

# Jack Markham #2

| FORMATION                                      | TOP  | BOTTOM | REMARKS                                                                                                                |
|------------------------------------------------|------|--------|------------------------------------------------------------------------------------------------------------------------|
| From top rotary drive bushing to derrick floor | 0    | 1      |                                                                                                                        |
| From top derrick floor to 7-5/8" OD casing     | 1    | 18.4   |                                                                                                                        |
| Gallies and sand                               | 18.4 | 36     |                                                                                                                        |
| Sand and red rock                              | 36   | 325    |                                                                                                                        |
| Red bed                                        | 325  | 475    |                                                                                                                        |
|                                                |      |        | Set 10-3/4" OD casing @ 467 w/490 max. Circ. 200 max.                                                                  |
|                                                |      |        | Tested 10-3/4" OD casing w/1000# 30 min. no break before and after drilling plug.                                      |
| Red bed                                        | 475  | 1700   |                                                                                                                        |
| Red rock and anhydrite                         | 1700 | 1945   |                                                                                                                        |
| Red bed and anhydrite                          | 1945 | 2030   |                                                                                                                        |
| Anhydrite and salt                             | 2030 | 2193   |                                                                                                                        |
| Anhydrite                                      | 2193 | 2306   |                                                                                                                        |
| Anhydrite, gyp and salt                        | 2306 | 2481   |                                                                                                                        |
| Anhydrite and salt                             | 2481 | 2715   |                                                                                                                        |
| Anhydrite                                      | 2715 | 2797   |                                                                                                                        |
| Anhydrite and salt                             | 2797 | 3354   |                                                                                                                        |
| Anhydrite, salt and gyp                        | 3354 | 3485   |                                                                                                                        |
| Anhydrite                                      | 3485 | 4038   |                                                                                                                        |
| Lime                                           | 4038 | 4142   |                                                                                                                        |
| Anhydrite and lime                             | 4142 | 4205   |                                                                                                                        |
| Lime                                           | 4205 | 4258   |                                                                                                                        |
| ICI ran calipers                               | 465  | 4255   |                                                                                                                        |
|                                                |      |        | Set 7-5/8" OD casing @ 4258 w/2025 max 64 gal. 50 max signalite and 100 max heat. Circ. 100 max.                       |
|                                                |      |        | Tested 7-5/8" OD casing w/1000# 30 min. no break                                                                       |
| Lime                                           | 4258 | 4378   |                                                                                                                        |
| No formation logged                            | 4378 | 4418   |                                                                                                                        |
| Lime and shale                                 | 4418 | 4555   |                                                                                                                        |
| Lime                                           | 4555 | 4615   |                                                                                                                        |
| Lime and shale                                 | 4615 | 4695   |                                                                                                                        |
| Lime                                           | 4695 | 4748   |                                                                                                                        |
| Broken lime                                    | 4748 | 4840   |                                                                                                                        |
| Lime and shale                                 | 4840 | 4930   |                                                                                                                        |
| Sandy lime                                     | 4930 | 5020   |                                                                                                                        |
| Broken lime                                    | 5020 | 5132   |                                                                                                                        |
| Lime                                           | 5132 | 7685   |                                                                                                                        |
| Shale                                          | 7685 | 7860   |                                                                                                                        |
|                                                |      |        | 1/2" @ 4597                                                                                                            |
|                                                |      |        | 1/2" @ 4905                                                                                                            |
|                                                |      |        | 1" @ 5090                                                                                                              |
|                                                |      |        | 1" @ 5460, 1" @ 5740, 1" @ 6143, 3/4" @ 6514                                                                           |
|                                                |      |        | Top of Abu shale @ 7707. 20' low to Jack Markham #1, 1' low to Betenbough "B" #2, picked from Electric log and samples |
| Lime and shale                                 | 7860 | 7905   |                                                                                                                        |
| Shale                                          | 7905 | 7940   |                                                                                                                        |
| Schlumberger ran Electric Survey               | 4223 | 7941   |                                                                                                                        |
| Shale                                          | 7940 | 7962   |                                                                                                                        |
| Lime and shale                                 | 7962 | 8026   |                                                                                                                        |
| Shale                                          | 8026 | 8054   |                                                                                                                        |
| Shale and lime                                 | 8054 | 8099   |                                                                                                                        |
| Shale                                          | 8099 | 8138   |                                                                                                                        |
| Lime and shale                                 | 8138 | 8187   |                                                                                                                        |
| Shale                                          | 8187 | 8235   |                                                                                                                        |
| Lime and shale                                 | 8235 | 8264   |                                                                                                                        |
| Shale and streaks lime                         | 8264 | 8299   |                                                                                                                        |
|                                                |      |        | 1" @ 8050                                                                                                              |

