

Jamie 8/8/89

OHIO RIVER

HENDERSON LEASE TRACT "C"

WELL NO. 2
2.15
3.45 39.5
ACRES ±

LARGE ELM STUMP

N 65-18 W
298.01

WELL NO. 2

S 39-46 E
1499.74

RCLSTON

S 40-30 E

DRY

RUN

HENRIE

N 43-55 W

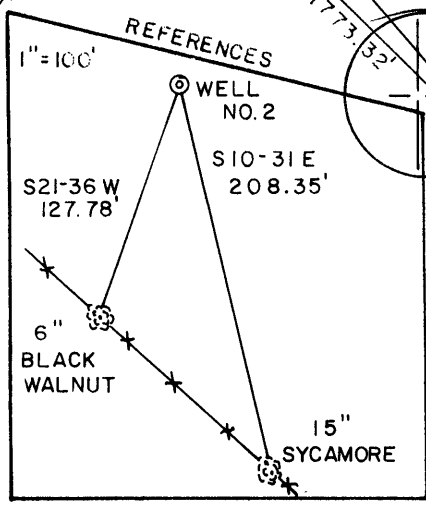
1773.32

555
192

ROLSTON

POST

ROLSTON

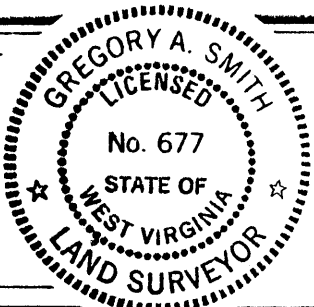


NOTE: NO WELLS SHOWN WITHIN 1500'



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.

L.L.S. 677 Gregory A. Smith



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

DATE NOVEMBER 2, 19 88

OPERATORS WELL NO. HENDERSON NO. 2

API WELL NO. 47 - 107 - 7446
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1952(27-5)
PROVEN SOURCE OF ELEVATION BENCH MARK ELEV. 610' SCALE 1" = 300'

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION

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

LOCATION: ELEVATION 604' WATERSHED DRY RUN OF BIG RUN OF THE OHIO RIVER +15' WC

DISTRICT WILLIAMS COUNTY WOOD QUADRANGLE MARIETTA 7.5' 458

SURFACE OWNER MICHAEL B. ROLSTON ACREAGE 39.5 073

ROYALTY OWNER MICHAEL B. ROLSTON LEASE ACREAGE 39.5 4

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE LEASE NO. _____

FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BEREA

ESTIMATED DEPTH 1950'

WELL OPERATOR BLAUSER WELL SERVICE INC. DESIGNATED AGENT STANLEY K. WILSON

ADDRESS P.O. BOX 829 MARIETTA, OHIO 45750 ADDRESS R.T. 1 BOX 116 BIG SPRING, WV 26037

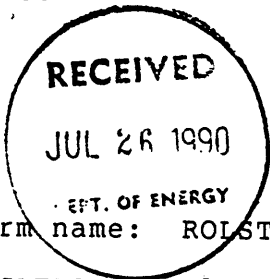
95

AUG 11 1989

LONGITUDE 81-21-13

11,450

COUNTY NAME PERMIT



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

Well Operator's Report of Well Work

Farm name: ROLSTON, MICHAEL B. Operator Well No.: HENDERSON #2

LOCATION: Elevation: 604.00 Quadrangle: MARIETTA

District: WILLIAMS County: WOOD
Latitude: 11450 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude: 6290 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: BLAUSER, DENNIS D., WELL
704 PIKE STREET, P.O. BOX 829
MARIETTA, OH 45750-0000

Agent: STANLEY K. WILSON

Inspector: GLEN P. ROBINSON
Permit Issued: 08/09/89
Well work Commenced: 10/31/89
Well work Completed: 11/09/89
Verbal Plugging
Permission granted on: N/A
Rotary Cable Rig
Total Depth (feet) 2255'
Fresh water depths (ft) 20-120'

Salt water depths (ft) 1320'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): None

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	20'	20'	Surface
8 5/8"	278'	278'	Surface
4 1/2"	2210'	2210'	330 cu. ft.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 2162
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 29 MCF/d Final open flow - Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 730 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 WELLBORE.

For: Aaron M. Huck Aaron M. Huck Adm. VP
BLAUSER, DENNIS D., WELL SERVICES, INC.

Prepared By: D. Tim Zoller, Petroleum Engineer
Date: July 24, 1990

107-1446

Perforations: 12 @ 2162' - 2165' 12 @ 2170' - 2173'
Using 2 1/8" strip jets .39 dia.

Fracturing: Well fractured with 75% quality Foam utilizing
7250 gal. gelled fluid & 235,000 SCFN₂
30,000 20/40 Mesh Sand
and 300 gal. 15% HCL

Well Log

Soil	0' - 16'
Unconsolidated Sand	16' - 50'
Grey shale	50' - 120'
Sand	120' - 151'
grey shale	151' - 157'
red rock	157' - 170'
grey shale	170' - 179'
sand	179' - 183'
red rock & grey shale	183' - 211'
sand	211' - 217'
grey shale	217' - 380'
red rock	380' - 385'
sand	385' - 392'
red rock	392' - 400'
sand	400' - 410'
red rock	410' - 415'
grey shale	415' - 470'
red rock	470' - 534'
sand	534' - 585'
red rock	585' - 705'
sand	705' - 915'
grey shale	915' - 925'
sand	925' - 1095'
grey shale	1095' - 1160'
sand	1160' - 1674'
grey shale	1674' - 1705'
red & grey shale	1705' - 1754'
grey shale	1754' - 1855'
coffee shale	1855' - 1860'
beresa sand	1860' - 1864'
grey shale	1864' - 2162'
sand & grey shale	2162' - 2178'
gordon sand	2178' - 2186'
grey shale	2186' - 2255' TD

*No Coal Encountered

1556

RECEIVED

47-107-1446
Issued 8/9/89 Expires 8/9/91
Page 3 of 7

AUG 01 1989 STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
DIVISION OF OIL AND GAS WORK PERMIT APPLICATION
DEPARTMENT OF ENERGY

- 1) Well Operator: Blauser Well Service, Inc. (Op. Code 6000) (0) *458*
- 2) Operator's Well Number: Henderson #2 3) Elevation: 604'
- 4) Well type: (a) Oil / or Gas X/
(b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
- 5) Proposed Target Formation(s): Berea *305*
- 6) Proposed Total Depth: 1930' feet
- 7) Approximate fresh water strata depths: 260' *130'*
- 8) Approximate salt water depths: 900' *OK*
- 9) Approximate coal seam depths: n/a *OK*
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill and stimulate 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.)
Drive Pipe Conductor	13"		54 or 48	120'	120'	<i>38 CSR 18-11.3</i>
Fresh Water	8 5/8"	H-40	20	285' <i>290'</i>	285' <i>290'</i>	CTS
Coal						
Intermediate						
Production	4 1/2"	J-55	10 1/2	1930'	1930'	CSR 18.11.1
Tubing						
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

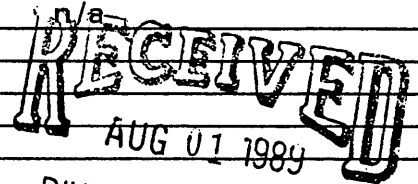
23003
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Agent

1) Date: July 24, 1989
2) Operator's well number
Henderson #2
3) API Well No: 47 - 107 - 1446
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:	5) (a) Coal Operator:
(a) Name <u>Michael B. Rolston - Power of</u>	Name <u>n/a</u>
Address <u>Henderson Hall</u>	Atty. Address _____
<u>Williamstown, WV 26187</u>	
(b) Name <u>Sandra Henderson Bauske</u>	(b) Coal Owner(s) with Declaration
Address <u>10429 South Millard</u>	Name _____
<u>Chicago, IL 60655</u>	Address _____
(c) Name <u>Dorothy Henderson</u>	Name _____
Address <u>12229 Gambel Drive</u>	Address _____
<u>Fountain Hills, AZ 85268</u>	
6) Inspector <u>Glen P. Robinson</u>	(c) Coal Lessee with Declaration
Address <u>Route 1, #6 Mt. Pleasant Estate</u>	Name <u>n/a</u>
<u>Mineral Wells, WV 26150</u>	Address _____
Telephone <u>(304)-489-9162</u>	



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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) (signature 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 Bjauser Well Service, Inc.
 By: [Signature]
 Its: Secretary/Treasurer
 Address P.O. Box 829
Marietta, OH 45750
 Telephone (614) 373-6305

Subscribed and sworn before me this 24th day of July, 1989

Marilyn S. Lang Zeller Notary Public
My commission expires April 18, 1990