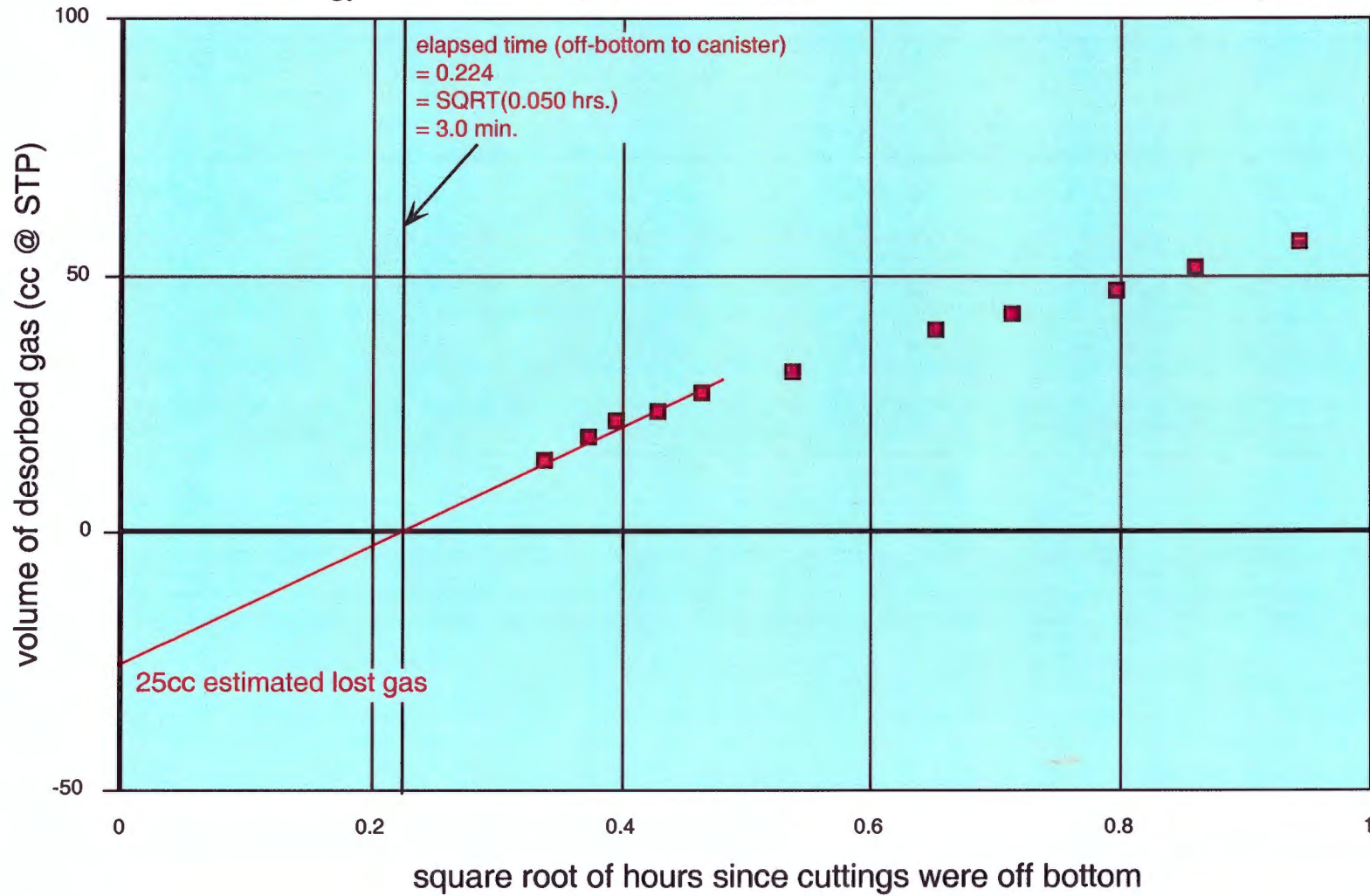


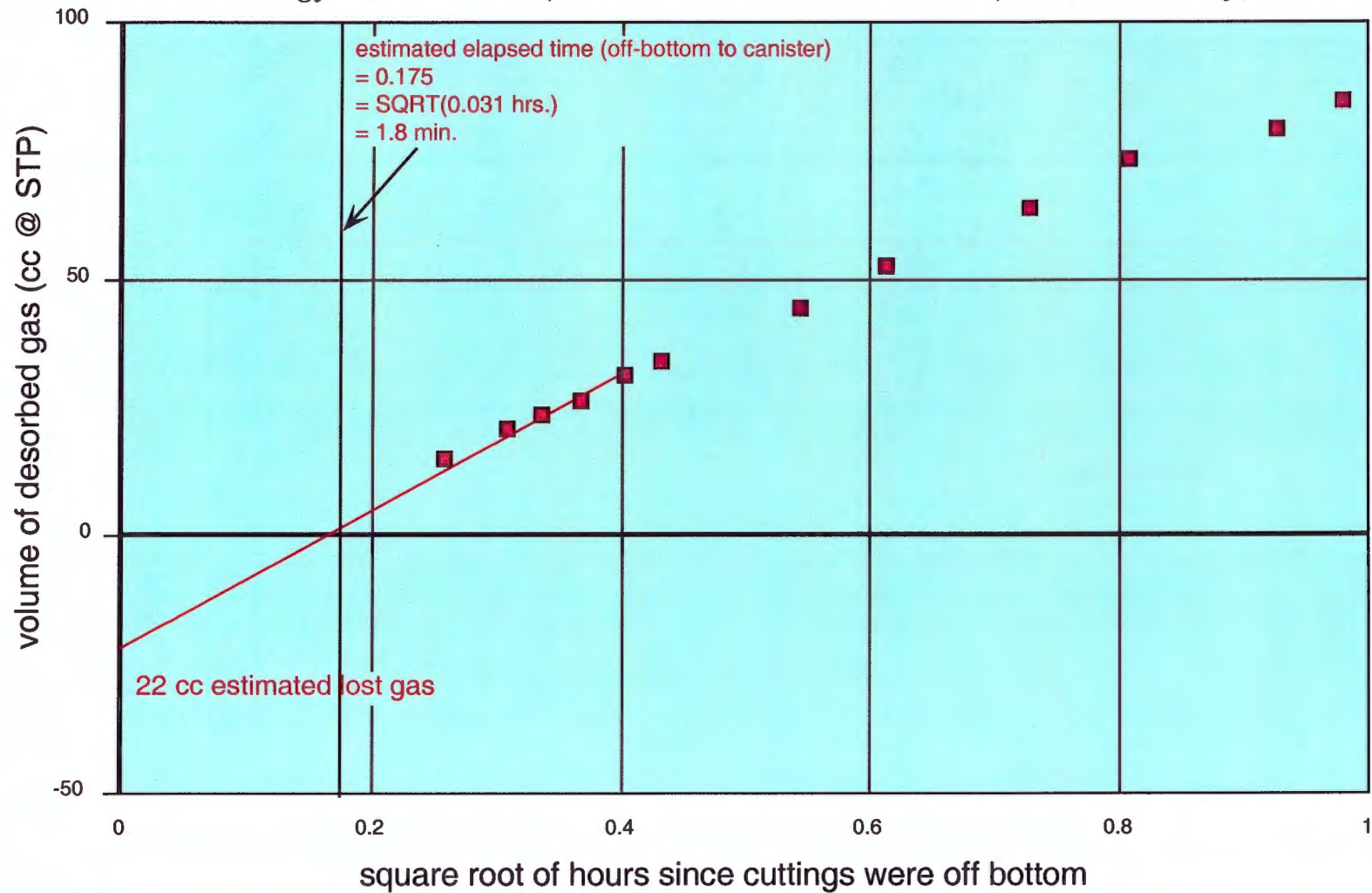
661' to 662' (Bevier Coal) in canister 10

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E., Neosho County, KS

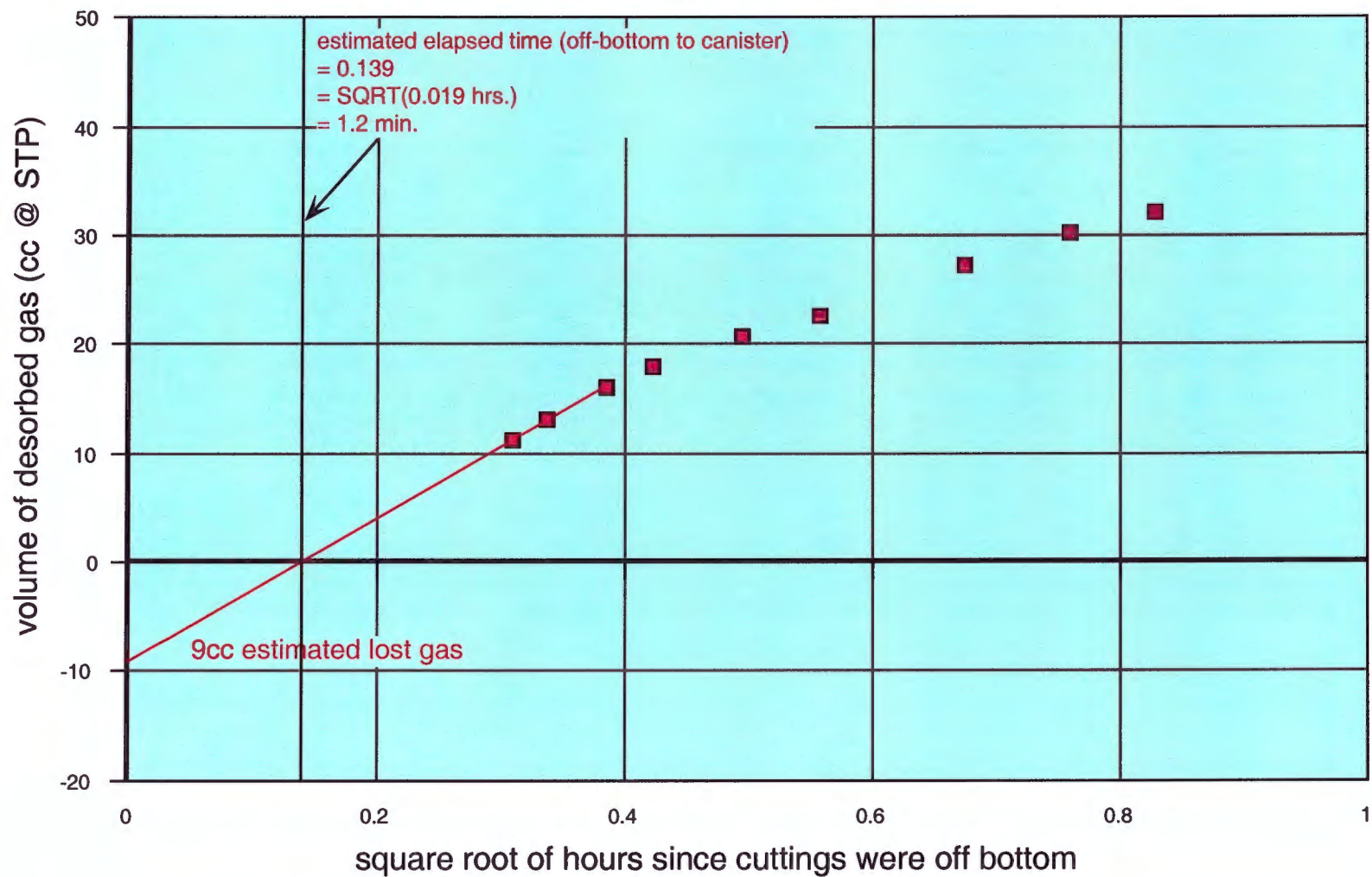


685' to 687' (Croweburg Coal) in canister H

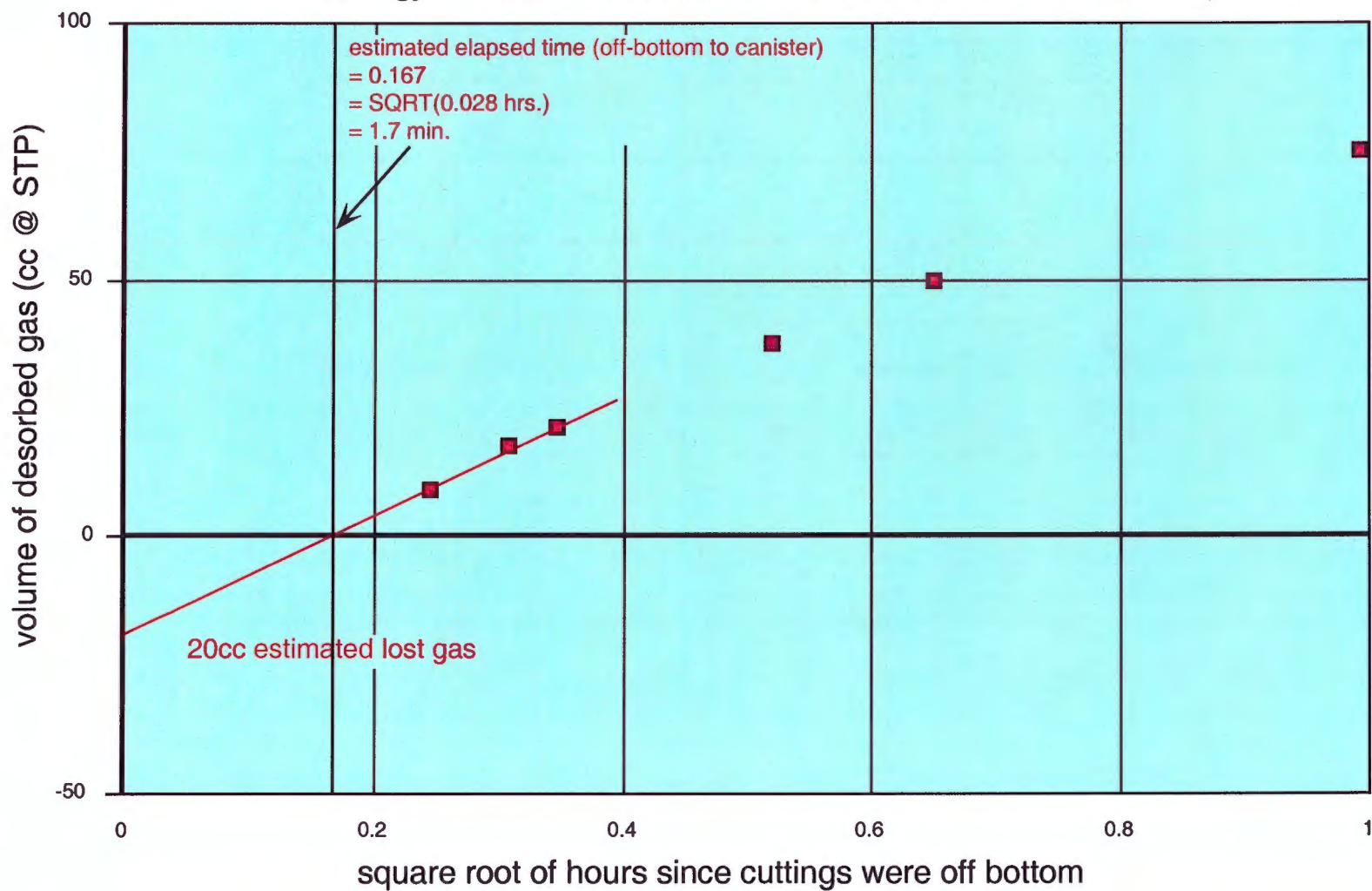
Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E., Neosho County, KS



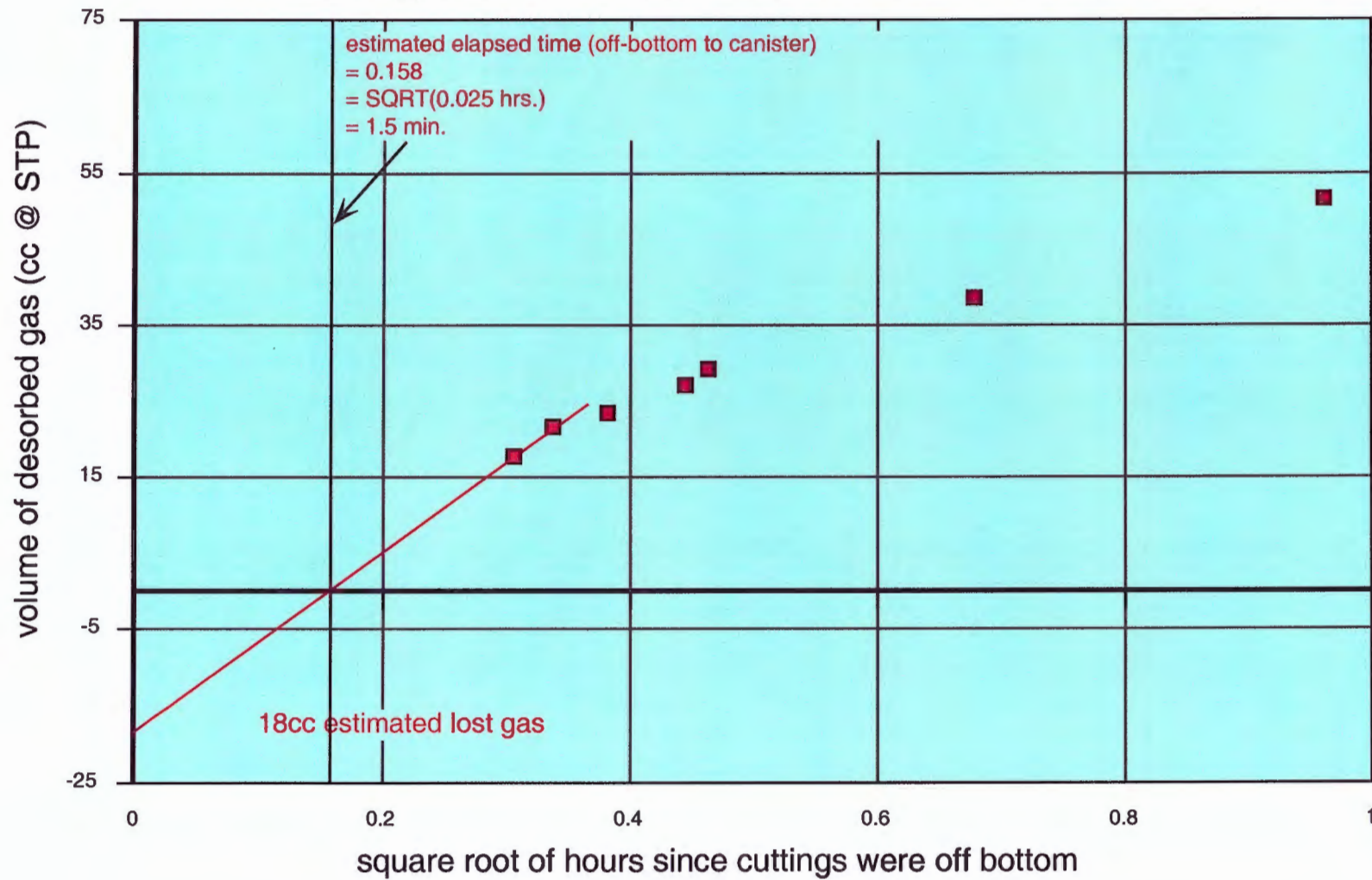
831' to 832' (Weir-Pittsburg Coal) in canister 1
 Devon Energy R. John #35-1; sec. 35-T.29S.-R.18E., Neosho County



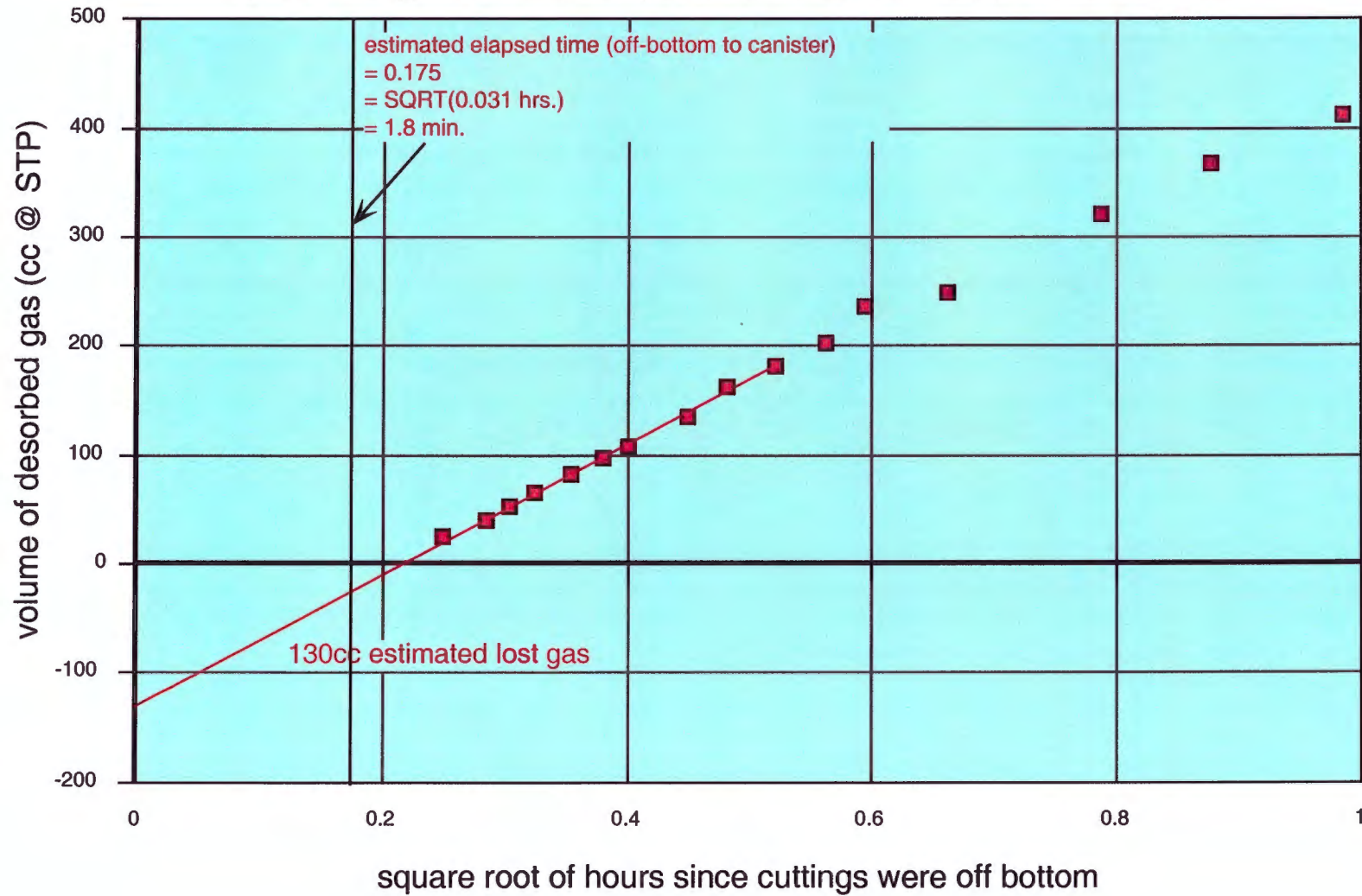
938' to 940' (Upper Rowe Coal) in canister 5
 Devon Energy R. John #35-1; sec. 35-T.29S.-R.18E., Neosho County



943' to 946' (Lower Rowe Coal) in canister 11
 Devon Energy R. John #35-1; sec. 35-T.29S.-R.18E., Neosho County



996' to 999' (Riverton Coal) in canister 7
Devon Energy R. John #35-1; sec. 35-T.29S.-R.18E., Neosho County



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS

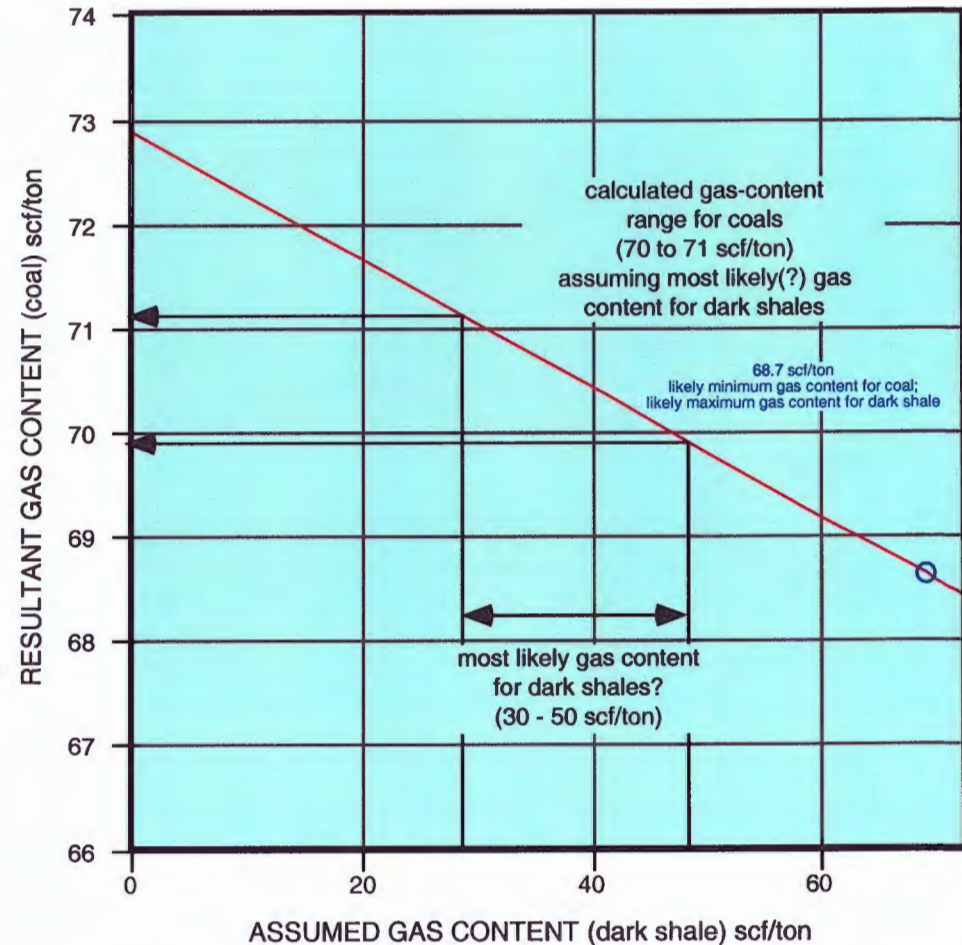
LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of Bevier coal from 661-662'

$$\text{GAS CONTENT}_{\text{coal}} = \frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 372 ccs
 weight_{dark shale} = 10.07 grams
 weight_{coal} = 163.41 grams

TOTAL DRY WEIGHT OF SAMPLE = 479.37 grams
 weight_{light-colored lithologies} = 305.89 grams (63.8%)
 weight_{dark shale} = 10.07 grams (2.1%)
 weight_{coal} = 163.41 grams (34.1%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	270.10	29.57% / 1.72% / 68.71%
>0.0661	102.11	46.06% / 1.84% / 52.10%
>0.0460	64.34	38.58% / 3.31% / 58.11%
>0.0331	21.35	20.78% / 3.90% / 75.32%
<0.0331	21.48	33.75% / 2.69% / 63.56%
479.37 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS

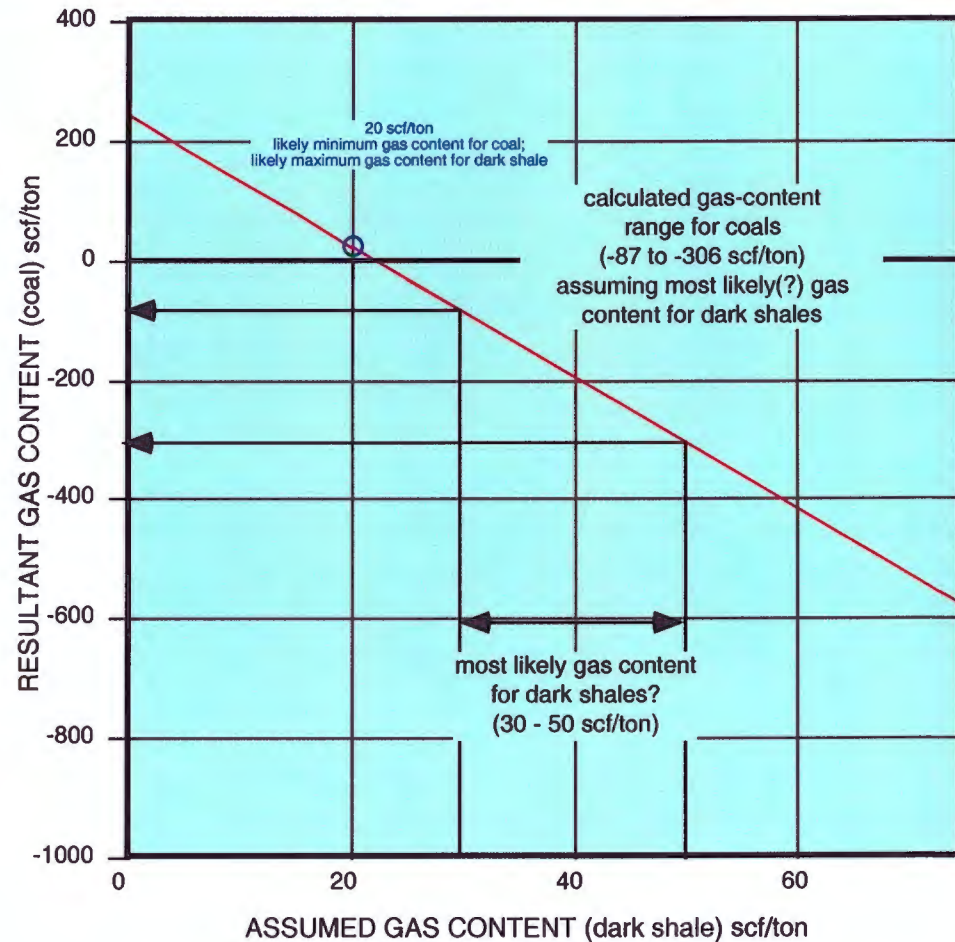
LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of Croweburg coal from 685-687'

$$\text{GAS CONTENT}_{\text{coal}} = \frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 408 ccs
 weight_{dark shale} = 591.18 grams
 weight_{coal} = 53.83 grams

TOTAL DRY WEIGHT OF SAMPLE = 828.75 grams
 weight_{light-colored lithologies} = 183.74 grams (22.2%)
 weight_{dark shale} = 591.18 grams (71.3%)
 weight_{coal} = 53.83 grams (6.5%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	612.49	5.27% / 72.36% / 22.37%
>0.0661	134.15	11.12% / 67.80% / 21.08%
>0.0460	62.00	7.73% / 71.16% / 21.11%
>0.0331	14.22	9.30% / 62.46% / 28.24%
<0.0331	5.89	8.36% / 68.44% / 23.20%
828.75 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS

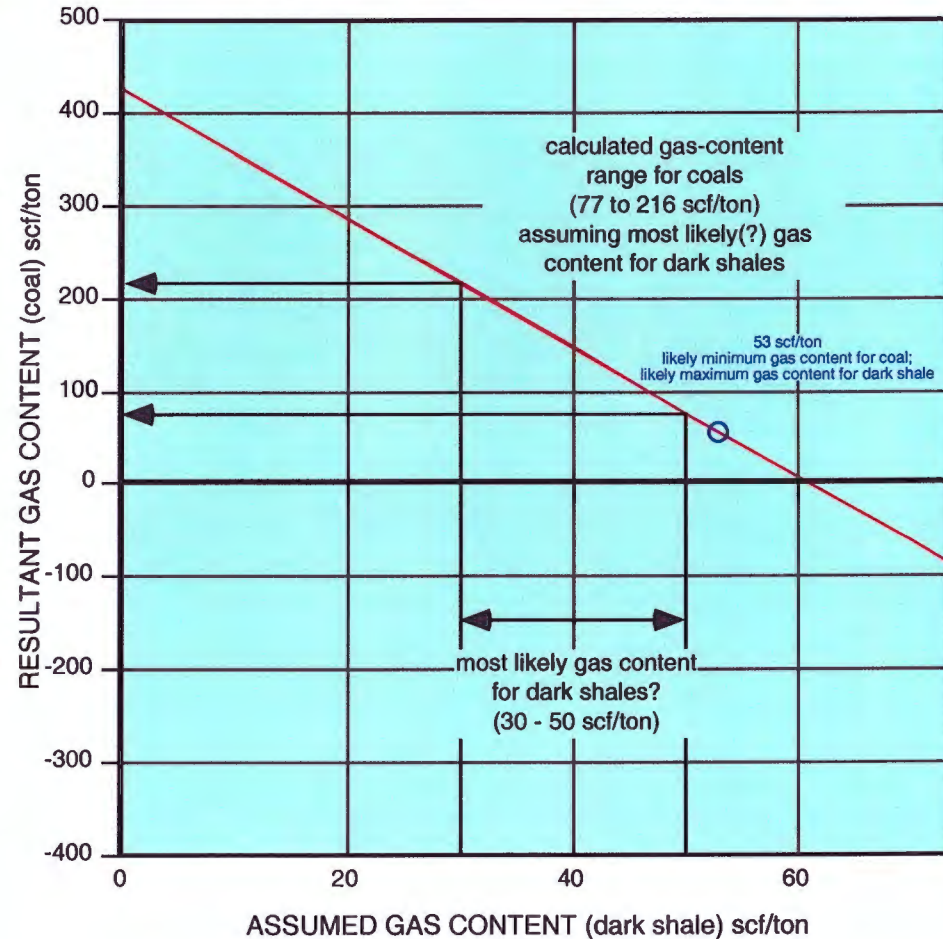
LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of Weir-Pittsburg coal from 831-832'

$$\text{GAS CONTENT}_{\text{coal}} = \frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 63 ccs
 weight_{dark shale} = 32.84 grams
 weight_{coal} = 4.72 grams

TOTAL DRY WEIGHT OF SAMPLE = 246.04 grams
 weight_{light-colored lithologies} = 208.47 grams (84.7%)
 weight_{dark shale} = 32.85 grams (13.4%)
 weight_{coal} = 4.72 grams (1.9%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	193.69	1.87% / 13.14% / 84.99%
>0.0661	36.77	2.31% / 15.20% / 82.49%
>0.0460	13.43	1.71% / 12.06% / 86.22%
>0.0331	1.36	0.37% / 6.64% / 92.99%
<0.0331	0.79	1.57% / 11.76% / 86.67%
246.04 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; sec. SE SW 35-T.29S.-R.18E.; Neosho Co., KS

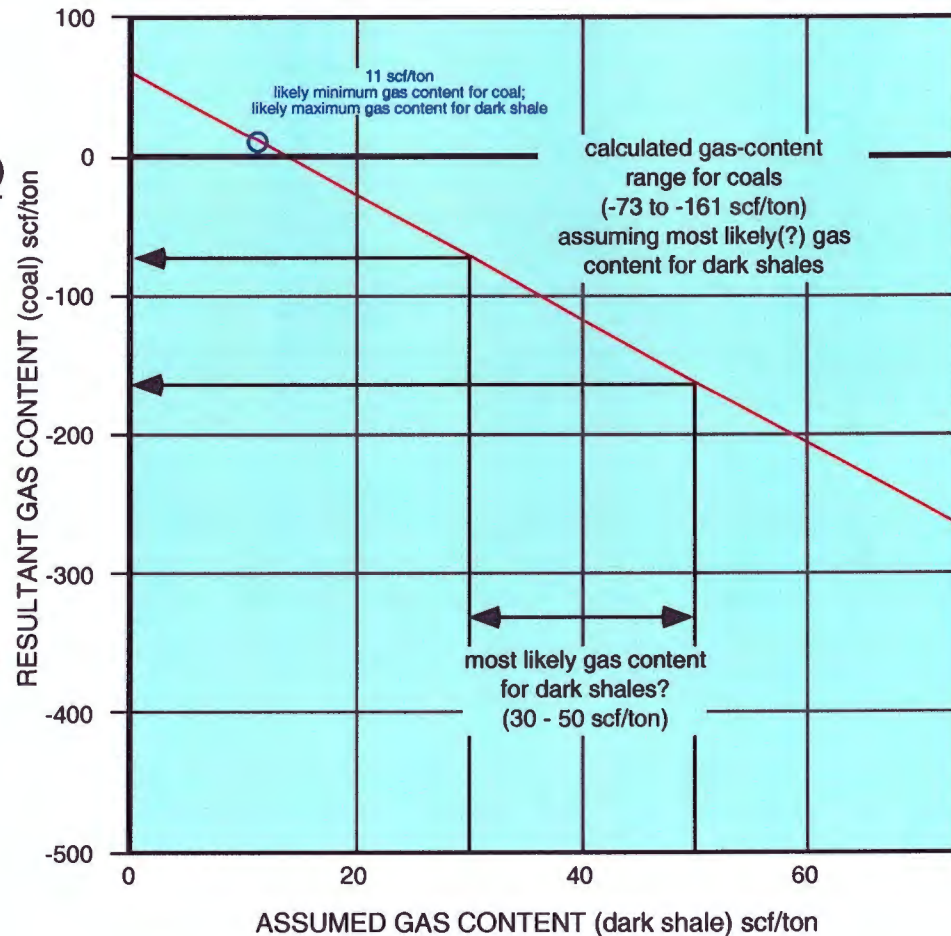
LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of upper Rowe coal from 938-940'

$$\text{GAS CONTENT}_{\text{coal}} = \frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 218 ccs
 weight_{dark shale} = 510.82 grams
 weight_{coal} = 115.17 grams

TOTAL DRY WEIGHT OF SAMPLE = 733.19 grams
 weight_{light-colored lithologies} = 107.20 grams (14.6%)
 weight_{dark shale} = 510.82 grams (69.7%)
 weight_{coal} = 115.15 grams (15.7%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	446.83	18.27% / 66.50% / 15.23%
>0.0661	152.07	15.20% / 71.13% / 13.67%
>0.0460	96.91	8.16% / 78.71% / 13.13%
>0.0331	24.51	4.29% / 80.29% / 15.43%
<0.0331	12.88	11.48% / 4.16% / 14.37%
733.19 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS

LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of lower Rowe coal from 943-946'

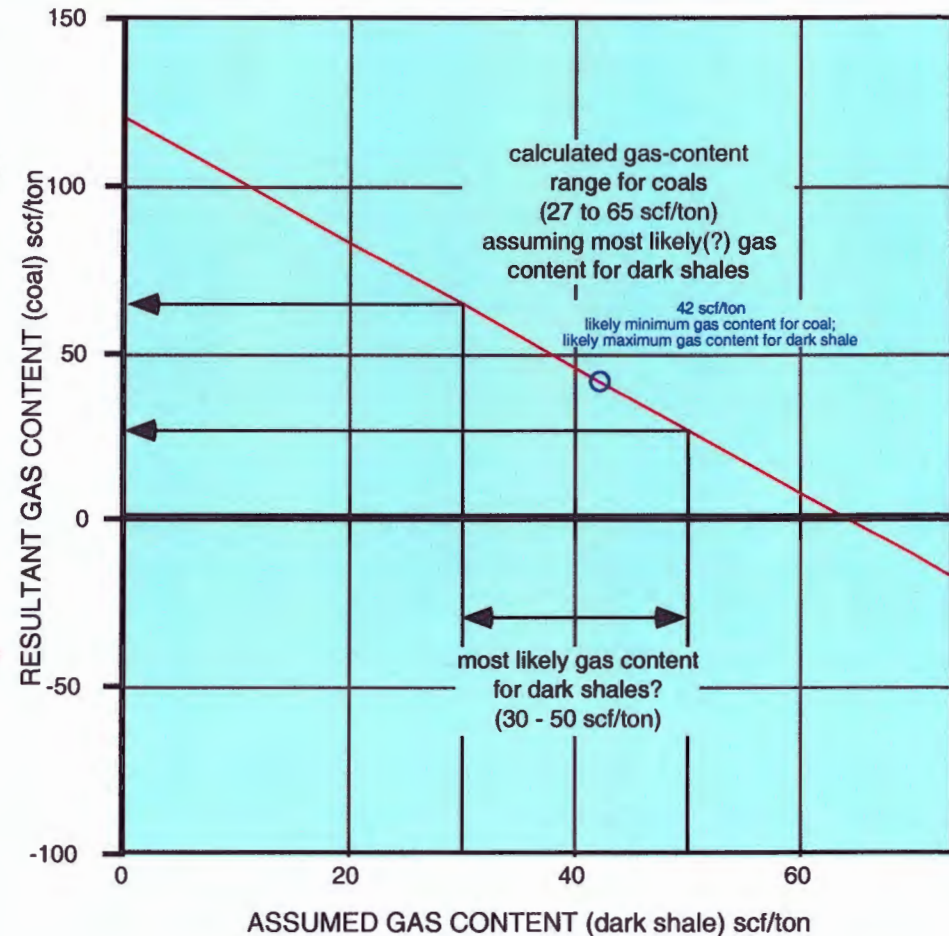
GAS CONTENT_{coal} =

$$\frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 196 ccs
weight_{dark shale} = 97.14 grams
weight_{coal} = 51.95 grams

TOTAL DRY WEIGHT OF SAMPLE = 452.07 grams
weight_{light-colored lithologies} = 302.99 grams (67.0%)
weight_{dark shale} = 97.14 grams (21.5%)
weight_{coal} = 51.95 grams (11.5%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	294.11	12.79% / 19.49% / 67.73%
>0.0661	91.61	8.55% / 29.25% / 62.20%
>0.0460	48.51	9.58% / 19.28% / 71.13%
>0.0331	11.24	10.43% / 19.78% / 69.78%
<0.0331	6.60	10.34% / 21.95% / 67.71%
452.07 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; sec. SE SW 35-T.29S.-R.18E.; Neosho Co., KS

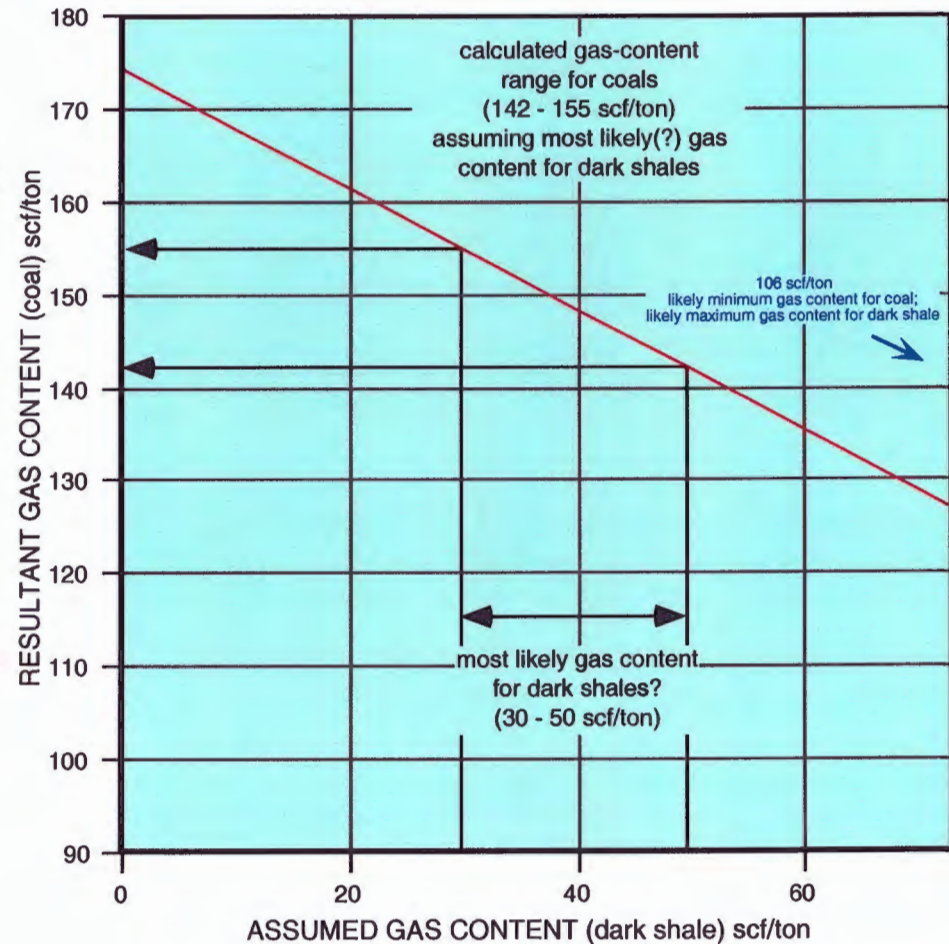
LITHOLOGIC COMPONENT SENSITIVITY ANALYSIS for calculation of gas content of Riverton coal from 996-999'

$$\text{GAS CONTENT}_{\text{coal}} = \frac{\text{total gas desorbed} - ((\text{gas content}_{\text{dark shale}}) * (\text{weight}_{\text{dark shale}}))}{\text{weight}_{\text{coal}}}$$

total gas desorbed = 2805 ccs
 weight_{dark shale} = 334.40 grams
 weight_{coal} = 515.62 grams

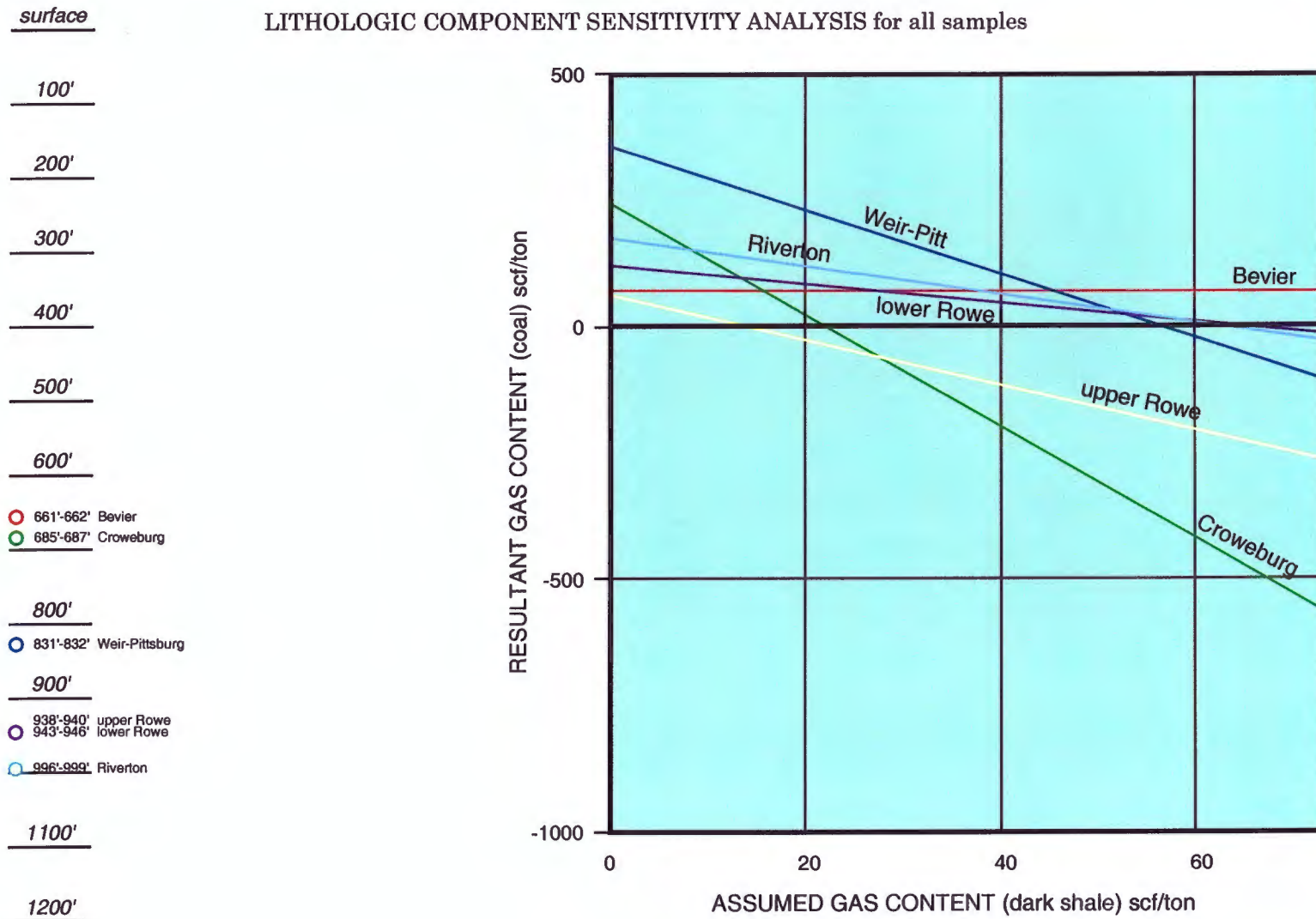
TOTAL DRY WEIGHT OF SAMPLE = 1219.06 grams
 weight_{light-colored lithologies} = 369.04 grams (30.3%)
 weight_{dark shale} = 334.40 grams (27.4%)
 weight_{coal} = 515.62 grams (42.3%)

sieve size	grams	% coal / % dark shale / % light-colored liths
>0.0930	722.59	40.34% / 35.18% / 24.48%
>0.0661	271.56	49.09% / 18.26% / 32.65%
>0.0460	158.62	45.07% / 14.06% / 40.87%
>0.0331	45.60	24.33% / 9.51% / 66.16%
<0.0331	20.69	39.71% / 19.25% / 41.04%
1219.06 TOTAL		



Desorption Characteristics of Cuttings Samples

Devon Energy R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS



Desorption Characteristics of Cuttings Samples (ie., coal & dark shale)

Devon R. John #35-1; SE SW sec. 35-T.29S.-R.18E.; Neosho Co., KS

surface

100'

200'

300'

400'

500'

600'

661'-662' Bevier
685'-687' Croweburg

800'

831'-832' Weir-Pittsburg

900'

938'-940' upper Rowe
943'-946' lower Rowe

996'-999' Riverton

1100'

1200'

