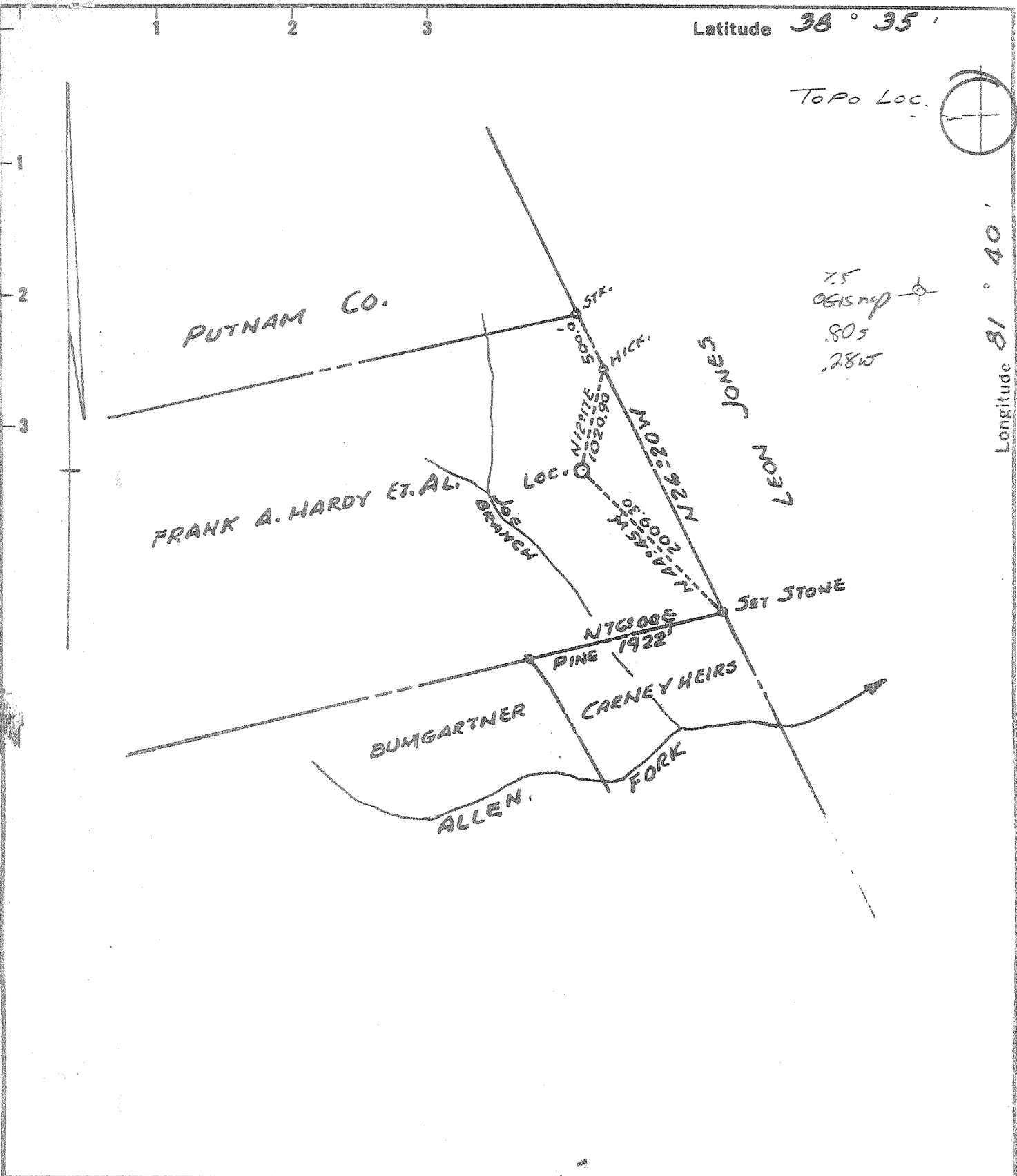


Latitude 38° 35'

TOPO LOC.



Longitude 81° 40'



- Fracture
- Before 6/5/27
- New Location
- Drill Deeper
- Redrill
- Abandonment

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by Paragraph 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia.

The accuracy of this survey is within the limits and as prescribed in paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations.

PROVEN ELEVATION ROAD INTERSECTION ALLEN FR. 691'

Issued 5-23-67-2xp.

Issued 5-15-74

Company **MANFIELD DRILLING CO. INC.**

Address **MANFIELD, OHIO**

Farm **FRANK A. HARDY ET AL.**

PART OF (250 AC.)

Tract Acres **3000** Lease No. _____

Well (Farm) No. **1** Serial No. _____

Elevation (Spirit Level) **985.16**

Quadrangle **KENNA** Sissonville SW

County **KANAWHA** District **POCA**

Engineer **J. Defton**

Engineer's Registration No. **1032**

File No. _____ Drawing No. _____

Date **5-1-'68** Scale **1" = 1320'**

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP
FILE NO. **MAN-2271-P**

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

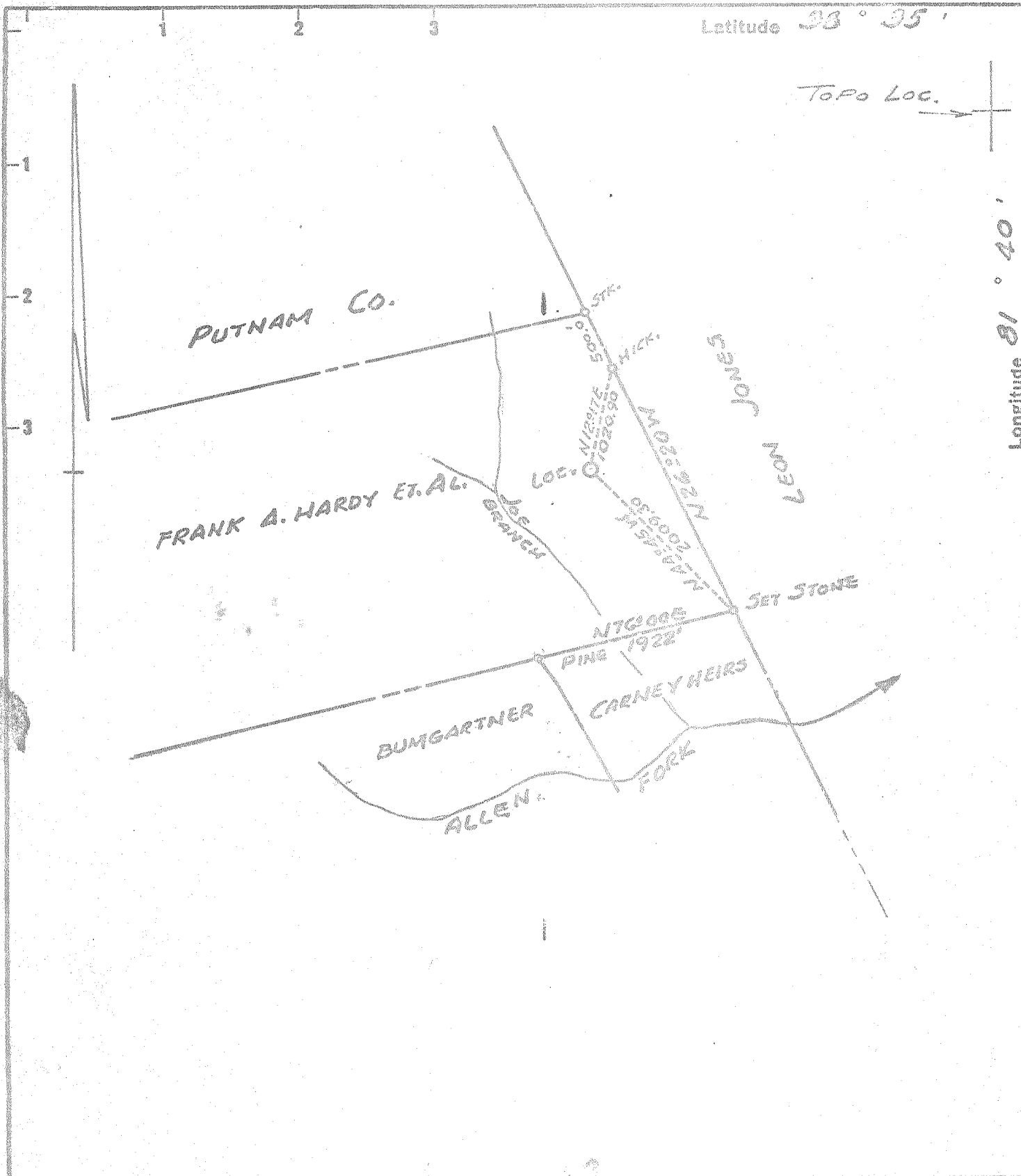
- Denotes one inch spaces on border line of original tracing.

47-039

6-D

Rocky Fork (312) Deep Well

JUN 10 1974



Fracture
 Before 6/5/27
 New Location
 Drill Deeper
 Redrill
 Abandonment
 Issued 5-23-69

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The accuracy of this survey is within the limits and as prescribed in paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations. PROVEN ELEVATION ROAD INTERSECTION ALLEN TR. 691'

Company MANFIELD DRILLING CO., INC.
 Address MANFIELD, OHIO
 Farm FRANK A. HARDY ET AL.
 Part of (250 Ac.)
 Tract _____ Acres 3000 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 985.16
 Quadrangle KENNA SW
 County KANAWHA District POCA
 Engineer J. L. Deaton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 5-1-'68 Scale 1" = 1320'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. MAN-2271-P

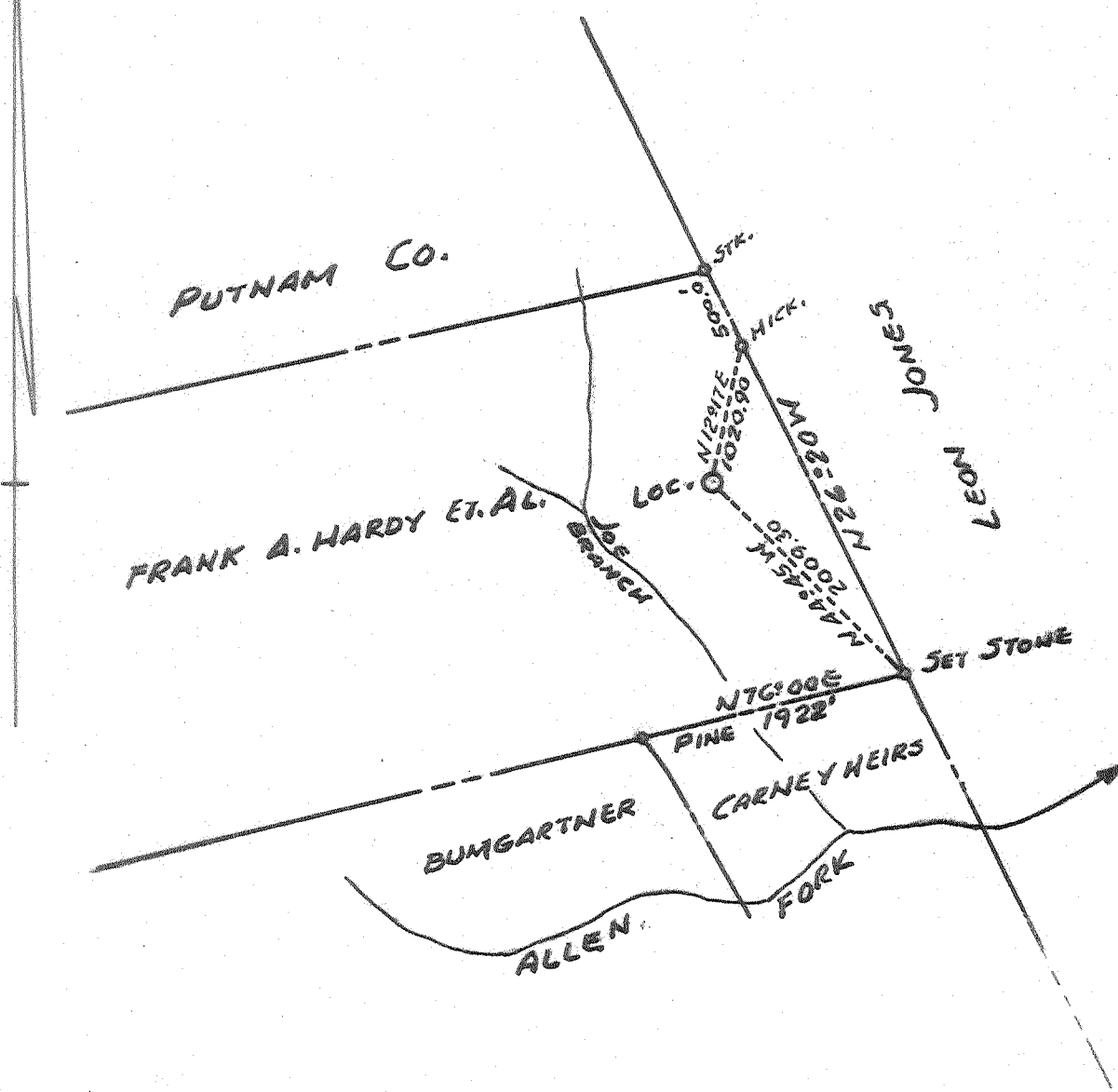
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- Denotes one inch spaces on border line of original tracing.

Latitude **38° 35'**

Longitude **81° 40'**

TOPO LOC. →



- Fracture Before 6/5/27
- New Location
- Drill Deeper
- Redrill
- Abandonment

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by Paragraph 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia.

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PROVEN ELEVATION ROAD INTERSECTION ALLEN FR. 691'

Company MANFIELD DRILLING CO., INC.
 Address MANFIELD, OHIO
 Farm FRANK A. HARDY ET. AL.
 Part of (250 Ac.)
 Tract _____ Acres 3000 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 985.16
 Quadrangle KENNA SW
 County KANAWHA District POCA
 Engineer J. L. Defton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 5-1-'68 Scale 1" = 1320'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. KAN-2271

- + Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.
- Denotes one inch spaces on border line of original tracing.

Deep Well (Newburg)

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Kenna

Permit No. KAN 2271

WELL RECORD

Oil or Gas Well (KIND)

Company Manassold Drilling Co., Inc.
Address 1264 Richard Court, Mansfield, Ohio
Farm Frank A. Hardy et. al. Acres 250 Unit
Location (waters) Allen Fork
Well No. 1 Elev. 992 KB
District Poca County Kanawha
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced _____
Drilling completed July 6, 1968
Date Shot _____ From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) _____
WELL FRACTURED (DETAILS) _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8	251	251	
10			Size of
8 5/8	2213	2213	
6 3/4			Depth set
5 1/2	5956	5284	
4 1/2			
3			Perf. 5235
2			Perf. 5248
Liners Used			Perf. 5248
			Perf. 526

Attach copy of cementing record.
CASING CEMENTED _____ SIZE _____ No. Ft. _____
Amount of cement used (bags) _____
Name of Service Co. _____
COAL WAS ENCOUNTERED AT _____ FEET _____ IN _____
FEET _____ INCHES FEET _____ IN _____
FEET _____ INCHES FEET _____ IN _____

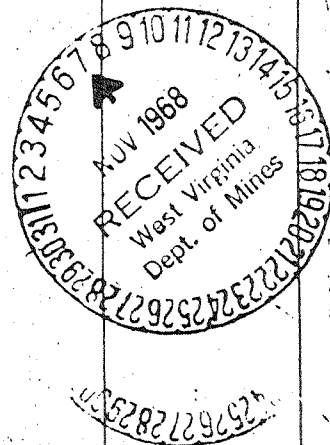
RESULT AFTER TREATMENT (Initial open Flow or bbls.) _____

ROCK PRESSURE AFTER TREATMENT _____ HOURS _____

Fresh Water _____ Feet _____ Salt Water Salt Sand _____ Feet 1740

Producing Sand _____ Depth _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	10			
Shale & Sand			10	1595			
Salt Sand			1595	2008	Water	1740	
Big Lime			2008	2144			
Big Injun			2144	2192			
Shale			2192	2602			
Borca			2602	2612			
Shale			2612	5142			
Corniferous			5142	5202			
Oriskany			5232	5284			
Dolomite & Limestone			5284	6039			
Newburg			6039	6050			
Dolomite & Limestone			6050	6077			
Total Depth				6077			



DEEP well

over →

P. O. BOX 200
SPENCER, W. VA 25876

LEO HINES
CONSULTING GEOLOGIST

PHONE
OFFICE (804) 927
RESIDENCE (804) 927

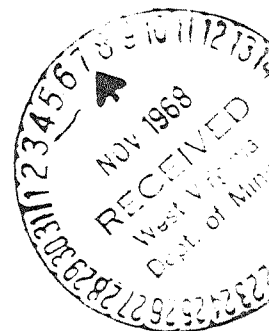
MILLER BUILDING - RIPLEY ROAD

Mansfield Drilling Company
No. 1 Frank A. Hardy
Poca District
Kanawha County, West Virginia

	SAMPLE TOP	LOG TOP	
Salt Sand	1591 - 2005	1595 - 2008	Salt Water @ 1730
Big Lime	2005 - 2146	2008 - 2144	
Keener	2146 - 2164	2144 - 2160	
Big Injun	2164 - 2193	2160 - 2192	
Berea	2601 - 2612	2602 - 2612	V. Small Show Gas 2
Corniferous	5136 - 5235	5142 - 5232	
Oriskany	5235	5232 - 5284	Gas @ 5239 est 2MM
Newburg	6040 - 6051	6039 - 6050	
Total Depth	6077	T.D. 6055	V. Small Show Gas

SAMPLE DESCRIPTION OF BIG LIME AND BIG INJUN

- 2000 - 10 sd, fn-med gr, sub ang, wht, fair sorting: com calcite (wht)
2010 - 20 ls, tan, fn xl
2020 - 30 ls, tan-brn, lith - v fn xl; com lt tan, fn xl, ls
2030 - 40 ls, aa
2040 - 50 ls lt tan lith
2050 - 60 ls, tan, com lt tan, aa; tr tan ls w/ool
2060 - 70 ls, lt tan, lt gy; tr brn ls
2070 - 80 ls, lt tan, lith - v fn xl, sp sd grs fn sub ang
2080 - 90 ls, wht - v lt tan, v fn xl; tr tanool ls
90 - 2100 ls tan lith
2110 - 20 ls lt tan, fn xl; tr sd grs imbed in ls, fn gr
2120 - 30 ls, aa; com sd grs imbed in ls, fn-med; sp cs sd gr



- 2130 - 40 ls, lt tan, sdy, fn gr, sp med-ca grs
- 2140 - 50 sd, wht, med - ca gr, sub ang-med poor sorting; abndt tan ls, aa
- 2150 - 60^{sd} it gy - wht med gr sub ang - ang; tr tan ls
- 2160 - 70 sd, lt gy - wh^o fn-med gr, aa, poor sorting; sp gy sh strs
- 2170 - 80 sd aa; abndt dk gy sh
- 2180 - 90 sd, aa aa
- 90 - 2200 shale dk gy - blk com abndt sd aa

SAMPLE DESCRIPTION OF BEREA INTERVAL

- 2580 - 90 sh dk brn tr pyr
- 90 - 2600 sh dk brn aa
- 2600 - 05 sd, fn gr wht mica, tite, abndt pyr. fair pale blue flour
- 2605 - 10 sd aa aa tite aa fair flour
- 2610 - 15 sh gy mica ; abndt gy slt st mica
- 2615 - 20 75% sh aa 25% slt st gy - lt gy mica

SAMPLE DESCRIPTION OF CORNIFEROUS & ORISKANY

- 5120 - 30 sh dk brn, cale, tr pyr
- 5130 - 40 ls brn - brn - gy lith fn xl
- 5140 - 50 ls tan, lith, sp milky chert, abndt brn sh strs
- 5150 - 60 ls tan - brn, aa com milk chert
- 5160 - 70 aa abndt dk brn ls lith com chert aa
- 5170 - 80 ls st tan wht v fn xl tr chert
- 5180 - 90 aa
- 90 - 5200 ls tan v fn xl com dk brn ls, tr milk chert
- 5200 - 10 ls tan brn lith v fn xl, tr glanc, tr milk chert; sp sh strs
- 5210 - 20 ls brn tan aa sp chert
- 5220 - 30 ls tan fn xl tr milk chert

k

IMPOSSIBLE TO CATCH SAMPLES BELOW 5239 DUE TO GAS

Kan 2271

SAMPLE DESCRIPTION OF NEWBURG

- 5972 - 77 ls brn dk brn lith; dolomite
- 5977 - 86 aa
- 5986 - 92 ls brn aa ; com tan ls ; tr anhy wht
- 5992 - 98 aa aa
- 98 - 6003 ls aa ; aa ; tr anhy
- 6003 - 06 dolo brn; abndt tan dolo v fn xl; tr anhy
- 6006 - 11 dolo dk brn arg; sp tan dolo
- 6011 - 17 dolo aa
- 6017 - 22 aa ; tr gy sh str
- 6022 - 27 aa ; aa
- 6027 - 32 dolo dk brn; com brn tan dolo v fn xl
- 6032 - 37 dolo tan brn v fn xl
- 6037 - 42 dolo brn aa; com gy dolo; com clear sub rd sd grs
- 6042 - 47 dolo aa com gy dolo aa; abndt sd ~~grs~~ (sd)
- 6047 - 52 sd lt tan v fn sub rd; abndt tan dolo
- 6052 - 57 dolo tan aa ; abndt sd
- 6057 - 62 dolo tan aa ; abndt sd aa
- 6062 - 67 dolo brn v fn xl; com-sp sd grs aa
- 6067 - 72 dolo tan aa; abndt v fn xl gy dolo; sp sd aa
- 6072 - 77 dolo, lt tan com brn v fn xl sp - tr sd aa

Very small show gas in Newburg

TOTAL DEPTH - 6077 DRLR.

