

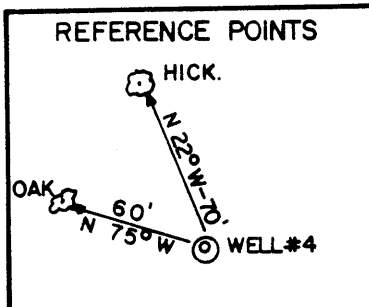
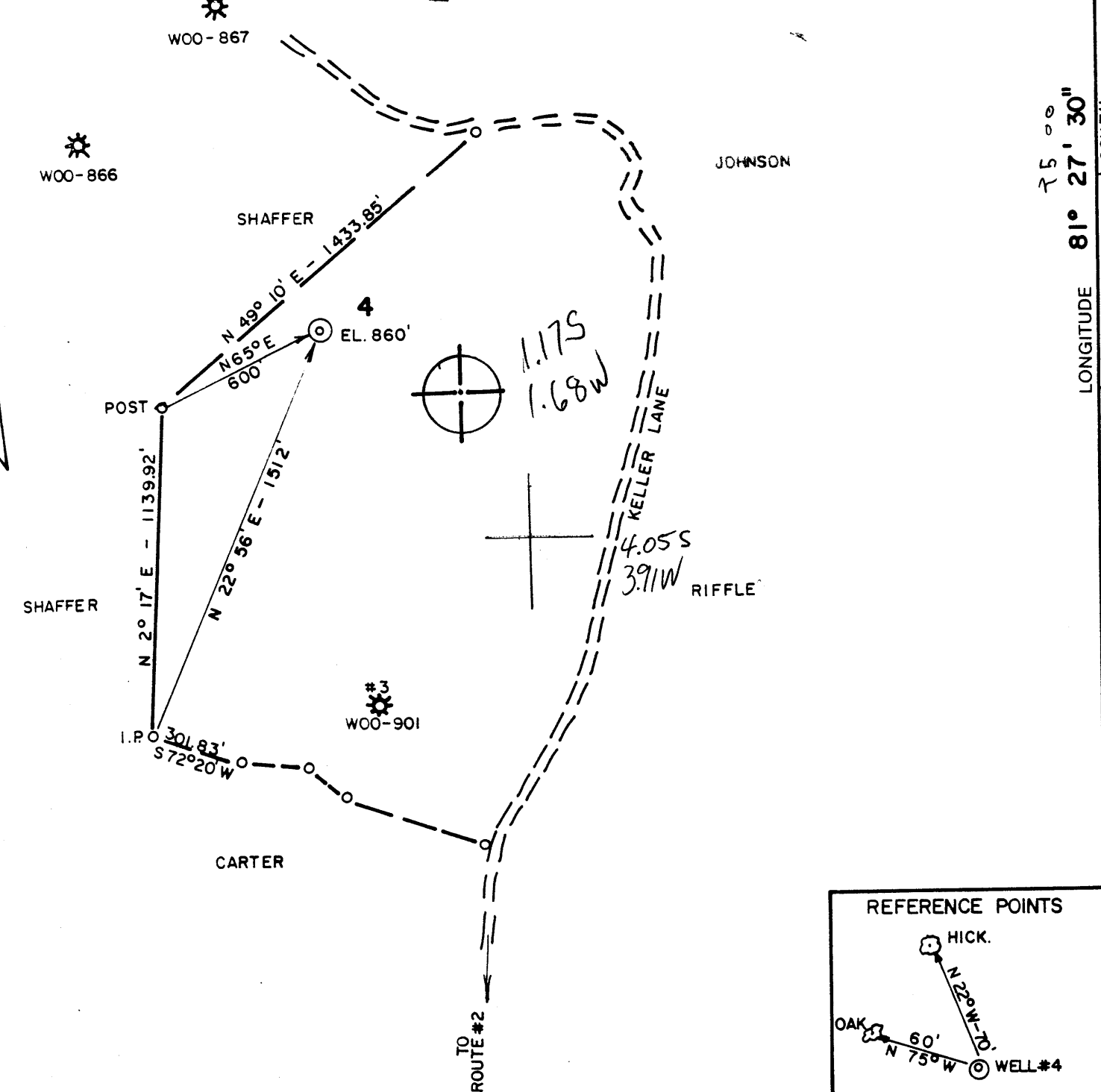
CODE \_\_\_\_\_ CARD \_\_\_\_\_ PLOT \_\_\_\_\_

8830' WEST

LATITUDE 39° 22' 30" 25 00

LONGITUDE 81° 27' 30" 75 00 SOUTH 0029 223

NORTH



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

FILE NO. 85 - 338  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1' / 200'  
 PROVEN SOURCE OF ELEVATION WELL #3 (765')

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) [Signature]  
 R.P.E. 3788 L.L.S. \_\_\_\_\_



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE 6/12, 19 85  
 OPERATOR'S WELL NO. 4  
 API WELL NO. 47-107-1371

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_  
 LOCATION: ELEVATION 860 WATER SHED \_\_\_\_\_ COUNTY WOOD  
 DISTRICT WILLIAMS  
 QUADRANGLE VALLEY MILLS 7.5' 650 Marietta 023 WC4  
 SURFACE OWNER LEO RIFFLE ACREAGE 58.81  
 OIL & GAS ROYALTY OWNER LEO RIFFLE LEASE ACREAGE 58.81

COUNTY NAME

PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PERMIT

PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION BEREA ESTIMATED DEPTH 2500'  
 WELL OPERATOR BLAUSER WELL SERVICE DESIGNATED AGENT STANLEY K. WILSON  
 ADDRESS P. O. BOX 829 095 MARIETTA, OH 45750 ADDRESS RT. 1, BOX 116 BIG SPRINGS, WV 26137

JUL 29 1985

640 Boaz (70)



IV-35 FEB 25 1986  
(Rev 8-81)

Date January 31, 1986  
Operator's  
Well No. #4  
Farm Riffle  
API No. 47 - 107 - 1371

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 X / Underground Storage     / Deep     / Shallow     /)

LOCATION: Elevation: 860' Watershed Ohio River  
District: Williams County Wood Quadrangle Valley Mills

COMPANY Blauser Well Service, Inc.  
ADDRESS Marietta, OH 45750  
DESIGNATED AGENT Stanley K. Wilson  
ADDRESS Big Springs, WV 26137  
SURFACE OWNER Leo Riffle  
ADDRESS Route 1, Williamstown, WV 26187  
MINERAL RIGHTS OWNER Leo Riffle  
ADDRESS Route 1, Williamstown, WV 26187  
OIL AND GAS INSPECTOR FOR THIS WORK Glen  
Robinson ADDRESS Mineralwells, WV  
PERMIT ISSUED July 10, 1985  
DRILLING COMMENCED October 27, 1985  
DRILLING COMPLETED November 2, 1985  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON n/a

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	254	254	80 sx
7			
5 1/2			
4 1/2	2155'	2155'	75 sx
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Berea Depth 2100 feet  
Depth of completed well 2182 feet Rotary X / Cable Tools      
Water strata depth: Fresh 60 feet; Salt 881 feet  
Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Berea Pay zone depth 2100 feet  
Gas: Initial open flow 3 Mcf/d Oil: Initial open flow Tr Bbl/d  
Final open flow (40) Mcf/d Final open flow (1/2) Bbl/d  
Time of open flow between initial and final tests 24 hours  
Static rock pressure 730 psig (surface measurement) after 72 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

MAR 10 1986  
(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated 2103' - 2105' with 12 shots

Fractured well with 250 gal. 15% HCL and 58,500 lbs 12/20 mesh sand and 900 bbls. water.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	200	
Shale			200	552	
Sand			552	579	
Shale			579	882	
Sand			882	900	
Shale			900	998	
Sand			998	1044	
Shale			1044	1050	
Sand			1050	1084	
Shale			1084	1116	
Sand			1116	1158	
Shale			1158	1216	
Sand			1216	1224	
Shale			1224	1312	
Sand			1312	1350	
Shale			1350	1490	
Sand			1490	1511	
Shale			1511	1534	
Sand			1534	1544	
Shale			1544	1616	
Big Injun <sup>PO</sup>			1616	1762	saltwater
Shale			1762	2100	
Berea			2100	2104	
Shale			2104	TD	oil/gas
				TD 2182	

(Attach separate sheets as necessary)

Blausser Well Service, Inc.

Well Operator

By: Arno M. Hunk

Date: 1/31/86

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

**RECEIVED**  
JUN 24 1985



1) Date: June 14, 19 85  
 2) Operator's Well No. L. Riffle #4  
 3) API Well No. 47 107 - 1371  
 State County Permit:

**OIL & GAS DIVISION  
DEPT. OF MINES**

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

- 4) WELL TYPE: A Oil  / Gas   
 B (If "Gas", Production  / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow \_\_\_\_\_)
- 5) LOCATION: Elevation: 860 Watershed: Ohio River  
 District: Williams County: Wood Quadrangle: Valley Mills 7.5'
- 6) WELL OPERATOR Blauser Well Service, Inc. 095 7) DESIGNATED AGENT Stanley K. Wilson  
 Address P.C. Box 829 Address Route 1, Box 116  
Marietta, OH 45750 6000 Big Springs, WV 26137
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Glen P. Robinson Name Bill Putnam  
 Address Route 1, #6 Mt. Pleasant Est. Address Mile Run Road  
Mineralwells, WV 26150 Marietta, OH 45750
- 10) PROPOSED WELL WORK: Drill  / Drill deeper \_\_\_\_\_ / Redrill: \_\_\_\_\_ / Stimulate \_\_\_\_\_ /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Berea 395  
 12) Estimated depth of completed well, 2500' feet  
 13) Approximate strata depths: Fresh, 80' feet; salt, 1670' feet.  
 14) Approximate coal seam depths: n/a Is coal being mined in the area? Yes \_\_\_\_\_ / No

**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									
Fresh water	8 5/8"	J-55	24	X		250'	250'	to surf.	Kinds <u>by rule 15.05</u>
Coal									Sizes
Intermediate									
Production	4 1/2"	J-55	9.5	X		2500'	2500'	500' fill	<u>as required by rule 15.01</u>
Tubing									
Liners									Perforations:
									Top Bottom

**OFFICE USE ONLY  
DRILLING PERMIT**

Permit number 47-107-1371 Date July 10 19 85

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 July 10, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>19</u>	<u>ALB</u>	<u>MU MU</u>	<u>MU MU</u>	<u>15930</u>

*Margaret J. Haise*  
 Administrator, Office 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