

7000a(1 & 2)  
 target = 2x50' holes  
 a1 = 42' a2 = 45'  
 8" casing

water?  
 don't know  
 lots of  
 gravel

CLIENT: U.S. Geological Survey/ S.C.E.C.  
 PROJECT: SSIP  
 CLIENT REP: Liz Rose

Thurs. 10/28/10

Date: 10/28/10 Hole # 7000a Rig # 1 Driller: Sam Crum Supervisor: Plus

| TIME    | LOG # | FOOTAGE | REMARKS   | LOG REFERENCE #   |
|---------|-------|---------|---|---|
|         | 1/12  |         | traveled from 4040a to 7000a  |   |
| 12:20pm |       |         | but rig got a flat front tire -<br>Allen said except Dustin & the rig   | 1. Crew Travel To Site<br>2. Rig Up<br>3. Reenter Hole<br>4. Drilling<br>5. Pull Pipe<br>6. Mix Mud & Fill<br>7. Coring<br>8. Install Casing/Pipe<br>9. Cementing<br>10. Rig Down<br>11. Move Rig To New Site<br>12. Maintenance<br>13. Standby (Explain)<br>14. Other (Explain)<br>15. Logging<br>16. Water Trip |
|         |       |         | TRUCKS GOT STUCK ONCE ON<br>UPPER STEP ABOVE ROAD<br>NEAR THE STAKES -  |   |
| 12:45   | 12    |         | Sam left to go get the tire<br>for the rig fixed  |   |
|         |       |         | Travis/Dustin unloaded &<br>welded casing   |   |
| 4:00    | 1/12  |         | Kenzie got water from canal<br>Sam/Dustin finish getting<br>tire back on - move<br>to set up rig                              |   |
| 5:00    |       |         | Left rig set up w 20' from<br>original stake; it could<br>not get further west<br>to newer stakes - too soft<br>EVEN w/ water |   |
|         |       |         |   | MATERIALS USED  |
|         |       |         |   | Mud _____ sacks   |
|         |       |         |   | LC _____ Type _____   |
|         |       |         |   | _____ sacks   |
|         |       |         |   | _____ sacks   |
|         |       |         |   | _____ sacks   |
|         |       |         |   | Viscose _____   |
|         |       |         |   | Cement _____  |
|         |       |         |   | Diesel _____  |
|         |       |         |   | Foamer _____  |
|         |       |         |   | Detergent _____   |
|         |       |         |   | Other _____   |
|         |       |         |   | CREW HOURS  |
|         |       |         |   | Driller _____ / _____   |
|         |       |         |   | Helper _____ / _____  |
|         |       |         |   | Helper _____ / _____  |

Fri. 10/29/10

|        |      |               |  |  |
|--------|------|---------------|--|--|
| 7:45am | 1    |               | Got casing from SW Drilling<br>Yard  |  |
| 8:45   | 1    |               | left Hwy 86/100th Ave Truck stop   |  |
| 9:35   | 2    |               | Crew on site   |  |
| 10:06  | 4    |               |  |  |
| 10:07  | 12   | 7000a1        | Travis had to climb all the way up<br>the tower to fix something   |  |
| 10:29  | 4    | 0             |  |  |
| 10:34  | 4    | 15'           |  |  |
| 10:40  | 8    |               | Rocley at 20'  |  |
| 10:55  | 8    | 35'           | All different types of rock  |  |
| 11:11  | 4    | 50'           |  |  |
| 11:17  | 5    |               |  |  |
| 11:24  | 8    | CASING<br>42' | Cased to 42' (hole caved in some)  |  |
| 12:00  | 10   | 7000a2        | Need to move it slightly to drill<br>hole # 2; moved in  |  |
| 12:29  | 4    | 0             |  |  |
| 12:45  | 4/8  | 15'           | gravel, sand   |  |
| 1:01   | 4/8  | 35'           |  |  |
| 1:27   | 14   | 55'           |  |  |
| 1:30   | 5    |               |  |  |
| 1:37   | 8    | CASING<br>45' | Filled 1st section first to ensure no<br>holes - then continued w/casing<br>Hole collapsed in when rig sunk down<br>on back stands; cleaned up, covered hole |  |
| 2:00   | 8/10 |               |  |  |
| 2:52   | 11   |               |  |  |

Footage: FROM \_\_\_\_\_ TO \_\_\_\_\_ TOTAL FOOTAGE \_\_\_\_\_

Bit 9 7/8" changed at \_\_\_\_\_ Size \_\_\_\_\_"  
 Bit \_\_\_\_\_ changed at \_\_\_\_\_ Size \_\_\_\_\_"  
 Bit \_\_\_\_\_ changed at \_\_\_\_\_ Size \_\_\_\_\_"

Approved \_\_\_\_\_

Definitely got stuck



7002a(1+2)

2 x 30' holes  
8" casing

CLIENT: U.S. Geological Survey/ S.C.E.C.

PROJECT: SSIP

CLIENT REP: Liz Rose

| TIME  | LOG # | FOOTAGE  | REMARKS   | LOG REFERENCE #          |
|---|-------|----------|---|--------------------------|
| Fri Date: 10/29/10 Hole # 7002a Rig # 1 Driller: Sam Crum Supervisor: Felix |       |          |   |                          |
| 3:07  | 1/2   |          | Set up rig, Shaker, drop off casing   | 1. Crew Travel To Site   |
|   |       |          | leaving everything out for the night - will drill both holes tomorrow                         | 2. Rig Up                |
| 3:45  |       |          | All off site  | 3. Reenter Hole          |
|   |       |          |   | 4. Drilling              |
|   |       |          |   | 5. Pull Pipe             |
|   |       |          |   | 6. Mix Mud & Fill        |
|   |       |          |   | 7. Coring                |
|   |       |          |   | 8. Install Casing/Pipe   |
|   |       |          |   | 9. Cementing             |
|   |       |          |   | 10. Rig Down             |
|   |       |          |   | 11. Move Rig To New Site |
|   |       |          |   | 12. Maintenance          |
|   |       |          |   | 13. Standby (Explain)    |
|   |       |          |   | 14. Other (Explain)      |
|   |       |          |   | 15. Logging              |
|   |       |          |   | 16. Water Trip           |
| Sat 10/30/10  |       |          |   |                          |
| 8:05  | 1     |          | from SW drilling  |                          |
| 9:00  | 2     |          |   |                          |
| 9:18  | 16    |          | Vance & Travis went to canal after watering down sand in work area                            |                          |
|   |       | 7002a1   |   |                          |
| 9:50  | 4     | 0        |   |                          |
| 10:10   | 4     |          | All clay, some gravel on shaker   |                          |
| 10:40   | 4     | 15'      | Very thick clay   |                          |
| 11:02   | 8     |          |   |                          |
| 11:30   | 4/8   | 35'      | (Local guy who lives in nearby trailer shocked up & is hanging around)                        |                          |
| 11:35   | 5     | 40'      | casing wouldn't drop down enough, had to pull it and redrill - the thick hard clay swelled up | Mud _____ sacks          |
| 11:40   | 8     | CASING   |   | LC _____ Type _____      |
| 11:50   | 4     | DRILLING |   | _____ sacks              |
|   | 5     |          |   | _____ sacks              |
| 12:00   | 8     | CASING   |   | _____ sacks              |
| 12:05   | 14    | 40'      | Cased to 40' & filled w/ water top is at surface level  | _____ sacks              |
|   |       | 7002a2   |   | Viscose _____            |
| 12:45   | 4     | 0        | more gravel & sand; pebble-sized; sub-angular in sand & clay                                  | Cement _____             |
| 12:50   | 8     | 15'      | (I asked the local spectator to stand 50' away & he left)                                     | Diesel _____             |
| 12:59   | 4     | 20'      |   | Foamer _____             |
| 1:05  | 12    |          | Rock got stuck in shaker - need to get a new fitting until tomorrow                           | Detergent _____          |
| 1:42  | 10    |          | off site  | Other _____              |
| 1:55  |       |          |   |                          |
| Sun 10/31/10  |       |          |   |                          |
| 8:00 AM   |       |          | Sam, Travis, Dustin Vance arrived to fix shaker   | CREW HOURS               |
| 8:45 AM   | 4     |          |   | Driller _____            |
| 9:15  | 11    |          | Very thick clay again - (see sample at 140')  | Helper _____             |
| 9:26  | 4/8   | 35'      |   | Helper _____             |
| 9:26  | 4/8   | 42'      |   |                          |

Footage: FROM \_\_\_\_\_ TO \_\_\_\_\_ TOTAL FOOTAGE \_\_\_\_\_

Bit 9/8 changed at \_\_\_\_\_ Size \_\_\_\_\_  
 Bit \_\_\_\_\_ changed at \_\_\_\_\_ Size \_\_\_\_\_  
 Bit \_\_\_\_\_ changed at \_\_\_\_\_ Size \_\_\_\_\_

Approved \_\_\_\_\_

Right on the road, so didn't get stuck

7002a2

Continued...

CLIENT: U.S. Geological Survey/ S.C.E.C.

PROJECT: SSIP

CLIENT REP: Liz Rose

Sum. 10/31/10

Date: 10/31/10 Hole # 7002a Rig # 1 Driller: Sam Crum Supervisor: Fms

| TIME    | LOG # | FOOTAGE | REMARKS                                    | LOG REFERENCE #   |
|---------|-------|---------|--|---|
| 9:38 am | 8     | CASING  | BRAIN CASING                               | 1. Crew Travel To Site<br>2. Rig Up<br>3. Reenter Hole<br>4. Drilling<br>5. Pull Pipe<br>6. Mix Mud & Fill<br>7. Coring<br>8. Install Casing/Pipe<br>9. Cementing<br>10. Rig Down<br>11. Move Rig To New Site<br>12. Maintenance<br>13. Standby (Explain)<br>14. Other (Explain)<br>15. Logging<br>16. Water Trip |
| 9:50    | 10    | ↓       | Cased to 40' & filled w/water              |   |
| 10:02   | 11    | 40'     | Covered holes = tracks, MOVED OUT TO 7003a |   |
| 10:07   |       |         | All off site                               |   |
|         |       |         |  |   |
|         |       |         |  |   |
|         |       |         |  |   |
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|         |       |         |  |   |
|         |       |         |  |   |
|         |       |         |  |   |
|         |       |         |  | <b>MATERIALS USED</b>   |
|         |       |         |  | Mud _____ sacks   |
|         |       |         |  | LC _____ Type _____   |
|         |       |         |  | _____ sacks   |
|         |       |         |  | _____ sacks   |
|         |       |         |  | _____ sacks   |
|         |       |         |  | Viscose _____   |
|         |       |         |  | Cement _____  |
|         |       |         |  | Diesel _____  |
|         |       |         |  | Foamer _____  |
|         |       |         |  | Detergent _____   |
|         |       |         |  | Other _____   |
|         |       |         |  | <b>CREW HOURS</b>   |
|         |       |         |  | Driller / _____   |
|         |       |         |  | Helper / _____  |
|         |       |         |  | Helper / _____  |

Footage: FROM \_\_\_\_\_ ' TO \_\_\_\_\_ ' TOTAL FOOTAGE \_\_\_\_\_

Bit 9 7/8" changed at \_\_\_\_\_ ' Size \_\_\_\_\_ "

Bit \_\_\_\_\_ changed at \_\_\_\_\_ ' Size \_\_\_\_\_ "

Bit \_\_\_\_\_ changed at \_\_\_\_\_ ' Size \_\_\_\_\_ "

Approved \_\_\_\_\_



