

DEET

Date: API# February 17, 2002

47-039-05404

## State of West Virginia **Division of Environmental Protection** Section of Oil and Gas Well Operator's Report of Well Work

Farm name:

Kenneth Britton

Operator Well No.:

DEG.

McLean A-70

MIN.

Left

in

Well

36'

626'

1957'

5754'

5617

LOCATION:

Elevation:

801

Ouadrangle:

38

81

Casing

&

Tubing Size

16"

9 5/8"

7"

4 1/2"

2 3/8"

Sissonville

Used

in

**Drilling** 

District: Latitude: Union 6.155

7,575

feet South of

feet West of

County: DEG.

Kanawha

32 MIN.

42

SEC. 30 30 SEC.

Cement

Fill up

Cu. Ft.

235 sks

315 sks

100 sks

Latex

Longitude: Company: Cabot Oil & Gas Corporation

900 Lee Street East, Suite 500

Charleston, WV 25301

John Abshire
Carlos Hively
8/21/01
9/14/01

Well Work Completed: Verbal Plugging

Permission granted on:

X Cable

Total Depth (feet) Fresh Water Depths (ft)

Salt Water Depths (ft)

Coal Depths (ft)

1/10/02

5768 92'

181'-186', 220'-223', 505'-509'

1196', 1480', 1601' Is coal being mined in area (Y / N)?

**OPEN FLOW DATA** 

<b>Producing formation</b>	NEWBURG		_ Pay zone depth (ft)	5634' – 5648'	
Gas: Initial open flow	60	MCF/d	Oil: Initial open flow	0	Bbl/d
Final open flow	84 Commingled	MCF/d	Final open flow	0	Bbl/d
Time of open flow between initial and final tests					Hours
Static rock pressure			pressure after	87	Hours
Cocond producing					

Second producing formation	ORISKANY		Pay zone depth (ft)	t) 4888' – 4908'	
Gas: Initial open flow	ODOR	MCF/d	Oil: Initial open flow	0	Bbl/d
Final open flow	84 Commingled	MCF/d	Final open flow	0	Bbl/d
Time of open f	low between i	initial and	final tests	4	Hours

psig (surface pressure after Static rock pressure 900

87

Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING:1).DETAILS OF PERFORATED INTERVALS, FRACTURING 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED OR STIMULATING, PHYSICAL CHANGE, ETC. GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

**CABOT OIL & GAS CORPORATION** 

Date:

MAR 1 5 200 Operations Manager

Perforated Newburg using 3 1/8" HSC(12 gram, 0.33 entry) 4SPF from 5634'-5648' KB (56 holes).

Performed Xlink gel frac on (Newburg) as follows: Breakdown: Max psi 2200 at surface, pumped 112 bbls water, 12 bbl acid, could not get a good break at 3000 psi (Max psi). Avg Treating:1896 psig, Max Treating:2975 psig. Total Slurry Vol:80.1 bbl, Total Fluid Vol:124 bbl, Avg Inj Rate:1.5 bpm, Max Inj Rate:1.5 bpm. Performed X-link gel frac on stage 1 as follows: Breakdown:3000 psig, Avg Treating:4800 psig, Max Treating:5512 psig, Final ISIP:4100 psig, 5-Min ISIP:3101 psig, 10-Min ISIP:3084 psig, 15 Min ISIP - 3017, 20 Min ISIP - 2953. Total Slurry Vol:383 bbl, Total Fluid Vol:365 bbl, Avg Inj Rate:1.5 bpm, Max Inj Rate:9.2 bpm, Max Prop Con:2.4 ppg, Total Prop:169 sks.

Perforated Oriskany section using 3 1/8" HSC (12 gram, .33 entry) 2 SPF from 4888'-4908'KB (41 holes). Packer set @ 4828' KB. Packer would not hold, had to pull tubing up to 4754' KB before packer would hold. Performed X-link gel frac on stage 2 as follows: Breakdown:4000 psig, Avg Treating:5100 psig, MaxTreating: 5246 psig, Final ISIP:4115 psig 5-Min, ISIP:3726 psig, 10-Min ISIP:3406 psig. Total Slurry Vol: 111 bbl, Total Fluid Vol:200 bbl, Avg Inj Rate:4 bpm, Max Inj Rate:6.2 bpm, Max Prop Con:1 ppa, Total Prop:4300# 20/40 sand. LMFP @ 4930' KB.

TOP	BOTTOM	REMARKS
0 1090 1388 1773 1900 1980 2366 2382 4793 4884 4910 5630 5650	1090 1388 1773 1900 1980 2366 2382 4793 4884 4910 5630 5650 5768' TD	
	0 1090 1388 1773 1900 1980 2366 2382 4793 4884 4910 5630	0 1090   1090 1388   1388 1773   1773 1900   1900 1980   1980 2366   2366 2382   2382 4793   4793 4884   4891 5630   5630 5650