

WR35

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

22-AUG-90
API # 47-61-00938

RECEIVED
Division of Energy
SEP 05 90
Permitting
Oil and Gas Section

Well Operator's Report of Well Work

FARM NAME: LYNCH, JOHN D., ET AL Operator Well No.: LYNCH #7
LOCATION: Elevation: 1240.00 Quadrangle: MORGANTOWN NORTH.
District: UNION County: MONONGALIA
Latitude: 11,100 Feet South of 39 Deg. 42 Min. 30 Sec.
Longitude: 3,400 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: 08/16/89
Well Work Commenced: 08/15/89
Well Work Completed: 08/20/89
Verbal Plugging
Permission granted on: n/a
Rotary ___ Cable ___ Rig
Total Depth (feet) 1751'
Fresh water depths (ft) 1050
Salt water depths (ft) n/a
Is coal being mined in area (y/n)? n
Coal Depths (ft): 620

Size	Used in & Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	40'	40'	
7 "	1170'	1170'	150

OPEN FLOW DATA

Producing Formation Big Injun Pay zone depth (ft) 1529'
Gas: Initial open flow 5 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 40 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 240 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 4 cuts at the following intervals:
 Squaw Sand: 1708' - No treatment applied
 Big Injun Sand: 1490', 1512', 1518', 1529', 1536'

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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	471	160 Fresh Water
Sandstone	Gray	Med	471	500	
Sandstone & Shale	Gray	Hrd	500	535	
Upper Freeport Cl	Black	Sft	535	538	
Shale & Sandstone	Gray	Sft	538	650	
Lower Freeport Cl	Black	Sft	650	655	
Shale & Sandstone	Gray	Med	655	885	
Coal	Black	Sft	885	890	
Shale & Sandstone	Gray	Med	890	914	
Homewood Sndstone	Gray	Med	914	1020	985 Fresh Water 3"
Shale	Gray	Sft	1020	1050	Stream
Sandstone	Gray	Med	1050	1086	1080 Fresh Water
Shale & Sandstone	Gray	Hrd	1086	1250	
Shale	Gray	Med	1250	1288	
Little Lime	Gray	Med	1288	1300	
Sandstone & Shale	Gray	Med	1300	1338	
Big Lime	Gray	Hrd	1338	1427	
Big Injun Limest	Tan	Hrd	1427	1543	
Shale	Gray	Hrd	1543	1625	
Squaw Sandstone	Gray	Med	1625	1663	
Shale	Gray	Med	1663	1690	
Sandstone <i>weir?</i>	Gray	Hrd	1690	1733	
Shale	Gray	Med	1733	1817	
TD Logger			1817		

NOUMENON CORPORATION, a W.VA. CORP.

By: *John R. Johnson*

Date: *August 24, 1990*

9429

7" casing was set at 1,170 feet and was cemented to surface. 6 3/4" hole was drilled to total depth.

The completion was to be in the 6 1/4" open hole using John Wahl's rig and Don Taylor air notching technique where the four notch tool is located on the bottom of 1 1/2" tubing. Notches were cut on the open formation face at 1,490.2 feet, 1,512.8 feet, 1,518.7 feet, 1,529.3 feet, and 1,536.1 feet. The notches were cut in order from the lower-most to the upper-most and the well bore was filled or plugged back progressively with frac sand. The actual fracing was a hydro-frac carried out by utilizing a string of 4 1/2" casing with a packer and a string of 1 1/2" tubing suspended inside the 4 1/2"; the 1 1/2" tubing was used to reverse circulate out the sand plug-back material and the 4 1/2" was lowered so that the packer was set above each seceding open hole notch. The zones were fraced from the upper-most to the lower-most progressively using this technique.

The first zone was fraced in the Big Injun at 1,490.2 feet; BDP 2,250; ATP 2,400; AIR 30 bpm; used 100 sacks 20-40 sand; 150 bbls sand laden fluid; ISIP 1,100; 5 min SIP 900.

The second zone was also in the Big Injun at a depth of 1,512.8 feet; BDP 2,600; ATP 2150; AIR 31 bpm; ISIP 1,150; used 100 sacks 20-40 sand; 150 bbls sand laden fluid.

Next zone in the Big Injun at 1,518.7 feet; BDP 1,800; ATP 2,300; AIR 35 bpm; ISIP 1,230; 5 min SIP 930; used 100 sacks 20-40 sand.

The next zone was in the Big Injun notch at 1,529.3 feet; BDP 3,200; ATP 2,500; AIR 29 bpm; ISIP 1,540; 5 min SIP 1,000; used 100 sacks 20-40 sand.

The last zone treated was a notch in the Big Injun at 1,536.1 feet; BDP 1,900; ATP 2,390; AIR 31 bpm; ISIP 1,450; 5 min SIP 930; used 250 sacks 20-40 sand; 227 bbls sand laden fluid; maximum sand concentration 2 1/2 PPG.

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SEP 10 1990

47-061-0938

Issued 8/22/89 Expires 8/22/91

FORM WW-2B

Page ___ of ___

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

- 1) Well Operator: Noumenon Corporation ⁶²⁰ 34710, 7, 483
- 2) Operator's Well Number: Lynch # 7 3) Elevation: 1240
- 4) Well type: (a) Oil / or Gas x/
(b) If Gas: Production x/ Underground Storage /
Deep / Shallow x/
- 5) Proposed Target Formation(s): Big Injun ³⁷¹
- 6) Proposed Total Depth: 1900 feet
- 7) Approximate fresh water strata depths: 920
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 650
- 10) Does land contain coal seams tributary to active mine? Yes / No x/
- 11) Proposed Well Work: Drill and open hole frac.
- 12) Drill & Stimulate New Well

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	10"		32 lb.	40'	- -	
Fresh Water						
Coal						
Intermediate	7"	J-55	17 lb.	980'	980'	38 CSR 14-11.2.5 CTS
Production	<u>Produce open hole</u>					
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

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1525

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

- 1) Date: August 14, 1989
- 2) Operator's well number
Lynch # 7
- 3) API Well No: 47 - 061 - 0938
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:
 - (a) Name John D. Lynch
Address 378 Jacobs Drive
Morgantown, WV 26505
 - (b) Name Robert E. Lynch, Jr.
Address 305 Rotary Street
Morgantown, WV 26505
 - (c) Name Ann L. Borchert
Address 105 Lady Helen Court
Fayetteville, GA 30214
- 5) (a) Coal Operator:
 - Name N/A
Address _____
 - (b) Coal Owner(s) with Declaration
 - Name N/A
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
 - Name N/A
Address _____
- 6) Inspector Donald Ellis
Address 2604 Crab Apple Lane
Fairmont, WV 26554
Telephone (304)-534-5596

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:
 _____ 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 Novmenon Corporation
 By: [Signature]
 Its: President
 Address 256 High Street
Morgantown, WV 26505
 Telephone (304) 292-8488

OFFICIAL SEAL
 Notary Public, State of West Virginia
JANET S. BOWSER
 256 HIGH ST
 MORGANTOWN, W. VA. 26505
 My Commission Expires October 28, 1997

Subscribed and sworn before me this 14th day of August, 1989
[Signature] Notary Public
 My commission expires 10/28/97