

## **CORE PHOTOGRAPHY**

**WELL: BOB WHITE 36-44-8-62**  
**SAMPLE: ROTARY SIDEWALL CORES**

## **FINAL REPORT**

Prepared for

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## I - CORE PHOTOGRAPHY - WELL BOB WHITE 36-44-8-62

|  |     |    |
|--|-----|----|
| <b>TABLE OF CONTENTS</b>                             | I - | i  |
| <b>LIST OF TABLES AND FIGURES</b>                    | I - | i  |
| <b>RESULTS AND DISCUSSION</b>                        | I - | 1  |
| <b>LIST OF TABLES</b>                                |     |    |
| TABLE 1. SAMPLE INVENTORY AND ASSIGNED ANALYSIS      | I - | 2  |
| <b>LIST OF FIGURES</b>                               |     |    |
| FIGURE 1. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 1   | I - | 4  |
| FIGURE 2. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 2   | I - | 5  |
| FIGURE 3. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 3   | I - | 6  |
| FIGURE 4. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 4   | I - | 7  |
| FIGURE 5. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 5   | I - | 8  |
| FIGURE 6. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 6   | I - | 9  |
| FIGURE 7. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 7   | I - | 10 |
| FIGURE 8. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 8   | I - | 11 |
| FIGURE 9. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 9   | I - | 12 |
| FIGURE 10. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 10 | I - | 13 |
| FIGURE 11. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 11 | I - | 14 |
| FIGURE 12. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 12 | I - | 15 |
| FIGURE 13. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 13 | I - | 16 |
| FIGURE 14. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 14 | I - | 17 |
| FIGURE 15. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 15 | I - | 18 |
| FIGURE 16. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 16 | I - | 19 |
| FIGURE 17. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 17 | I - | 20 |
| FIGURE 18. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 18 | I - | 21 |
| FIGURE 19. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 19 | I - | 22 |
| FIGURE 20. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 20 | I - | 23 |
| FIGURE 21. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 21 | I - | 24 |
| FIGURE 22. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 22 | I - | 25 |
| FIGURE 23. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 23 | I - | 26 |
| FIGURE 24. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 24 | I - | 27 |
| FIGURE 25. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 25 | I - | 28 |
| FIGURE 26. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 26 | I - | 29 |
| FIGURE 27. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 27 | I - | 30 |
| FIGURE 28. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 28 | I - | 31 |
| FIGURE 29. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 29 | I - | 32 |

**LIST OF FIGURES - CONTINUED**

|  |        |
|--|--------|
| FIGURE 30. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 30 | I - 33 |
| FIGURE 31. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 31 | I - 34 |
| FIGURE 32. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 32 | I - 35 |
| FIGURE 33. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 33 | I - 36 |
| FIGURE 34. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 34 | I - 37 |
| FIGURE 35. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 35 | I - 38 |
| FIGURE 36. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 36 | I - 39 |
| FIGURE 37. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 37 | I - 40 |
| FIGURE 38. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 38 | I - 41 |
| FIGURE 39. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 40 | I - 42 |
| FIGURE 40. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 40 | I - 43 |
| FIGURE 41. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 42 | I - 44 |
| FIGURE 42. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 42 | I - 45 |
| FIGURE 43. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 43 | I - 46 |
| FIGURE 44. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 44 | I - 47 |
| FIGURE 45. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 45 | I - 48 |
| FIGURE 46. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 46 | I - 49 |
| FIGURE 47. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 47 | I - 50 |
| FIGURE 48. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 48 | I - 51 |
| FIGURE 49. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 49 | I - 52 |
| FIGURE 50. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 50 | I - 53 |

## **RESULTS AND DISCUSSION**

Fifty samples from Bob White 36-44-8-62 well were received covered with mud. Samples were cleaned with chloroform/methanol followed by methanol to remove the reservoir and drilling fluids. The sample inventory can be found in Table 1.

After drying in vacuum oven, all samples were photographed with white light. Photos were taken with a Nikon D100.

Black and white and color reference bars were included in the core photographs. A scale bar in both inches and centimeters were also included.

One longitudinal pictures was taken on each plug.

All photos were provided in [Figure 1 through 50](#).

**TABLE 1. SAMPLE INVENTORY AND ASSIGNED ANALYSIS**

|                |                         |
|----------------|-------------------------|
| Project No.:   | WTC-10-001855           |
| Company        | CARRIZO OIL & GAS, INC. |
| Pool or Zone:  |                         |
| Field or Area: |                         |
| Well Location: | BOB WHITE 36-44-8-62    |

| Sample ID | Interval Depth (ft) | Comments  | Azeotrope Cleaning | Core Photo | X-Ray Diffraction | Thin Section | VR & RockEval | Fluid Sensitivity |
|-----------|---------------------|-----------|--------------------|------------|-------------------|--------------|---------------|-------------------|
| 1         | 6725                | Fort Hays | X                  | X          | X                 |              |               |                   |
| 2         | 6701                | "C" Bench | X                  | X          | X                 |              |               | X                 |
| 3         | 6704.5              | "C" Bench | X                  | X          | X                 | X            |               | X                 |
| 4         | 6692                | "C" Bench | X                  | X          | X                 |              |               | X                 |
| 5         | 6685                | "C" Bench | X                  | X          | X                 |              |               | X                 |
| 6         | 6683                | "C" Bench | X                  | X          | X                 |              |               | X                 |
| 7         | 6653                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 8         | 6652                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 9         | 6651                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 10        | 6650                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 11        | 6649                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 12        | 6648                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 13        | 6646                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 14        | 6645                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 15        | 6644                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 16        | 6642                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 17        | 6640                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 18        | 6639                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 19        | 6637                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 20        | 6635                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 21        | 6634                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 22        | 6633                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 23        | 6632                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 24        | 6630                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 25        | 6628.5              | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 26        | 6627.5              | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 27        | 6626                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 28        | 6625                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 29        | 6624                | "B" Bench | X                  | X          | X                 |              |               | X                 |
| 30        | 6622                | "B" Bench | X                  | X          | X                 | X            |               | X                 |
| 31        | 6621                | "B" Bench | X                  | X          | X                 | X            |               | X                 |

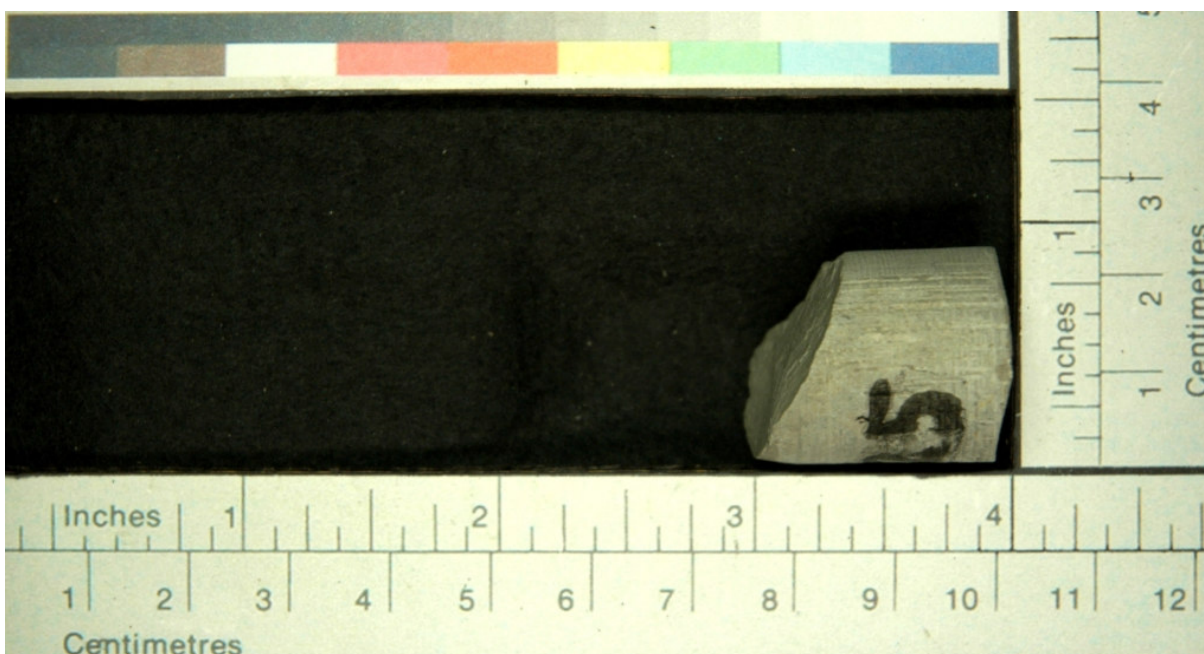
**TABLE 1. SAMPLE INVENTORY AND ASSIGNED ANALYSIS - CONTINUED**

|                |                         |
|----------------|-------------------------|
| Project No.:   | WTC-10-001855           |
| Company        | CARRIZO OIL & GAS, INC. |
| Pool or Zone:  |                         |
| Field or Area: |                         |
| Well Location: | BOB WHITE 36-44-8-62    |

| Sample ID | Interval Depth (ft) | Comments             | Azeotrope Cleaning | Core Photo | X-Ray Diffraction | Thin Section | VR & RockEval | Fluid Sensitivity |
|-----------|---------------------|----------------------|--------------------|------------|-------------------|--------------|---------------|-------------------|
| 32        | 6619                | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 33        | 6616                | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 34        | 6613.5              | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 35        | 6607                | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 36        | 6605                | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 37        | 6589                | "B" Bench            | X                  | X          | X                 |              |               | X                 |
| 38        | 6569.5              | hot GR between A & B | X                  | X          | X                 |              |               | X                 |
| 39        | 6566.5              | hot GR between A & B | X                  | X          | X                 |              |               | X                 |
| 40        | 6541                | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 41        | 6538.5              | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 42        | 6536.5              | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 43        | 6533.5              | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 44        | 6529                | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 45        | 6527                | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 46        | 6526                | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 47        | 6524                | "A" Bench            | X                  | X          | X                 |              |               | X                 |
| 48        | 6522                | "A" Bench            | X                  | X          | X                 | X            |               | X                 |
| 49        | 6490                | Sharron Springs      | X                  | X          | X                 |              | X             |                   |
| 50        | 6724                | Fort Hays            | X                  | X          | X                 | X            |               |                   |

**FIGURE 1. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 1**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 1         | 6725       | Fort Hays |



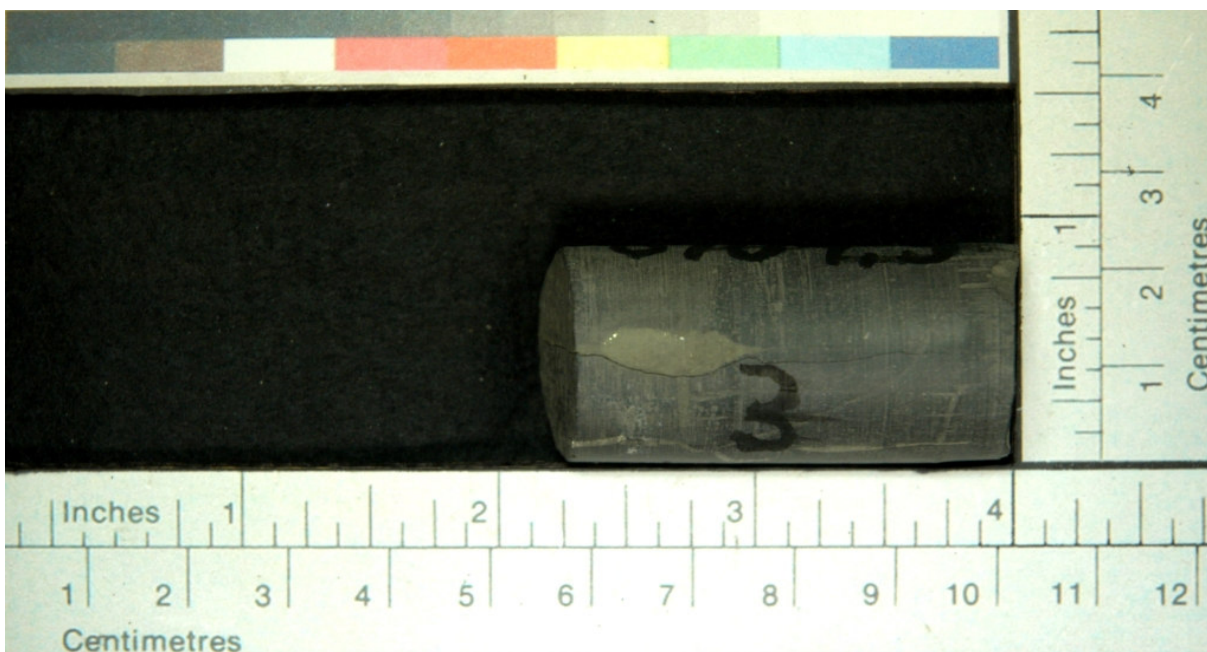
**FIGURE 2. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 2**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 2         | 6701       | "C" Bench |



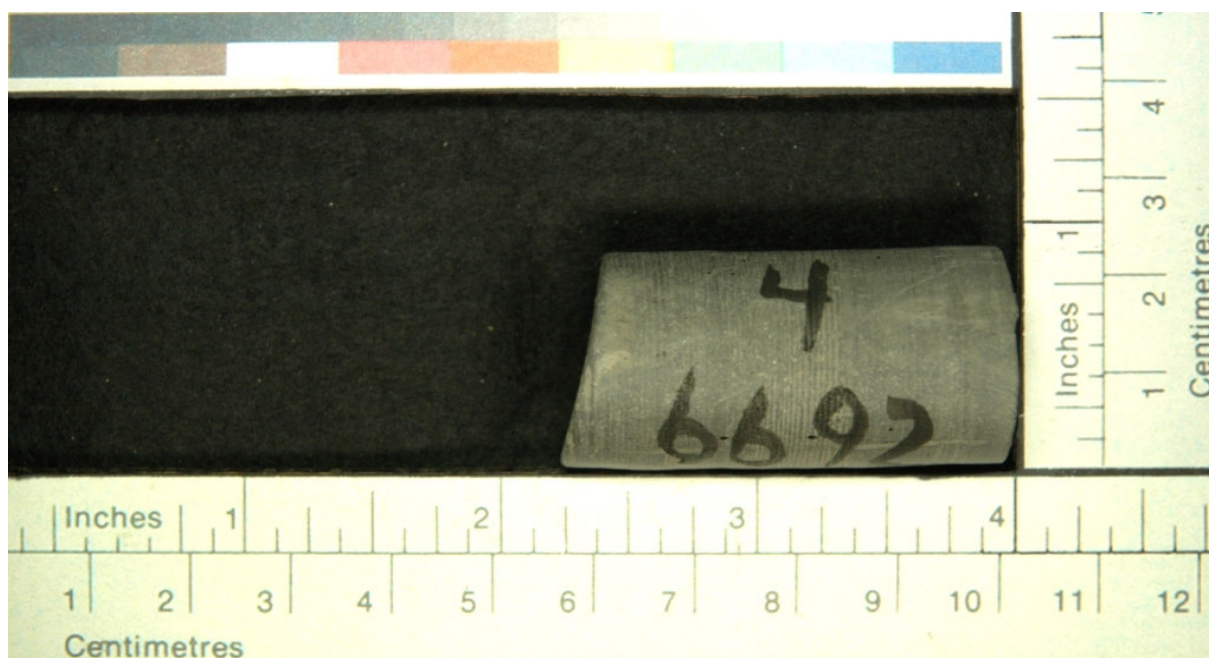
**FIGURE 3. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 3**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 3         | 6704.5     | "C" Bench |



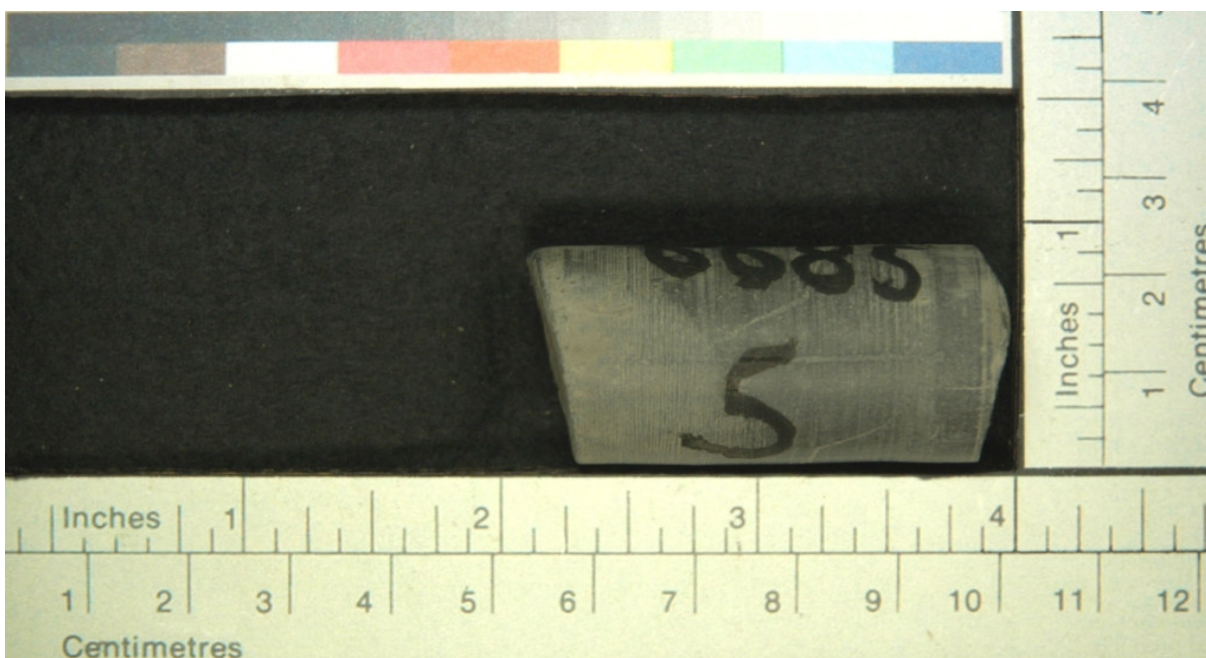
**FIGURE 4. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 4**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 4         | 6692       | "C" Bench |



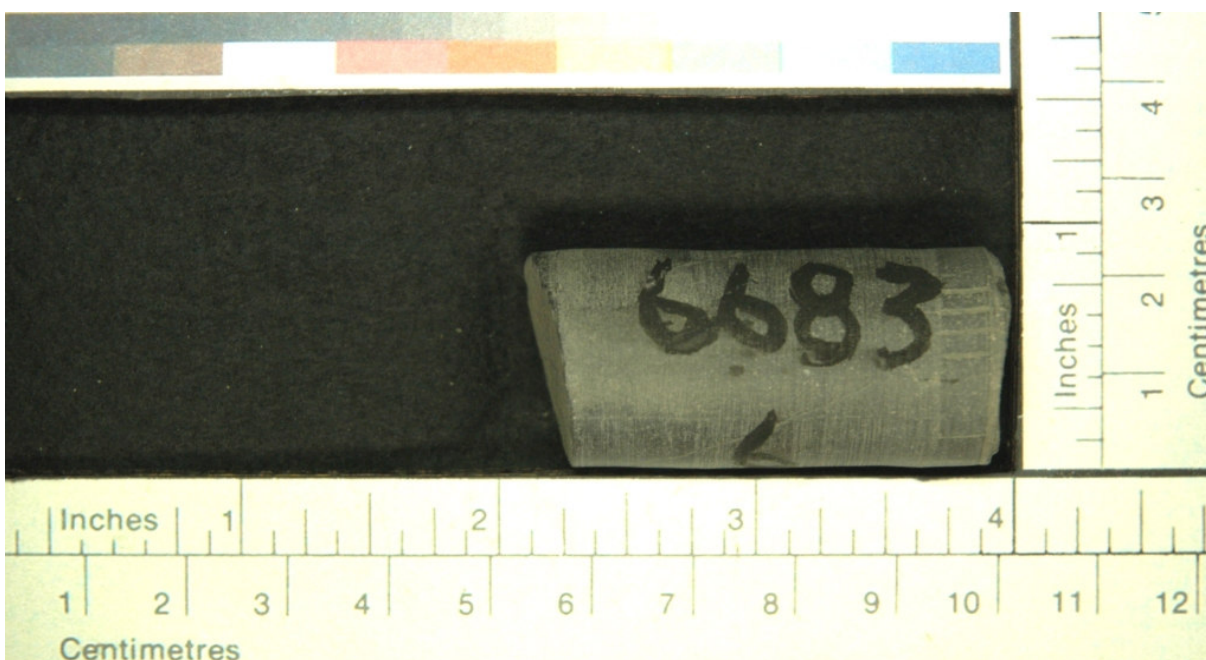
**FIGURE 5. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 5**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 5         | 6685       | "C" Bench |



**FIGURE 6. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 6**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 6         | 6683       | "C" Bench |



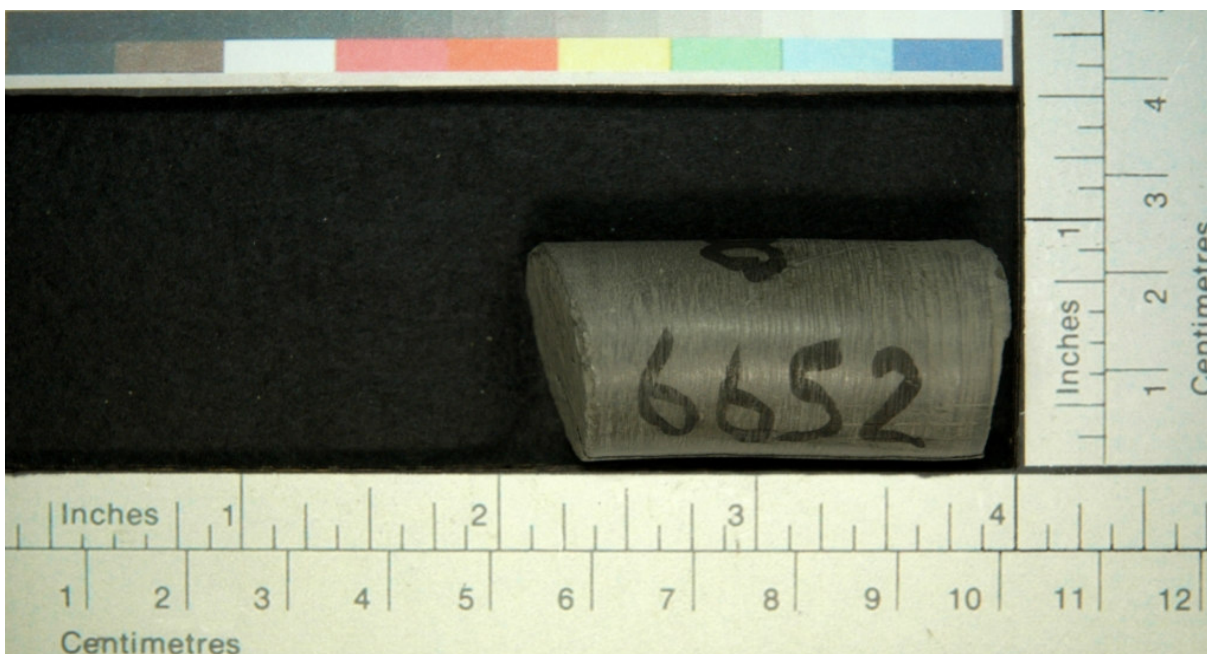
**FIGURE 7. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 7**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 7         | 6653       | "B" Bench |



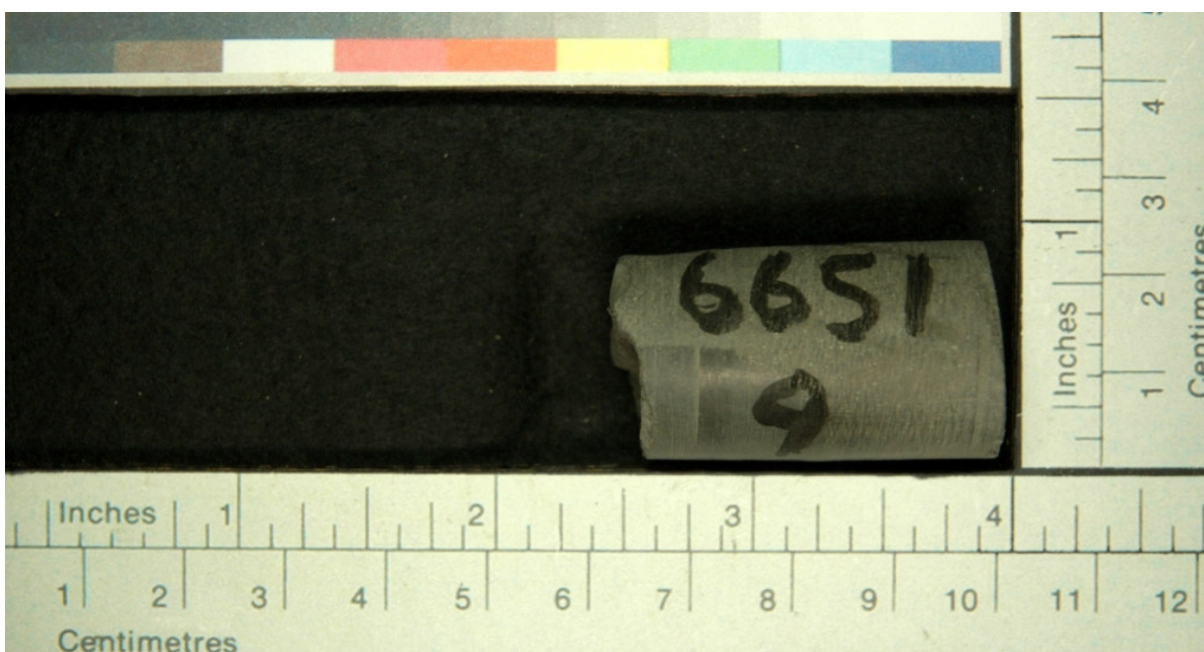
**FIGURE 8. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 8**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 8         | 6652       | "B" Bench |



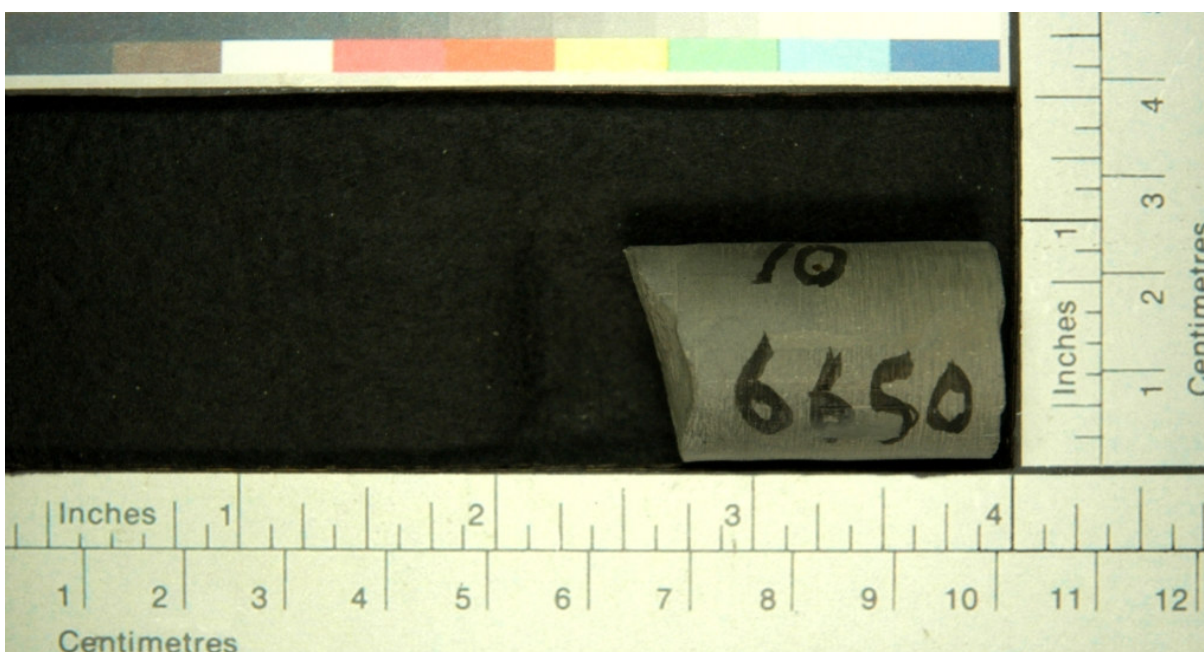
**FIGURE 9. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 9**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 9         | 6651       | "B" Bench |



**FIGURE 10. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 10**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 10        | 6650       | "B" Bench |



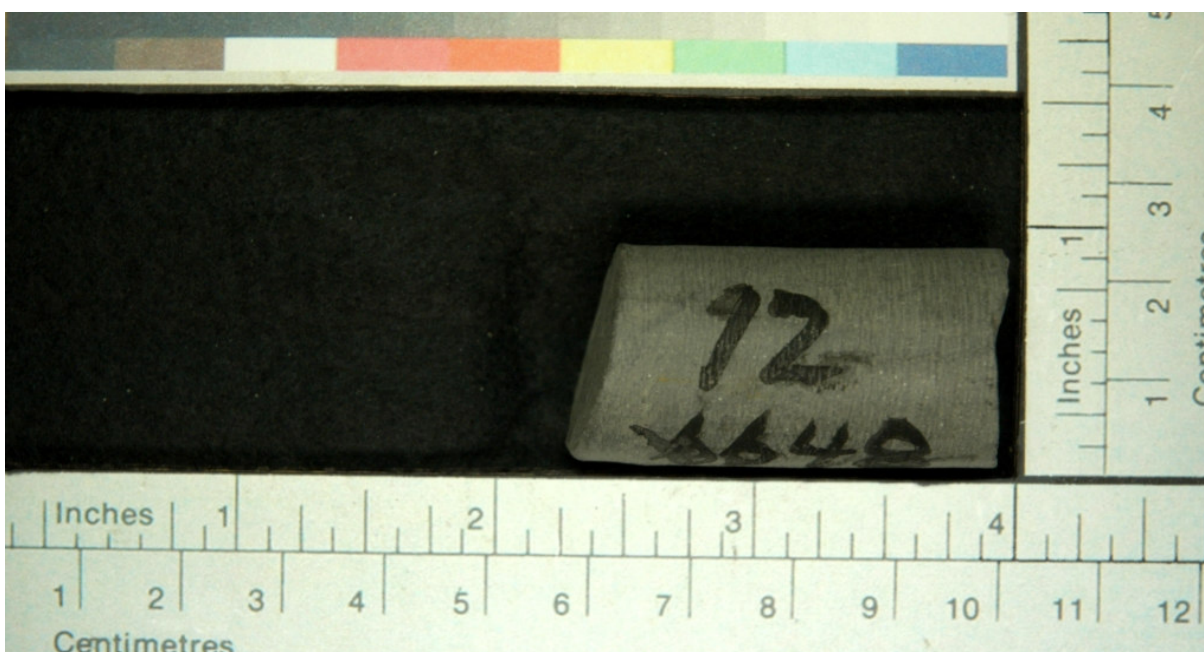
**FIGURE 11. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 11**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 11        | 6649       | "B" Bench |



**FIGURE 12. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 12**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 12        | 6648       | "B" Bench |



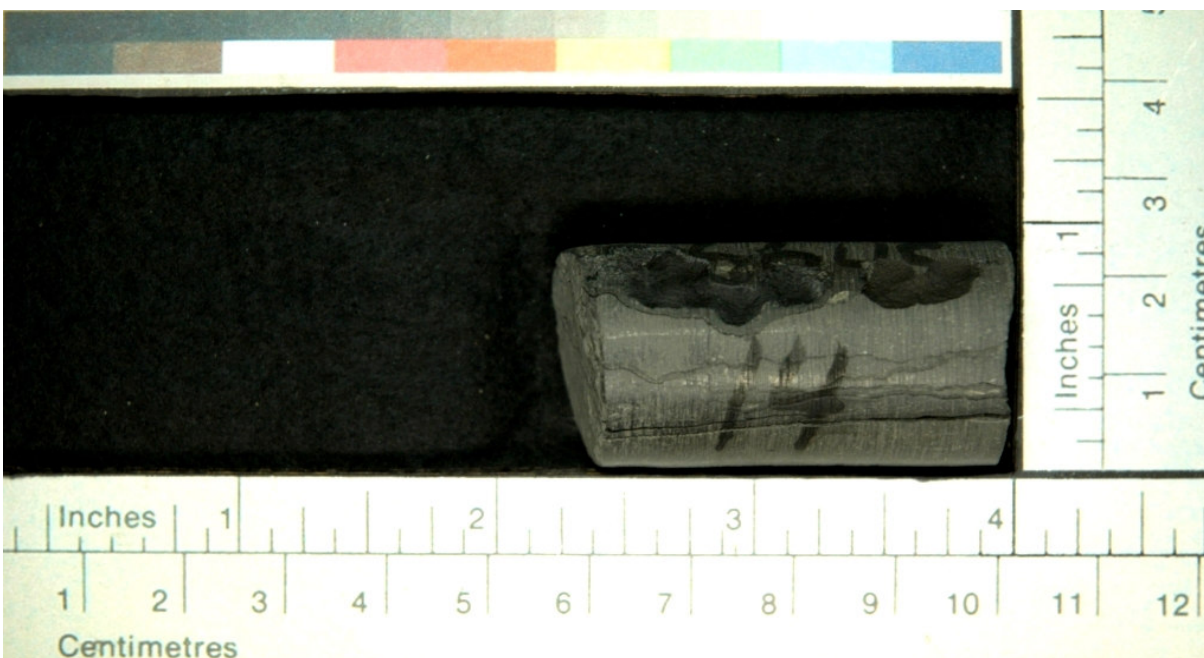
**FIGURE 13. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 13**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 13        | 6646       | "B" Bench |



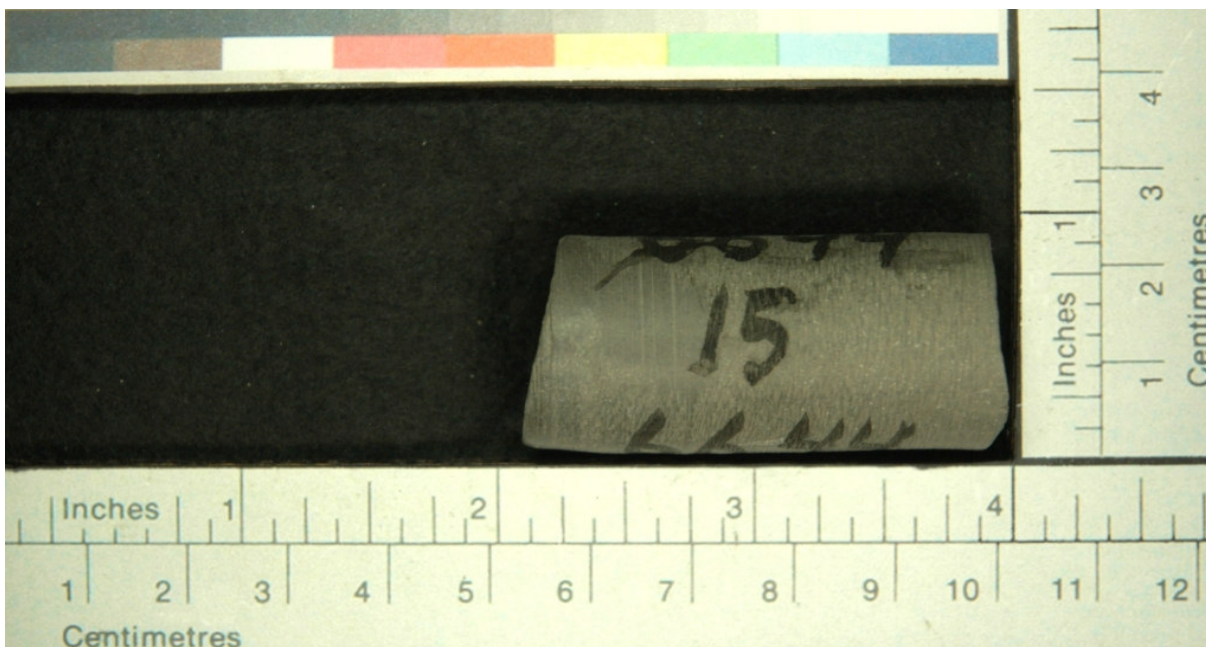
**FIGURE 14. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 14**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 14        | 6645       | "B" Bench |



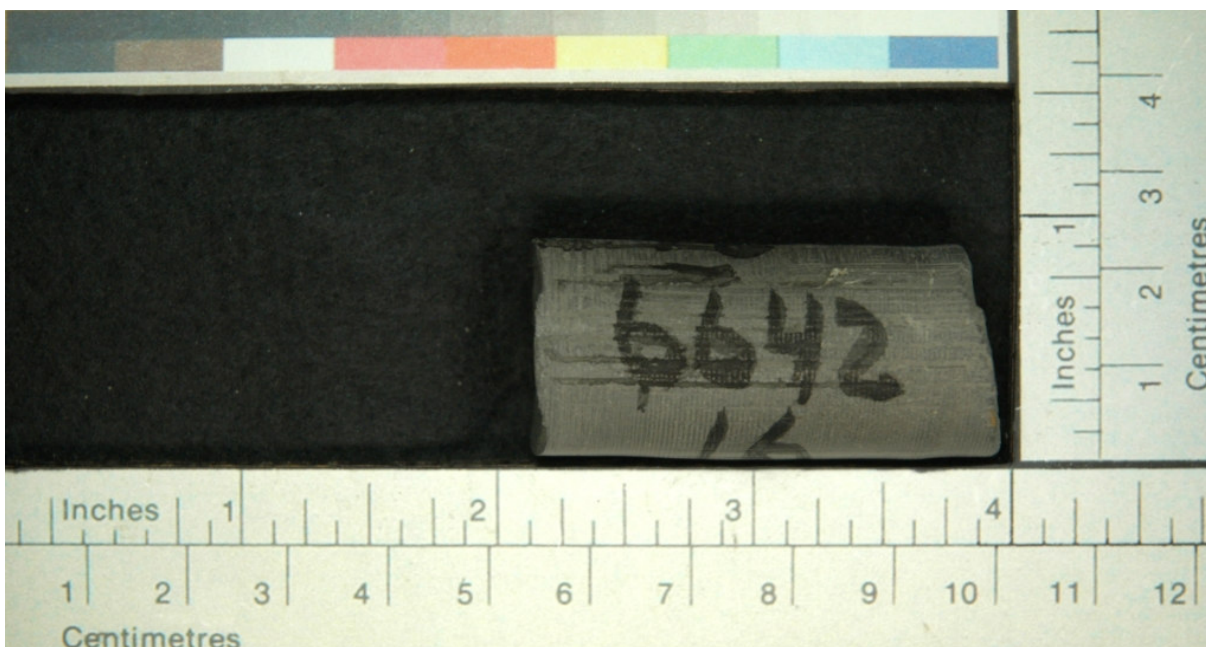
**FIGURE 15. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 15**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 15        | 6644       | "B" Bench |



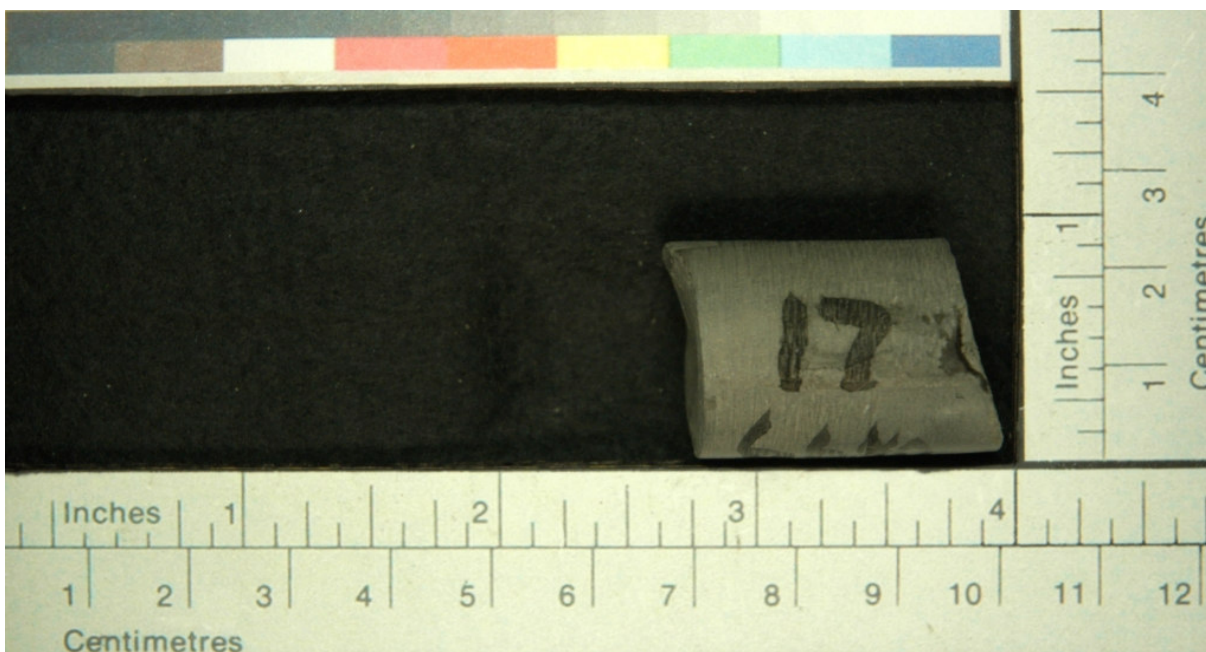
**FIGURE 16. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 16**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 16        | 6642       | "B" Bench |



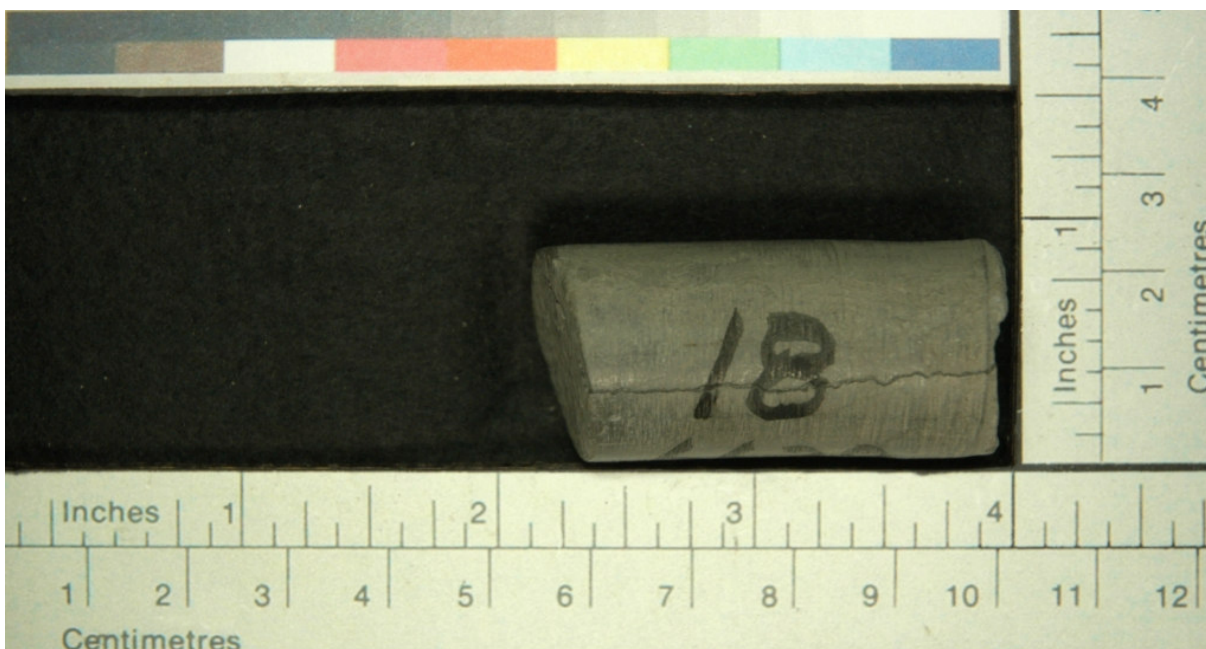
**FIGURE 17. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 17**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 17        | 6640       | "B" Bench |



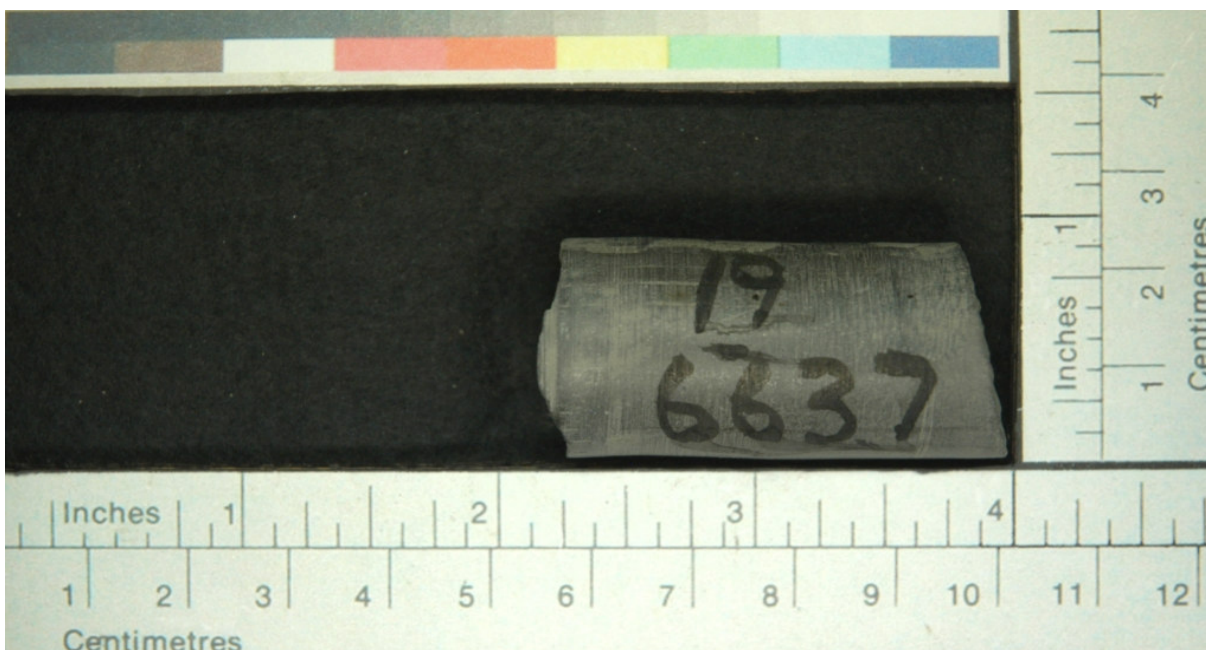
**FIGURE 18. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 18**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 18        | 6639       | "B" Bench |



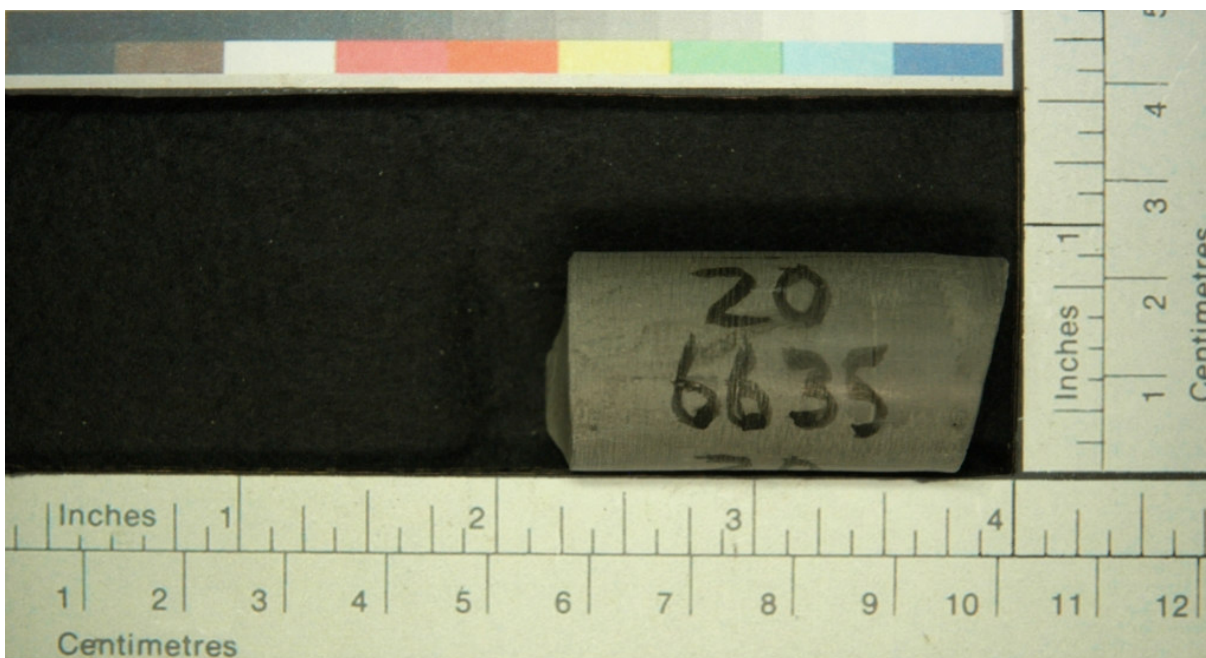
**FIGURE 19. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 19**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 19        | 6637       | "B" Bench |



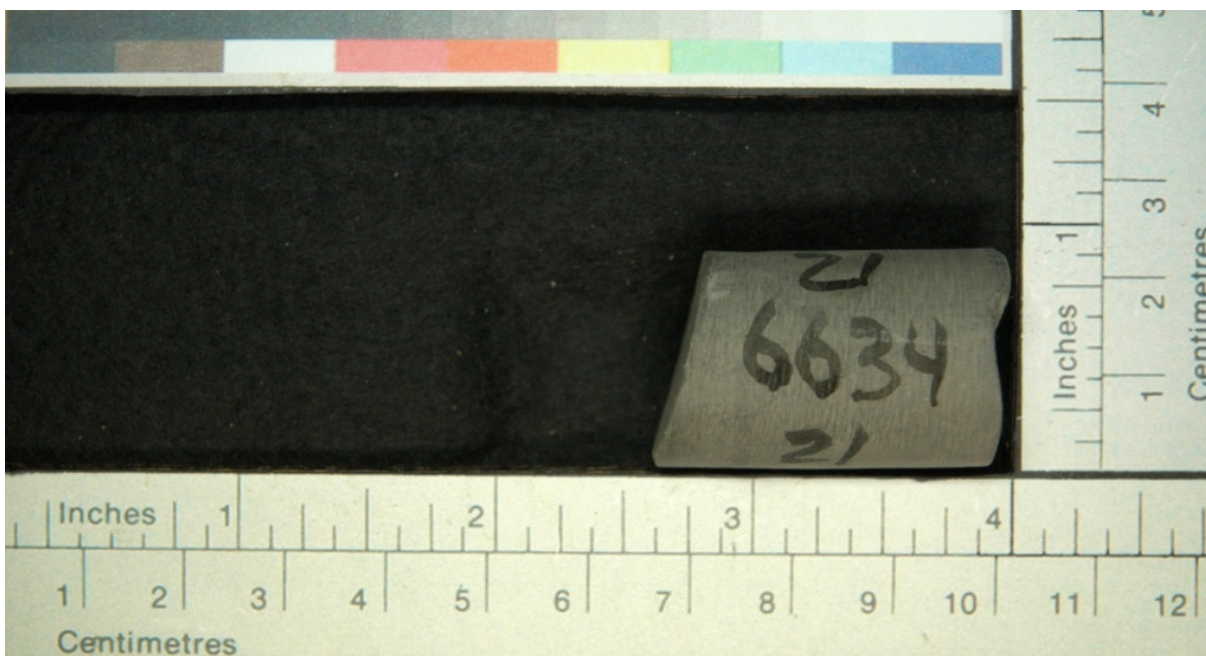
**FIGURE 20. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 20**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 20        | 6635       | "B" Bench |



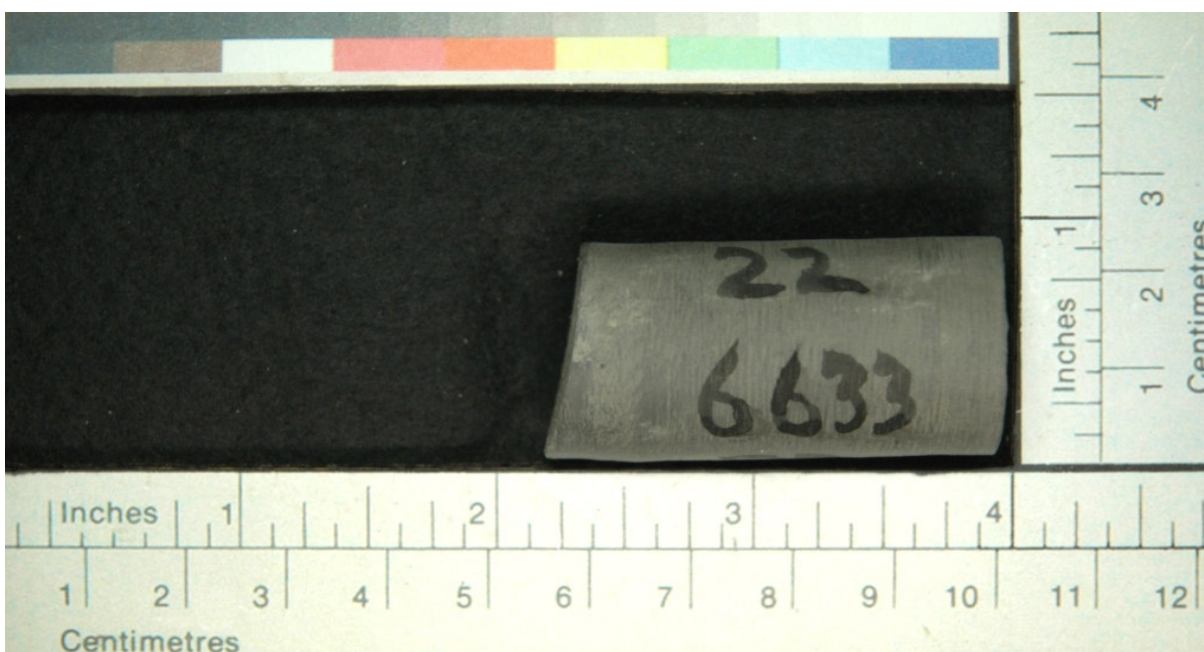
**FIGURE 21. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 21**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 21        | 6634       | "B" Bench |



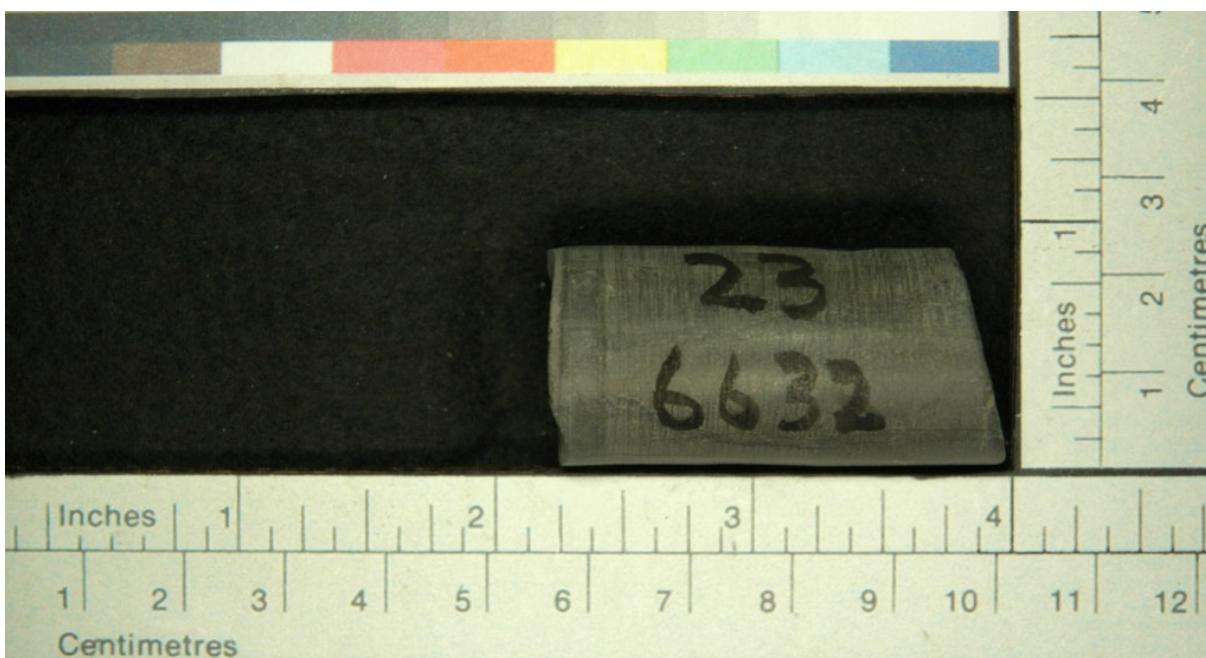
**FIGURE 22. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 22**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 22        | 6633       | "B" Bench |



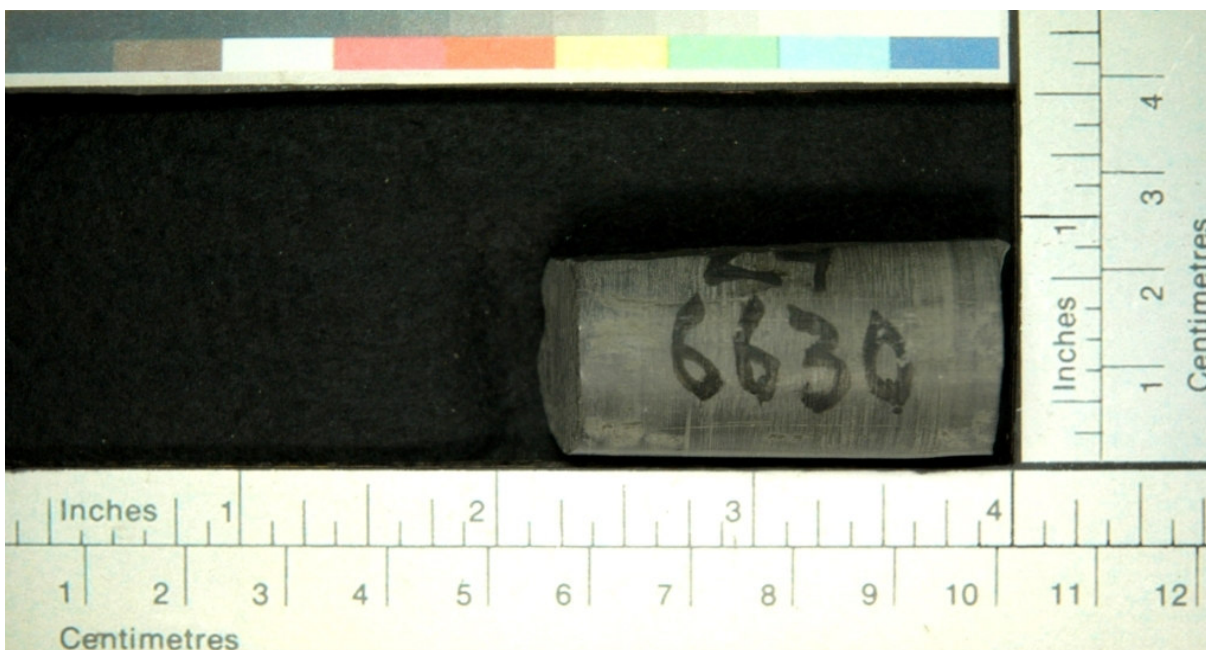
**FIGURE 23. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 23**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 23        | 6632       | "B" Bench |



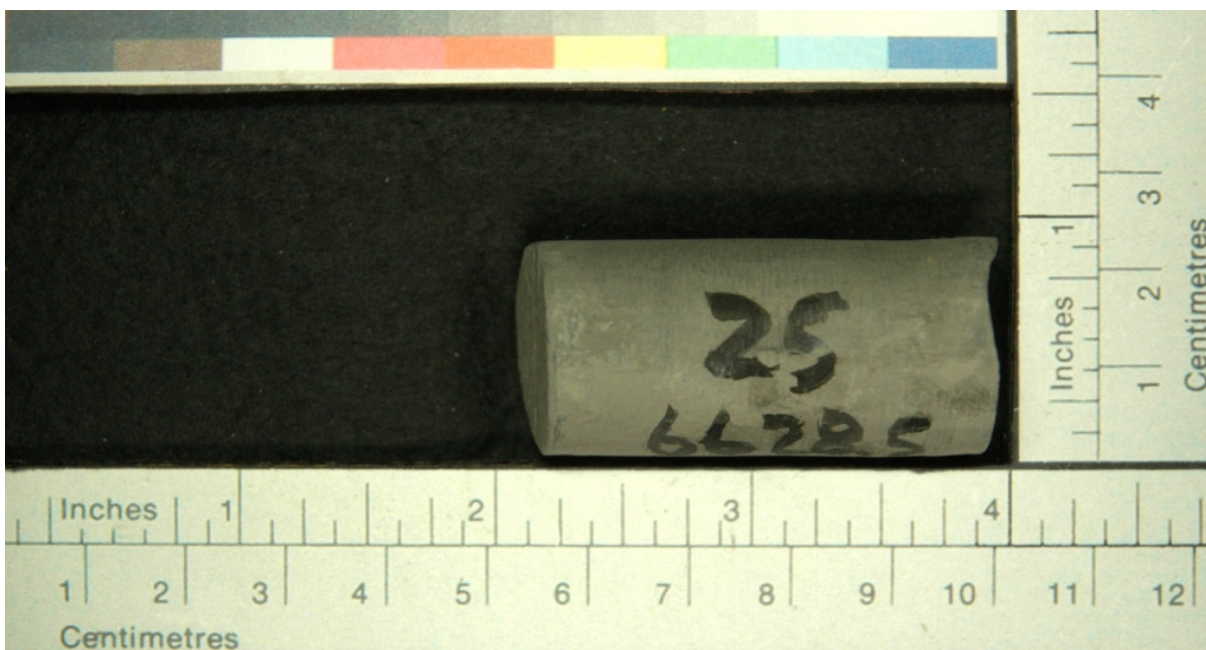
**FIGURE 24. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 24**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 24        | 6630       | "B" Bench |



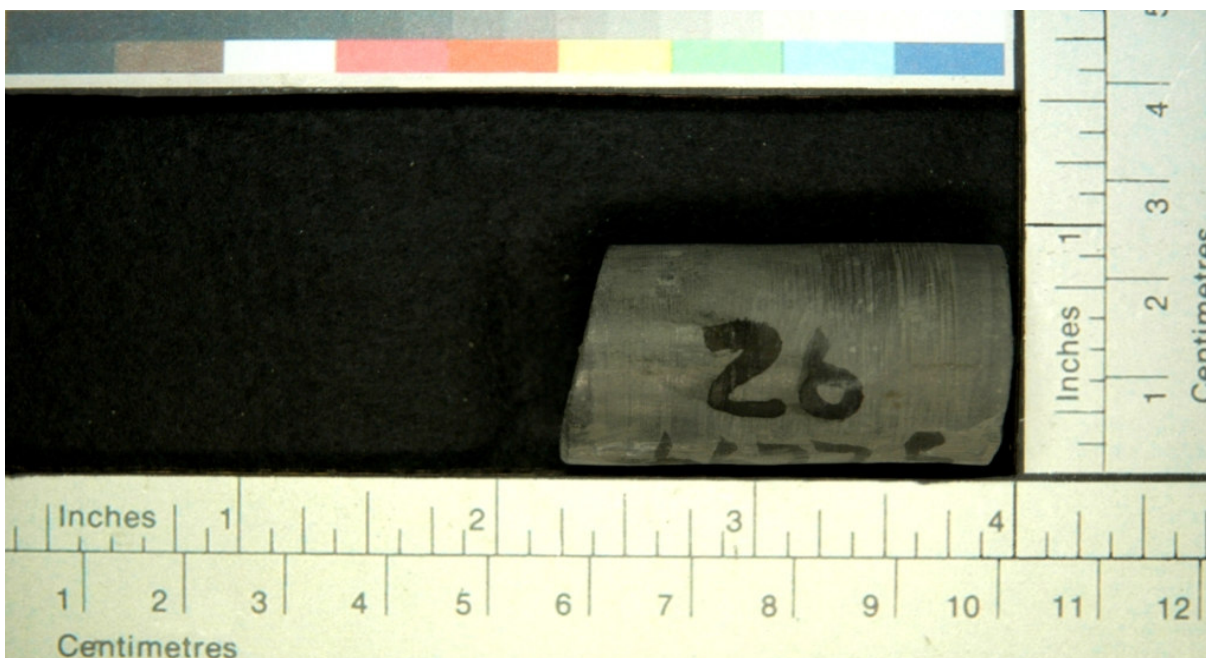
**FIGURE 25. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 25**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 25        | 6628.5     | "B" Bench |



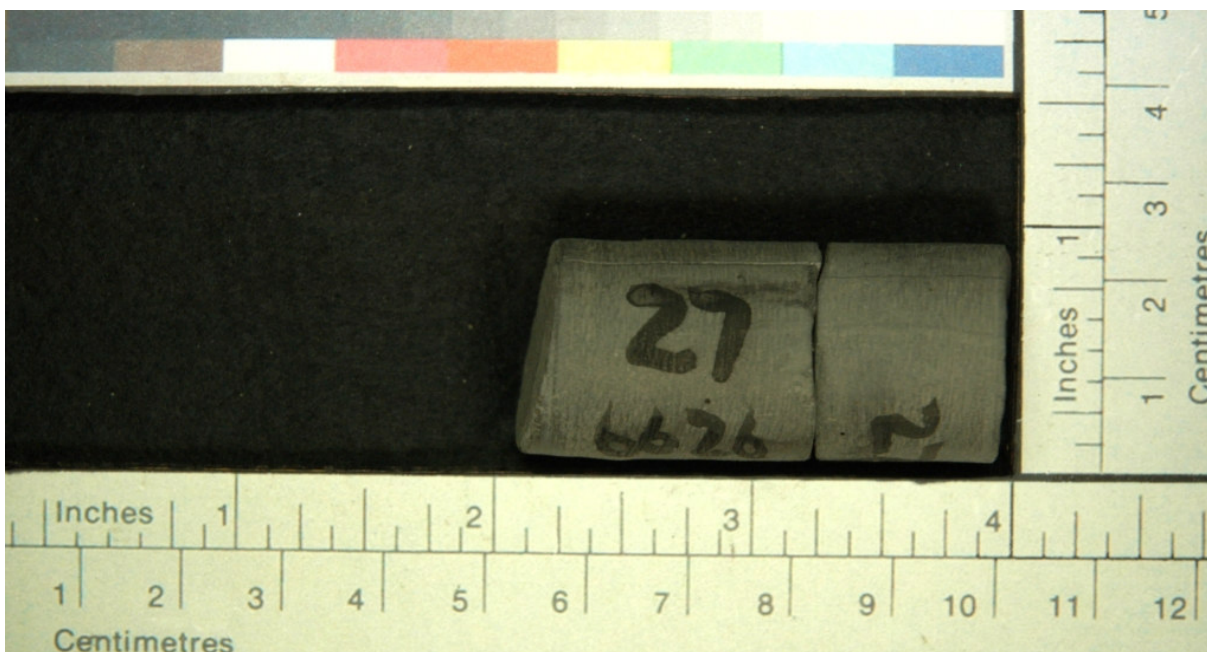
**FIGURE 26. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 26**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 26        | 6627.5     | "B" Bench |



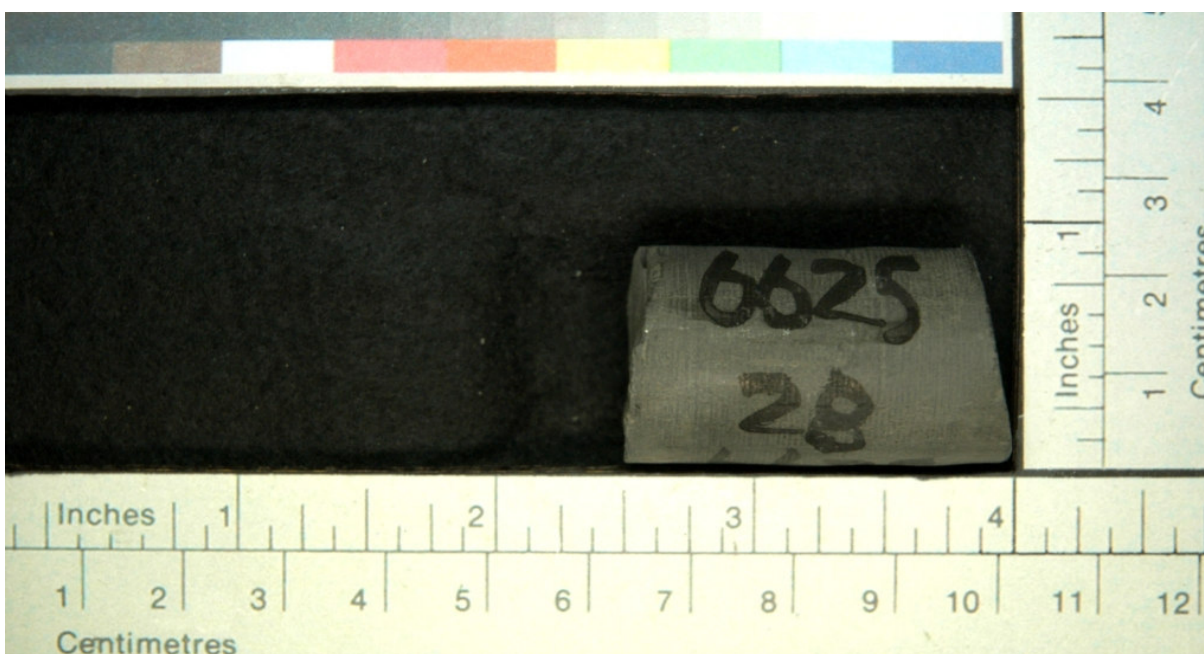
**FIGURE 27. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 27**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 27        | 6626       | "B" Bench |



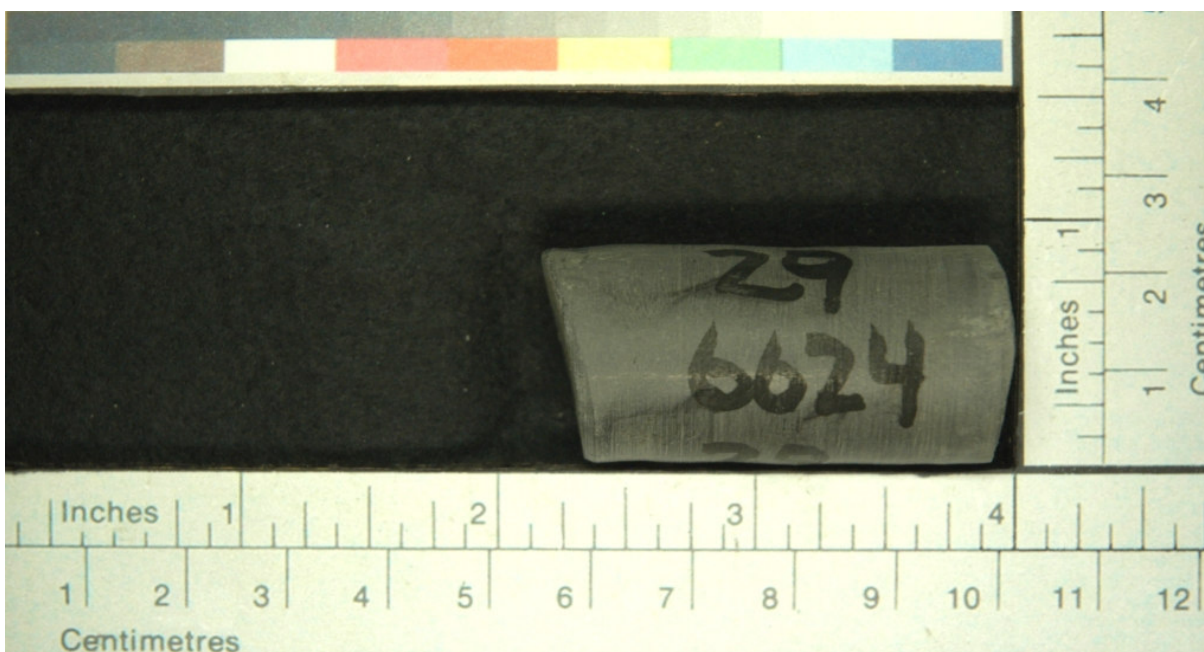
**FIGURE 28. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 28**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 28        | 6625       | "B" Bench |



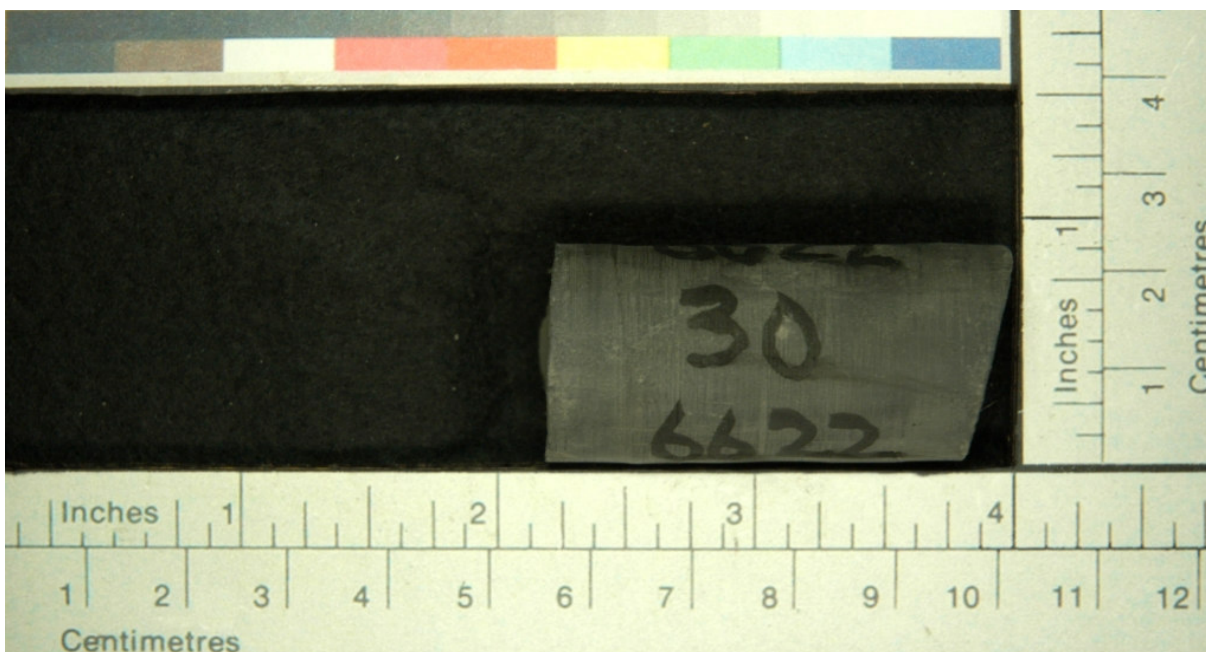
**FIGURE 29. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 29**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 29        | 6624       | "B" Bench |



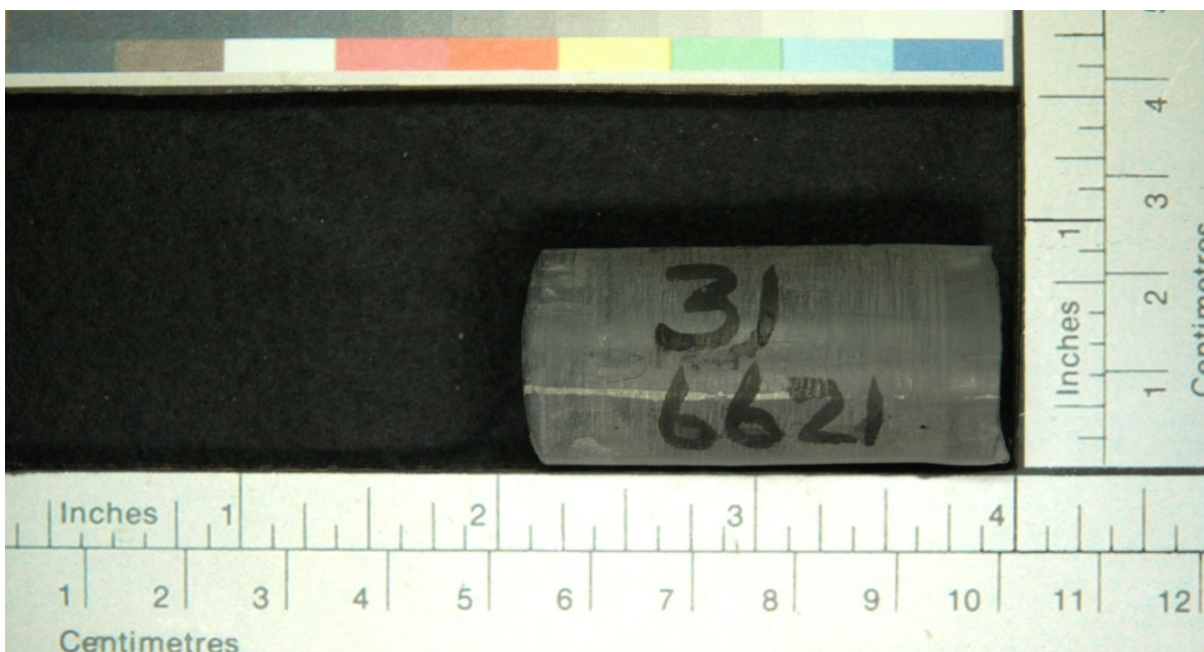
**FIGURE 30. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 30**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 30        | 6622       | "B" Bench |



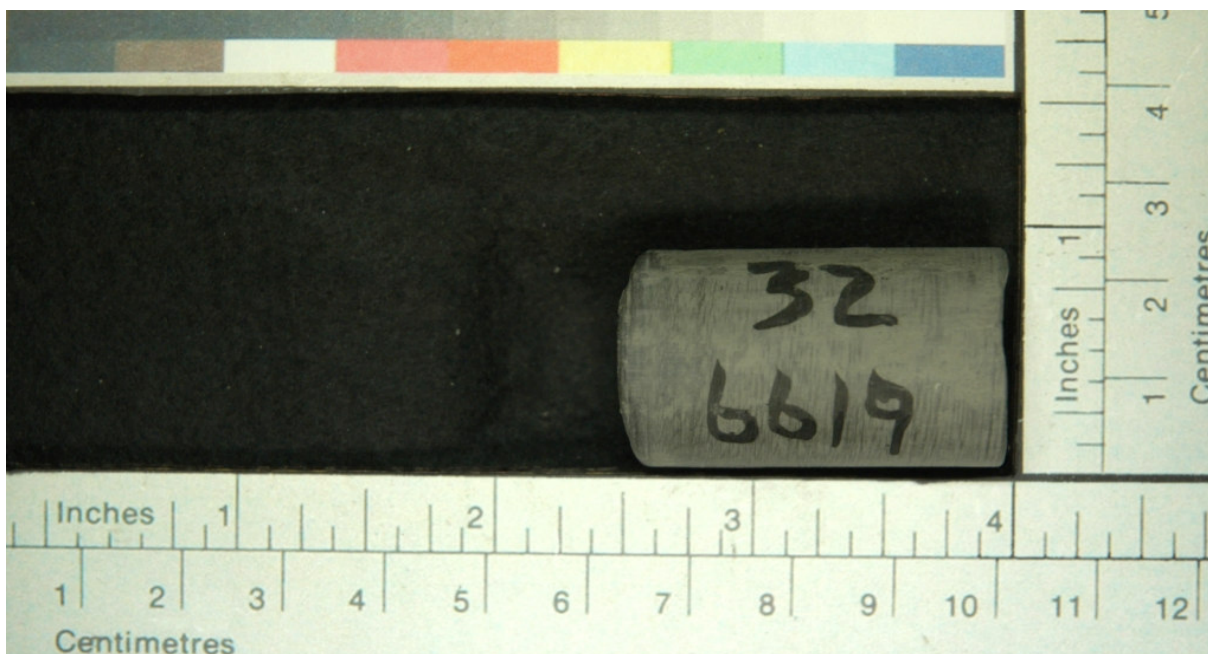
**FIGURE 31. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 31**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 31        | 6621       | "B" Bench |



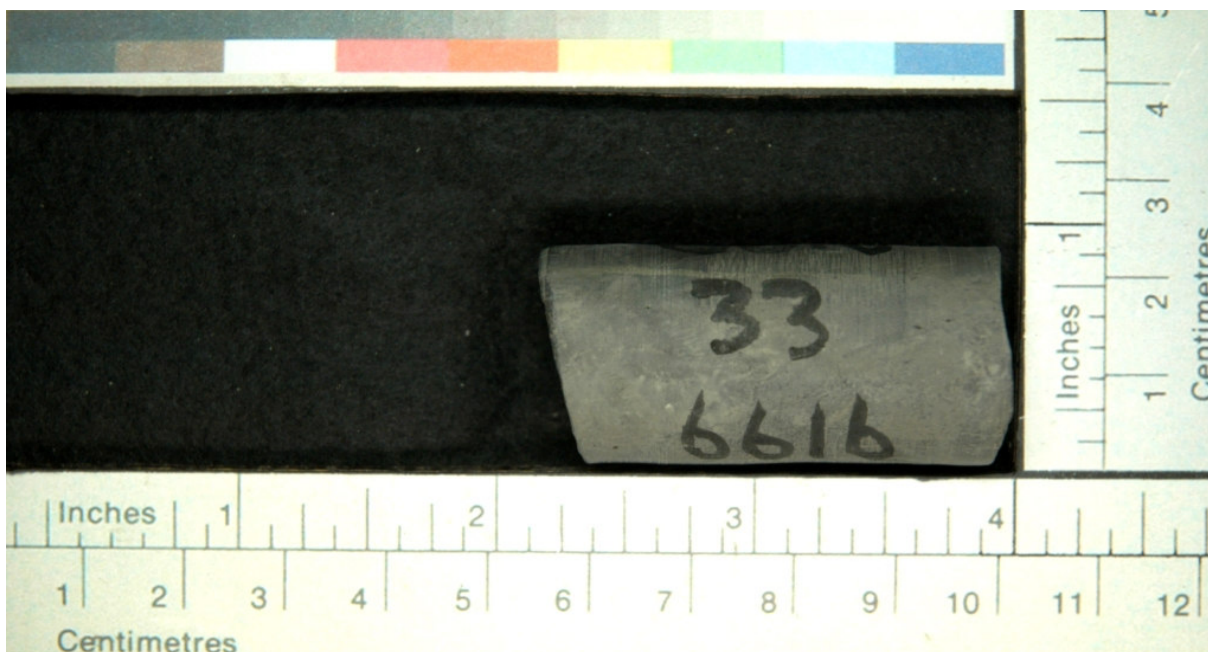
**FIGURE 32. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 32**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 32        | 6619       | "B" Bench |



**FIGURE 33. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 33**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 33        | 6616       | "B" Bench |



**FIGURE 34. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 34**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 34        | 6613.5     | "B" Bench |



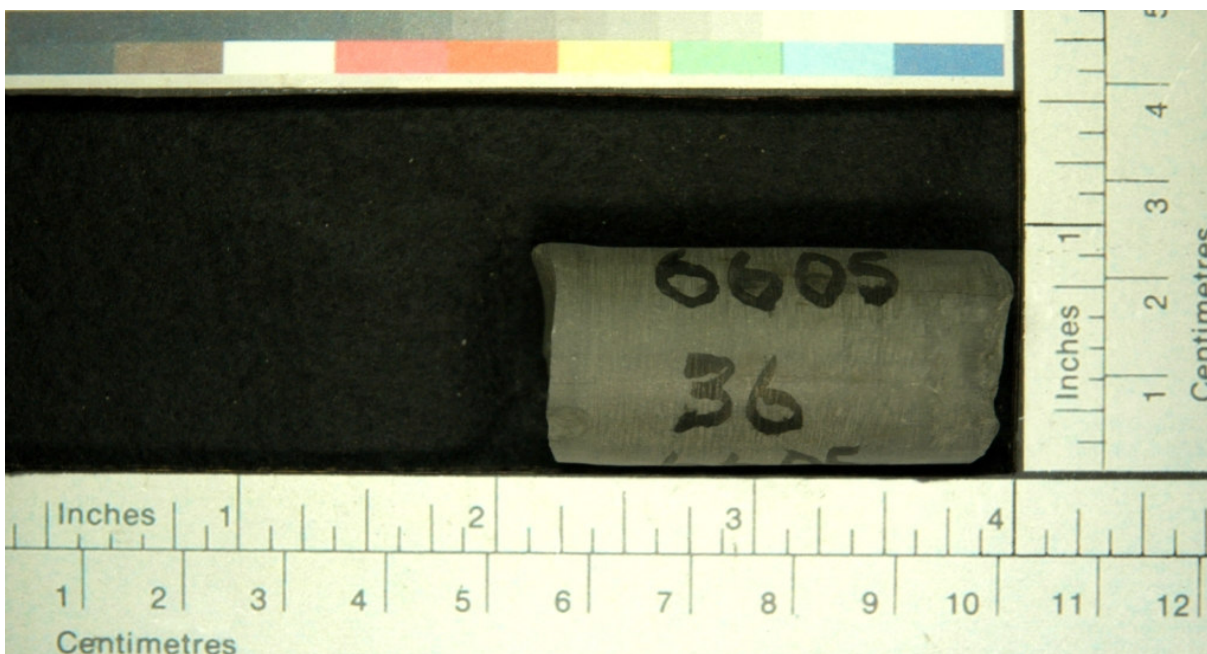
**FIGURE 35. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 35**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 35        | 6607       | "B" Bench |



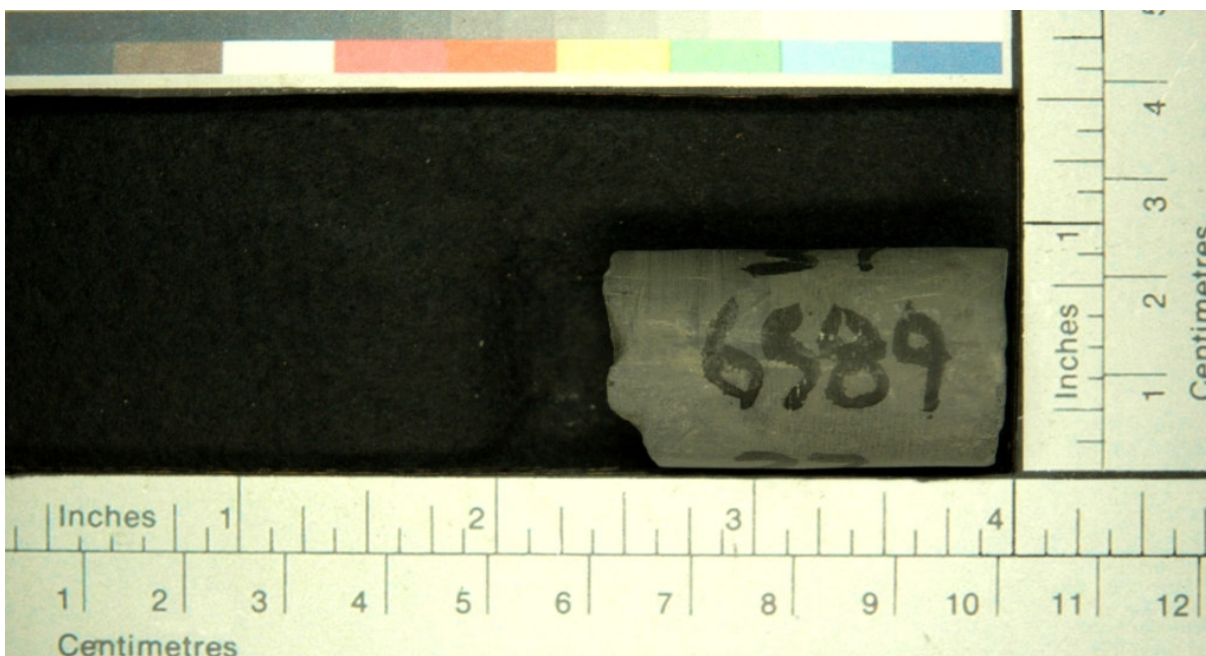
**FIGURE 36. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 36**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 36        | 6605       | "B" Bench |



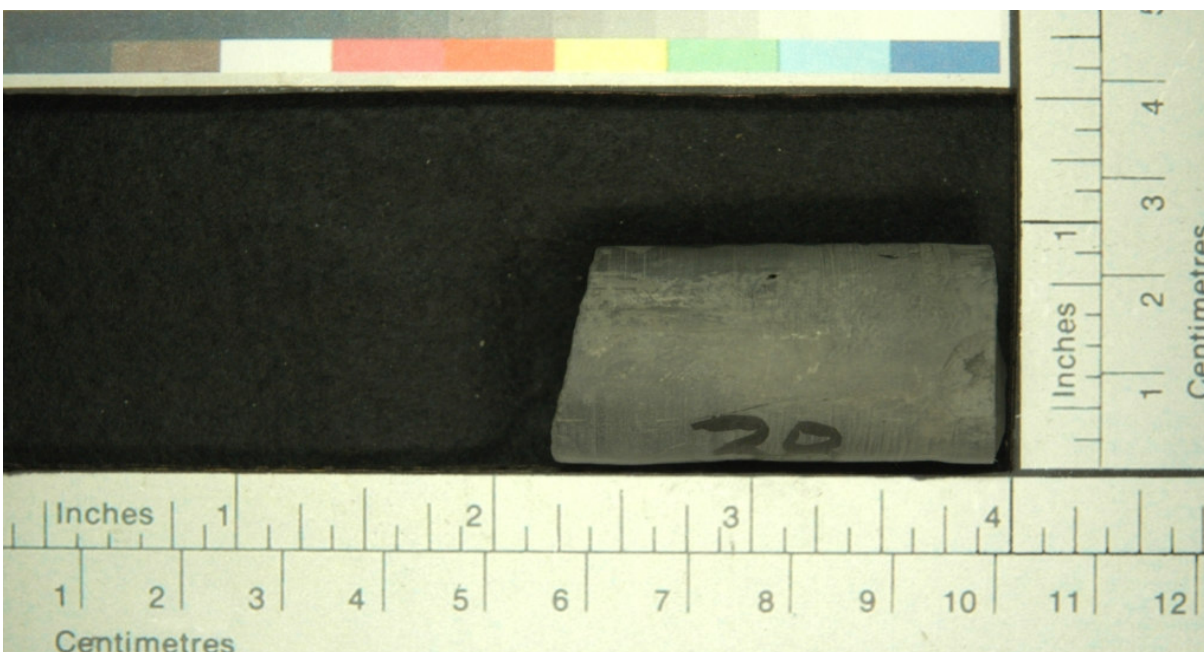
**FIGURE 37. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 37**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 37        | 6589       | "B" Bench |



**FIGURE 38. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 38**

| Sample ID | Depth (ft) | Comments             |
|-----------|------------|----------------------|
| 38        | 6569.5     | hot GR between A & B |



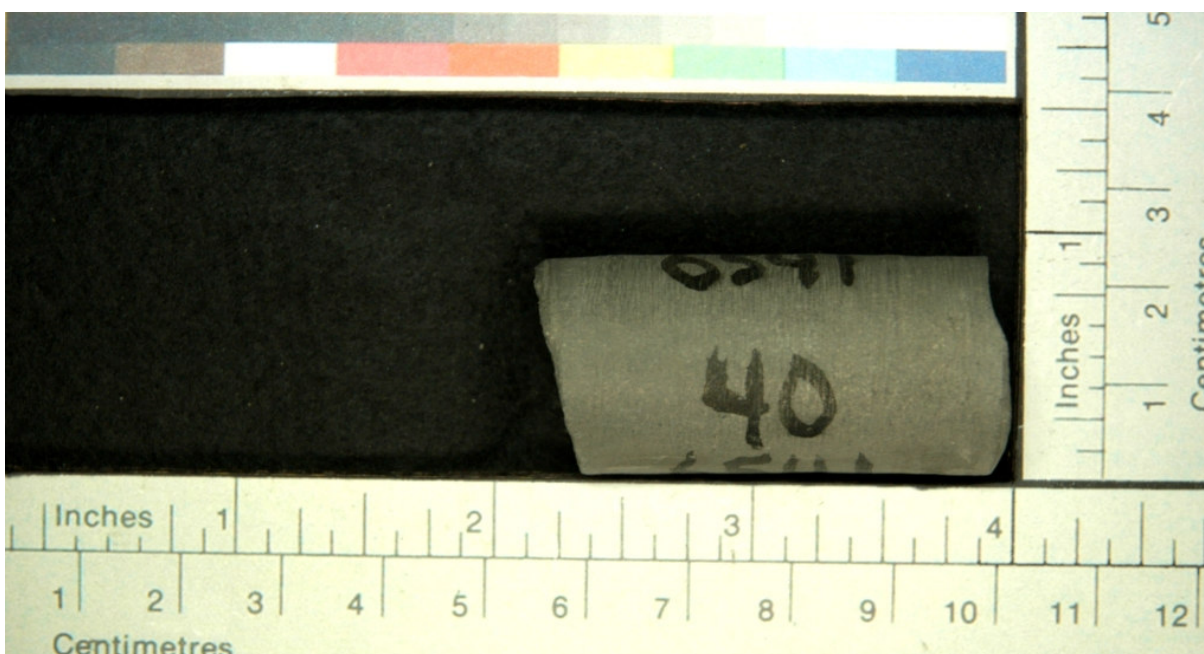
**FIGURE 39. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 40**

| Sample ID | Depth (ft) | Comments             |
|-----------|------------|----------------------|
| 39        | 6566.5     | hot GR between A & B |



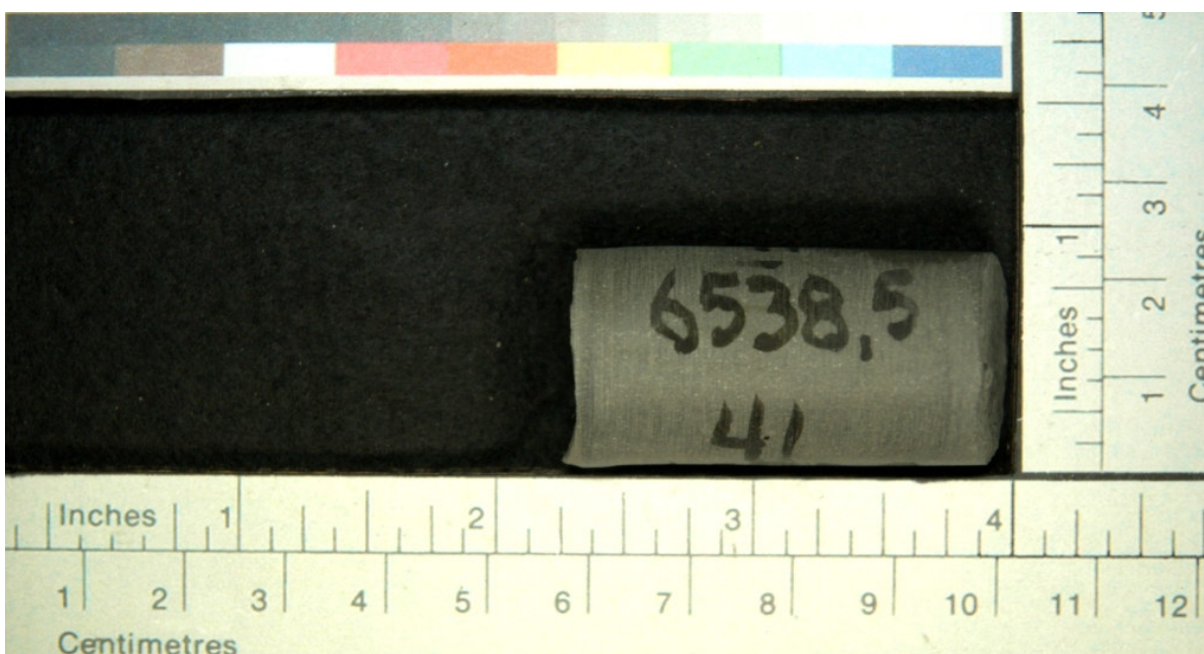
**FIGURE 40. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 40**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 40        | 6541       | "A" Bench |



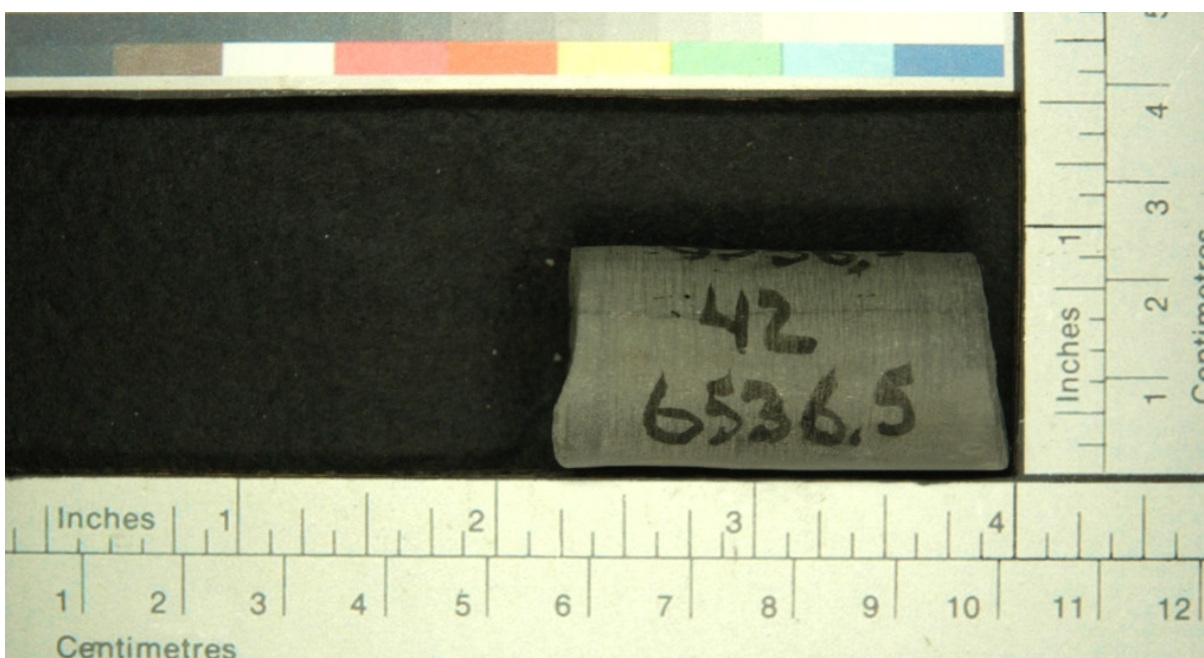
**FIGURE 41. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 42**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 41        | 6538.5     | "A" Bench |



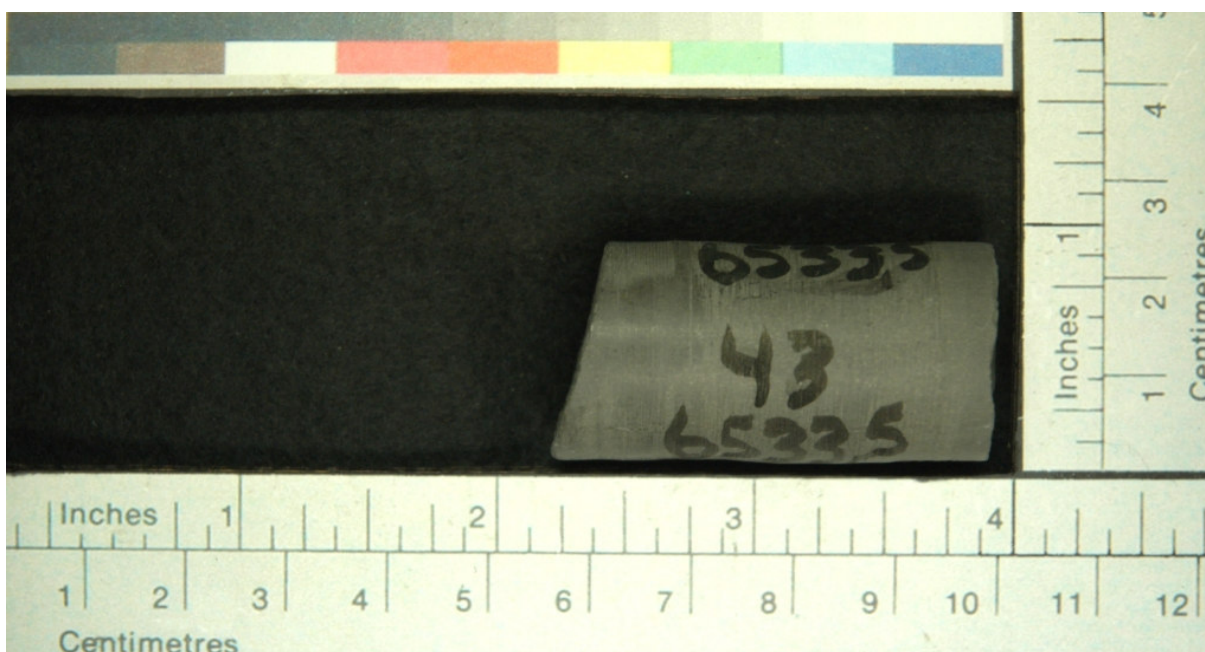
**FIGURE 42. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 42**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 42        | 6536.5     | "A" Bench |



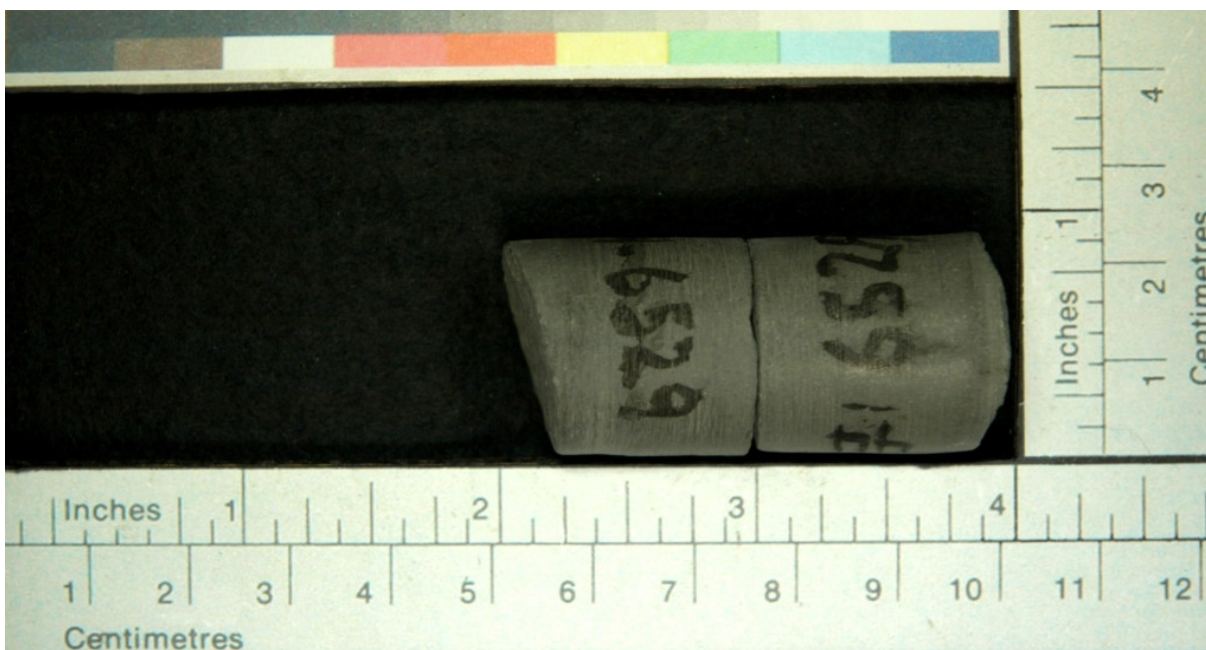
**FIGURE 43. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 43**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 43        | 6533.5     | "A" Bench |



**FIGURE 44. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 44**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 44        | 6529       | "A" Bench |



**FIGURE 45. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 45**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 45        | 6527       | "A" Bench |



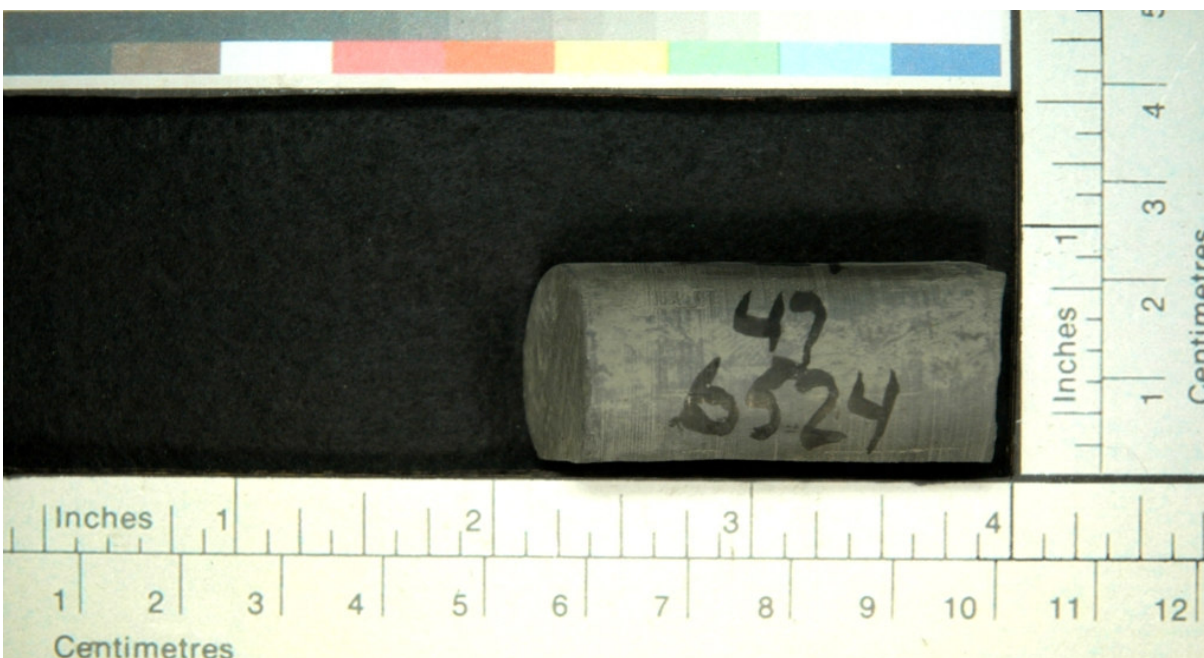
**FIGURE 46. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 46**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 46        | 6526       | "A" Bench |



**FIGURE 47. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 47**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 47        | 6524       | "A" Bench |



**FIGURE 48. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 48**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 48        | 6522       | "A" Bench |



**FIGURE 49. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 49**

| Sample ID | Depth (ft) | Comments        |
|-----------|------------|-----------------|
| 49        | 6490       | Sharron Springs |



**FIGURE 50. DESCRIPTION AND PHOTOGRAPH OF SAMPLE # 50**

| Sample ID | Depth (ft) | Comments  |
|-----------|------------|-----------|
| 50        | 6724       | Fort Hays |

