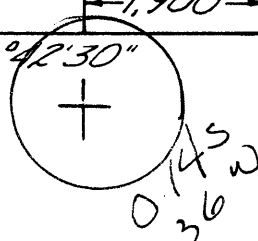


Jamie 10/10/89

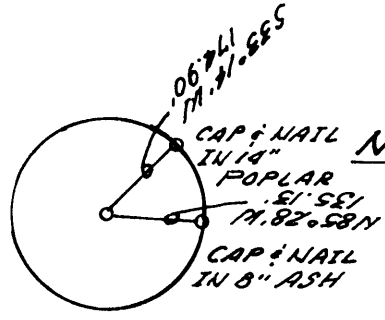
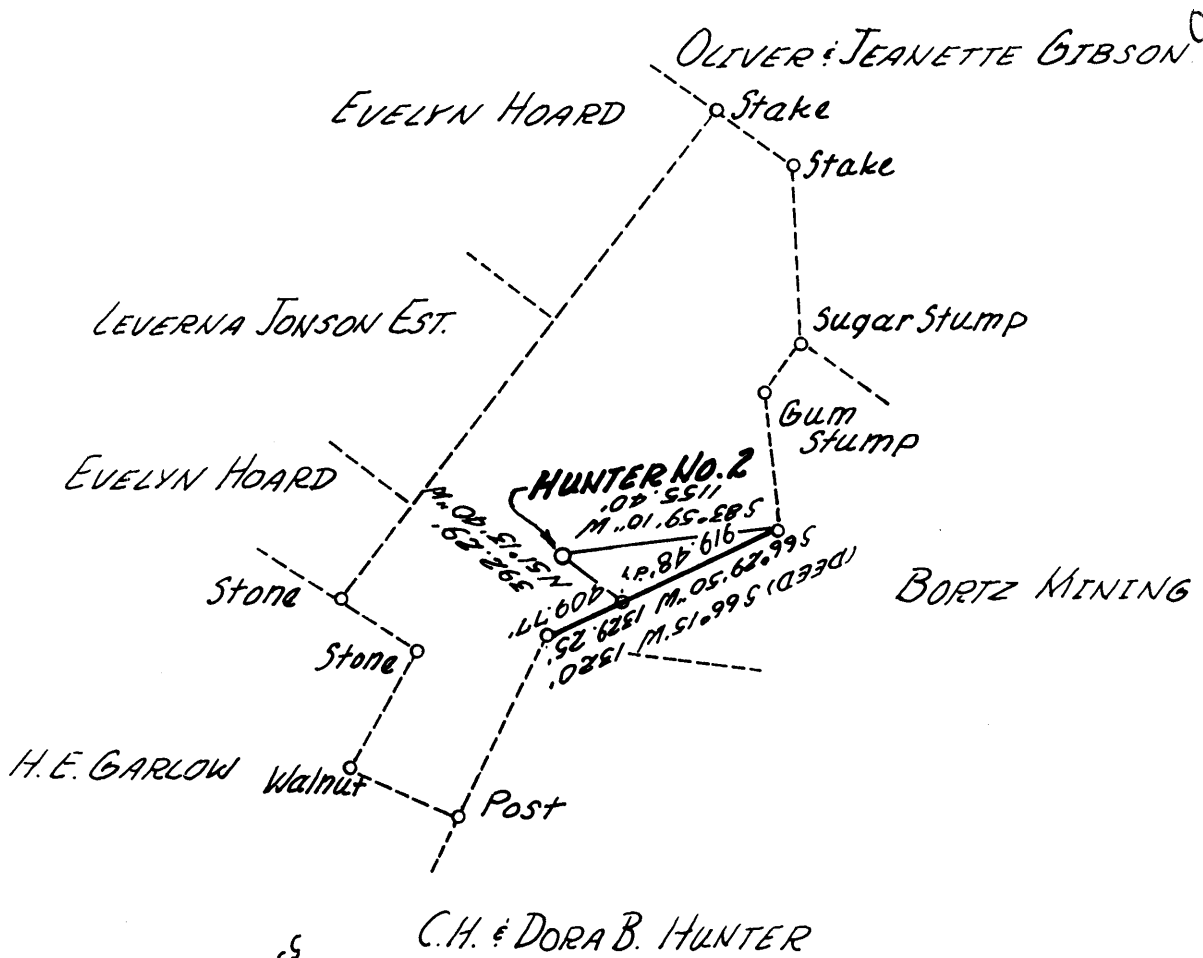
LATITUDE 39°42'30"



800'

LONGITUDE 79°55'00"

NORTH



No known wells within 1200'

REFERENCES
Bk. 121 Pg. 14

15' loc
3.02 S
0.36 W

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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:2500'
 PROVEN SOURCE OF ELEVATION U.S.G.S. QUAD

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) [Signature]
 R.P.E. 7064 L.L.S. _____

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE OCTOBER 9, 19 89
 OPERATOR'S WELL NO. HUNTER #2
 API WELL NO. 47-061-0946
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1120' WATER SHED MONONGAHELA RIVER
 DISTRICT UNION COUNTY MONONGALIA
 QUADRANGLE MORGANTOWN NORTH, W.V.A. - PA ±15' NW
 SURFACE OWNER CHARLES TR. & MARY J. HUNTER (D.B. 743 P. 655) ACREAGE 85.1 AC.
 OIL & GAS ROYALTY OWNER SAME LEASE ACREAGE SAME

PROPOSED WORK: DRILL X 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 _____ ESTIMATED DEPTH _____
 WELL OPERATOR NOUMENON CORPORATION DESIGNATED AGENT STEPHEN K. SHULMAN, PRES.
 ADDRESS P.O. Box 842, Morgantown, W.V. ADDRESS SAME
26507-0842, W.V.

OCT 13 1989

6-6 Cassville- Bowlby (06%)

FORM WV-6

COUNTY NAME PERMIT

WR35

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

22-AUG-90
API # 47-61-00946

REC'D
Division of
SEP 05
Permitting
Oil and Gas Section

Well Operator's Report of Well Work

FARM NAME: HUNTER, CHARLES, ET UX Operator Well No.: HUNTER #2
LOCATION: Elevation: 1120.00 Quadrangle: MORGANTOWN NORTH.
District: UNION County: MONONGALIA
Latitude: 800 Feet South of 39 Deg. 42 Min. 30 Sec.
Longitude: 1,900 Feet West of 79 Deg. 55 Min. 00 Sec.

COMPANY: NOUMENON CORPORATION, a WV
P.O. Box 116
Core, WV 26529-0116

AGENT: STEPHEN K. SHUMAN

Inspector: DONALD ELLIS

Permit Issued: 10/10/89

Well Work Commenced: 10/13/89

Well Work Completed: 10/20/89

Verbal Plugging

Permission granted on: n/a

Rotary X Cable Rig

Total Depth (feet) 2552'

Fresh water depths (ft) 1160

Note: Dampness only

Salt water depths (ft) n/a

Is coal being mined in area (y/n)? n

Coal Depths (ft): 560

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Cu. Ft.
11 3/4"	40'	40'	
7 "	1041'	1041'	CTS
4 1/2"		2524'	1130 sks

OPEN FLOW DATA

Producing Formation Squaw, Fifth, Big Injun Pay zone depth (ft) 1529'
Gas: Initial open flow 0 MCF/d Oil: Initial open flow Bbl/d
Final open flow 200 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 12 Hours
Static rock Pressure 150 psig (surface pressure) after 8 Hours

Second producing Formation All above Pay zone deptq (ft)
Gas: Initial open flow Above MCF/d Oil: Initial open flow Bbl/d
Final open flow Above MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Above Hours
Static rock Pressure Above psig (surface pressure) after Above Hours
Note: Above information is a composite of both pay zones.

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.

SEP 10 1990

PERFORATION AND STIMULATION DATA:

The 4 1/2" casing was notched with 8 cuts at the following intervals:

- Fifth Sand - 2384', 2364', 2362', 2358'
- Gordon Stray - 2084'
- Thirty Foot - 1992', 1970', 1965'
- Gantz - 1886'
- Berea - 1822'
- Lower Squaw - 1627'
- Upper Squaw - 1568', 1550' treatment applied
- Big Injun - 1462', 1433', 1421', 1396', 1352'

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The notches were fraced separately unless otherwise indicated -
See attached exhibit.

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Sandstone & Shale	Gray	Hrd	0	252	
Sandstone	Gray	Med	252	316	
Red Rock & Shale	Gra/Rd	Med	316	323	
Sandstone	Gray	Hrd	323	334	
Red Rock	Red	Sft	334	343	
Red Rock & Shale	Gra/Rd	Med	343	376	
Sandstone	Gray	Hrd	376	500	
Sandstone & Shale	Gray	Med	500	560	
Coal	Black	Sft	560	565	
Shale & Sandstone	Gray	Med	565	652	
Sandstone	White	Hrd	652	727	
Shale & Sandstone	Gray	Sft	727	830	
Sandstone	Gray	Hrd	830	885	
Shale & Sandstone	Gray	Med	885	1025	
Sandstone	Gray	Med	1025	1040	
Red Rock & Shale	Gra/Rd	Med	1040	1053	
Sandstone	Gray	Hrd	1053	1196	Dampness at 1160'
Little Lime	Gray	Med	1196	1212	
Shale	Gray	Sft	1212	1242	
Big Lime	Gray	Hrd	1242	1334	
Big Injun	Tan	Hrd	1334	1392	
Sandstone & Shale	Gray	Hrd	1392	1477	
Base Big Injun ^{Squaw?}	Gray	Hrd	1477	1503	
Sandstone & Shale	Gray	Med	1503	1545	
Squaw ^{weir?}	Gray	Med	1545	1705	
Shale	Gray	Med	1705	1815	
Berea ?	Gray	Med	1815	1830	
Sandstone	Gray	Hrd	1830	1888	
Gantz	Gray	Med	1888	1901	
Sandstone & Shale	Gray	Med	1901	1915	
Fifty Foot	Gray	Hrd	1915	1945	
Shale	Gray	Med	1945	1967	
Thirty Foot	Gray	Hrd	1967	2012	
Sandstone & Shale	Gray	Med	2012	2084	
Gordon Stray	Gray	Hrd	2084	2098	
Sandstone & Shale	Gray	Med	2098	2320	
Fifth Sand "A"	Gray	Hrd	2320	2338	
Shale	Gray	Med	2338	2358	
Fifth Sand	Gray	Hrd	2358	2372	
Sandstone & Shale	Gray	Med	2372	2455	

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Bayard	Gray	Hrd		2455		2463	
Shale	Gray	Med		2463		2486	
Elizabeth	Gray	Hrd		2486		2490	
TD Logger				2500			

NOUMENON CORPORATION, a W. VA. CORP.

By: Stephen G. Shuman, Pres.
Date: 8/31/90

9671

The four and one-half (4 1/2) inch casing was notched then at several points with eight (8) notches cut at each position starting with the first notches in the Fifth Sand at 2384, 2364, 2362, and 2358 feet. The Gordon Stray Sand was notched at 2084 ft. The Thirty Foot Sand was notched at 1992, 1970, and 1965 1/2 ft. The Gantz Sand was notched at 1886 ft.; the Berea Sand at 1822 ft.; the Lower Squaw Sand was notched at 1627 ft.; the Upper Squaw at 1568 and 1550 ft.; the Big Injun Sand was notched at 1462, 1433 1/2, 1421, 1396, and 1352 ft. The notching was completed on November 8, 1989; the casing was filled with 20/40 sand to the base of the uppermost notch.

The notches are fraced separately from the top down, that is, starting at the upper-most notch, flushing-out the sand fill-up form inside the four and one-half (4 1/2) inch casing down below the notch and using two and seven-eighths (2 7/8) inch tubing with a packer set above the notch so that the frac is pupmed down to two and seven-eighths (2 7/8) inch tubing and is isolated for each notch separately.

The first notch at 1352 in the Big Injun was fraced on November 9 at 5:16 PM; BDP 3400 PSI, ATP 2612 PSI, AIR 17.1 BPM, ISIP 1200, 5 minute SIP 1050, HHP 1095. Used 75 sacks of 20-40 sand, 9780 gallons total fluid.

Second stage in the Big Injun notch at 1398' at 5:56 PM November 9, 1989; BDP 3200 PSI; ATP 2813 PSI; AIR 17.1 BPM; ISIP 1100. Used 75 sacks of sand maximum 1 1/2 PPG, 7750 gallons total fluid.

Stage three--Big Injun 1421' notch, 8:00 AM, 11-10-89; BDP 3100 PSI; ATP 3050 PSI; AIR 16.6 BPM; ISIP 1150 PSI; 5 minute SIP 1000 PSI. Used 75 sacks of 20-40 sand, 8640 total gallons fluid, which included an extra pad volume.

Stage four--Big Injun at 1433 1/2', frac communicated outside 4 1/2 inch casing possibly through formation fracture with Stage three, therefore, Stage four was aborted and moved on to Stage five.

Stage five--Big Injun at 1462 feet at 9:56 AM, 11-10-89; BDP 2550; ATP 2463; AIR 17.1 BPM; ISIP 1200 PSI. Used 75 sacks 20-40 sand, 7770 gallons of water.

Stage six--Notch at 1550 feet in Upper Squaw; BDP 3400 PSI; ATP 2350 PSI; AIR 17.1 BPM; ISIP 1200, used 75 sx 20/40 sand.

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Oil and Gas Section

SEP 10 1990

Fracing progress was delayed approximately five (5) hours due to a breakdown of a dozer moving sand trucks.

Stage seven--Notch at 1568' in Upper Squaw at 4:00 PM, 11-10-89; BDP 3000 PSI; ATP 2925 PSI; AIR 21.4 BPM; ISIP 1200; 5-minute SIP 1000 PSI. Used 75 sacks of sand, 5670 gallons total fluid.

Stage eight--In Lower Squaw at notch 1627 feet; BDP 3300 PSI; ATP 3175 PSI; AIR 23 BPM; ISIP 1300 PSI; 5 minute SIP 1200 PSI. Used 75 sacks 20-40 sand, 7530 gallons total fluid. Completed at 5:47 PM.

On the morning of November 11, 1989, after leaving the well sit open and blow all night, it had cleaned itself and was making an estimated 100,000 cubic feet of gas while still cleaning a lot of frac water.

The Berea was fraced on November 11, 1989 at 7:55 AM, notch at 1822 feet; BDP 3300 PSI; ATP 3350 PSI; AIR 20 BPM; ISIP 1600. Used 75 sacks of sand, total fluid estimated at 7500 gallons.

Washed down to the Gantz notch at 1886 for Stage ten, began at 9:16 AM; BDP 2900 PSI; ATP 3312; AIR 20.6 BPM; ISIP 1600 PSI; 5 minute SIP 1200 PSI. Used 75 sacks 20-40 sand, 8200 gallons total water.

Stage eleven--Thirty Foot Sand with notch at 1965 1/2 ft.; BDP 4000 PSI; ATP 3600 PSI; AIR 23 BPM; ISIP 1650; 5 minute SIP 1200 PSI. Used 100 sacks 20-40 sand, 8700 gallons total fluid.

Stage twelve--Notch at 1970 feet--could not break down with 4500 PSI; attempted to reseal packer but packer failed; pulled tubing, found rubber stripped from packer, redressed packer and re-ran. Probably had packer set in notch at 1970. Because of the time required to trip the tubing and dress the packer, it was decided to skip Stage thirteen in the bottom of the Thirty Foot Sand, stage fourteen in the Gordon Stray, and go directly to:

Stage fifteen in the Fifth Sand with notches at 2358, 2362, and 2364; BDP 3800 PSI; ATP 3300 PSI; AIR 22.4 BPM; ISIP 1600 PSI; 5 minute SIP 1600 PSI. Used 250 sacks of sand, total fluid 18,220 gallons, maximum 1 1/2 pounds per gallon.

Stage sixteen--Fifth Sand notch at 2384 feet commenced at 6:17 PM; BDP 4200 PSI; ATP 3475 PSI; AIR 22.5 BPM; ISIP 1650 PSI. Used 225 sacks 20-40 sand, 16,500 gallons water. Completed at 6:36 PM, Nov. 11, 1989.

On November 11 the well was left open overnight and continued to flow back through Nov. 12. Tubing was pulled on Nov. 12 and the well swabbed through 4 1/2 inch casing to clean up.

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

Issued 10/11/89
Expires 10/11/91
483

- 1) Well Operator: Noumenon Corporation 34710 (7) 624
- 2) Operator's Well Number: Hunter #2 3) Elevation: 1120'
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production / Underground Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): Bayard Sand #23
- 6) Proposed Total Depth: 2900 feet
- 7) Approximate fresh water strata depths: 955' 141' 445'
- 8) Approximate salt water depths:
- 9) Approximate coal seam depths: 540' (Upper Freeport) 555'-561' 641'-645' 856'-861' 874'-880'
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill, Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	11-3/4"		42#	40'	40'	
Fresh Water						
Coal						38CSR18-11.3 38CSR10-11.2.2
Intermediate	7"		23#	1025'	1025'	CTS
Production	4-1/2"		10.5#	2900' TD		
Tubing					PAC.	if used 9' by full 38CSR18-11.1
Liners						

PACKERS : Kind possibly produce open hole if
 Sizes
 Depths set so No 4 1/2 will be run

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OCT 10 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

34410
27
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Banket Agency Agent
 (Type)

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OCT 10 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: OCTOBER 10, 1989
Operator's well number
Hunter #2
API Well No: 47 - 061-0946
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Charles & Mary J. Hunter Jr.</u>
Address <u>Route 4, Box 318</u>
<u>Morgantown, WV 26505</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name <u>N/A</u>
Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>N/A</u>
Address _____</p> <p>Name _____
Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name <u>N/A</u>
Address _____</p> |
| <p>6) Inspector <u>Donald Ellis</u>
Address <u>2604 Crabapple Lane</u>
<u>Fairmont, WV 26554</u>
Telephone <u>(304)-534-5596</u></p> | |

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
 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:

- 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 Noumenon Corporation
By: [Signature]
Its: Vice President
Address 256 High Street, P.O. Box 842
Morgantown, WV 26507-0842
Telephone (304) 292-8488

Subscribed and sworn before me this 10th day of OCTOBER, 19 89

[Signature] Notary Public
My commission expires FEBRUARY 5, 1996