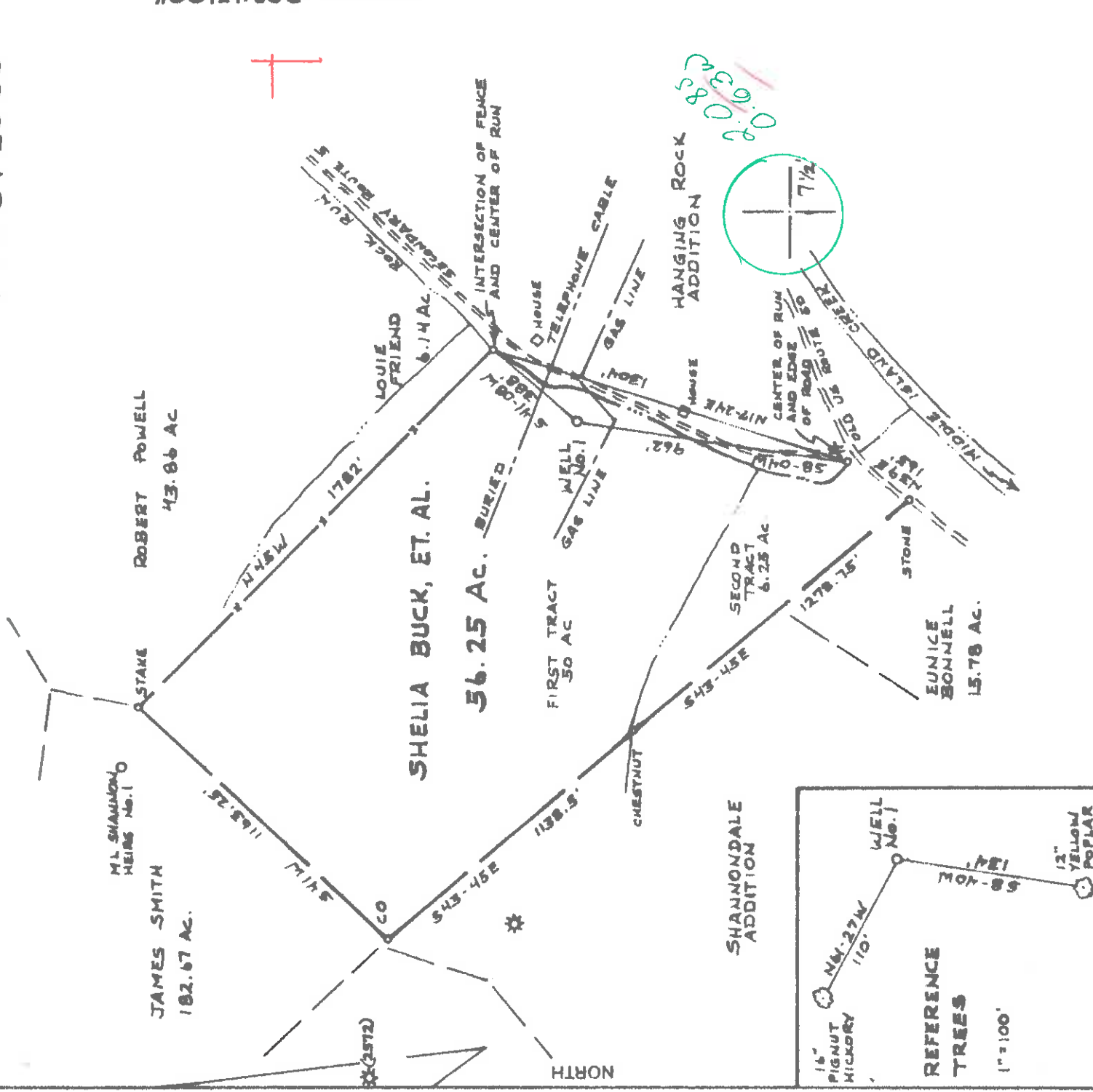


WV 11-21-85

LATITUDE 39°20'00"

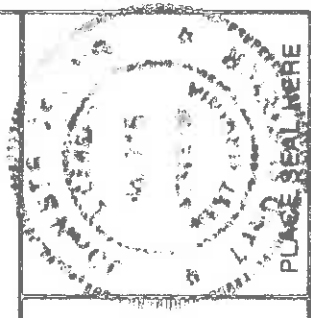
LONGITUDE 80°45'00"



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION BM NEAR ROCK RUN CHURCH ELEV. 833

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) John S. Strickling
 R.F.E. L.L.S. 715



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE 10 SEPTEMBER 19 85
 OPERATOR'S WELL NO. S. BUCK No. 1
 API WELL NO. _____

47 017 3778
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 803' WATER SHED ROCK RUN
 DISTRICT WEST UNION COUNTY PODDRIDGE
 QUADRANGLE WEST UNION, WV 714'071 ACREAGE 56.25
 SURFACE OWNER SHELIA BUCK, ET AL LEASE ACREAGE 56.25
 OIL & GAS ROYALTY OWNER SHELIA BUCK, ET AL

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 SIG JINJIN ESTIMATED DEPTH 2100'
 WELL OPERATOR HUGH SPENCER 830 DESIGNATED AGENT HUGH SPENCER
 ADDRESS WEST UNION, W.V.A. 26456 ADDRESS WEST UNION, W.V.A. 26456

COUNTY NAME PERMIT

FORM IV-6 (8-78) H1 HALL

66 Smithton-Flint - Sodalite (99)

DEC 1 1985



State of West Virginia

DEPARTMENT OF ENERGY

Oil and Gas Division

Date Nov 13, 1986
 Operator's Well No. S. Buck #1
 Farm S. Buck
 API No. 47-017-3478

WELL OPERATOR'S REPORT

OF
 DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 803' watershed Rock Run
 District: West Union County Doddridge Quadrangle West Union, WV 7 1/2'

COMPANY SPENCER ENTERPRISES
 ADDRESS Box 143 Smithburg, WV 26436
 DESIGNATED AGENT Hugh Spencer
 ADDRESS West Union, WV 26456
 SURFACE OWNER Shiela & John Buck
 ADDRESS 116 Reynolds St., Spencer, WV
 MINERAL RIGHTS OWNER Shiela & John Buck
 ADDRESS 116 Reynolds St., Spencer, WV
 OIL AND GAS INSPECTOR FOR THIS WORK Harold
Mike Underway ADDRESS Box 114 Salem, WV 26426
 PERMIT ISSUED December 12, 1985
 DRILLING COMMENCED 5/29/86
 DRILLING COMPLETED 6/19/86
 IF APPLICABLE: PLUGGING OF DRY HOLE ON
 CONTINUOUS PROGRESSION FROM DRILLING OR
 REMORKING. VERBAL PERMISSION OBTAINED
 ON

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	40'	0'	
9 5/8			
8 5/8	273.90	273.90	100 SLS STANDARD SURFACE
7			
5 1/2			
4 1/2		1860'	100 SLS STANDARD 500
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Big Injun Depth 1700 feet
 Depth of completed well 1975 feet Rotary / Cable Tools
 Water strata depth: Fresh 150 feet; Salt NONE feet
 Coal seam depths: NONE Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth 1700 feet
 Gas: Initial open flow N/A Mcf/d Oil: Initial open flow NONE Bbl/d
 Final open flow 975 Mcf/d Final open flow NONE Bbl/d
 Time of open flow between initial and final tests 5 hours
 Static rock pressure 430 psig (surface measurement) after 34 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.

17 holes between 1702 & 1711
 5 holes " 1721 & 1730

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
RED CLAY			0	5	Including indication of all fresh and salt water, coal, oil and gas Small amount of fresh water at 150'
SHALE			5	15	
SAND			15	70	
SHALE			70	150	
RED ROCK			150	200	
SHALE			200	230	
SAND			230	260	
SHALE			260	320	
SAND			320	360	
SHALE			360	385	
SAND			385	392	
SHALE			392	400	
SAND			400	414	
SHALE			414	480	
RED ROCK			480	503	
SAND			503	523	
SHALE			523	570	
R.R. shale			570	660	
R.R. shale			660	670	
SAND			670	710	
SAND			710	714	
SAND			714	722	
SHALE			722	820	
SHALE			820	850	
SHALE			850	870	
SAND			870	890	
SHALE			890	915	
SAND			915	924	
SHALE			924	958	
SAND			958	1098	
SHALE			1098	1487	
SHALE			1487	1540	
SHALE			1540	1642	

(Attach separate sheets as necessary) GNS show at 1700'

1842
1750
1740

HUGH K. SPENCER
 Well Operator

By: Bruce B. Spencer
 Date: 11/13/86

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 all intervals encountered in the drilling of a well."

- 1) Date: Oct. 18 1985
 2) Operator's Well No. S. Buck No. 1
 3) API Well No. 47 017-3478 State West Virginia County Putnam Permit



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

- 4) WELL TYPE: A Oil Gas B (if "Gas", Production Undergrnd storage Deep Shallow
 5) LOCATION: Elevation: 803' Watershed: Rock Run
 District: WEST UNION County: Dodderidge Quadrangle: WEST UNION, WV 76
 6) WELL OPERATOR Hugh Spencer CODE: 230 DESIGNATED AGENT Hugh Spencer
 Address WEST UNION, WVA 26426 Address WEST UNION, W.V. 26426

8) OIL & GAS INSPECTOR TO BE NOTIFIED

Name HAROLD MIKE UNDERWOOD
 Address Box 143
SMITHSBURG, WV 26426

9) DRILLING CONTRACTOR:

Name SPENCER ENTERPRISES
 Address Box 143
SMITHSBURG, WV 26426

- 10) PROPOSED WELL WORK: Drill deeper Redrill Stimulate
 Plug off old formation Perforate new formation
 Other physical change in well (specify) _____

11) GEOLOGICAL TARGET FORMATION, BIG INDIAN 371

- 12) Estimated depth of completed well, 2100' feet
 13) Approximate traata depths: Fresh, 100' feet; salt, NONE feet.
 14) Approximate coal seam depths: NONE Is coal being mined in the area? Yes No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	Size	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
		Grade	Weight per ft.	For drilling	Left in well		
Conductor	11"			20'	20'		
Fresh water	8"			300'	300'		CTS by rule 1505
Coal							
Intermediate							
Production	4 1/2"				2300		500' full depth set
Tubing							
Lin...							

OFFICE USE ONLY
 DRILLING PERMIT

Permit number: 47-017-3478 Date December 12 1985

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 December 12, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WVCP	S&E	Other
	<u>AS</u>	<u>mw</u>	<u>mw</u>	<u>30807</u>	<u>mw</u>	<u>mw</u>	
				<u>30812</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. File

