

Latitude

38° 42' 30"

→ 0025

7.5' loc

Ua 7/23/1999

0.085

0.59W

79° 57' 30"

Longitude

Topo Location

7.5' Loc. _____ 15' Loc. 2965
_____ (calc.) 294W

Company _____

Farm _____

15' Quad Durbin nw
(sec.) _____

7.5' Quad Mill Creek _____

District _____

WELL LOCATION PLAT

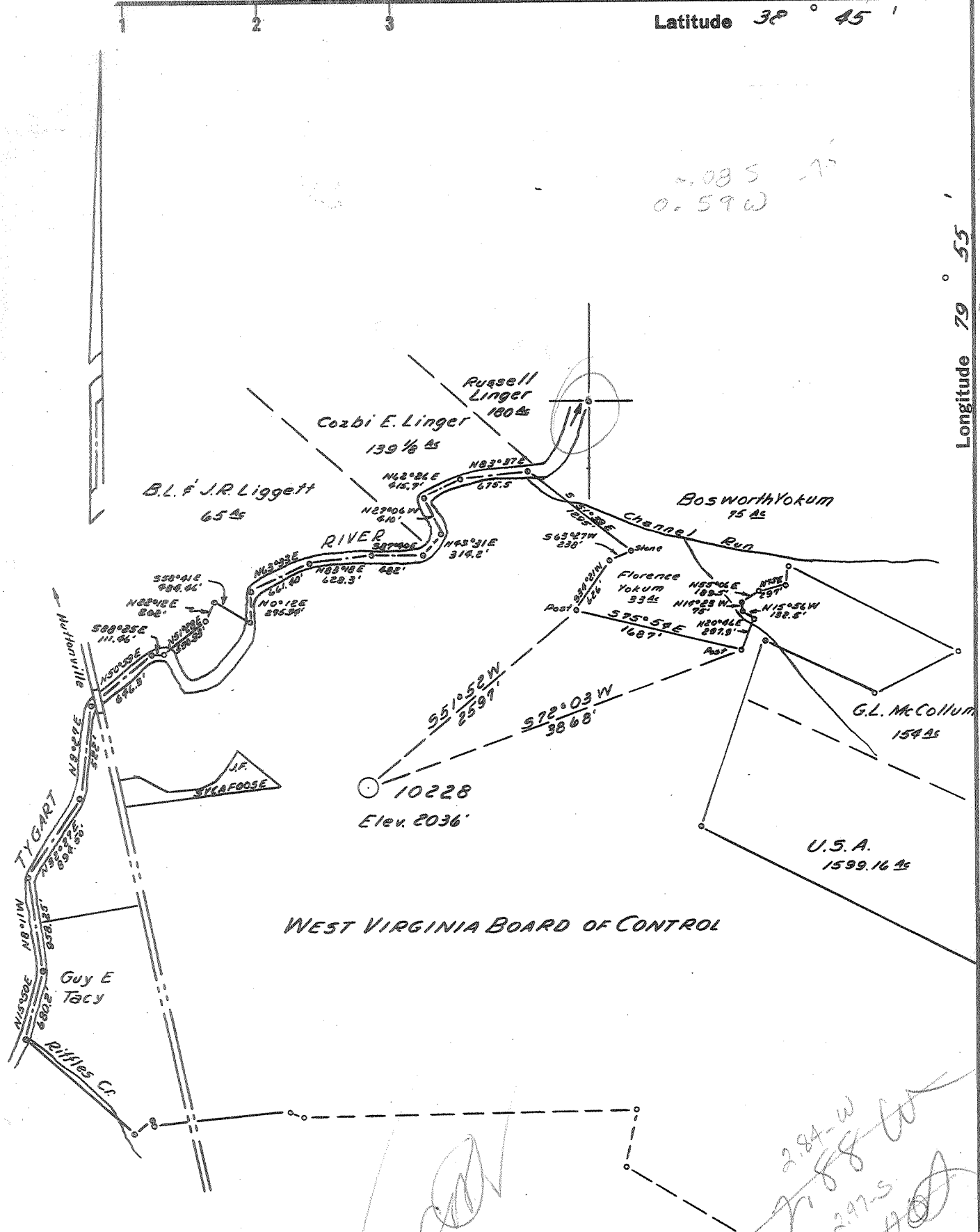
County 083 **Permit** 103

DEEP WELL

Latitude 38° 45'

Longitude 79° 55'

0.08 S
0.59 W



WEST VIRGINIA BOARD OF CONTROL

284-W
7188 W
297.5
3100

- New Location
- Drill Deeper
- Abandonment

MAR 29 1959

Map Sheet 1632, C2; F.B. 1207, P. 18-21

Company HOPE NATURAL GAS CO.
 Address CLARKSBURG, W.VA.
 Farm WEST VIRGINIA BOARD OF CONTROL
 Tract _____ Acres 2,806.24 Lease No. 67454
 Well (Farm) No. _____ Serial No. 10228
 Elevation (Spirit Level) 2036'
 Quadrangle DURBIN *Mill Creek*
 County RANDOLPH District HUTTONSVILLE
 Engineer Guy H. Bradley
 Engineer's Registration No. 2425
 File No. _____ Drawing No. _____
 Date 3/9/59 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. RAN-103

+ 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.

1-0 0 Deep Well 4366



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 14

Quadrangle DURBIN

Permit No. RAN-103

WELL RECORD

Oil or Gas Well Gas (dry)
(KIND)

Company Hope Natural Gas Company
Address Clarksburg, W. Va.
Farm W.Va. Board of Control Acres 2806
Location (waters) _____
Well No. 10228 Elev. 2036
District Huttonsville County Randolph
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced 3-9-59
Drilling completed 3-9-61
Date Shot Not From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume Snow only Cu. Ft.
Rock Pressure ????? lbs. _____ hrs.
Oil None bbls., 1st 24 hrs.
WELL ACIDIZED Yes

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size EX 20"	76	76	Kind of Packer _____
13			Size of _____
XXX 9-5/8"	3015	3015	Depth set _____
8 1/4			
6 5/8	6291	2874	
5 3/16			
EX 4 1/2"	10,659	7985'	Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

WELL FRACTURED ~~EXPOSED CENTRAL PART OF 100' PLUG~~
no results (See Remarks on back)

RESULT AFTER TREATMENT None

ROCK PRESSURE AFTER TREATMENT ??????

Fresh Water N.R. Rotary Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Devonian Shale		Surface	2280		W 78		
✓ Tully Limestone		2280	2310				
✓ Marcellus Shale		2310	2475				
✓ Tioga-Metabentonite		2475	2480				
✓ Onondaga Limestone		2480	2510				
✓ Huntersville Chert		2510	2695				
✓ Criskany		2695	2830				
✓ Helderberg Limestone		2830	3460				
✓ SILURIAN		3460					
✓ Rose Hill Shale		4906	5703				
✓ Tuscarora Sandstone		5703	5917				
✓ Juanita Formation		5917	7310				
✓ Shale - Martinsburg		7310	10118				
✓ Trenton Limestone		10118	-				
Total Depth			13,121'				

4876
2036
-2840

2830
2036
-794

W 5347, 5687, 5740 - Tusc.

5740 sh gas - Tusc.
7188, 7240-44 sh gas - Juniata
8244, 8555 sh gas - Martinsburg
10210, 10246, 10298, 10314, 10322, 10334-37 sh gas
10490 3,000-M est. 1,400-M
11443, 11453 sh gas

Trenton

5917 13121
2036 2236
3981 11085

645

APR 5 1961

1960

(o r)

W.VA. BOARD OF CONTROL No. 10228 - HOPE NATURAL GAS COMPANY - RAN-103

Formation	Color	Hard or Soft	Top 1/4	Bottom	Oil, Gas or Water	Depth Found	Remarks
REMARKS:							
<p>The well was drilled to 11,765'. The drill pipe twisted off at 10,257'. Set Baker plug at 10,235' and placed 200' of cement on top of plug. Set whipstock at 10,081' and drilled to 13,121'--total depth. Plugged back to 10,659'. Ran 10,659' of 4-1/2" casing on a 4-1/2" float shoe. Perforated 4-1/2" casing 10,472-10,492'. Test after perforations 310 Mcf. Shut in for rock pressure test, 23 hour test was 3220#. Blew well off. Gas test 202 Mcf. Attempt to acidize failed due to Gel-Flake plugging perforations. Bailed fluid--gas test 1 Mcf. Frac notched 10,490 to 10,474'. Gas increased 1 Mcf to 3 Mcf. Bailed fluid--gas test 133 Mcf. Acidized with 2,000 gallons 15% hydrochloric acid. Fluid level at 2377' 12 hours after treatment. 17 hours after treatment well flowed and gas test was 1,641 Mcf, blowing down to 152 Mcf in 96 hours. Acidized second time with 7,000 gallons of 15% hydrochloric acid, 14,000 gallons 5% acid and followed with 6,000 gallons fresh water. Gas test 5 days after treatment--400 Mcf which blew down to 73 Mcf in seven days.</p>							
<p>Ran 4-1/2" Baker plug at 10,456', perforated 4-1/2" casing at 10,378-10,400'. Gas test 192 Mcf 20 minutes after perforating. Perforated 10,338-10,350'. Gas test 180 Mcf which blew down to 4 Mcf in 2-1/2 hours. Frac notched at 10,343'. Test 3 hours later was 3 Mcf. Found rotary drilling mud at 9500' in hole. Bailed drilling mud. Gas test --130 Mcf. After blowing 2 days, gas test was 62 Mcf. Acidized with 4,000 gallons 15% hydrochloric acid and 6,000 gallons fresh water. Gas test after treatment was 33 Mcf. Shut in well for rock pressure test. 4180# dead weight test in 103 days. Gas test was 4,966 Mcf, blowing to 192 Mcf in 28 hours.</p>							
<p>Drove plug set at 10,457' down to 10,533'. Gas test--272 Mcf. Well bailed dry Oct. 3, 1960. Gas test--58 Mcf. Ran 4-1/2" Baker plug at 10,010' with 3 bags cement on top. Cut and pulled 7985' of 4-1/2" casing. Set 7" plug at 6150' and cemented to 5911'. Perforated 7" casing 5805-5830. 24 gallons salt water per hour. Set 7" Baker plug at 5724' with 20' of cement on top. Cut and pulled 2874' of 7" casing. Set 9-5/8" plug at 2874' with 31' cement on top. Perforated 9-5/8" casing 2815-2819' and 2804-2811'. 30 gallons salt water per hour was produced thru perforation. Well completed as a <u>dry hole and abandoned.</u></p>							

Date March 21, 1961, 19__

APPROVED Hope Natural Gas Company, Owner

By Jack Bailey
(Title)

Huntersville District, Randolph County, N. Va.

Hope Springs was Co., Ultrasburg, N. Va.

Well 10, 123, 211; 10, 123, 211.

of 200 acres. Elevation 2000' ±.

Drilling commenced 3-9-38; completed 3-9-38.

Well now succ. Voluna, - snow only.

rock pressure - ? Well fractured - no results.

The well was drilled to 11,765 feet. Then drillpipe twisted off at

10,257'. Set Baker plug at 10,230' and placed 200' of cement on top

of plug. Set whipstock at 10,001 feet and drilled to 10,131 - total

depth. Plugged back to 10,059 feet. Ran 10,659' of 4 1/2" casing on a

4 1/2" float shoe. Perf. 4 1/2" 10,472-10,492'. Test after perf. 310 Mcf.

Shut in for rock pressure test. 25 hours, test was 5220 lb. Blew well

off. Gas test 202 Mcf. Attempt to acidize failed due to Gel-flake

plugging perforations. Bailed fluid - gas test 1 Mcf. Frac notched 10,490-10,474'.

Gas inc. 1 Mcf to 3 Mcf. Bailed fluid - gas test 133 Mcf. Acidized with

2,000 gals. 15% hydrochloric acid. Fluid level at 2377' 12 hrs. after

treatment. 17 hrs. after treatment, well flowed and gas test was 1,641 Mcf,

blowing down to 152 Mcf in 95 hours; acidized second time with 7,000 gals.

of 15% hydrochloric acid, 14,000 gals. of 5% acid and followed with 6,000

gals fresh water. Gas test 3 days, after treatment - 400 Mcf which blew down

to 72 Mcf in seven days.

Ran 4 1/2" Baker plug at 10,456', perforated 4 1/2" casing at 10,373-10,400'.

Gas test 192 Mcf, 20 min. after perf. Perf. 10,338-10,350'. Gas test 130 Mcf

which blew down to 4 Mcf in 2 1/2 hrs. Frac notched at 10,343'. Test 3 hrs.

later was 3 Mcf. Found rotary drilling mud at 9500' in hold. Bailed drilling

mud. Gas test - 130 Mcf. After blowing 2 days, gas test was 62 Mcf.

acidized with 4,000 gal. 15% hydrochloric acid and 6,000 gals. fresh water.

Gas test after treatment was 33 Mcf. Shut in well for rock pressure test.

4150 lb. dead weight test in 103 days. Gas test was 4,900 Mcf., blowing

to 198 Mcf in 20 hrs.

Drove plug set at 10,457' down to 10,333'. Gas test - 272 Mcf.

Well bailed dry oct. 3/00. Gas test - 50 Mcf. Ran 4 1/2" Baker plug at

10,010' with 3 bags cement on top. Out and pulled 7980' of 4 1/2" casing.

Set 7" plug at 6150' and cemented to 5911'. Perf. with 20' of cement on

top. Out and pulled 2374' of 7" casing. Set 9-5/8" plug at 2374' with 31'

cement on top. Perf. 9-5/8" casing 2,10-2,219' and 2,304-2,311'. 30 gals. salt

water per hr. was produced thru perf. well completed as a dry hole and

abandoned.

Water 78'; water 3347'; 4667'; 5740'; shale gas 5740'; shale gas 7100';

7240-44'; 8244'; 8655'; 102.0'; 10246'; 10298'; 10314'; 10322'; 10334';

10337'; 10496'; 3,000 g est 1,400 . shale gas 14443'; 14453'.

Record to Dept. of Mines 3-21-31.

Record from Allen 4-3-31.

	Top.	Bottom.
Devonian shale	0	2200
Tully limestone	2200	2310
Marcellus shale	2310	2475
Wedge-metaventonite	2475	2480
Onondaga limestone	2480	2510
Huntersville chert	2510	2695
Criskany	2695	2830
Helderberg limestone	2830	3450
SILURLAN		3450

Deep Well

	Top.	Bottom.
Rose Hill shale	4900	- 5703
Muscovite sandstone	5703	- 5917
Triassic formation	5917	- 7310
Shale	7310	- 10118
Triassic limestone	10118	
Total depth		13,121

Buttonsville District, Randolph County, W. Va.

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

Drilled under per to Ran-103; Bureau Quad.

On 2800 acres. Elevation, 2036' L.

Drilling commenced 3-9-59; completed 3-9-61.

Well not shot. Volume, - show only.

Rock pressure - ? Well fractured - no results.

The well was drilled to 11,765 feet. Ten drillpipe twisted off at 10,257'. Set Baker plug at 10,235' and placed 200' of cement on top of plug. Set whipstock at 10,081 feet and drilled to 13,131 - total depth. Plugged back to 10,659 feet. Ran 10,659' of 4 1/2" casing on a 4 1/2" float shoe. Perf. 4 1/2" 10,472-10,492'. Test after perf. 310 Mcf. Shut in for rock pressure test, 23 hours, test was 3220 lb. blew well off. Gas test 202 Mcf. Attempt to acidize failed due to Gel-flake plugging perforations. Bailed fluid- gas test 1 Mcf. Frac notched 10,490-10,474'. Gas inc. 1 Mcf to 3 Mcf. Bailed fluid - gas test 133 Mcf. Acidized with 2,000 gals. 15% hydrochloric acid. Fluid level at 2377' 12 hrs. after treatment. 17 hrs. after treatment, well flowed and gas test was 1,641 Mcf, blowing down to 152 MCF in 96 hours. Acidized second time with 7,000 gals. of 15% hydrochloric acid, 14,000 gals. of 5% acid and followed with 6,000 gals fresh water. Gas test 5 days, after treatment - 400Mcf which blew down to 72 MCF in seven days.

Ran 4 1/2" Baker plug at 10,456', perforated 4 1/2" casing at 10,378-10,400'. Gas test 192 MCF, 20 min. after perf. Perf. 10,338-10,350'. Gas test 180 MCF which blew down to 4 MCF in 2 1/2 hrs. Frac notched at 10,343'. Test 3 hrs. later was 3 MCF Found rotary drilling mud at 9500' in hold. Bailed drilling mud. Gas test - 130 MCF. After blowing 2 days, gas test was 62 MCF. Acidized with 4,000 gal. 15% hydrochloric acid and 6,000 gals. fresh water. Gas test after treatment was 33 MCF. Shut in well for rock pressure test.

4180 lb. dead weight test in 103 days. Gas test was 4,900 MCF., blowing to 192 MCF in 20 hrs.

Drove plug set at 10,457' down to 10,533'. Gas test - 272 MCF. Well bailed dry Oct. 3/60. Gas test - 58 MCF. Ran 4 1/2" Baker plug at 10,010' with 3 bags cement on top. Cut and pulled 7985' of 4 1/2" casing. Set 7" plug at 6150' and cemented to 5911'. Perf. with 20' of cement on top. Cut and pulled 2874' of 7" casing. Set 9-5/8" plug at 2874' with 31' cement on top. Perf. 9-5/8" casing 2,15-2,619' and 2,804-2,811'. 30 gals. salt water per hr. was produced-thru perf. Well completed as a dry hole and abandoned.

Water 78'; water 5347 1/2', 4687', 5740'; shale gas 5740'; shale gas 7188'; 7240-44'; 8244'; 8555'; 102.01'; 10246'; 10298'; 10314'; 10322'; 10334';

10337'; 10498'; 3,000 M est 1,400 M. shale gas 14443'; 14453'.

Record to Dept. of mines 3-21-61.

Record from Allen 4-5-61.

	Top.	Bottom.
Devonian shale	0	- 2280
Tully limestone	2280	- 2310
Marcellus shale	2310	- 2475
Tioga-metabentonite	2475	- 2480
Onondaga limestone	2480	- 2510
Huntersville Chert	2510	- 2695
Oriskany	2695	- 2830
Helderberg-limestone	2830	- 3460
SILURIAN	3460	

(OVER)

Deep Well

	Top.	Bottom.
Rose Hill shale	4906	- 5703
Tuscarora Sandstone	5703	- 5917
Juniata Formation	5917	- 7310
Shale	7310	- 10118
Trento limestone	10118	
Total depth		13,121