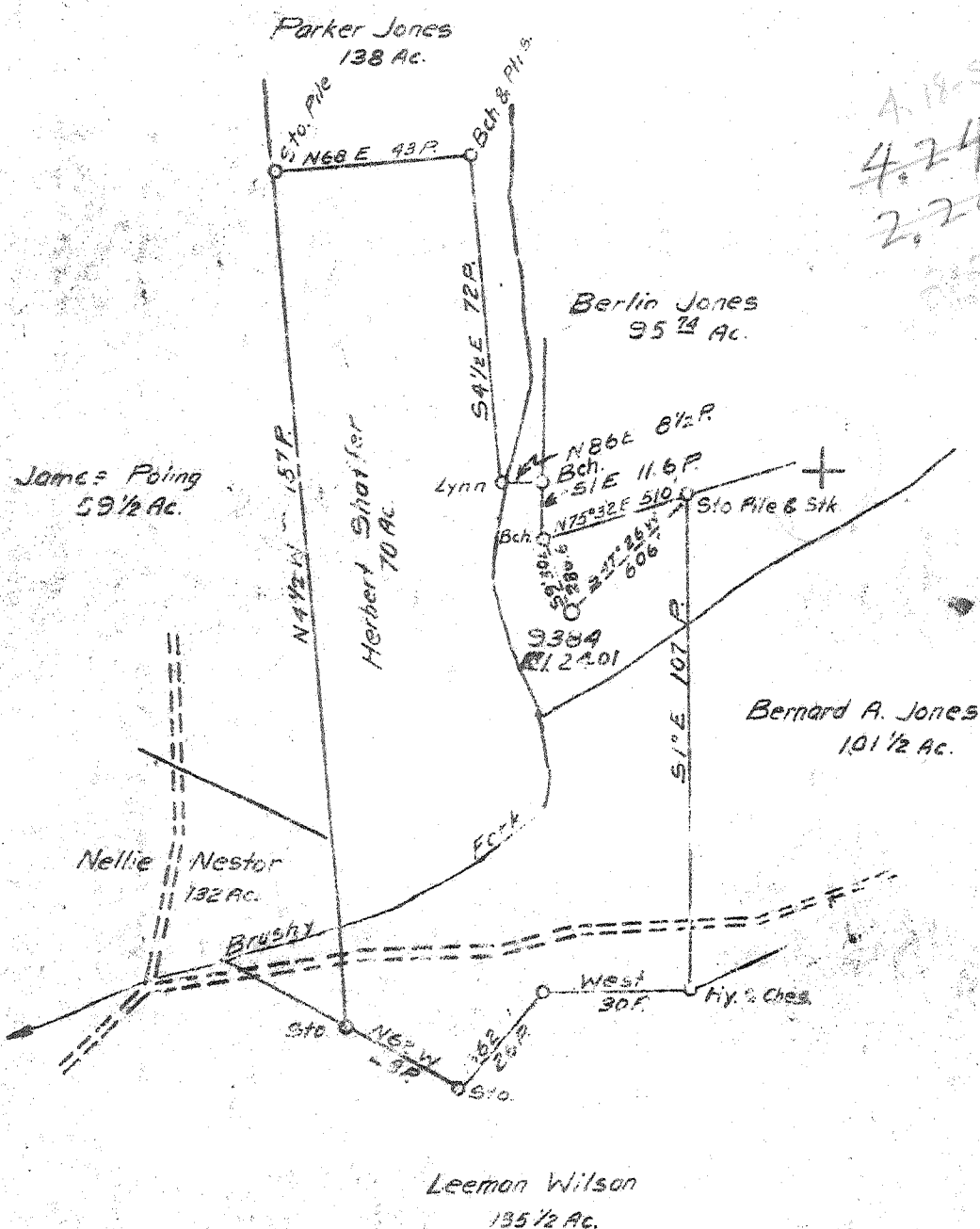


4 P

Latitude 39° 15'

Longitude 79° 45'



4.185  
 4.245  
 2.28 W  
 2.25 W

- New Location
- Drill Deeper
- Abandonment

FB 931 Page 27

Company	HOPE NATURAL GAS CO.		
Address	CLARKSBURG W.VA.		
Farm	HERBERT SHAFER		
Tract	Acres 70	Lease No.	52208
Well (Farm) No.	1	Serial No.	5384
Elevation (Spirit Level)	2401		
Quadrangle	BELINGTON - NE		
County	TUCKER	District	CLOVER
Engineer	W. M. Powers		
Engineer's Registration No.	900		
File No.	Drawing No.		
Date	1-2-51	Scale	1/4" = 40 P

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

**WELL LOCATION MAP**  
 FILE NO. JUC 5

+ 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.

(260)

Deep Well



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 9

*Wellington*

WELL RECORD

DRY

Permit No. TUC 5

Oil or Gas Well \_\_\_\_\_  
(KIND)

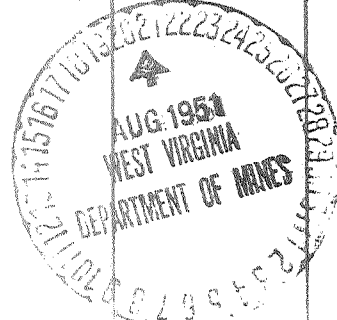
Company Hope Natural Gas Company.  
Address 445 West Main St., Clarksburg, W. Va.  
Farm Herbert Shaffer Acres 70  
Location (waters) \_\_\_\_\_  
Well No. 9384 Elev. 2401  
District Clover County Tucker  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling commenced Feb. 20, 1951  
Drilling completed August 16, 1951  
Date Shot not From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
18			
13	<u>44</u>	<u>44</u>	
10	<u>463</u>	<u>463</u>	Size of
8 1/2	<u>2322</u>	<u>2322</u>	
6 3/4	<u>5548</u>	<u>5548</u>	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume dry Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water 65 feet  
Salt water 2682 feet

8" set in 35 bags Cement-37 Gal 45 bags UniFlow  
CASING CEMENTED SIZE No. Ft. Date  
7" set in 60 bags UniFlow cement.  
COAL WAS ENCOUNTERED AT none recorded FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Surface			0	42			
Lime			42	57			
Slate			57	60			
Lime			60	80			hole full water 65'
Slate			80	112			
Grey lime			112	205			
Slate			205	230			
Lime			230	260			
Slate			260	310			
Lime			310	365			
Slate			365	380			
Lime			380	410			
Slate			410	435			
Lime			435	550			
Slate			550	568			
Gritty Lime			568	582			
White slate			582	605			
Lime			605	620			
Slate shell			620	670			
Lime			670	800			
Blue slate			800	812			
Lime			812	835			
Slate			835	845			
Grey lime			845	933			
Dark slate			933	970			
Gritty lime			970	985			
Dark slate			985	1005			
Dark Lime			1005	1055			
Slate shell			1055	1120			
Brown lime			1120	1145			
Slate shell			1145	1188			
Broken lime			1188	1219			
Slate shell			1219	1235			
Lime			1235	1250			
Slate			1250	1260			
Hard lime			1260	1316			
Slate shell			1316	1320			
Lime			1320	1377			
Slate shell			1377	1403			



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1403	1485			
Slate shell			1485	1560			
Lime			1560	1615			
Slate shell			1615	1670			
Broken lime			1670	1811			
Slate shell			1811	1830			
Lime			1830	1920			
Slate			1920	1930			
Gritty lime			1930	2118			
Slate			2118	2137			
Lime			2137	2169			
BENSON SAND			2169	2255	show gas	2240	
Gritty lime			2255	2305			
Slate			2305	2390			
Lime			2390	2415			
Slate shell			2415	2435			
Lime			2435	2575			
Slate shell			2575	2830	water	2682	Salty-1 bailer per hr.
Gritt lime			2830	2855			
Slate shell			2855	3120			
Brown shale			3120	3320			
Broken lime			3320	3455			
Slate shell			3455	3695			
Lime			3695	3740			
Slate shell			3740	3768			
Lime			3768	3770			
Slate			3770	3930			
Shale			3930	4033			
Lime			4033	4408			
Brown shale			4408	4685			
Lime			4685	4738			
Brown shale			4738	5024			
Brown lime - <i>app of Silly</i>			5024	5064			
Brown shale			5064	5462			
Black shale - <i>Murchies</i>			5462	5527			
ONONDAGA			5527	5546		5527	5719
Light chert			5546	5676		2401	2401
Broken chert } dark <i>HRV</i>			5676	5685			
Dark shale			5685	5715			
Broken chert			5715	5719		- 3126	- 3318
ORISKANY SAND			5719	5827			
Chert lime - <i>hell</i>			5827	5984			
Total depth				5984			

(485)

Date August 17, 1951, 19

APPROVED Hope Natural Gas Company, Owner

By *R. R. NUZUM*  
(Title) *CRK*

HERBERT SHAFFER NO. 1 (9384) WELL

Clover District, Tucker County, W. Va.

By Hope Natural Gas Co., Clarksburg, W. Va.

Located 4.22 mi. S. of 39° 15' and 2.3 mi. W. of 79° 45' - NE - Belington Quadrangle

Elevation, 2401' L.

Permit Tuc-5

Drilling commenced first part of March 1951; completed, August 1951.

Dry hole.

Ran casing at 2318' and 5559'.

Section based on samples from 4706 to 6984'; examined by Russell R. Flowers.

Record to RCT from Flowers, April 11, 1952.

Top	Bottom	Thick- ness	
			HARRELL SHALE, 321+ FEET
4706	4924	218	Shale, dark-gray to grayish-black, silty in part, small amount is calcareous, somewhat carbonaceous
4924	5027	103	Shale, grayish-black, some grayish-black to black, carbonaceous, mostly grayish-black to black (highly carbonaceous and somewhat pyritic) in the lower part, somewhat calcareous some of the shale is slickensided
			TULLY LIMESTONE, 26 FEET
5027	5053	26	Limestone, olive-gray to medium dark gray, argillaceous, with some highly calcareous shale
			HAMILTON AND MARCELLUS SHALES, 500 FEET
5053	5078	25	Shale, dark-gray, very highly calcareous at the top to calcareous at the bottom
5078	5308	230	Shale, dark-gray to grayish-black, pyritic in part; small amount is calcareous
5308	5321	13	Shale, dark-gray; some shaly dolomite
5321	5330	9	Shale, dark-gray to grayish-black
5330	5336	6	Dolomite, dark-gray, shaly to a dolomitic shale, highly calcareous
5336	5350	14	Shale, dark-gray to grayish-black, small amount is calcareous and dolomitic
5350	5380	30	Shale, grayish-black, some grayish-black to black (carbonaceous)
5380	5509	129	Shale, grayish-black to black, carbonaceous; small amount of vein calcite and pyrite
5509	5520	11	Limestone, (shaly) to shale (highly calcareous), medium- to dark-gray and brownish-black, pyritic; a large amount of grayish-black to black shale
5520	5531	11	Shale, grayish-black to black, carbonaceous, calcareous
5531	5540	9	Shale, grayish-black to black and black, highly carbonaceous, pyritic; some vein calcite
5540	5553	13	Shale, grayish-black to black, very highly calcareous, carbonaceous
			HUNTERSVILLE CHERT, 166 FEET
5553	5559	6	Limestone, dark-gray to grayish-black, very shaly to a highly calcareous shale, pyritic in part, trace of glauconitic in the lower part
5559	5561	2	Limestone, medium- to dark-gray, shaly, cherty to calcareous chert
5561	5585	24	No sample
5585	5587	2	Chert, light-gray, mostly transparent, spicular, slightly dolomitic
5587	5594	7	Chert, mottled light-gray to medium light gray (mostly transparent) and dark-gray to grayish-black (argillaceous), spicular, somewhat dolomitic

(Continued on page 2)

## HERBERT SHAFFER NO. 1 (9384) WELL (Continued)

Top	Bottom	Thick- ness	
5594	5603	9	Chert, mottled light- to medium-gray (transparent to translucent) and dark-gray to grayish-black (argillaceous), somewhat dolomitic
5603	5609	6	Chert (silty at top) to siltstone (cherty at bottom), light- to medium-gray, some grayish-black (argillaceous), somewhat dolomitic
5609	5620	11	Siltstone to chert, medium-gray; some dark-gray (argillaceous pyritic, somewhat dolomitic, highly pyritic and glauconitic in the lower part
5620	5637	17	Chert, medium- to dark-gray, some grayish-black, silty, argillaceous, pyritic, spicular in part, somewhat dolomitic
5637	5674	37	Chert (highly argillaceous) to silicified shale, dark-gray to grayish-black, pyritic, slightly dolomitic, mostly grayish-black silicified shale at the bottom
5674	5702	28	Shale, grayish-black, highly silicified at the top to silicified at the bottom, pyritic; trace of dolomite
5702	5711	9	Shale, grayish-black, some grayish-black to black, pyritic, slightly glauconitic and somewhat cherty at the bottom
5711	5719	8	Chert (argillaceous to shale (cherty), mostly grayish-brown, moderately dolomitic; calcareous in the lower part, pyritic
ORISKANY SANDSTONE, 265+ FEET, and HELDERBERG FORMATION			
5719	5723	4	Sandstone, light-gray, fine- to medium-grained, subrounded to rounded, some coarse grains at the top, calcareous
5723	5730	7	Sandstone, (very highly calcareous) to limestone (very sandy), medium to medium dark gray, mostly fine-grained at the top and very fine to fine in the lower part (subrounded,) some medium grains, some dark (argillaceous) material
5730	5734	4	Sandstone, light-gray, very fine grained, some fine g rains at the top, calcareous
5734	5741	7	Sandstone (very highly calcareous) to limestone (very sandy), light- to medium-gray, very fine to fine-grained
5741	5743	2	Sandstone, medium light gray, mostly very fine grained, very highly calcareous
5743	5749	6	Sandstone, light-gray, very fine grained, some fine g rains at the top; calcareous
5749	5751	2	Sandstone, light- to medium-gray, some grayish-black (very shaly) in the upper part, very fine grained, highly calcareous
5751	5753	2	Sandstone, light-gray, very fine grained, some fine g rains, highly calcareous
5753	5755	2	Sandstone, medium-gray with grayish-black (shaly) streaks, very fine to fine-grained, a few medium grains, very highly calcareous
5755	5756	1	Sandstone, medium- to dark-gray, mostly fine g rained, very highly calcareous
5756	5758	2	Sandstone, medium-gray, some grayish-black (shaly) spots, very fine grained, silty, highly calcareous
5758	5759	1	Sandstone, light- to medium-gray with grayish-black (shaly) spots, very fine to fine-grained, some medium g rains, very highly calcareous
5759	5763	4	Sandstone, medium-dark gray with grayish-black (shaly) spots; mostly very fine g rained, calcareous
5763	5772	9	Sandstone, light- to medium-gray with dark-gray to grayish-black (very shaly) streaks, very fine to medium-grained, subrounded, highly calcareous

(Continued on page 3)

## HERBERT SHAFFER NO. 1 (9384) WELL (CONCLUDED)

P. 3

Top	Bottom	Thick- ness	
5772	5782	10	Limestone (very sandy) to sandstone (very highly calcareous), medium-gray with white (limestone) and grayish-black (very shaly) spots, very fine to fine-grained, some medium grains
5782	5784	2	Sandstone (very fine) to siltstone, medium-gray with some grayish-black (shaly), highly calcareous
5784	5794	10	Sandstone, (very highly calcareous) to limestone (very sandy), medium-gray, very fine to medium-grained
5794	5808	14	Sandstone, light-gray, very fine to fine-grained, some medium grains at top and bottom, highly calcareous, silty
5808	5810	2	Sandstone, to limestone, medium- to dark-gray, very fine sand to silt, shaly in part
5810	5820	10	Sandstone, very light to light-gray, very fine to fine-grained, some medium grains at the top, 5813 to 5814', and at the bottom, subrounded, very fine grained from 5811 to 5813', quartzose, highly calcareous in the lower part
5820	5823	3	Sandstone, light-gray, with some medium- to dark-gray (shaly), very fine grained, some fine grains, highly calcareous
5823	5827	4	Sandstone, (very fine) to siltstone, medium-gray with light-gray spots in the lower part, highly calcareous to silty limestone
5827	5834	7	Limestone (very silty) to siltstone (highly calcareous), medium-gray to grayish-black (shaly), cherty, very cherty at the bottom
5834	5835	1	Siltstone, medium- to dark-gray, highly calcareous, very cherty
5835	5839	4	Siltstone to sandstone (very fine), medium gray, very highly calcareous, very cherty at the bottom
5839	5848	9	Siltstone, dark-gray to grayish-black with medium-gray spots, very highly calcareous, shaly, somewhat cherty
5848	5853	5	Siltstone, dark-gray at the top to medium-gray at the bottom, very highly calcareous with limestone spots, somewhat sandy (very fine, some fine), somewhat cherty
5853	5859	6	Siltstone (highly calcareous) to limestone (very silty), medium-gray, somewhat sandy (very fine, some fine), slightly cherty
5859	5866	7	Limestone, medium- to dark-gray, very sandy (very fine), slightly cherty
5866	5886	20	Limestone, medium (very sandy and silty) to sandstone (very fine to siltstone, very highly calcareous), medium- to dark-gray, very cherty at 5848 to 5850', some fossil fragments.
5886	5891	5	Limestone (very silty) to siltstone (very highly calcareous), medium- to dark-gray, very cherty, somewhat argillaceous, sandy (very fine to fine) at the bottom
5891	5903	12	Limestone (very sandy) to sandstone (very highly calcareous, mostly fine-grained), mostly medium dark gray, some fine to medium (rounded) grains
5903	5908	5	Limestone, light- to medium-gray, very sandy (fine- to coarse-grained, rounded to well-rounded)
5908	5935	27	Limestone, medium- to dark-gray, very sandy (very fine to fine-grained, some fine to medium grains), silty in part
5935	5945	10	Limestone (very silty) to siltstone (very highly calcareous), medium- to dark-gray, some grayish-black (argillaceous), sandy at the top
5945	5972	27	Limestone (very silty, shaly) to siltstone and shale (highly calcareous), dark-gray to grayish-black with light- to medium-gray spots; some white calcite at the top

(Continued on page 4)

Top	Bottom	Thick- ness	
5972	5976	4	Shale, grayish-black with medium-gray (limestone spots), very highly calcareous, silty
5976	5983	6	Depth correction
5983	5984	1	Shale, grayish-black, very highly calcareous
	5984		Total depth