

County ... VIGO
T 10, 11, 12, 13 N R 8, 9, and 10 W
Sec
Other Survey

Quarry or Pit Core ☒ Dim Other
Name
Former Names
.....
Operator
Former Operators

COAL AND INDUSTRIAL MINERALS SECTION
INDIANA GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
611 NORTH WALNUT GROVE
BLOOMINGTON, INDIANA 47401

| MEMORANDUM REPORTS BY: | |
|------------------------|-------|
| Name | Date |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

| REMARKS |
|---|
| Elm Oil & Gas Co. #2 Raymond & Janet Gard |
| Kline #1 Turner |
| Bayou Oil #1 Farmer |
| Cline #1 Hartman |
| Lowry & Able #1 Baum |
| Survey Drill Hole #86 |
| Midwestern Gas #1 Bemis |
| Survey Drill Hole #334 |

SDH-334
Vigo County
NW¼NW¼NW¼ Sec. 9, T. 10 N., R. 8 W.
Elevation 594 Feet
Nelson R. Shaffer

| Unit | Description | Depth | Depth | Thick- ness | Sample |
|------|---|-------|-------|----------------|-----------|
| 1 | Mudstone, gray (N-5 to N-6); massive; slakeable, clayey; thin (0.1) shale bed approximately 28.6', some carbonaceous streaks | 28.0 | 29.5 | 1.5 | NS86-0002 |
| 2 | Bone coal, very shaley; lower 0.3 feet bright banded coal. | 29.5 | 30.3 | 0.8 | NS86-0003 |
| 3 | Core loss. | 30.3 | 31.8 | 1.5 | None |
| 4 | Underclay, gray; massive; numerous plant fragments; noncalcareous. | 31.8 | 32.1 | 0.3 | NS86-0004 |
| 5 | Limestone, light gray (10YR7/2) slightly brownish; very fine grained; argillaceous; nodular in part; minor carbonaceous wisps; fine crystalline pyrite common; several fractures with coarse calcite. | 32.1 | 33.6 | 1.5 | NS86-0005 |
| 6 | Underclay, gray to greenish gray; pods of carbonate like above in parts; massive; plant fragments; slightly pyritiferous. | 33.6 | 36.8 | 3.2 | NS86-0006 |
| 7 | Sandstone, very light gray; fine grain; moderately sorted; micaceous; 3½ feet lost in this unit. | 36.8 | 43.0 | 6.2 | NS86-0007 |
| 8 | Shale, gray (5Y6/1) to greenish gray; fine sand, carbonaceous pieces, small micas; horizontal burrows; minor pyrite; some larger plant (?) fragments. | 43.0 | 44.4 | 1.4 | NS86-0008 |
| 9 | Shale, gray (N-4 to N-5); mottled; no sand but silty with small micas; many vertical burrows filled with greenish gray; calcareous fossils near base. | 44.4 | 47.6 | 3.2 | NS86-0009 |
| 10 | Limestone, light gray (10YR7/1) lenses of gray shale; very argillaceous; large whole fossils of brachiopods; contorted black shale laminae some seem brecciated; becomes darker toward base; lower contact gradational. | 47.6 | 50.2 | 2.6 | NS86-0010 |
| 11 | Limestone, dark gray mottled with gray like above; fine grained; argillaceous; some large brachiopods; crinoid fragments especially at base; traces pyrite crystals; traces fusain. | 50.2 | 57.6 | 7.4 | NS86-0011 |
| 12 | Shale, black (N-2); silty; numerous burrows, some with calcareous fragments; fissile; very organic rich; pyrite crystals common; some slickensides. | 57.6 | 58.3 | 0.7 | NS86-0012 |
| 13 | Shale, black (N-2); fissile; silty; considerable fine organic material; pyrite common; laminae and nodules of dark grayish brown (10YR4/2) phosphate; sphalerite bearing phosphate 59.5; large pyrite nodule 60.5. | 58.3 | 60.7 | 2.4 | NS86-0013 |
| 14 | Springfield Coal Member; bright banded coal; abundant calcite filled cleats in upper half, some horizontal calcite laminae. | 60.7 | 65.3 | 4.6 | NS86-0014 |

| | | | | | |
|----|--|------|------|-----|-----------|
| 15 | Underclay, gray to greenish gray; massive; plant casts and carbonaceous residue. | 65.3 | 69.5 | 4.2 | NS86-0015 |
| 16 | Underclay, greenish gray; silty; soft; massive; noncalcareous; but some zones have abundant pyrite cement; fewer plant remains than above. | 69.5 | 77.6 | 8.1 | NS86-0016 |
| 17 | Underclay, greenish gray like unit 15 but has abundant light yellowish brown (10YR6/6) siderite as nodules and veins; becomes more bedded and harder toward base; some vertical root casts; some slickensides. | 77.6 | 84.2 | 6.6 | NS86-0017 |
| 18 | Shale, gray (5Y5/1), some laminated most is massive; silty; some sideritic zones; pyrite present. | 84.2 | 86.8 | 2.6 | NS86-0018 |
| 19 | Shale, gray (10YR5/1); well bedded; slightly silty; some large pyrite nodules. | 86.8 | 92.5 | 5.7 | NS86-0019 |
| | Total Depth | 92.5 | | | |

Midwestern Gas #1 Bemis
 SE¼SE¼SW¼ Sec. 28. T. 12 N., R. 10 W.
 Vigo County, Indiana
 Elevation 498 feet
 Drilling completed Nov. 10, 1963., Feb. 9, 1965
 Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|--------|----------------|------------|
| | Silurian | | | |
| 1 | Carbonate, light bluish gray (5B7/1), fine to coarse grained, highly indurated, big calcite crystals common, vuggy and porous, fossiliferous. | 2020.0 | 4.0 | A81-0423 |
| 2 | Carbonate, bluish white (5B9/1), medium to coarse grained, highly indurated, big calcite crystals common, vuggy and porous. | 2024.0 | 4.4 | A81-0429 |
| 3 | Carbonate, white (N9), coarse grained, highly indurated with big calcite crystals, fossiliferous. | 2028.4 | 3.8 | A81-0430-1 |
| 3 | Carbonate, white (N9), coarse grained, highly indurated with big calcite crystals, fossiliferous. | 2032.2 | 3.8 | A81-0430-2 |
| 4 | Carbonate, in shades of white (N9) and bluish white (5B9/1), coarse grained, highly indurated with coarse calcite crystals, fossiliferous. | 2036.0 | 4.0 | A81-0431 |
| 1 | Carbonate, light bluish gray (5B7/1), coarse grained highly indurated with big calcite crystals, vuggy and porous. | 2052.0 | 2.0 | A91-0432 |
| 1 | Carbonate in shades of white (N9) and bluish white (5B9/1), coarse grained, highly indurated with coarse grained calcite crystals, fossiliferous, vuggy and porous. | 2084.0 | 5.8 | A81-0433-1 |
| 1 | Carbonate in shades of white (N9) and bluish white (5B9/1), coarse grained, highly indurated with coarse grained calcite crystals, fossiliferous, vuggy and porous. | 2089.8 | 5.7 | A81-0433-2 |

Midwestern Gas #1 Bemis
 SE¹/4SE¹/4SW¹/4 Sec. 28, T. 12 N., R. 10 W.
 Vigo County, Indiana
 Elevation 488 feet
 Drilling completed Nov. 10, 1963, Feb. 9, 1965

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth</u> <u>(ft)</u> | <u>Thickness</u> <u>(ft)</u> | <u>Sample</u> <u>No.</u> |
|-----------------|---|-----------------------------|---------------------------------|-----------------------------|
| <u>Silurian</u> | | | | |
| 1. | Carbonate, light bluish gray (5B7/1), fine to coarse grained, highly indurated, big calcite crystals common, vuggy and porous, fossiliferous. | 2020.0 | 4.0 | AB1-423 |
| 2. | Carbonate, bluish white (5B9/1), medium to coarse grained, highly indurated, big calcite crystals common, vuggy and porous. | 2024.0 | 4.4 | AB1-429 |
| 3. | Carbonate, white (N9), coarse grained, highly indurated with big calcite crystals, fossiliferous. | 2028.4 2032.2 | 3.8 3.8 | AB1-430- AB1-430- |
| 4. | Carbonate, in shades of white (N9) and bluish white (5B9/1), coarse grained, highly indurated with coarse calcite crystals, fossiliferous. | 2036.0 | 4.0 | AB1-431 |
| ----- | | | | |
| 1. | Carbonate, light bluish gray (5B7/1), coarse grained highly indurated with big calcite crystals, vuggy and porous. | 2052.0 | 2.0 | AB1-432 |
| ----- | | | | |
| 1. | Carbonate in shades of white (N9) and bluish white (5B9/1), coarse grained, highly indurated with coarse grained calcite crystals, fossiliferous, vuggy and porous. | 2084.0 2089.8 | 5.8 5.7 | AB1-433- AB1-433- |

SD H 96 vigo

File #236
 Survey Drill Hole 36
 630'FNL X 140'FEL, NE¼SW¼SE¼ sec. 23, T. 13 N., R. 10W.
 Vigo County, Indiana
 Elevation 617 feet
 Drilling completed March 2, 1962
 Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|-------|----------------|----------|
| | Pennsylvanian | | | |
| 1 | Core not split. | 62.8 | 17.2 | None |
| 2 | Core not split. | 90.0 | 9.3 | None |
| 3 | Core not split. | 99.3 | 20.7 | None |
| 4 | Core not split. | 110.0 | 18.0 | None |
| 5 | Core not split. | 128.0 | 19.0 | None |
| 6 | Siderite, light brownish gray (5YR6/1). | 147.0 | 0.3 | A81-0470 |
| 7 | Shale/siltstone, light bluish gray (5B7/1); laminated and sandy at places; thin siderite bands and nodules present. | 147.3 | 14.8 | A81-0471 |
| 8 | Siderite, grayish red (10R4/2). | 162.1 | 0.3 | A81-0472 |
| 9 | Siltstone in shades of light bluish gray (5B7/1) and light gray (N7) with carbonaceous particles throughout and occasional sideritic bands. | 162.4 | 1.4 | A81-0473 |
| 10 | Geophysics Section. | 163.6 | 1.6 | None |
| 11 | Siltstone in shades of light bluish gray (5B7/1) and light gray (N7) with specks of carbonaceous particles, sideritic. | 165.4 | 0.7 | A81-0474 |
| 12 | Geophysics Section. | 166.1 | 0.7 | None |
| 13 | Core not split. | 166.8 | 13.2 | None |
| 14 | Siltstone, medium gray with siderite band, stringer and nodule scattered throughout; carbonized plant material at places; calcareous. | 180.0 | 4.0 | A81-0475 |
| 15 | Core missing. | 184.0 | 1.1 | |
| 16 | Carbonate, very light gray (N8) to medium gray (N5) fine grained; sideritic at places, light yellowish stain at places, argillaceous at the middle. | 185.1 | 5.0 | A81-0476 |
| 17 | Shale/sandy siltstone, yellowish gray (5Y7/2) 190.1 to very light gray, sideritic throughout. | 190.1 | 7.3 | A81-0477 |

Survey Drill Hole 86
 630' FNL X 140' FEL, NE¹/₄SW¹/₄SE¹/₄ sec. 23, T. 13 N., R. 10 W.
 Vigo County, Indiana
 Elevation 617 feet
 Drilling completed March 2, 1962

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth</u> <u>(ft)</u> | <u>Thickness</u> <u>(ft)</u> | <u>Sample</u> <u>No.</u> |
|----------------------|---|-----------------------------|---------------------------------|-----------------------------|
| <u>Pennsylvanian</u> | | | | |
| 1. | Core not split. | 62.8 | 17.2 | None |
| 2. | Core not split. | 80.0 | 9.3 | None |
| 3. | Core not split. | 89.3 | 20.7 | None |
| 4. | Core not split. | 110.0 | 18.0 | None |
| 5. | Core not split. | 128.0 | 19.0 | None |
| 6. | Siderite, light brownish gray (5YR6/1). | 147.0 | 0.3 | A81-470 |
| 7. | Shale/siltstone, light bluish gray (5B7/1); laminated and sandy at places; thin siderite bands and nodules present. | 147.3 | 14.8 | A81-471 |
| 8. | Siderite, grayish red (10R4/2). | 162.1 | 0.3 | A81-472 |
| 9. | Siltstone in shades of light bluish gray (5B7/1) and light gray (N7) with carbonaceous particles throughout and occasional sideritic bands. | 162.4 | 1.4 | A81-473 |
| 10. | Geophysics Section. | 163.8 | 1.6 | None |
| 11. | Siltstone in shades of light bluish gray (5B7/1) and light gray (N7) with specks of carbonaceous particles, sideritic. | 165.4 | 0.7 | A81-474 |
| 12. | Geophysics Section. | 166.1 | 0.7 | None |
| 13. | Core not split. | 166.8 | 13.2 | None |
| 14. | Siltstone, medium gray with siderite band, stringer and nodule scattered throughout; carbonized plant material at places; calcareous. | 180.0 | 4.0 | A81-475 |

| | | | | |
|-----|---|-------|-----|---------|
| 15. | Core missing. | 184.0 | 1.1 | None |
| 16. | Carbonate, very light gray (N8) to medium gray (N5) fine grained; sideritic at places, light yellowish stain at places, argillaceous at the middle. | 185.1 | 5.0 | A81-476 |
| 17. | Shale/sandy siltstone, yellowish gray (5Y7/2) to very light gray, sideritic throughout. | 190.1 | 7.3 | A81-477 |

Lowry & Able #1 Baum
 470' FSL x 425' FEL SE1/4NE1/4SE1/4 sec. 36, T. 12 N., R. 8 W.
 Vigo County, Indiana
 (Elevation 597 feet
 Drilling completed May 22, 1952

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth (ft.)</u> | <u>Thickness (ft.)</u> | <u>Sample No.</u> |
|-------------|--|------------------------|----------------------------|-----------------------|
| 1. | Carbonate 5Y6/1, very fine grained, dissiminated pyrite, calcite crystals along veins. | 573.0 | 0.8 | A79-239 |
| 2. | Carbonate 10YR6/2, fine grained, occasional pyritic sandy lense, calcite crystals along veins. | 573.8 | 5.7 | A79-240 |
| 3. | Carbonate 5YR4/1, fine to medium grained, laminated; calcite along veins. | 579.5 | 3.1 | A79-241 |
| 4. | Core loss. | 582.6 | 1.4 | none |
| 5. | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly, fossil. | 584.0 | 5.0 | A79-242-1 |
| | | 589.0 | 5.0 | A79-242-2 |
| | | 594.0 | 5.0 | A79-242-3 |
| 6. | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly. | 599.0 | 3.7 | A79-243-1 |
| | | 602.7 | 3.7 | A79-243-2 |
| 7. | Carbonate N5, fine grained. | 606.4 | 3.6 | A79-244 |
| 8. | Carbonate 10YR6/2, medium grained, occasional calcite crystal and cherty band. | 610.0 | 3.2 | A79-245 |
| 9. | Carbonate 5YR8/1, very fine grained, occasional chert nodule and shaly band. | 613.2 | 1.7 | A79-246 |
| 10. | Carbonate 5YR6/1, medium grained, occasional chert nodules, calcite, and shaly band. | 614.9 | 4.0 | A79-247 |
| 11. | Carbonate N7, very fine grained to medium grained, intermixed, occasional chert nodules, shaly at places. | 618.9 | 4.1 | A79-248 |

St. Louis

| | | | | |
|-----|---|-------|-----|---------|
| 12. | Carbonate N7, fine to medium grained, intermixed, occasional chert nodules, calcite, shales, fossils. | 623.0 | 3.0 | A79-249 |
|-----|---|-------|-----|---------|

Salem

| | | | | |
|-----|--|-------|-----|-----------|
| 13. | Carbonate N7, fine to medium grained, intermixed, profusion of chert nodules, shaly at places. | 626.0 | 6.0 | A79-250 |
| 14. | Carbonate N7, fine to medium grained, occasional chert nodule, calcite, fossil, pyrite. | 632.0 | 5.9 | A79-251 |
| 15. | Carbonate 5YR8/1, fine grained, rare chert nodule, porous at places, fossil, dissiminated. | 637.9 | 3.1 | A79-252 |
| 16. | Carbonate 5YR8/1, medium grained, highly porous, calcite veins. | 641.0 | 1.9 | A79-253 |
| 17. | Carbonate 5YR7/2, medium grained, and shale 5G8/1, in the proportion 7:3, fossil. | 642.9 | 0.9 | A79-254 |
| 18. | Carbonate N8, fine grained. | 643.8 | 2.1 | A79-255 |
| 19. | Carbonate 5Y8/1, fine grained. | 645.9 | 1.3 | A79-256 |
| 20. | Carbonate 5YR6/1, medium grained, shaly at places. | 647.2 | 1.8 | A79-257 |
| 21. | Carbonate 5YR8/1, fine grained, occasional calcite vein. | 649.0 | 6.0 | A79-258 |
| 22. | Carbonate 10YR6/2, fine grained and shale 5G8/1, with propotion of 9:1, calcite vein. | 655.0 | 3.0 | A79-259 |
| 23. | Carbonate 5YR8/1, fine grained, occasional greenish shaly material, fossil. | 658.0 | 5.8 | A79-260 |
| 24. | Carbonate N6, medium grained and thin shale dissiminated calcite and gypsum (?), quartz. | 663.8 | 2.1 | A79-261 |
| 25. | Carbonate 5YR6/1, fine to medium grained, calcite veins. | 665.9 | 1.8 | A79-262 |
| 26. | Carbonate N9, fine grained. | 667.7 | 3.7 | A79-263-1 |
| | | 671.4 | 3.6 | A79-263-2 |

| | | | | |
|-----|---|-------|-----|-----------|
| 27. | Carbonate 5YR8/1, fine grained. | 675.0 | 1.9 | A79-264 |
| 28. | Shale N6. | 676.9 | 3.1 | A79-265 |
| 29. | Carbonate 5Y6/1, fine to medium grained, calcite veins. | 680.0 | 4.8 | A79-266 |
| 30. | Carbonate N8, fine grained. | 684.8 | 0.4 | A79-267 |
| 31. | Shaly carbonate N7, fine grained. | 685.2 | 1.1 | A79-268 |
| 32. | Carbonate 10YR8/1, fine grained, calcite crystals. | 686.3 | 0.3 | A79-269 |
| 33. | Carbonate 10YR4/2, fine grained. | 686.6 | 2.6 | A79-270 |
| 34. | Carbonate N7, fine grained, coarse grained calcite crystals at places. | 689.2 | 1.3 | A79-271 |
| 35. | Carbonate 10YR4/2, fine grained, coarse and porous at the bottom. | 690.5 | 1.2 | A79-272 |
| 36. | Core loss. | 691.7 | 3.3 | none |
| 37. | Carbonate N8, fine grained, coarse and porous at the top. | 695.0 | 1.9 | A79-273 |
| 38. | Carbonate 10YR6/2, fine to medium grained, shaly towards top. | 696.9 | 1.1 | A79-274 |
| 39. | Carbonate N8, fine grained, porous. | 698.0 | 0.6 | A79-275 |
| 40. | Carbonate 10YR6/2, fine grained with occasional shale band N3, calcite crystals dissiminated. | 698.6 | 3.3 | A79-276-1 |
| | | 701.9 | 3.3 | A79-276-2 |
| 41. | Carbonate 10YR6/2, fine grained with occasional chert nodules. | 705.2 | 2.5 | A79-277 |
| 42. | Carbonate N5, medium grained. | 707.7 | 2.5 | A79-278 |
| 43. | Carbonate N6, fine grained, rare shale stringer, stylolitic. | 710.2 | 3.0 | A79-279 |
| 44. | Carbonate N4, medium grained. | 713.2 | 0.8 | A79-280 |
| 45. | Carbonate N7, medium grained and shale 5GY6/1, intermixed in proportion of 6:4. | 714.0 | 3.1 | A79-281 |
| 46. | Carbonate N7, fine grained, occasionally laminated and shaly. | 717.1 | 5.1 | A79-282 |

| | | | | |
|-----|---|-------|-----|-----------|
| 47. | Carbonate 5YR8/1, fine grained, occasionally porous, dissiminated quartz crystal. | 722.2 | 1.8 | A79-283 |
| 48. | Carbonate N8, medium grained. | 724.0 | 3.8 | A79-284 |
| 49. | Carbonate N7, fine grained occasionally shale bands, stylolitic. | 727.8 | 2.4 | A79-285 |
| 50. | Carbonate N6, medium grained, dissiminated calcite (?) mineral, stylolitic. | 730.2 | 3.8 | A79-286 |
| 51. | Carbonate 5YR6/1, medium grained, occasionally shaly. | 734.0 | 1.4 | A79-287 |
| 52. | Carbonate N8, medium grained, sandy, stylolitic (building stone facies). | 735.4 | 5.8 | A79-288-1 |
| | | 741.2 | 5.9 | A79-288-2 |
| | | 747.1 | 5.9 | A79-288-3 |

Lowry & Able #1 Baum
470' FSL x 425' FEL SE¼NE¼SE¼ sec. 36, T. 12 N., R. 8 W.
Vigo County, Indiana
Elevation 597 feet
Drilling completed May 22, 1952
Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|-------|----------------|------------|
| 1 | Carbonate 5Y6/1, very fine grained, disseminate pyrite, calcite crystals along veins. | 573.0 | 0.8 | A79-0239 |
| 2 | Carbonate 10YR6/2, fine grained, occasional pyritic sandy lense, calcite crystals along veins. | 573.8 | 5.7 | A79-0240 |
| 3 | Carbonate 5YR4/1, fine to medium grained, laminated, calcite along veins. | 579.5 | 3.1 | A79-0241 |
| 4 | Core loss. | 582.6 | 1.4 | none |
| 5 | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly, fossil. | 584.0 | 5.0 | A79-0242-1 |
| 5 | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly, fossil. | 589.0 | 5.0 | A79-0242-2 |
| 5 | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly, fossil. | 594.0 | 5.0 | A79-0242-3 |
| 6 | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly. | 599.0 | 3.7 | A79-0243-1 |
| 6 | Carbonate 10YR6/2, medium to coarse grained, occasionally shaly. | 602.7 | 3.7 | A79-0243-2 |
| 7 | Carbonate N5, fine grained. | 606.4 | 3.6 | A79-0244 |
| 8 | Carbonate 10YR6/2, medium grained, occasional calcite crystal and cherty band. | 610.0 | 3.2 | A79-0245 |
| 9 | Carbonate 5YR8/1, very fine grained, occasional chert nodule and shaly band. | 613.2 | 1.7 | A79-0246 |
| 10 | Carbonate 5YR6/1, medium grained, occasional chert nodules, calcite, and shaly band. | 614.9 | 4.0 | A79-0247 |
| 11 | Carbonate N7, very fine grained to medium grained, intermixed, occasional chert nodules, shaly at places. | 618.9 | 4.1 | A79-0248 |
| | St. Louis | | | |
| 12 | Carbonate N7, fine to medium grained, intermixed, occasional chert nodules, calcite, shales, fossils. | 623.0 | 3.0 | A79-0249 |
| | Salem | | | |
| 13 | Carbonate N7, fine to medium grained, intermixed, profusion of chert nodules, shaly at places. | 626.0 | 6.0 | A79-0250 |
| 14 | Carbonate N7, fine to medium grained, occasional chert nodule, calcite, fossil, pyrite. | 632.0 | 5.9 | A79-0251 |

| | | | | |
|----|---|-------|-----|------------|
| 15 | Carbonate 5YR8/1, fine grained, rare chert nodule, porous at places, fossil, disseminate. | 637.9 | 3.1 | A79-0252 |
| 16 | Carbonate 5YR8/1, medium grained, highly porous, calcite veins. | 641.0 | 1.9 | A79-0253 |
| 17 | Carbonate 5YR7/2, medium grained, and shale 5G8/1, in the proportion 7:3, fossil. | 642.9 | 0.9 | A79-0254 |
| 18 | Carbonate N8, fine grained. | 643.8 | 2.1 | A79-0255 |
| 19 | Carbonate 5Y8/1, fine grained. | 645.9 | 1.3 | A79-0256 |
| 20 | Carbonate 5YR6/1, medium grained, shaly at places. | 647.2 | 1.8 | A79-0257 |
| 21 | Carbonate 5YR8/1, fine grained, occasional calcite vein. | 649.0 | 6.0 | A79-0258 |
| 22 | Carbonate 10YR6/2, fine grained and shale 5G8/1, with proportion of 9:1, calcite vein. | 655.0 | 3.0 | A79-0259 |
| 23 | Carbonate 5YR8/1, fine grained, occasional greenish shaly material, fossil. | 658.0 | 5.8 | A79-0260 |
| 24 | Carbonate N6, medium grained and thin shale disseminate calcite and gypsum (?), quartz. | 663.8 | 2.1 | A79-0261 |
| 25 | Carbonate 5YR6/1, fine to medium grained, calcite veins. | 665.9 | 1.8 | A79-0262 |
| 26 | Carbonate N9, fine grained. | 667.7 | 3.7 | A79-0263-1 |
| 26 | Carbonate N9, fine grained. | 671.4 | 3.6 | A79-0263-2 |
| 27 | Carbonate 5YR8/1, fine grained. | 675.0 | 1.9 | A79-0264 |
| 28 | Shale N6. | 676.9 | 3.1 | A79-0265 |
| 29 | Carbonate 5Y6/1, fine to medium grained, calcite veins. | 680.0 | 4.8 | A79-0266 |
| 30 | Carbonate N8, fine grained. | 684.8 | 0.4 | A79-0267 |
| 31 | Shaly carbonate N7, fine grained. | 685.2 | 1.1 | A79-0268 |
| 32 | Carbonate 10YR8/1, fine grained, calcite crystals. | 686.3 | 0.3 | A79-0269 |
| 33 | Carbonate 10YR4/2, fine grained. | 686.6 | 2.6 | A79-0270 |
| 34 | Carbonate N7, fine grained, coarse grained calcite crystals at places. | 689.2 | 1.3 | A79-0271 |
| 35 | Carbonate 10YR4/2, fine grained, coarse and porous at the bottom. | 690.5 | 1.2 | A79-0272 |
| 36 | Core loss. | 691.7 | 3.3 | none |
| 37 | Carbonate N8, fine grained, coarse and porous at the top. | 695.0 | 1.9 | A79-0273 |
| 38 | Carbonate 10YR6/2, fine to medium grained, shaly towards top. | 696.9 | 1.1 | A79-0274 |
| 39 | Carbonate N8, fine grained, porous. | 698.0 | 0.6 | A79-0275 |

| | | | | |
|----|--|-------|-----|------------|
| 40 | Carbonate 10YR6/2, fine grained with occasional shale band N3, calcite crystals disseminate. | 698.6 | 3.3 | A79-0276-1 |
| 40 | Carbonate 10YR6/2, fine grained with occasional shale band N3, calcite crystals disseminate. | 701.9 | 3.3 | A79-0276-2 |
| 41 | Carbonate 10YR6/2, fine grained with occasional chert nodules.42 | 705.2 | 2.5 | A79-0277 |
| 42 | Carbonate N5, medium grained. | 707.7 | 2.5 | A79-0278 |
| 43 | Carbonate N6, fine grained, rare shale stringer, stylolitic. | 710.2 | 3.0 | A79-0279 |
| 44 | Carbonate N4, medium grained. | 713.2 | 0.8 | A79-0280 |
| 45 | Carbonate N7, medium grained and shale 5GY6/1, intermixed in proportion of 6:4. | 714.0 | 3.1 | A79-0281 |
| 46 | Carbonate N7, fine grained, occasionally laminated and shaly. | 717.1 | 5.1 | A79-0282 |
| 47 | Carbonate 5YR8/1, fine grained, occasionally porous, disseminate quartz crystal. | 722.2 | 1.8 | A79-0283 |
| 48 | Carbonate N8, medium grained. | 724.0 | 3.8 | A79-0284 |
| 49 | Carbonate N7, fine grained occasionally shale bands, stylolitic. | 727.8 | 2.4 | A79-0285 |
| 50 | Carbonate N6, medium grained, disseminate calcite (?) mineral, stylolitic. | 730.2 | 3.8 | A79-0286 |
| 51 | Carbonate 5YR6/1, medium grained, occasionally shaly. | 734.0 | 1.4 | A79-0287 |
| 52 | Carbonate N8, medium grained, sandy, stylolitic (building stone facies). | 735.4 | 5.8 | A79-0288-1 |
| 52 | Carbonate N8, medium grained, sandy, stylolitic (building stone facies). | 741.2 | 5.9 | A79-0288-2 |
| 52 | Carbonate N8, medium grained, sandy, stylolitic (building stone facies). | 747.1 | 5.9 | A79-0288-3 |

Cline #1 Hartman
NE1/4NW1/4NE1/4 sec. 13, T 11 N., R. 9 W.
Vigo County, Indiana
Elevation 556
Drilling completed October 6, 1948

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth (ft.)</u> | <u>Thickness (ft.)</u> | <u>Sample No.</u> |
|---------------------------|---|------------------------|----------------------------|-----------------------|
| <u>Devonian Limestone</u> | | | | |
| 1. | Carbonate, white (N9) to very light gray (N8), fine grained, slightly vuggy and porous. | 1898.0 | 4.0 | J81-523 |
| 2. | Carbonate, very pale orange (10YR8/2) to grayish orange (10YR7/4), fine grained. | 1902.0 | 1.5 | J81-524 |
| 3. | Carbonate, yellowish gray (5Y8/1), to light olive gray (5Y6/1), fine grained. | 1903.5 | 1.6 | J81-525 |
| 4. | Carbonate, white (N9) to yellowish gray (5Y8/1), fine grained. | 1905.1 | 4.3 | J81-526 |
| 5. | Carbonate, white (N9) to yellowish gray (5Y8/1), fine grained. | 1909.4 | 4.2 | J81-527 |
| 6. | Carbonate, yellowish gray (5Y8/1), fine grained. | 1913.6 | 1.4 | none |
| 6. | Carbonate, very light gray (N8) to yellowish gray (5Y8/1), fine grained, sandy. | 1915.0 | 4.5 | J81-528 |
| 7. | Carbonate, white (N9), fine grained. | 1919.5 | 1.6 | J81-529 |
| 8. | Carbonate, very light gray (N8), fine grained, sandy at places. | 1921.1 | 2.5 | J81-530 |
| 9. | Carbonate in shades between white (N9) and very pale orange (10YR8/2), fine grained. | 1923.6 | 2.1 | J81-531 |
| 10. | Carbonate, very light gray (N8) to light gray (N7), fine to medium grained. | 1925.7 | 4.3 | J81-532 |

File 27 vigo

Cline #1 Hartman
 NE¼NW¼NE¼ sec. 13, T 11 N., R. 9 W.
 Vigo County, Indiana
 Elevation 556
 Drilling completed October 6, 1948
 Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|--------|----------------|----------|
| | Devonian Limestone | | | |
| 1 | Carbonate, white (N9) to very light gray (N8), fine grained, slightly vuggy and porous. | 1898.0 | 4.0 | J81-0523 |
| 2 | Carbonate, very pale orange (10YR8/2) to grayish orange (10YR7/4), fine grained. | 1902.0 | 1.5 | J81-0524 |
| 3 | Carbonate, yellowish gray (5Y8/1), to light olive gray (5Y6/1), fine grained. | 1903.5 | 1.6 | J81-0525 |
| 4 | Carbonate, white (N9) to yellowish gray (5Y8/1), fine grained. | 1905.1 | 4.3 | J81-0526 |
| 5 | Carbonate, white (N9) to yellowish gray (5Y8/1), fine grained. | 1909.4 | 4.2 | J81-0527 |
| 6 | Carbonate, yellowish gray (5Y8/1), fine grained. | 1913.6 | 1.4 | none |
| 6 | Carbonate, very light gray (N8) to yellowish gray (5Y8/1), fine grained, sandy. | 1915.0 | 4.5 | J81-0528 |
| 7 | Carbonate, white (N9), fine grained. | 1919.5 | 1.6 | J81-0529 |
| 8 | Carbonate, very light gray (N8), fine grained, sandy at places. | 1921.1 | 2.5 | J81-530 |
| 9 | Carbonate in shades between white (N9) and very pale orange (10YR8/2), fine grained. | 1923.6 | 2.1 | J81-531 |
| 10 | Carbonate, very light gray (N8) to light gray (N7), fine to medium grained. | 1925.7 | 4.3 | J81-532 |

Bayou Oil #1 Farmer
SW¹/₄SW¹/₄NW¹/₄ sec. 10, T. 10 N., R. 10 W.
Vigo County, Indiana

Elevation 506 feet

Drilling completed October 27, 1948

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth</u> <u>(ft)</u> | <u>Thickness</u> <u>___(ft)___</u> | <u>Sample</u> <u>___No.___</u> |
|-------------|--|-----------------------------|---------------------------------------|-----------------------------------|
| | St. Louis limestone/Salem limestone? | | | |
| 1. | Carbonate, light gray (N7), medium grained, stylolitic. | 1300.0 1305.5 | 5.5 5.5 | A81-800-1 A81-800-2 |

Bayou Oil #1 Farmer

Bayou Oil #1 Farmer
SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 10 N., R. 10 W.
Vigo County, Indiana
Elevation 506 feet
Drilling completed October 27, 1949
Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|--------|----------------|------------|
| | St. Louis Limestone/Salem Limestone | | | |
| 1 | Carbonate, light gray (N7), medium grained, stylolitic. | 1300.0 | 5.5 | A81-0800-1 |
| 1 | Carbonate, light gray (N7), medium grained, stylolitic. | 1305.5 | 5.5 | A81-0900-2 |

~~Kline~~
Kline #1 Turner
SW¹/₄SW¹/₄SE¹/₄ sec. 9, T. 10 N., R. 10 W.
Vigo County, Indiana

Elevation 513 feet

Drilling completed September 1, 1948

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth</u> <u>(ft)</u> | <u>Thickness</u> <u>(ft)</u> | <u>Sample</u> <u>No.</u> |
|---------------------|---|-----------------------------|---------------------------------|-----------------------------|
| St. Louis Formation | | | | |
| 1. | Carbonate, light gray (N7) to medium light gray (N6), fine grained, stylolitic. | 1236.0 | 5.2 | J81-157 |
| 2. | Carbonate, olive gray (5Y4/1), fine grained with chert band. | 1241.2 | 0.3 | J81-158 |
| 3. | Carbonate, very light gray (N8), fine grained, stylolitic. | 1241.5 | 0.7 | J81-159 |
| 4. | Carbonate, light gray (N7), medium grained, crystalline. | 1242.2 | 0.5 | J81-160 |
| 5. | Carbonate, pale yellowish brown (10YR6/2), fine grained. | 1242.7 | 1.0 | J81-161 |
| 6. | Carbonate, light olive gray (5Y6/1), fine grained with chert band. | 1243.7 | 0.7 | J81-162 |
| 7. | Carbonate, yellowish gray (5Y8/1), fine grained. | 1244.4 | 1.0 | J81-163 |
| 8. | Carbonate, medium light gray (N6), fine grained. | 1245.4 | 0.6 | J81-164 |
| 9. | Carbonate, very light gray (N8), fine grained. | 1246.0 | 0.6 | J81-165 |
| 10. | Carbonate, very light gray (N8) and light gray (N7) interbedded. | 1246.6 | 3.4 | J81-166 |
| 11. | Carbonate, light olive gray (5Y6/1), fine grained. | 1250.0 | 3.2 | J81-167 |
| 12. | Carbonate, very light gray (N8), fine to medium grained, crystalline, stylolitic. | 1253.2 1258.1 | 4.9 4.9 | J81-168- J81-168- |

Kline #1 Turner

Kline #1 Turner
 SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 10., R. 10 W.
 Vigo County, Indiana
 Elevation 513 feet
 Drilling completed September 1, 1946
 Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|---|--------|----------------|------------|
| | St. Louis Formation | | | |
| 1 | Carbonate, light gray (N7) to medium light gray (N6), fine grained, stylolitic. | 1236.0 | 5.2 | J81-0157 |
| 2 | Carbonate, olive gray (5Y4/1), fine grained with chert band. | 1241.2 | 0.3 | J81-0158 |
| 3 | Carbonate, very light gray (N9), fine grained, stylolitic. | 1241.5 | 0.7 | J81-0159 |
| 4 | Carbonate, light gray (N7), medium grained, crystalline. | 1242.2 | 0.5 | J81-0160 |
| 5 | Carbonate, pale yellowish brown (10YR6/2), fine grained. | 1242.7 | 1.0 | J81-0161 |
| 6 | Carbonate, light olive gray (5Y6/1), fine grained with chert band. | 1243.7 | 0.7 | J81-0162 |
| 7 | Carbonate, yellowish gray (5Y6/1), fine grained. | 1244.4 | 1.0 | J81-0163 |
| 8 | Carbonate, medium light gray (N6), fine grained. | 1245.4 | 0.6 | J81-0164 |
| 9 | Carbonate, very light gray (N8), fine grained. | 1246.0 | 0.6 | J81-0165 |
| 10 | Carbonate, very light gray (N8) and light gray (N7) interbedded. | 1246.6 | 3.4 | J81-0166 |
| 11 | Carbonate, light olive gray (5Y6/1), fine grained. | 1250.0 | 3.2 | J81-0167 |
| 12 | Carbonate, very light gray (N8), fine to medium grained, crystalline, stylolitic. | 1253.2 | 4.9 | J81-0169-1 |
| 12 | Carbonate, very light gray (N8), fine to medium grained, crystalline, stylolitic. | 1258.1 | 4.9 | J81-0169-2 |

Elm Oil & Gas Co. #2 Raymond & Janet Gard
 NW1/4SE1/4SW1/4 sec. 24, T. 12 N., R. 8 W.
 Vigo County, Indiana

Drilling completed September 1, 1949

Described by Prodip Dutta

Core description

| <u>Unit</u> | <u>Description</u> | <u>Depth (ft.)</u> | <u>Thickness (ft.)</u> | <u>Sample No.</u> |
|-------------|---|------------------------|----------------------------|-----------------------|
| | <u>New Albany Shale</u> | | | |
| 1. | Not split | 1595.0 | 2.4 | none |
| 2. | Shale, light gray (N7) to dark yellowish brown (10YR4/2), specks of pyrite at places. | 1597.4 | 1.7 | A83-1 |
| 3. | Missing | 1599.1 | 0.1 | none |
| 4. | Shale, light gray (N7) to dark yellowish brown (10YR4/2). | 1599.2 | 0.6 | A83-2 |
| 5. | Not split | 1599.8 | 4.5 | none |
| | <u>Devonian carbonate</u> | | | |
| 6. | Carbonate, light gray (N7), fine to medium grained, stylolitic. | 1604.3 | 4.7 | A83-3 |
| 7. | Carbonate in shades of light gray (N7) to very light gray (N8), fine grained, stylolitic, shaly at bottom. | 1609.0 | 3.0 | A83-4 |
| 8. | Carbonate, very light gray (N8) to pinkish gray (5Y8/1), coarse grained, stylolitic. | 1612.0 | 3.3 | A83-5 |
| 9. | Carbonate, yellowish gray (5Y8/1), medium to coarse grained, fossili- ferous. | 1615.3 | 3.7 | A83-6 |

Elm Oil & Gas Co. #2 Raymond & Janet Gard
 NW¼SE¼SW¼ sec. 24, T. 12 N., R. 8 W.
 Vigo County, Indiana
 Drilling completed September 1, 1949
 Described by Prodip Dutta

| Unit | Description | Depth | Thick- ness | Sample |
|------|--|--------|----------------|----------|
| | New Albany Shale | | | |
| 1 | Not split | 1595.0 | 2.4 | none |
| 2 | Shale, light gray (N7) to dark yellowish brown (10YR4/2), specks of pyrite at places. | 1597.4 | 1.7 | A83-0001 |
| 3 | Missing | 1599.1 | 0.1 | none |
| 4 | Shale, light gray (N7) to dark yellowish brown (10YR4/2). | 1599.2 | 0.6 | A83-0002 |
| 5 | Not split | 1599.8 | 4.5 | none |
| | Devonian carbonate | | | |
| 6 | Carbonate, light gray (N7), fine to medium grained, stylolitic. | 1604.3 | 4.7 | A83-0003 |
| 7 | Carbonate in shades of light gray (N7) to very light gray (N8), fine grained, stylolitic, shaly at bottom. | 1609.0 | 3.0 | A83-0004 |
| 8 | Carbonate, very light gray (N8) to 1612.0 pinkish gray (5Y8/1), coarse grained, stylolitic. | 1612.0 | 3.3 | A83-0005 |
| 9 | Carbonate, yellowish gray (5Y8/1), medium to coarse grained, fossiliferous. | 1615.3 | 3.7 | A83-0006 |