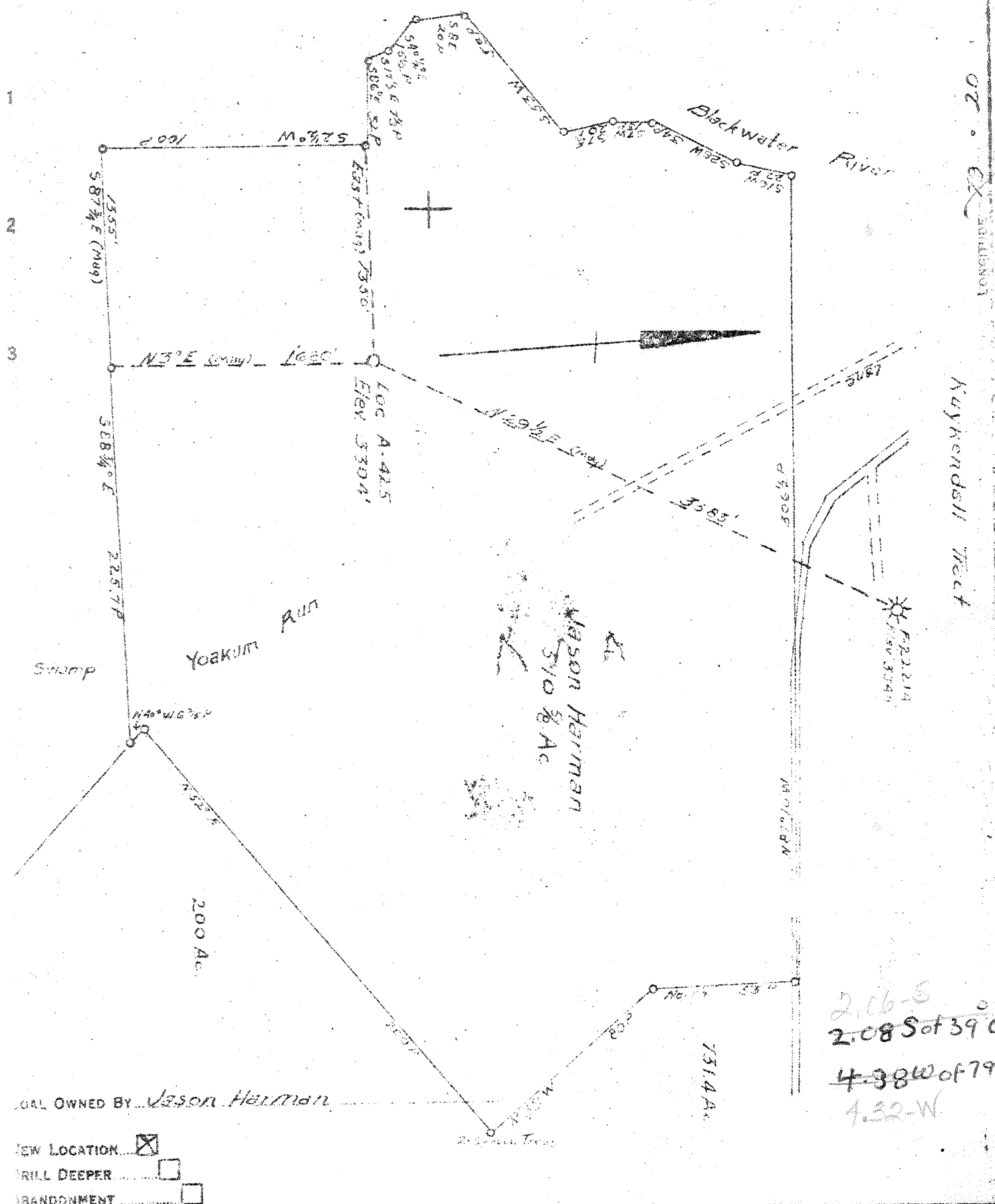


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LATITUDE 39 05

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WELL OWNED BY Jason Harman

- WELL LOCATION
- DRILL DEEPER
- ABANDONMENT

COMPANY Cumberland and Allegheny Gas Co.  
 ADDRESS 800 Union Trust Bldg. Pittsburgh, Pa.  
 FARM Jason Harman  
 TRACT \_\_\_\_\_ ACRES 510 5/8 LEASE NO. 55-0m Oil Co.  
 WELL (FARM) NO. 1 SERIAL NO. A-425  
 ELEVATION (SPIRIT LEVEL) 3304'  
 QUADRANGLE Davis - SC  
 COUNTY Tucker DISTRICT Dry Fork  
 ENGINEER Thomas E. Virgin  
 ENGINEER'S REGISTRATION NO. \_\_\_\_\_  
 FILE NO. \_\_\_\_\_ DRAWING NO. Y-13-190  
 DATE May 23, 1949 SCALE 1" = 800'

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

**WELL LOCATION MAP**

FILE NO. JUC-4 P4A  
*Turn over on backside*

+ 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*

6-6 387

2.06-S  
 2.08 S of 39 05  
 4.38 W of 79 22  
 1.32-W

TUC-4

Tully lime 7775-7802

Hamilton + Marcellus shales 7802-8239

Onondagan Group 8239-8403

Helderberg type lime 8403-8505

Oriskany sand 8505-8533

Helderberg lime 8533-9085

TD - 9085

Gas pocket 8630-8633 - 100 MCF

Well plugged + abandoned

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

JAM V. ORTIZ, JR.

32 -



In Fork District, Tucker County, W. Va.  
 By Cumberland & Allegheny Gas Co., 800 Union Trust Bldg., Pittsburgh, Pa.  
 Located 2.1 mi. S. of 39° 05' and 4.4 mi. W. of 79° 20' - SC - Davis Quadrangle.  
 Elevation, 3304' L.  
 Drilling commenced June 1949; completed September 1950.  
 Acidized September 26, 1950.  
 Gas pocket at 8630-8633'; 100,000 cu. ft.  
 Plugged back to 8650'.  
 Section based on samples from 7759 to 9085'; examined by Russell R. Flowers.  
 Record to RCT from Flowers May 31, 1951.

TUC-4

Top. Bottom. Thickness.

7759 - 7775	16	Shale, grayish-black to black, carbonaceous TULLY LIMESTONE, 27 FEET
7775 - 7786	11	Limestone, dark-gray to olive-black, very fine textured, very shaly, a very large part of these samples are grayish-black to black shale
7786 - 7792	6	Limestone, dark-gray to olive-black, very fine textured, very shaly; some olive-gray to grayish-black, calcareous shale; a large amount of grayish-black to black shale
7792 - 7802	10	Limestone to calcareous shale, olive-black and brownish-black to grayish-black; a very large amount of grayish-black to black shale
HAMILTON AND MARCELLUS FORMATIONS, 487 FEET		
7802 - 7827	25	Shale, grayish-black, some grayish-black to black (carbonaceous); small amounts of olive-black to brownish-black, shaly limestone
7827 - 7852	25	Shale, dark-gray to grayish-black, some grayish-black to black
7852 - 7917	65	Shale, grayish-black, some grayish-black to black (many of the samples contain cavings)
7917 - 7973	56	Shale, grayish-black to black, carbonaceous
7973 - 8158	185	Shale, grayish-black, some grayish-black to black (carbonaceous)
8158 - 8183	25	Shale, black (highly carbonaceous) and grayish-black to black
8183 - 8197	14	Shale, grayish-black to black
8197 - 8206	9	Shale, dark-gray, calcareous in part
8206 - 8226	20	Limestone (very shaly) to shale (calcareous), dark-gray to olive-black
8226 - 8281	55	Shale, black (highly carbonaceous) and grayish-black to black, calcareous in part, somewhat pyritic in the lower part; small amounts of white vein calcite
8281 - 8289	8	Siltstone, brownish-gray to brownish-black, very shaly, very highly micaceous, pyritic (bentonite), 20%; shale, dark-gray to black (carbonaceous), highly calcareous in part; trace of vein calcite
HUNTERSVILLE FORMATION, 117 FEET and Needmore Shale (?)		
8289 - 8308	19	Limestone (very shaly) to shale (highly calcareous), grayish-black to black, carbonaceous; about 20% of the top two samples is a brownish-gray to brownish-black, very highly micaceous, pyritic, shaly siltstone (bentonitic); some black carbonaceous shale; a small amount of white vein calcite in the upper part
8308 - 8326	18	Shale, grayish-black to black, carbonaceous, pyritic and calcareous in part; a moderate to large amount of dark-gray calcareous shale
8326 - 8336	10	Shale, medium dark to dark-gray, calcareous; some grayish-black to black shale (Depth corrected from 8336 to 8333)

(OVER)

Top.	Bottom.	Thickness.	
8333	- 8336	3	Chert, medium dark gray, calcareous to a dark-gray and grayish black shaly limestone; a large amount of cavings
8336	- 8340	4	Shale, grayish-black to black, siliceous with some medium dark to dark-gray chert
8340	- 8346	6	Shale, grayish-black to black, highly silicified, calcareous in part
8346	- 8365	19	Shale, grayish-black, some grayish-black to black, silicified in part
8365	- 8372	7	Shale, black, "coaly" (appears to be crumpled); small amount of clear glassy vein quartz with well-developed crystal faces on one end indicating cavity filling; small amount of white to light-gray vein calcite
8372	- 8384	12	Shale, grayish-black, some black
8384	- 8393	9	Shale, grayish-black to black, silicified in part; small amount of medium- to dark-gray shaly chert
8393	- 8396	3	Shale, grayish-black to black, silicified to shaly chert
8396	- 8403	7	Siltstone (very cherty), medium-gray, mottled with dark-gray to grayish-black, a large amount of grayish-black (very shaly), highly calcareous
HELDERBERG FORMATION (?), 102 FEET			
8403	- 8413	10	Siltstone and sandstone (very fine), medium- to dark-gray, some grayish-black (shaly), highly calcareous to silty and sandy limestone
8413	- 8420	7	Limestone, mottled light- and dark-gray (with white to light-gray spots and grayish-black, shaly streaks), very sandy (very fine) and silty, somewhat cherty, contains fossil fragments
8420	- 8423	3	Limestone, medium- to dark-gray (with white to light-gray spots and grayish-black shaly streaks), very sandy, (very fine), somewhat cherty
8423	- 8439	16	Limestone (very sandy) to sandstone (very highly calcareous), medium light to medium dark gray, very fine to medium-grained, subrounded (the largest grains are rounded), contains much shaly material in the upper part
8439	- 8444	5	Limestone, light- to medium-gray mottled with dark-gray (shaly) material, very sandy (very fine to medium-grained)
8444	- 8450	6	Limestone (sandy, fine) to very fine, silty sandstone, medium dark gray to dark-gray, contains much dark (shaly) material
8450	- 8459	9	Limestone (very sandy) at top to sandstone (very highly calcareous) at the bottom, medium-gray (with dark-gray shaly spots), very fine to fine-grained, some medium (rounded) grains, contains much dark (shaly) material
8459	- 8463	4	Sandstone (very fine, highly calcareous) to limestone (very sandy), medium-gray, silty, some fine to medium (quartz) grains, some dark (shaly) material
8463	- 8465	2	Limestone (very sandy) to sandstone (very highly calcareous), mottled light- and dark-gray, very silty, much dark (shaly) material
8465	- 8472	7	Sandstone, medium-gray, some dark-gray (very shaly), very fine grained, some fine grains, silty, very highly calcareous, more shaly in the lower part
8472	- 8474	2	Limestone (very sandy) to sandstone (very fine, highly calcareous), medium- to dark-gray, some light-gray, some grayish-black, very silty, a large amount of dark (shaly) material
8474	- 8480	6	Limestone (very sandy) to sandstone (very fine, highly calcareous), medium- to dark-gray, very silty, shaly; some fine to very coarse, milky quartz grains

(Continued on p. 3)

Top.	Bottom.	Thickness.	
8480	- 8484	4	Siltstone to sandstone (very fine), dark-gray to grayish-black, very shaly, highly calcareous
8484	- 8488	4	Sandstone, medium-gray (with dark-gray, very shaly streaks), fine to very fine, silty in part, highly calcareous
8488	- 8491	3	Sandstone (very fine) to siltstone, medium-gray (with dark-gray, very shaly streaks), highly calcareous
8491	- 8493	2	Sandstone, medium-gray, very fine to medium-grained, shaly, to a very sandy (very fine) and silty, grayish-black shale, highly calcareous
8493	- 8500	7	Shale, (very silty) to siltstone (shaly), grayish-black to black, sandy (very fine) to a very fine to medium-grained, medium-gray sandstone, highly calcareous
8500	- 8505	5	Shale, grayish-black to black, silty to a dark-gray and grayish-black, shaly siltstone, highly calcareous, sandy (very fine)
8505	- 8505	..	Siltstone, medium- to dark-gray, sandy (very fine), highly calcareous; some grayish-black to black, silty shale SHEAR ZONE (?), 3 FEET
8505	- 8507	2	Sandstone, very light to light-gray, fine-grained, some medium and some very fine grains, somewhat calcareous; some siltstone, medium- to dark-gray, highly calcareous, shaly to a silty shale (grayish-black); a large amount of dark-gray to grayish-black shale (cavings?)
8507	- 8508	1	Siltstone to very fine sandstone, medium- to dark-gray, highly calcareous, somewhat shaly to a silty, grayish-black shale; some very light to light-gray, fine- to medium-grained sandstone (mostly broken into individual grains) ORISKANY SANDSTONE, 6 FEET
8508	- 8514	6	Sandstone, very light gray, fine- to medium-grained, some coarse grains, subrounded to rounded, quartzitic (mostly clear and glassy quartz), much of this sandstone is broken across the sand grains, somewhat calcareous HUNTERSVILLE FORMATION OR NEEDMORE (?) SHALE, 5 FEET
8514	- 8517	3	Shale, grayish-black, some grayish-black to black (this shale is not cavings)
8517	- 8518	1	Shale, grayish-black; sandstone (probably very light gray cavings). This sample is too highly contaminated with iron rust to describe
8518	- 8519	1	Shale, grayish-black, some grayish-black to black; small amount of very light gray sandstone. (This and the above sample may represent another shear zone) ORISKANY SANDSTONE, 19 FEET
8519	- 8520	1	Sandstone, light- to medium-gray, fine to medium-grained, subrounded to rounded, quartzose, slightly calcareous, contains a small amount of black interstitial material
8520	- 8522	2	Sandstone, very light to light-gray, very fine grained, some fine (rounded) grains, quartzitic, calcareous
8522	- 8525	3	Sandstone, light to medium light gray, very fine grained, highly calcareous
8525	- 8527	2	No sample
8527	- 8528	1	Sandstone, light to medium light gray, very fine grained, highly calcareous
8528	- 8530	2	Sandstone, light-gray, fine-grained, some medium (rounded) grains, somewhat calcareous; a large amount of dark-gray to black shale-(cavings?)

Top.	Bottom.	Thickness.	
8530	- 8538	8	Sandstone, very light to light-gray, fine to very fine, a few scattered medium (rounded) grains, quartzitic; highly calcareous
HELDERBERG FORMATION, 246 FEET			
8538	- 8540	2	Sandstone, light-gray (with medium- to dark-gray shaly streaks), very fine grained, some fine grains, very highly calcareous
8540	- 8544	4	Sandstone, medium light to medium dark gray, very fine grained, very highly calcareous, with spots of sandy limestone; some dark, shaly interstitial material in the lower part, some medium sand grains at the bottom
8544	- 8549	5	Sandstone (very fine, very highly calcareous) to limestone (very sandy), light- to medium-gray, contains some dark, shaly, interstitial material
8549	- 8551	2	Sandstone, light-gray, very fine to fine-grained, highly calcareous
8551	- 8554	3	Sandstone, light- to medium-gray, very fine grained, very highly calcareous with some sandy limestone, very shaly in part
8554	- 8555	1	Limestone, medium-gray, very sandy to sandstone, very fine grained, some fine grains, contains some dark (shaly) interstitial material
8555	- 8558	3	Limestone, medium- to dark-gray with some grayish-black (very shaly to shale), very sandy to sandstone (very fine, highly calcareous)
8558	- 8567	9	Sandstone (very highly calcareous, very fine) to limestone (very sandy), medium-gray, some dark-gray to grayish-black (shaly)
8567	- 8575	8	Limestone, dark-gray to grayish-black (with light-gray spots), very silty to a very highly calcareous, very shaly siltstone
8575	- 8577	2	Shale, grayish-black to black, highly calcareous, sandy (fine, rounded), somewhat cherty
8577	- 8579	2	Sandstone, very light to light-gray, very fine to fine-grained, some medium grains, quartzose, calcareous in part
8579	- 8584	5	Sandstone, light-gray (with some medium-gray, shaly spots in the lower part), fine-grained, many medium grains in the lower part, subrounded to rounded, highly calcareous at the top to a very sandy limestone at the bottom
8584	- 8587	3	Sandstone, medium-gray to dark-gray (limestone spots) to grayish-black (very shaly), very fine to medium-grained, highly calcareous
8587	- 8592	5	Sandstone, light-gray with medium-gray spots, very fine to fine-grained, highly to very highly calcareous
8592	- 8597	5	Limestone, light- to medium-gray (with dark-gray, very shaly streaks), very sandy (very fine); some fossil fragments
8597	- 8607	10	Sandstone, very light to light-gray, very fine to fine-grained, highly calcareous
8607	- 8608	1	Sandstone, light- to medium-gray, very fine to fine-grained, highly calcareous, somewhat shaly in part
8608	- 8616	8	Sandstone (very highly calcareous) to limestone (very sandy), light to medium-gray, very fine to fine-grained
8616	- 8621	5	Sandstone (very highly calcareous) to limestone (very sandy), medium-gray (with light-gray spots), some dark-gray (shaly), very fine to medium-grained
8621	- 8623	2	Limestone, medium- to dark-gray, very sandy (very fine to fine-grained)
8623	- 8630	7	Limestone, medium- to dark-gray (with light-gray spots), very sandy (very fine to fine), silty and cherty, shaly in part

Top.	Bottom.	Thickness.	
8630	- 8637	7	Limestone, dark-gray to brownish-black (with light- to medium-gray spots), very sandy (very fine), silty, cherty, very shaly in the lower part
8637	- 8646	9	Limestone, dark-gray to grayish-black, (with light-gray spots), very shaly and silty, somewhat sandy in the upper part (very fine)
8646	- 8653	7	Limestone, very light to medium-gray, very sandy (very fine to medium-grained)
8653	- 8663	10	Limestone, light- to dark-gray, sandy (fine to very fine)
8663	- 8692	29	Limestone, medium- to dark-gray, (with light-gray spots), sandy (very fine) to fine-grained, mostly very fine at the bottom)
8692	- 8703	11	Limestone, medium- to dark-gray (with light-gray spots), very sandy (very fine), cherty; at the bottom, very sandy to very fine sandstone (very highly calcareous), very cherty
8703	- 8733	30	Limestone, dark-gray to grayish-black (with light- to medium-gray spots), very shaly to a highly calcareous shale, silty, cherty in the upper part
8733	- 8752	19	Limestone, grayish-black (with light- to medium-gray spots), very shaly
8752	- 8769	17	Limestone, grayish-black to black, some medium-gray, very shaly to a highly calcareous shale
8769	- 8784	15	Limestone (very shaly) to shale (calcareous), grayish-black to black
			(HUNTERSVILLE OR MARCELLUS (?), 101 FEET
8784	- 8885	101	Shale, black and grayish-black to black, highly calcareous, siliceous, much of this shale contains very fine disseminated pyrite; some what vein calcite; less calcareous toward the bottom; a very small amount of chert in the bottom few samples
			HELDERSBERG FORMATION, 100 FEET
8885	- 8888	3	Shale, grayish-black, some grayish-black to black, calcareous; some medium- to dark-gray (with light-gray spots) limestone, very shaly, somewhat cherty
8888	- 8904	16	Limestone, light to medium dark gray, very shaly, cherty
8904	- 8909	5	Limestone, medium- to dark-gray (with light-gray spots), shaly, cherty, and silty (very fine quartz crystals)
8909	- 8916	7	Limestone, medium- to dark-gray, some grayish-black (shaly), some light-gray, somewhat cherty and silty; some fossil fragments
8916	- 8926	10	Limestone, medium- to dark-gray and brownish-black, some brownish-black to grayish-black (very shaly) at the top, very cherty, silty, somewhat shaly
8926	- 8935	9	Limestone, light- to dark-gray, somewhat shaly, silty, and cherty
8935	- 8951	16	Limestone, brownish-black to grayish-black, very shaly to a calcareous shale, cherty at the bottom, silty
8951	- 8960	9	Limestone, brownish-black (with light- to medium-gray spots), some grayish-black (shaly), very shaly, silty, and cherty
8960	- 8976	16	Limestone, dark-gray to grayish-black (with brownish cast); at the top, shaly and very silty; at the bottom, very shaly and cherty
8976	- 8989	13	Limestone (very shaly) to shale (highly calcareous), dark-gray with light- to medium-gray spots); some dark-gray to grayish-black, very silty in the upper part; small amount of light- to medium-gray chert and some fossil fragments

Top. Bottom. Thickness.

8989 - 9007	18	Limestone, dark-gray to grayish-black (with some light- to medium-gray spots), very shaly with some highly calcareous shale, silty in the upper part, somewhat cherty, fossiliferous
9007 - 9028	21	Limestone, dark-gray to grayish-black, very shaly to a highly calcareous shale
9028 - 9043	15	Shale (highly calcareous) and some very shaly limestone, dark-gray to grayish-black, a few scattered fossil fragments
9043 - 9065	22	Limestone, light- to medium-gray (with medium dark to dark-gray, shaly spots and streaks), very shaly, silty, some chert in the upper part
9065 - 9080	15	Shale, (highly calcareous) to limestone (very shaly), grayish-black, some medium- to dark-gray (with brownish cast)
9080 - 9085	5	Shale, dark-gray, calcareous; some medium- to dark-gray, shaly limestone; some medium light to medium dark gray chert
9085		Total depth

485