

Drill Hole No. MH-108

Date: 6/6/78

Bearing: N 18° E Inclination: 32° N.

Drilled By: Boyles Bro. Bob Kestly

Coordinates: North 427,089.21 East 4,454,539.48

Logged By: Ferry/ C. Gale

Elevation: 1043.05

Total Depth: T.D. 277.9 ft.

| DEPTH |      | %<br>RECOVERY | SAMPLE<br>NUMBER | SAMPLE<br>INTERVAL | ANALYSES |                   | DESCRIPTION OF MATERIAL DRILLED   |
|-------|------|---------------|------------------|--------------------|----------|-------------------|---|
| FROM  | TO   |               |                  |                    | Sp. Gr.  | BaSO <sub>4</sub> |   |
| 0.0   | 30.0 |               |                  |                    |          |                   | Case in hole, no sample recovery.   |
| 30.0  | 42.0 |               |                  |                    |          |                   | Sandstone & shale, weathered, tan to buff color, deposition of iron stain along fractures, highly broken.           |
| 42.0  | 58.0 |               |                  |                    |          |                   | Sandstone as above, weathered, 6.0' core loss between 48.0-54.0'.   |
| 58.0  | 65.0 |               |                  |                    |          |                   | Sandstone as above, weathered buff to tan, limonite staining along fractures.                                       |
| 65.0  | 70.0 |               |                  |                    |          |                   | Lt. gray fine-grained sandstone w/ wisps of black shale, locally limonite deposited along fractures.                |
| 70.0  | 80.0 |               |                  |                    |          |                   | Sandstone as before, leached locally along fractures.   |
| 80.0  | 86.0 |               |                  |                    |          |                   | Sandstone as before.  |
| 86.0  | 92.0 |               |                  |                    |          |                   | Interbedded gray sandstone & black shales, locally limonite along fractures, qtz. & calcite veinlets.               |
| 92.0  | 99.0 |               |                  |                    |          |                   | Interbedded black shale & sandstone w/ veinlets & stringers of qtz & calcite, leached locally w/ limonite staining. |

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Logged By: \_\_\_\_\_

Elevation: \_\_\_\_\_

Total Depth: \_\_\_\_\_

| DEPTH |       | %        | SAMPLE | SAMPLE   | ANALYSES |                   |  | DESCRIPTION OF MATERIAL DRILLED   |
|-------|-------|----------|--------|----------|----------|-------------------|--|---|
| FROM  | TO    | RECOVERY | NUMBER | INTERVAL | Sp. Gr.  | BaSO <sub>4</sub> |  |   |
| 99.0  | 105.0 |          |        |          |          |                   |  | Interbedded gray sandstone & black shales. Bedding dip 89°N.  |
| 105.0 | 116.0 |          |        |          |          |                   |  | Interbedded gray sandstone & black shale. Carbon rich locally. Qtz & calcite veinlets locally.                                |
| 116.0 | 127.0 |          |        |          |          |                   |  | Lt. gray sandstone, several small lamina of black shale, occasional qtz veinlets. Sandstone well cemented w/ silica.          |
| 127.0 | 138.0 |          |        |          |          |                   |  | Same as above. Bedding dip 89°N.  |
| 138.0 | 141.0 |          |        |          |          |                   |  | Same as above.  |
| 141.0 | 145.0 |          |        |          |          |                   |  | Interbedded black shale & gray sandstone. gnarled bedding, carbon rich shales, bedding slicken sides, highly broken. Sheared. |
| 145.0 | 147.0 |          |        |          |          |                   |  | Lt. gray sandstone, thin lamina of black shale occasionally. Bedding dip 89°S. Thin Marcasite along fracture.                 |
| 147.0 | 159.0 |          |        |          |          |                   |  | Sandstone as above w/ wisps of black shale, occasional veinlets of qtz & calcite. Sheared 147.0-150.0.                        |
| 159.0 | 163.0 |          |        |          |          |                   |  | Sandstone as before, qtz veinlets parallel w/ core 33°N.  |

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Logged By: \_\_\_\_\_

Elevation: \_\_\_\_\_

Total Depth: \_\_\_\_\_

| DEPTH |       | %        | SAMPLE | SAMPLE   | ANALYSES |                   |  | DESCRIPTION OF MATERIAL DRILLED   |
|-------|-------|----------|--------|----------|----------|-------------------|--|---|
| FROM  | TO    | RECOVERY | NUMBER | INTERVAL | Sp. Gr.  | BaSO <sub>4</sub> |  |   |
| 163.0 | 165.0 |          |        |          |          |                   |  | Sandstone as before, sheared, brecciated, recemented w/ qtz & calcite.  |
| 165.0 | 170.0 |          |        |          |          |                   |  | Interbedded black shale & gray sandstone. (highly broken & sheared 165.0-167.0)   |
|       |       |          |        |          |          |                   |  | Bedding dip 87°N.   |
| 170.0 | 173.0 |          |        |          |          |                   |  | Black shale, calcite in fractures.  |
| 173.0 | 182.0 |          |        |          |          |                   |  | Lt. gray sandstone, qtz & calcite veinlets at 176.5-177.0.  |
| 182.0 | 192.0 |          |        |          |          |                   |  | Lt. gray sandstone, occasionally thin lamina of black shale. Bedding dip 89°S. Abundant marcasite associated w/ black shale.                      |
| 192.0 | 204.0 |          |        |          |          |                   |  | Sandstone as before, 194.0-195.0 qtz & calcite stringers. Locally thin lamina of black shale that is highly sheared.                              |
| 204.0 | 226.0 |          |        |          |          |                   |  | Sandstone as before, shale lenses 225.0-226.0. Bedding dip 89°N.  |
| 226.0 | 228.7 |          |        |          |          |                   |  | Sandstone as before.  |
| 228.7 | 231.7 |          | 2876   |          |          |                   |  | Barite zone, low grade, approx 20% BaSO <sub>4</sub> , random oriented barite nodules. Nodules are angular shaped. This barite is unusual looking |

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Logged By: \_\_\_\_\_

Elevation: \_\_\_\_\_

Total Depth: \_\_\_\_\_

| DEPTH |       | %<br>RECOVERY | SAMPLE<br>NUMBER | SAMPLE<br>INTERVAL | ANALYSES |                   | DESCRIPTION OF MATERIAL DRILLED   |
|-------|-------|---------------|------------------|--------------------|----------|-------------------|---|
| FROM  | TO    |               |                  |                    | Sp. Gr.  | BaSO <sub>4</sub> |   |
|       |       |               |                  |                    |          |                   | as compared to the west end of the property.  |
| 231.7 | 235.3 |               | 2877             |                    |          |                   | Barite zone, med grade, approx 60% BaSO <sub>4</sub> ,<br>gnarled bedding locally, Bedding dip 84°S.  |
| 235.3 | 237.0 |               | 2878             |                    |          |                   | Barite zone, med grade, approx 50% BaSO <sub>4</sub> ,<br>barite has a bedded appearance rather than<br>modular. Bedding dip 88°N.                                    |
| 237.0 | 240.6 |               | 2879             | 3.6'               |          |                   | Barite zone, low grade, approx 30% BaSO <sub>4</sub> ,<br>interbedded w/ gray shales. Locally barite<br>is higher grade. Bedding dip 89°N.                            |
| 240.6 | 244.2 |               | 2880             | 4.2'               |          |                   | Barite zone, med grade approx 50% BaSO <sub>4</sub> ,<br>modules elongated along bedding plane.<br>Bedding dip 87°S.  |
| 244.2 | 248.6 |               | 2881             | 4.4'               |          |                   | Barite zone, med grade, approx 60% BaSO <sub>4</sub> ,<br>several large nodules 4-5 cm. in diameter w/<br>elongated nodules along bedding plane.<br>Bedding dip 89°S. |
| 248.6 | 253.0 |               | 2882             | 4.6'               |          |                   | Barite zone, low grade, 30% BaSO <sub>4</sub> , large<br>modules scattered in gray shales. Bedding<br>dip 85°N.   |
| 253.0 | 257.0 |               | 2883             | 4.0'               |          |                   | Barite zone, low grade, 15% BaSO <sub>4</sub> , qtz   |

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Logged By: \_\_\_\_\_

Elevation: \_\_\_\_\_

Total Depth: \_\_\_\_\_

| DEPTH |       | %<br>RECOVERY | SAMPLE<br>NUMBER | SAMPLE<br>INTERVAL | ANALYSES |                   |  | DESCRIPTION OF MATERIAL DRILLED   |
|-------|-------|---------------|------------------|--------------------|----------|-------------------|--|---|
| FROM  | TO    |               |                  |                    | Sp. Gr.  | BaSO <sub>4</sub> |  |   |
|       |       |               |                  |                    |          |                   |  | filled veinlets, 3.0' core loss in low grade barite.  |
| 257.0 | 258.1 |               | 2884             | 1.1'               |          |                   |  | Barite zone, low grade, 10% BaSO <sub>4</sub> , scattered nodules in gray shales.                           |
| 258.1 | 262.5 |               | 2885             | 4.4'               |          |                   |  | Barite, low grade, 10% BaSO <sub>4</sub> , scattered nodules in gray shales. Bedding dip 82°N.              |
| 262.5 | 264.0 |               | 2886             | 1.5'               |          |                   |  | Barite zone, low grade, 5% BaSO <sub>4</sub> .  |
| 264.0 | 268.5 |               | 2887             | 4.5'               |          |                   |  | Barite zone, low grade, 5% BaSO <sub>4</sub> , scattered nodules in gray & black shales.                    |
| 268.5 | 269.5 |               |                  |                    |          |                   |  | Sandstone & interbedded black shales, brecciated.   |
| 269.5 | 276.2 |               |                  |                    |          |                   |  | Black shales, w/ gray shale lenses. Bedding dip 75°N. Occasionally qtz & calcite veinlets.                  |
| 276.2 | 277.9 |               |                  |                    |          |                   |  | Arkansas Novaculite, cherty, finely fractured, fractures filled w/ carbon. Abundant marcasite in fractures. |
|       |       |               |                  |                    |          |                   |  |   |
|       |       |               |                  |                    |          |                   |  |   |
|       |       |               |                  |                    |          |                   |  |   |
|       |       |               |                  |                    |          |                   |  |   |
|       |       |               |                  |                    |          |                   |  |   |

Total Depth: \_\_\_\_\_

10/77



FANCY HILL - DIAMOND DRILL HOLES  
INDIVIDUAL CORE ANALYSES BY INTERVALS

| SAMPLE   | LOG<br># | DEPTH            | INTERVAL | A.P.<br>SPECIFIC<br>GRAVITY | CALCULATED<br>% BaSO <sub>4</sub> |
|----------|----------|------------------|----------|-----------------------------|-----------------------------------|
| MDDH 108 |          |                  |          |                             |                                   |
| 2876     | 4600     | 228.7-231.7      | 3.0      | 3.377                       | 47.69                             |
| 2877     | 4601     | 231.7-235.3      | 3.6      | 3.606                       | 61.28                             |
| 2878     | 4602     | 235.3-237        | 1.7      | 3.573                       | 59.43                             |
| 2879     | 4603     | 237-240.6        | 3.6      | 3.411                       | 49.82                             |
| 2880     | 4604     | 240.6-244.2      | 3.6      | 2.938                       | 15.73                             |
| 2881     | 4605     | 244.2-248.6      | 4.4      | 3.038                       | 23.82                             |
| 2882     | 4606     | 248.6-253        | 4.4      | 2.993                       | 20.25                             |
| 2883     | 4607     | 253-257          | 4.0      | 2.798                       | 3.43                              |
| 2884     | 4608     | 257-258.1        | 1.1      | 2.890                       | 11.64                             |
| 2885     | 4609     | 258.1-262.5      | 4.4      | 2.858                       | 8.85                              |
| 2886     | 4610     | 262.5-264        | 1.5      | 2.789                       | 2.59                              |
| 2887     | 4611     | 264-268.5        | 4.5      | 2.778                       | 1.57                              |
|          |          | Total            | 39.8     |                             |                                   |
|          |          | Weighted Average |          | 3.07                        | 26.35                             |