## Charles V. Ringer No. 9414 Well.

Portland District, Preston County, W. Va. By Hepe Natural Gas Co., 445 W. Main St., Clarksburg, W. Va.

Preston No. 15
Kingwood Quadrangie - NE.
Located 4-Ol miles S. of 39° 30' and 3.63 miles W. of 79° 30'.
Elevation 2194' L.

Drilling commenced April 27, 1950; completed August 21, 1950.

Gas Weil - Volume 368,000 Cu. Ft.

Rock Pressure 1760 pounds in 24 hours.

Fresh Water at 118 feet.

13" casing, 24'; 10", 502'; 8-1/4, 1671'; 6-5/8", 5488'; all left in.

Casing comented 7" and 8-5/8" set in coment.

Gas at 5523-26, 5547, 5580-97'; 5634-5638'; 5885-5911'.

Section based on samples from 4592 to 5983'; examined by Russell R. Flowers.

Т⊕р	Bot tem	Thickness	
4592	4641	49	Shale, dark-gray be grayish-black, seme medium- te dark-gray, silty
4641	4712	71.	Shale, mostly grayish-black, somewhat carbonaceous
			Tully Limestone, 22 Feet.
4712	4725	13	Limestone, olivergray to dark-gray, highly argil- laceous
4725	4734	9	Shale, dark-gray, some grayish-black, calcareous
			Hamilton & Marcellus Shales, 732 Feet.
473 <b>4</b>	<del>4</del> 800	66	Shale, dark-gray to grayish-black
4800	4850	50	Shale, dark-gray, some dark-gray to grayish-black, calcareous
4850	4926	76	Shale, dark-gray to grayish-black, somewhat cal-
<b>49</b> 26	498 <b>4</b>	58	Shale, dark-gray, some dark-gray to grayish-black in the lower part; small amount is calcareous
498 <b>4</b>	5119	135	Shale, dark-gray to grayish-black
5119	5236	117	Shale, very dark gray, somewhat delemitic in part, silty in part
5236	5300	6 <b>4</b>	Shale, dark-gray, some dark-gray to grayish-black in the lower part, slightly ca_lc_areous and slightly delemitic
5300	5401	101	Shale, dark-gray to grayish-black, some grayish-black to black in the middle and lower parts, small amount is calcareous and delemitic
5 <del>4</del> 01	5433	32	Shale, grayish-black to black, carbonaceous, cal- careous; a large amount of dark-gray, highly cal- careous and delemitic shale; small amount of calcite and pyrite
5433	5466	33	Shale, grayish-black to black, carbonaceous, py- ritic; highly calcareous in part

## Onondaga Group, 167 Feet.

		<u> </u>	ondage droup, 107 rees.
5466	<b>5487</b>	21	Shale, grayish-black to black (highly calcareous) at the top to a grayish-black, very shaly limestone at the bottom, slightly pyritic; some brownish-gray to brownish-black metabentonite at the top; smail amount of vein calcite and a trace of vein quartz at the top
5487	5489	2	Chert, darkegray to grayish-black, highly argil- laceous, calcareous, semewhat delemitic
5489	5496	7	Chert, medium- te dark-gray, seme light-gray in the lewer part; highly delemitic and calcareous in part
5 <b>496</b>	550 <b>5</b>	9	Chert, mettled light-gray (transparent to trans- lucent) and dark-gray (argillacecus), calcareous and delemitic, spicular, silty and slightly glaucenitic in part
5505	5511	12	Chert, light- to medium-gray, translucent to epaque, spicular, somewhat delemitic, brecciated with argillaceous fillings
551.1	5523	12	Chert, white to light-gray, transparent to trans- lucent, spicular, highly brecciated with argilla- ceeus and quartz fillings; contains a little ar- gillaceous material, slightly delemitic
5523	5526	3	Chert, white to light-gray (transparent to trans- lucent, spicular) mottled with some dark-gray (highly argillaceous), somewhat delomitic
552 <b>6</b>	5537	11	Chert, mottled light-gray (mostly translucent) and dark-gray (argillaceous), spicular, brecciated with quartz and argillaceous fillings, slightly delemitic
55 <b>37</b>	5541	4	Chert, light- to medium-gray, some dark-gray spets (argillaceous), translucent to epaque, silty, slightly delemitic
55 <b>41</b>	5562	21	Chert (silty) to siltstone, medium-gray to dark- gray, seme dark-gray to grayish-black, (argillaceous somewhat delomitic, spicular in part, small amount is glauconitic at 5549 to 5555; pyritic in the lower part
5562	55 <b>91</b>	29	Chert, medium- to darkegray (epaque), a mederate to large amount of grayish-black (highly argilla-ceous), slightly delemitic
5591	5604	13	Chert, dark-gray to grayish-black, silicified shale
560 <b>4</b>	5618	14	· Shale, grayish-black, to silicified shake; seme dark-gray chert
5618	5632	14	Shale, grayish-black
			(Top 11 feet like subsurface Oriskany in the Charleston area).
5632	5639	3	Sandstone, very light to light-gray, fine- to medium-grained, some coarse grains, subrounded to rounded, calcareous, contains a small amount of dark (argillaceous) interstitial material
5639	5643	4	Sandstone, light-gray, fine-grained at the tep, fine to very fine grained at bottom, some medium to cearse grains, subrounded to rounded, highly calcareous, a few fessil fragments

56 <b>43</b>	5653	10	Sandstone (highly calcareous) to a very sandy limestone, light- to medium-gray, someth dark-gray to grayish-black (shaly) streaks, very fine to medium-grained, some coarse grains, the larger grains are rounded; trace of chert (lacy), fessiliferous
5653	5662	9	Sandstone, medium light gray, some dark-gray (argillaceous), highly calcareous, very fine to fine-grained with many medium to coarse (rounded), grains in the upper part; some fossil fragments
5662	5674	12	Sandstone, medium- to dark-gray with light-gray spets, very fine to fine-grained, some medium to coarse grains, silty, argillaceous, highly calcareous
			Onondaga Group, 210 Feet.
5674	5686	12	Shale, grayish-black, silicified to a dark-gray chert, somewhat calcareous, slightly delomitic
5636	5690	4	Chert, white to medium-gray (spicular) with dark- gray to grayish-black (shaly) streaks, brecciated with quartz and argillaceous fillings, semewhat delemitie
5690	5719	29	Chert, white to medium-gray (ordinary to trans- parent) mettled with dark-gray to grayish-black (argillaceous), highly spicular, slightly dolo- mitie
5719	572 <b>7</b>	8	Siltstone to chert, mottled medium dark gray and grayish-black (highly argillaceous), delemitic
572 <b>7</b>	5 <b>754</b>	27	Chert, medium dark gray to grayish-black (highly argillaceous), very silty, small amount is dolo-mitic
5 <b>754</b>	5771	17	Chert, medium dark gray, a large amount of dark-gray to grayish-black (highly argillaceous), slightly dolomitic
5771	580 <b>7</b>	36	Chert to silicified shale, medium dark gray to grayish-black; trace of delomite
5807	5837	30	Shale, dark-gray to grayish-black, highly sil- icified; some medium dark gray chert
583 <b>7</b>	5860	23	Shalle, grayish-black, silicified
58 <b>60</b>	587 <b>6</b>	16	Shale, grayish-black
58 <b>76</b>	588 <b>4</b>	7	Shale, grayish-black; some medium- te dark-gray, highly calcareous, shaly chert
			Ridgeley Sandstone, 54 Feet.  (Top 11 feet like subsurface Oriskany in Charleston Area).
5884	5890	6	Sand stone, light-gray, some very light gray, some medium-gray, fine-grained, some medium grains calcareous, highly calcareous at the bettom, quartzitic, a small amount of interstitial shaly material
5890	5895	5	Sandstone, very light to light-gray, very fine to medium-grained, subrounded, highly calcareous, some fessil fragments
5895	5898	3	Sandstene, light- to medium-gray with seme grayish-black (shaly) streaks, very fine to medium-grained, seme cearse grains, the larger grains are rounded, highly calcareous, some fessil fragments

· 5898	5901	3	Sandstone (highly calcareous) to limestone (very sandy), medium- to dark-gray (argillaceous), very fine grained, some medium to cearse (rounded) grains in the lewer part
5901	5919	18	Sandstene, light- te medium-gray, very fine te medium-grained, seme coarse grains; the larger grains are rounded, silty, very highly calcareous with limestone spets; centains seme argillaceous material
5919	593 <b>3</b>	14	Sandstone, medium- to dark-gray (argillaceous, with grayish-black shale streaks), very fine to fine grained, some medium to coarse (rounded) grains, silty, highly calcareous
593 <b>3</b>	5938	5	Sandstone (very fine, silty), medium- to dark- gray, argillaceous, contains some fine to medium grains (rounded)
			HELDERBERG FORMATION, 45, plus, Feet.
5938	<b>594</b> 2	4	Sandstone (very fine) to siltstone, grayish-black (very shaly) at top to dark-gray (shaly) at the bettom, a few fine to medium quartz grains, highly calcareous
5942	59 <b>59</b>	17	Limestone (very silty) to siltstone and sandstone (very fine), highly calcareous), medium- to dark-gray with grayish-black (silty) streaks and lighte gray sandstone (fine to medium) spots; some white calcite
5959	5969	10	Limestone (very sandy) to sandstone (highly calcareous), light- to medium-gray mottled with dark-gray to grayish-black (highly argillaceous), very silty; the sand is very fine to coarse-grained (large grains are rounded), fessiliferous, a little perous chert in the lower part
5969	5974	5	Siltstone (very shaly) to shale (very silty), dark-gray to grayish-black (with white to medium-gray, sandy, cherty limestone spots), very highly calcareous
59 <b>74</b>	5977	3	Siltstone (sandy) to sandstone (very silty), light - to dark-gray, very highly calcareous, argillaceous, some of the sandstone is fine - to medium-grained and rounded
597 <b>7</b>	5983	6	Sandstone, light-gray (with some medium- to dark-gray argillaceous spots), very fine to medium-grained, subrounded to rounded, mostly very fine grained at the bettem, highly calcareous
	5983		TOTAL DEPTH