

OZARK-MAHONING COMPANY

Yingling Tract.

Started 12-6-51

Rose Creek Mine 353 ft. level.

Finished 12-17-51

Diamond Drill Hole No 1

Elevation: 47-0

Location: 100 ft. south and 107.5 ft. east of
the center of the shaft.

Angle: 45° Bearing N. 51° W.

Drilled by: B. W. Bales

Examined by: E. A. Bracke

0 - 3	No core.	2.47	26.93
3 - 10	Dark gray shale.	2.57	32.90
10 - 20	Brown lime shaly.	3.53	39.43
20 - 23	Dark gray sand.	2.47	41.90
23 - 31	Brown lime shale streaks.	2.37	44.27
31 - 38	Soft black shale.	2.76	47.03
38 - 49'6"	Rich acid spar, some quartzite inclusions 10' - 4" core.	2.13	49.16
49'6" - 72	Broken white quartzite showing spar stringers 20%.	2.13	51.29
72 - 86	Broken gray quartzite, scattered acid spar stringers, little calcite.	2.34	53.63
86 - 93	Broken gray quartzite, heavy spar stringers and calcite.	3.75	57.38
93 - 97	Gray broken quartzite.	3.55	60.93
97 - 101	" " " , some heavy spar stringers.		
101 - 105	Gray brecciated quartzite, traces spar.		
105 - 108	Gray quartzite, shaly partings, traces spar and calcite.		
108 - 117	Gray broken quartzite, traces of spar. Fault at 117.		
117 - 125	Broken leached buff lime, scattered spar stringers.		
125 - 131	Light brown colitic lime, few calc. stringers.		

Ore face 38 - 49'6" averages 70-80 CaF₂.

The following are the results of the assays of the samples of the ore body at the mine. The samples were taken from the different levels of the mine and the results are given in the following table.

Assays	CaCO ₃	CaF ₂
38 - 40		59.61
40 - 42		96.38
42 - 44		72.99
44 - 44'6"		77.08
44'6" - 49'6"		54.68
49'6" - 55	2.67	16.93
55 - 60	3.39	23.41
60 - 65	3.03	24.68
65 - 70	2.67	23.13
70 - 75	6.64	9.04
75 - 80	5.56	13.27
80 - 85	3.76	11.16
85 - 90	25.24	41.16
90 - 95	6.46	15.24
95 - 100	3.76	27.78
100 - 105	10.98	3.55

OZARK-MAHONING COMPANY

Kingling Rose Creek Mine
 Diamond Drill Hole No. 2
 Elevation: 47.0
 Location: 96' south and 106.5' east
 of the center of the shaft
 Angle: 45° Bearing: N 16° - 45' W
 Drilled by: S. W. Bales
 Examined by: E. A. Brecke

Started: 12-17-51
 Finished: 12-22-51

- 0-10 Bx Shaly lime
- 10-15 Brown lime, shaly, calcite stringers
- 15-21 Gray shale
- 21-29 Brown lime, shale streaks 3' core
- 29-33 Soft shale 6" core showing quartzite with spar
- 33-35 Quartzite spar stringers
- 35-90 Broken gray quartzite scattered spar stringers
- 90-95 " " " some gouge and calcite trace spar fault 95'
- 95-117 Gray fine grained sand Rosiclare
- 117-142 Gray and brown lime, some calcite streaks

ASSAY		CaCO3	CaF2
33-35	10-15	3.39	58.49
35-40		3.03	8.06
40-45		3.76	8.62
45-50		2.49	24.40
50-55		6.46	15.95
55-60		3.94	14.26
60-65		5.02	9.18
65-70		4.66	14.54
70-75		4.30	6.37
75-80		6.10	13.27
80-85		8.99	4.11
85-90		5.38	16.93
90-95'-6"		13.14	12.99

10-15 Brown lime shaly
 15-21 Brown shale
 21-29 Brown lime, calcite streaks
 29-33 Soft shale 6" core showing quartzite with spar
 33-35 Quartzite spar stringers
 35-90 Broken gray quartzite scattered spar stringers
 90-95' " " " some gouge and calcite trace spar fault 95'
 95-117 Gray fine grained sand Rosiclare
 117-142 Gray and brown lime, some calcite streaks

ASSAY	CaCO3	CaF2
10-15	3.39	58.49
15-21	3.03	8.06
21-29	3.76	8.62
29-33	2.49	24.40
33-35	6.46	15.95
35-40	3.94	14.26
40-45	5.02	9.18
45-50	4.66	14.54
50-55	4.30	6.37
55-60	6.10	13.27
60-65	8.99	4.11
65-70	5.38	16.93
70-75	13.14	12.99

OTARK-MAHONING COMPANY

Yingling Rose Creek Mine.

Started 12-22-51
Finished 1-5-52

Diamond Drill Hole No. 3

Elevation: 47.0

Location: 97' south and 112.5' east
of the center of the shaft.

Angle: 40° Bearing N. 28° 30' E.

Drilled by: E. W. Hales

Examined by: E. A. Brecke

- 0 - 8 Gray shale
- 8 - 19 Brown lime shaly
- 19 - 24 Gray shale, fossiliferous
- 24 - 32 Brown shaly lime
- 32 - 47 Black shale
- 47 - 48.5 Brown shaly lime
- 48.5 - 51 Good acid spar, little quartzite
- 51 - 93 Broken quartzite, scattered spar stringers
- 93 - 137 " " thin seams of spar, some calcite
- 137 - 147 Gray sand shale streaks, some calcite, traces spar
- 147 - 155 Sandstone, calcite breccia
- 155 - 160 Gray lime, con. calcite, traces spar
- 160 - 162-1/2 Gray lime, con. calcite, traces spar, some heavy spar stringers
- 162-1/2 - 175 Brown lime

Assay	CaCO ₃	CaF ₂
48.5 - 51	7.55	72.15
51 - 55	1.77	9.47
55 - 60	3.58	16.79
60 - 65	4.43	8.90
160 - 162-1/2	64.06	26.93

OZARK MAHONING COMPANY

Yingling - Rose Creek Mine

Started 1-5-52
Finished 1-14-52

Diamond Drill Hole No. 4

Elevation: 47.0

Location: 101' south and 101' east of the
center of the shaft.

Angle: 40° Bearing N. 72° - 30' W.

Drilled by: Bales

Examined by: E. A. Brecke

0 - 10 Gray Shale
 10 - 25 Brown shaly
 25 - 34 Gray shaly and fossiliferous lime
 34 - 43'6" Gray shale
 43'6" - 48 Gray broken quartzite, some good spar
 48 - 74'6" Gray quartzite, broken scattered spar stringers
 74'6" - 83'6" Gray quartzite, heavily brecciated, some spar
 83'6" - 93 Broken gray quartzite, little spar
 93 - 101 Gray quartzite brecciated, some spar
 101 - 132'8" " " , broken, little spar
 132'8" - 142 Gray to black shaly quartzite, some brecciation, little calcite,
 Fault 142
 142 - 155 Brown lime

<u>Assays</u>	<u>CaCO₃</u>	<u>CaF₂</u>
43'6" - 48	2.85	46.37
70 - 75	4.59	16.22
75 - 80	2.37	29.23
80 - 85	3.11	21.71
85 - 90	3.11	15.21

	<u>CaCO₃</u>	<u>CaF₂</u>
90 - 95	2.93	18.53
95 - 101	2.00	31.97

OZARK-MAHONING COMPANY

Started: 1-15-52
 Finished: 1-18-52

Yingling Rose Creek Mine

Diamond Drill Hole No. 5

Elevation: 53.0

Location: 97' south & 105' east of
 the center of the shaft

Angle: 40° above Hor. Bearing N 41° 30' W

Drilled by: B. W. Bales

Examined by: A. G. Johnson

0-11	Shale
11-26	Gray shaly ls. - Calc. seams
26-44	Shale - Calc. seams
44-50'6"	Mostly black shale - gouge
50'6"-58'6"	Very small core recovery - shale - did not core probable fault zone
58'6" - 78'6"	Gray sandy shale - Sand streaks

OSARK-MAHONING COMPANY

Yingling Rose Creek Mine

Started: 1-19-52

Diamond Drill Hole No. 6

Finished 2-2-52

Elevation: 47.0 353 ft. level

Location: 49.5 ft. south and 3 ft. east of the shaft.
N. E. 1/4 S. W. 1/4 of Sec. 11,
Twp. 11 S., Range 7 East, Hardin County.

Angle 45° Bearing: S. 63° - 30 ft. E.

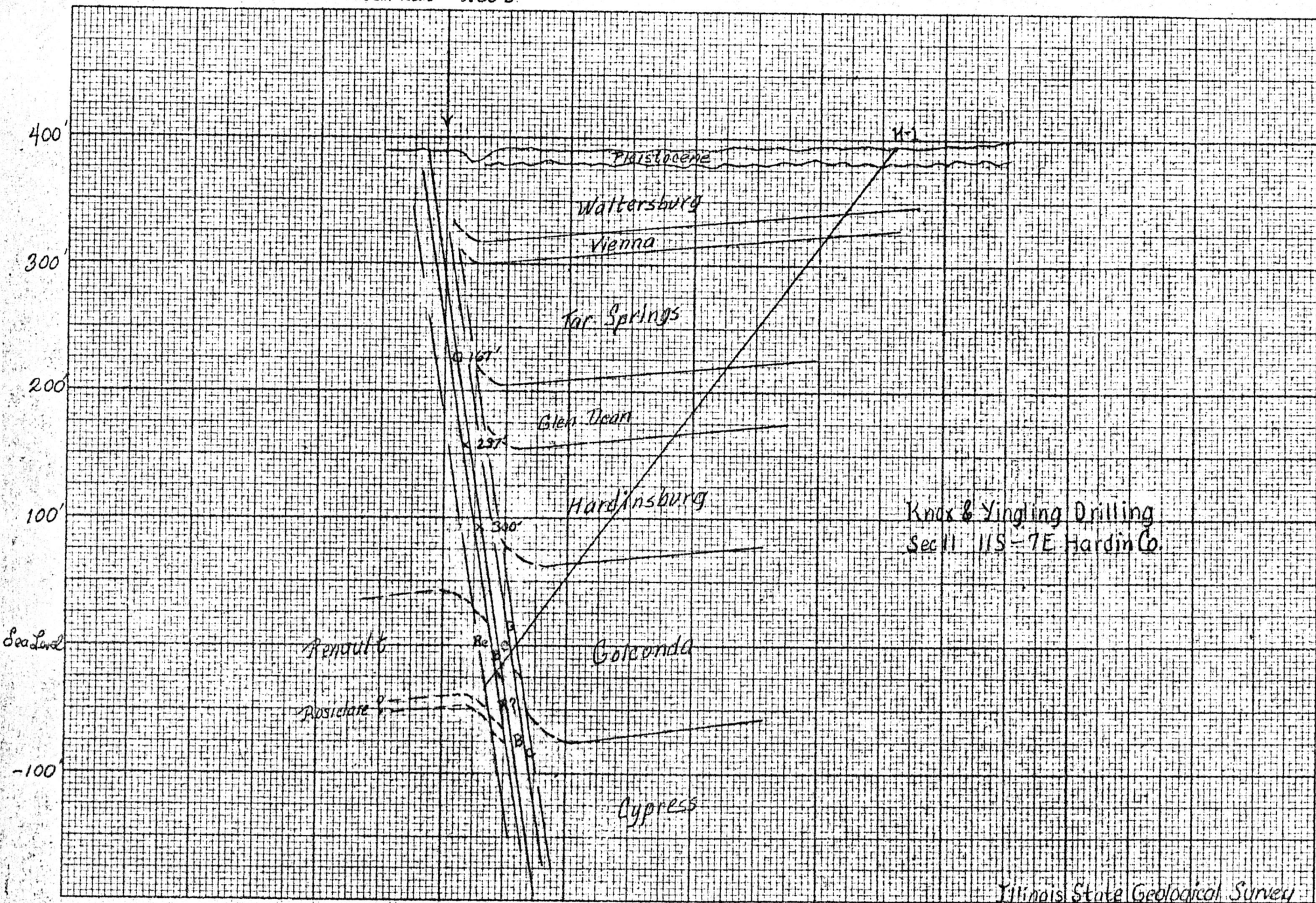
Drilled by: B. W. Bales

Examined by: E. A. Brecke

- 0 - 13 Broken gray quartzite, some spar stringers
Est. 15% CaF₂ 50% core recovery
- 13 - 26 - Broken gray quartzite, some spar stringers. Est. 15% CaF₂, 60% core
- 26 - 49 " " " " " " " " 10% CaF₂, 80% core
- 49 - 66 Light gray broken quartzite, scattered spar seams, 5% CaF₂, 60% core
- 66 - 87 " " " " " " " " 5% CaF₂, 70% core
- 87 - 93 White quartzitic sand, heavy spar and calcite streaks, 90% core.
- 93 - 104 " " " traces of spar and calcite, Est. 5% CaF₂, 90% core.
- 104 - 123 Broken gray quartzite scattered heavy spar stringers.
Est. 5 to 10% CaF₂, 95% core recovery.
- 123 - 129 Broken gray quartzite, some spar and calcite. Est. 15% CaF₂,
90% core recovery.
- 129 - 138-1/2 Broken gray quartzite, thin spar stringers. Est. 10% CaF₂.
- 138-1/2 - 142 Gray sand, shaly partings, sheared. Fault at 142 ft.
- 142 - 156 Dark gray quartzitic sand, scattered spar stringers. Est. 10% CaF₂,
85% core recovery.
- 156 - 180 Dark gray sand, scattered thin spar stringers and calcite. 75% core
recovery.

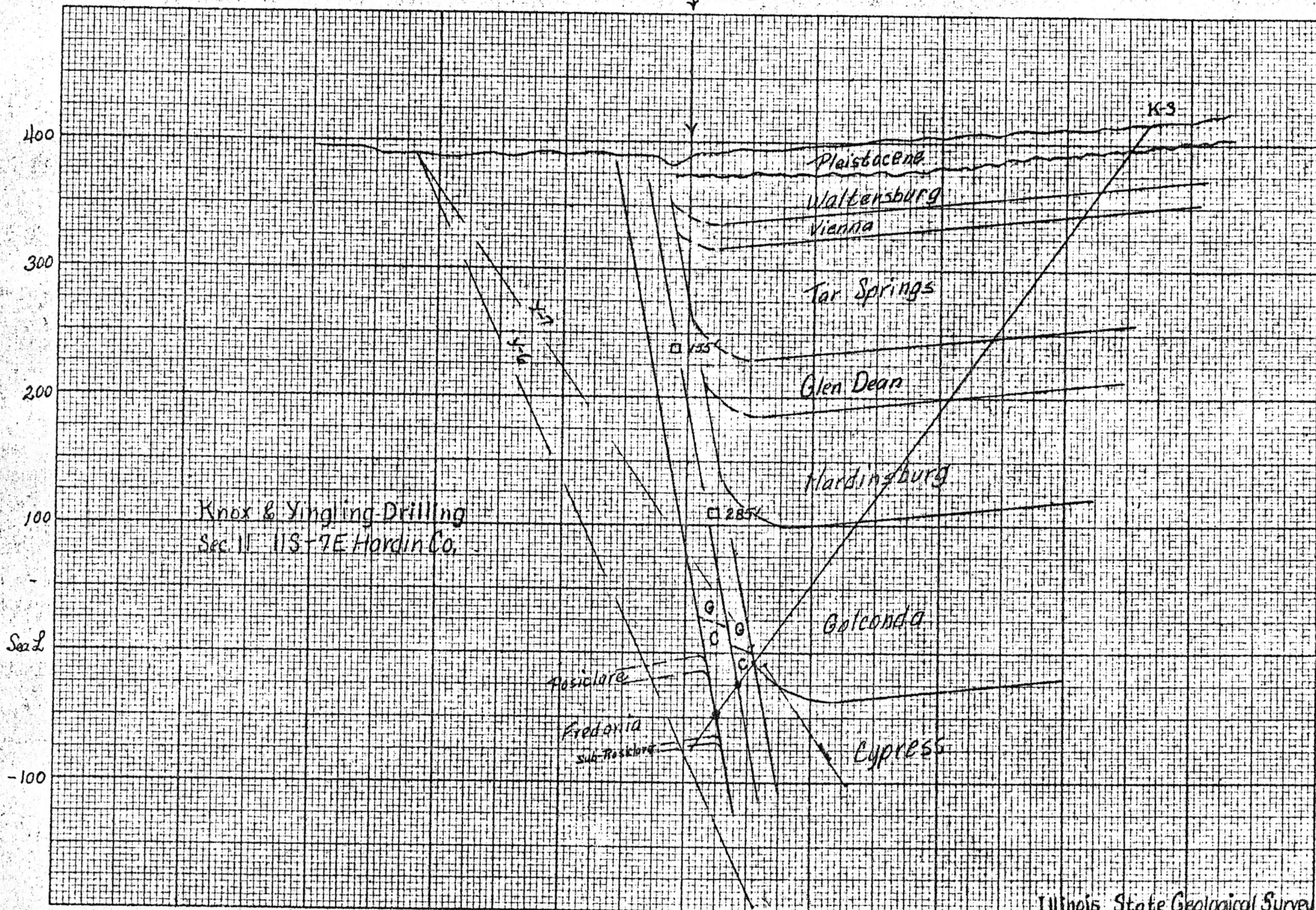
Assays	CaCO ₃	CaF ₂
83' - 6" - 87	4.57	28.94
87 - 93'6"	12.75	13.67
123 - 129	4.78	13.33
129 - 132	11.63	31.54

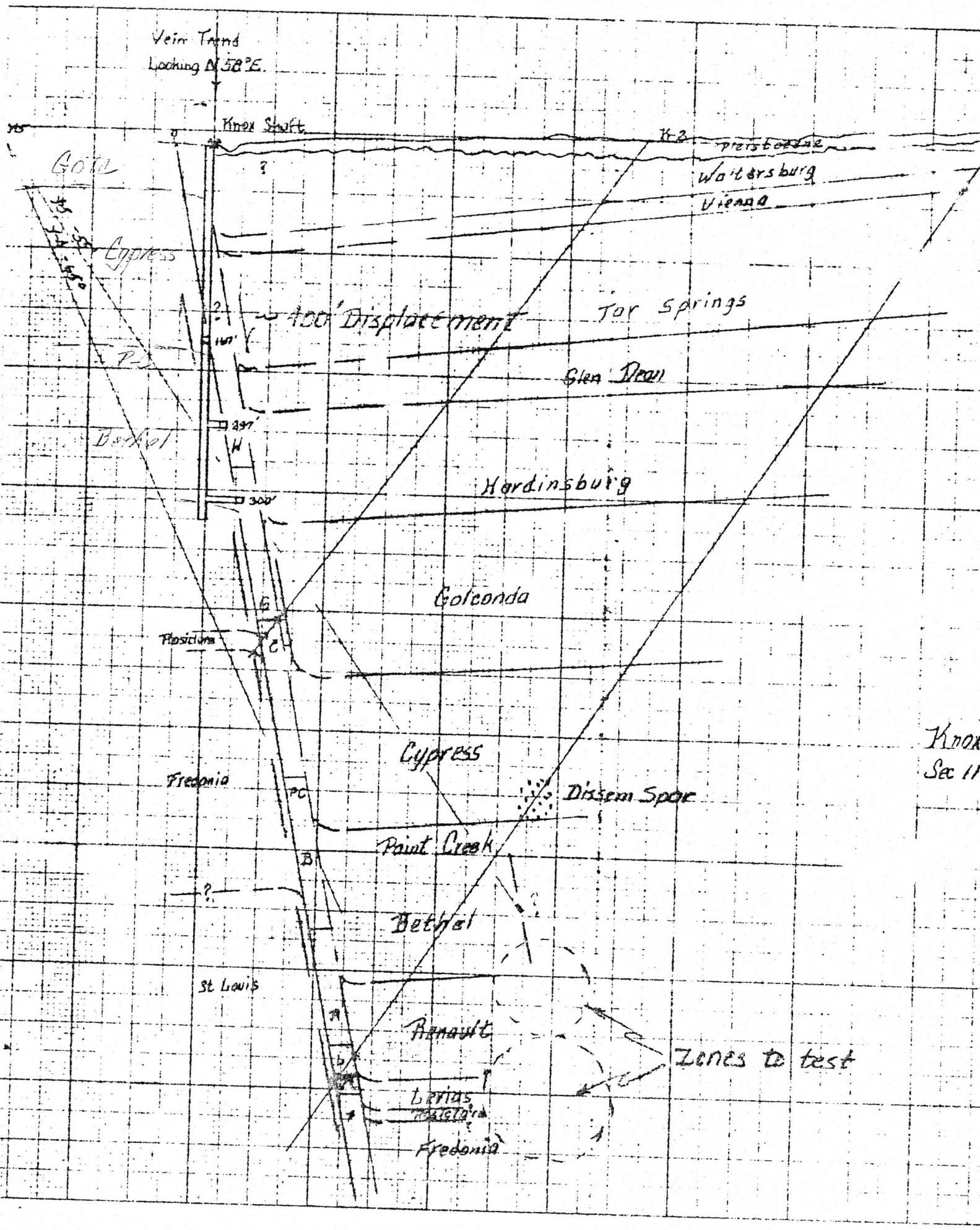
Vein Trend ↓ N58°E



Illinois State Geological Survey

Vein Trend
↓
N58°E





Knox
 Sec 11