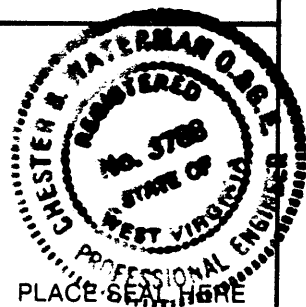


FILE NO. 84-467
 DRAWING NO. _____
 SCALE 1" = 200'
 MINIMUM DEGREE OF ACCURACY 1/200'
 PROVEN SOURCE OF ELEVATION BOAZ (613')

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) Chester Waterman
 R.P.E. 3788 L.L.S. _____



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE 8/16, 19 84
 OPERATOR'S WELL NO. 4A
 API WELL NO. 47-107-1325

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

LOCATION: ELEVATION 602' WATERSHED OHIO RIVER
 DISTRICT WILLIAMS O COUNTY WOOD
 QUADRANGLE VALLEY MILLS 6507.5' MARIETTA 073 WC4

SURFACE OWNER EUGENE MAYO ACREAGE 11
 OIL & GAS ROYALTY OWNER EUGENE MAYO LEASE ACREAGE 11
 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 BEREA ESTIMATED DEPTH 2100'
 WELL OPERATOR BLAUSER WELL SERVICE DESIGNATED AGENT STANLEY K. WILSON
 ADDRESS P. O. BOX 829 ADDRESS RT. 1, BOX 116
095 MARIETTA, OH 45750 BIG SPRINGS, WV 26137

NOV 05 1984

FORM IV-6 (8-78)

COUNTY NAME PERMIT

RECEIVED

FEB 28 1985



OIL & GAS DIVISION *State of West Virginia*
DEPT. OF MINES Department of Mines
 Oil and Gas Division

Date February 1, 1985
 Operator's Well No. A-4
 Farm Mayo
 API No. 47 - 107 - 1325

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: 602 Watershed Ohio River
 District: Williams County Wood Quadrangle Valley Mills

COMPANY Blauser Well Service
 ADDRESS Marietta, OH 45750
 DESIGNATED AGENT Stanley K. Wilson
 ADDRESS Big Springs, WV 26137
 SURFACE OWNER Eugene Mayo
 ADDRESS Williamstown, WV 26187
 MINERAL RIGHTS OWNER Eugene Mayo
 ADDRESS Williamstown, WV 26187
 OIL AND GAS INSPECTOR FOR THIS WORK Glen P. Robinson ADDRESS Mineralwells, WV
 PERMIT ISSUED October 25, 1984
 DRILLING COMMENCED October 31, 1984
 DRILLING COMPLETED November 4, 1984
 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.			
13-10"			
9 5/8			
8 5/8	263	263	to surface
7			
5 1/2			
4 1/2	1920	1920	500'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Berea Sand Depth 1850 feet
 Depth of completed well 1961 feet Rotary X / Cable Tools
 Water strata depth: Fresh 40 feet; Salt 1300 feet
 Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Berea Pay zone depth 1850 feet
 Gas: Initial open flow 91 Mcf/d Oil: Initial open flow 10 Bbl/d
 Final open flow 91 Mcf/d Final open flow 10 Bbl/d
 Time of open flow between initial and final tests 24 hours
 Static rock pressure 570 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 11 1985

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

Perforated with 13 shots 1850-56'

Hydraclically Fractured with 50,000 lbs 20/40 sand.
10,000 lbs 10/20 sand.

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	492	
shale			492	608	
sand			608	654	
shale			654	790	
sand			790	970	
shale			970	1004	
sand			1004	1038	
shale			1038	1064	
sand			1064	1080	
shale			1080	1233	
sand			1233	1254	
shale			1254	1280	
Big Injun			1280	1495	
shale			1495	1834	
coffee shale			1834	1850	
berrea sand			1850	1856	
Devonian shale			1856	<u>1961 TD</u>	oil & gas

(Attach separate sheets as necessary)

Blausner Well Service, Inc.

Well Operator

By: Aaron M. Huck Aaron M. Huck Sec/Treas

Date: February 25, 1985

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."



1) Date: August 27, 19 84
 2) Operator's Well No. E. G. Mayo #4-A
 3) API Well No. 47 - 107 - 1325
 State County Permit

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: 602' Watershed: Ohio River (O)
 District: Williams County: Wood Quadrangle: Valley Mills 7.5'
- 6) WELL OPERATOR Blauser Well Service, Inc. 7) DESIGNATED AGENT Stanley K. Wilson
 Address P.O. Box 829 Address Route 1, Box 116
Marietta, OH 45750 Big Springs, WV 26137
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Glen P. Robinson Name Haught, Inc.
 Address Route 1, #6 Mt. Pleasant Est. Address 4424 Emerson Avenue
Mineralwells, WV 26150 Parkersburg, WV 26101
- 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
- 12) Estimated depth of completed well, 2100' feet
- 13) Approximate trata depths: Fresh, 40 feet; salt, 1300 feet.
- 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes OIL & GAS DIVISION

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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									Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8"	H-40	24	X		250'	250'	to surface	
Production	4 1/2"	K-55	10.5	X		2100'	2100'	1100'	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

DEPT. OF MINES

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-107-1325

October 25, 19 84
 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 October 25, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>19</u> BLANKET	Agent: <u>LS</u>	Plat: <u>TS</u>	Casing: <u>TS</u>	Fee: <u>014-129</u>
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Margaret J. Hesse
 Administrator, Office of Oil and Gas

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