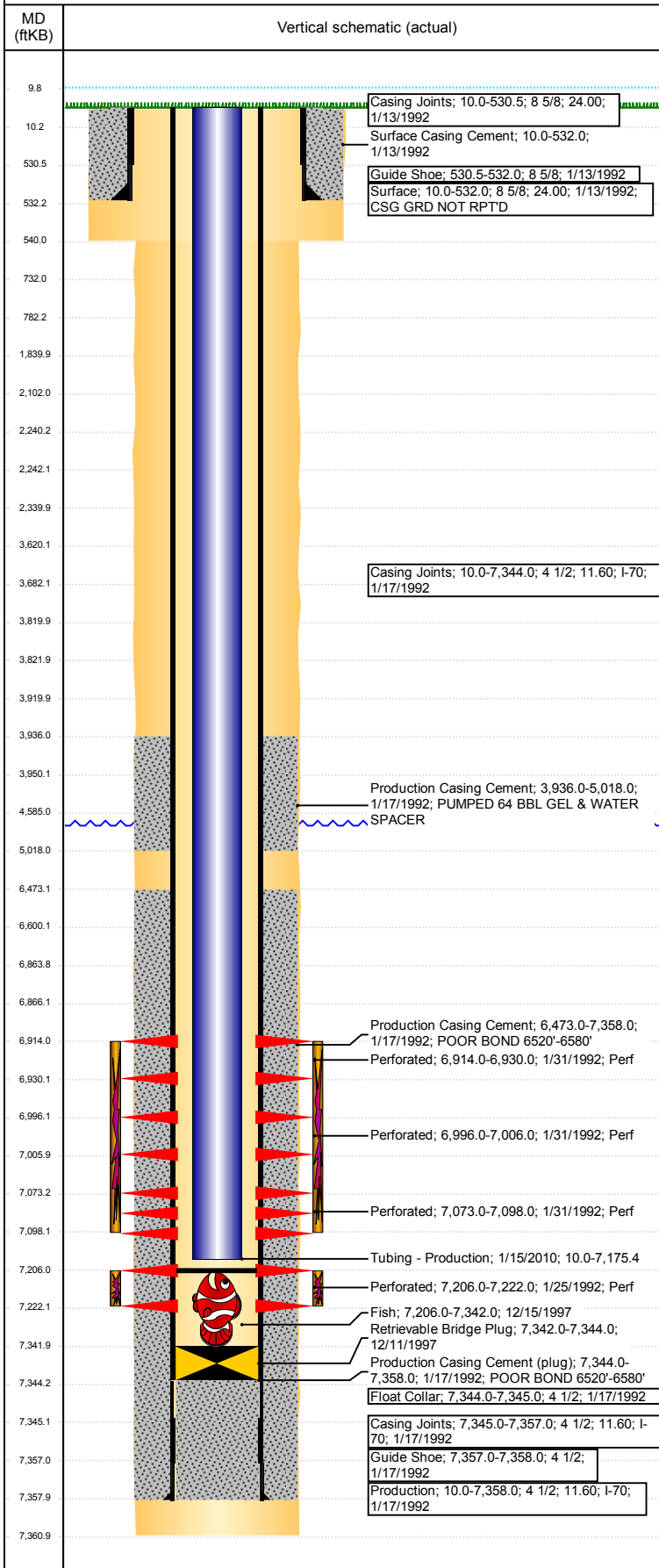


**Well Name: HSR-VICKI 10-23**

VERTICAL - ORIGINAL HOLE, 6/13/2018 3:16:09 PM



## Well Header

|   |                                    |                                       |
|---|------------------------------------|---------------------------------------|
| API<br>05-123-15502                                     | Well Report Center<br>425859176    | Well Configuration Type<br>VERTICAL   |
| Original KB Elevation (ft)<br>4,736                     | KB - GL / MSL (ftKB)<br>10.00      | Spud Date<br>1/12/1992                |
| Production Route<br>Watt - C2-07                        | Well Production Status<br>SI       | SoRT Ignore<br>No                     |
| Directions To Well<br>WCR 33 & WCR 42, E 3/8, N, E INTO | Actual Latitude (°)<br>40.29513000 | Actual Longitude (°)<br>-104.74165000 |

Comment  
01/04/2010: FISH TAGGED @ 7206'. FISH CONSISTS OF BAKER LOK-SET PACKER, "K" VALVE, 3 7/8" OVERSHOT, 8 JNTS 2 3/8" TBG, SAFETY JNT, 10 JNTS 2 3/8" TBG, BULLDOG BAILER, 2 3/8" X 4' TBG SUB, 5' CUT OFF TBG.

RBP STUCK AT BOTTOM OF HOLE

TD DISCREPANCY: ST COMP RPT 7350', DRL RPT 7303', LOGGER TD 7361', PROD CSG SET @ 7358' KB, USED LOGGER TD

SURF CSG DEPTH DISCREPANCY: ST COMP RPT @ 522', DRL RPT @ 532', CSG STRING LENGTH = 522', KB DIFF = 10. USED DRL RPT.  
PROD CSG DEPTH DISCREPANCY: ST COMP RPT @ 7347', DRL RPT @ 7358', KB DIFF = 10. USED DRL RPT.

WELLHEAD IS 5000# WP, 3000# BACKSIDE VALVE RATING

## Congressional Location

|                 |                 |               |               |                      |             |                    |
|-----------------|-----------------|---------------|---------------|----------------------|-------------|--------------------|
| Quarter 3<br>NW | Quarter 4<br>SE | Section<br>23 | Township<br>4 | Twntshp N/S Dir<br>N | Range<br>66 | Range E/W Dir<br>W |
|-----------------|-----------------|---------------|---------------|----------------------|-------------|--------------------|

## Rig Operator

Rig Operator

## Plug Back Total Depths

| Date     | Depth (ftKB) | Method | Com                         |
|----------|--------------|--------|-----------------------------|
| 1/4/2010 | 7,206.0      | TAG    | TAGGED TOP OF FISH AT 7206' |

## Wellbore Sections

| Section Des | Size (in) | Act Top, MD (ftKB) | Act Btm, MD (ftKB) |
|-------------|-----------|--------------------|--------------------|
| SURFACE     | 12 1/4    | 10                 | 540                |
| PRODUCTION  | 7 7/8     | 540                | 7,361              |

## Zone Statuses

| Zone Name | Status Date | Status |
|-----------|-------------|--------|
| NIOBRARA  | 11/8/2013   | PR     |
| CODELL    | 5/9/2017    | SI     |

## Casing Strings

### Surface, 532.0ftKB

| Casing Description | Run Date  | OD (in) | Wt/Len (l...) | Grade | Top, MD (ft...) | MD (ftKB) |
|--------------------|-----------|---------|---------------|-------|-----------------|-----------|
| Surface            | 1/13/1992 | 8 5/8   | 24.00         |       | 10.0            | 532.0     |

### Production, 7,358.0ftKB

| Casing Description | Run Date  | OD (in) | Wt/Len (l...) | Grade | Top, MD (ft...) | MD (ftKB) |
|--------------------|-----------|---------|---------------|-------|-----------------|-----------|
| Production         | 1/17/1992 | 4 1/2   | 11.60         | 1-70  | 10.0            | 7,358.0   |

## Cement

| Des                      | Start Date | Top (ftKB) | Btm (ftKB) |
|--------------------------|------------|------------|------------|
| Surface Casing Cement    | 1/13/1992  | 10.0       | 532.0      |
| Production Casing Cement | 1/17/1992  | 3,936.0    | 5,018.0    |
| Production Casing Cement | 1/17/1992  | 6,473.0    | 7,358.0    |

## Proposed Cement

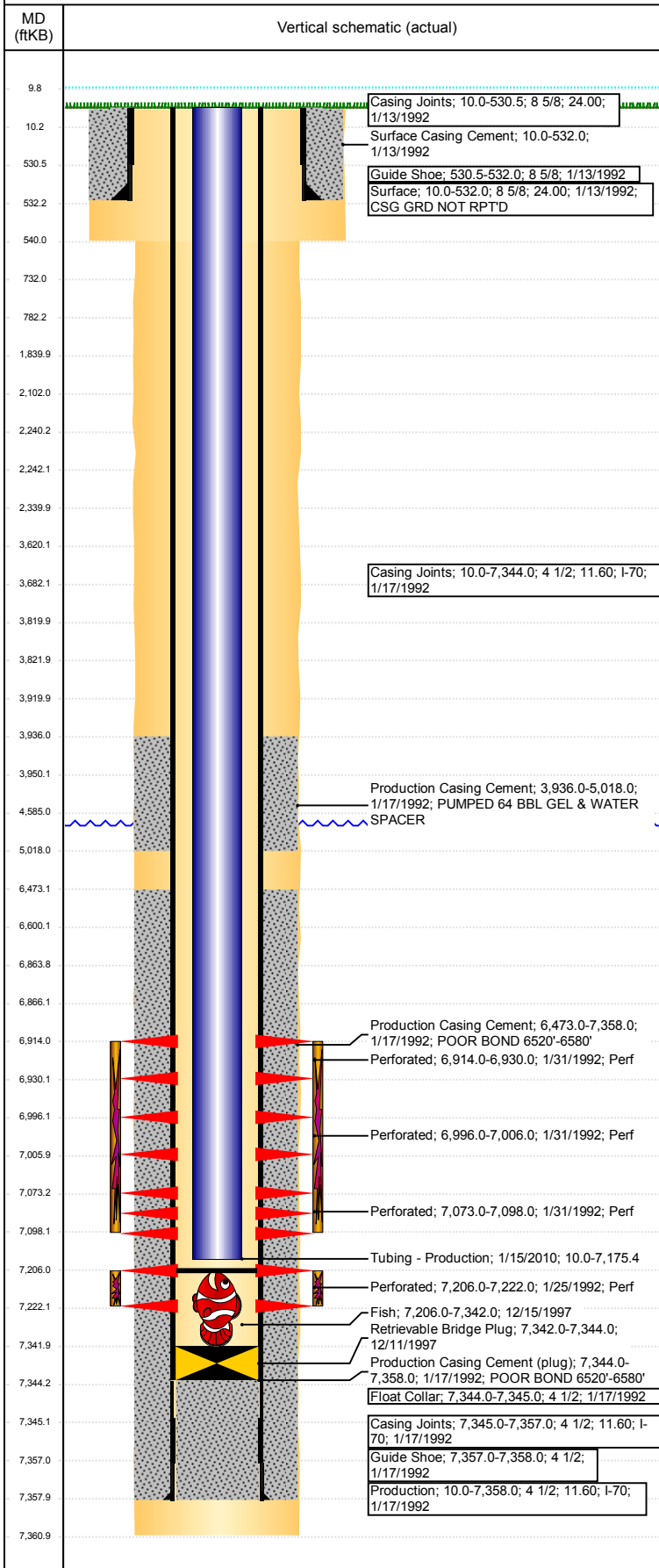
| Des          | Top (ftKB) | Btm (ftKB) |
|--------------|------------|------------|
| Balance Plug | 732.0      | 782.0      |
|              | 10.0       | 732.0      |
| Balance Plug | 2,242.0    | 2,340.0    |
|              | 2,102.0    | 2,240.0    |
|              | 3,620.0    | 3,920.0    |
|              | 1,840.0    | 2,340.0    |
| Balance Plug | 3,822.0    | 3,920.0    |
|              | 3,682.0    | 3,820.0    |
| Balance Plug | 6,600.0    | 6,864.0    |
| Balance Plug | 3,950.0    | 4,585.0    |

## Tubing Strings

| Tubing Description  | Run Date  | String... | ID (in) | Wt (lb/ft) | Grade | Len (ft) | Set De... |
|---------------------|-----------|-----------|---------|------------|-------|----------|-----------|
| Tubing - Production | 1/15/2010 | 2 3/8     | 2.00    | 4.70       | J-55  | 7,165.41 |           |

**Well Name: HSR-VICKI 10-23**

VERTICAL - ORIGINAL HOLE, 6/13/2018 3:16:10 PM



| Tubing Components |         |            |       |     |          |            |                  |
|-------------------|---------|------------|-------|-----|----------|------------|------------------|
| Item Des          | OD (in) | Wt (lb/ft) | Grade | Jts | Len (ft) | Btm (ftKB) | Btm (TVD) (ftKB) |
| EUE 8rd Tubing    | 2 3/8   | 4.70       | J-55  | 228 | 7,163.76 | 7,173.8    |                  |
| Seal Nipple       | 2 3/8   |            |       | 1   | 1.15     | 7,174.9    |                  |
| Notched collar    | 2 3/8   |            |       | 1   | 0.50     | 7,175.4    |                  |

| Other In Hole |                         |         |            |            |
|---------------|-------------------------|---------|------------|------------|
| Run Date      | Des                     | OD (in) | Top (ftKB) | Btm (ftKB) |
| 12/11/1997    | Retrievable Bridge Plug | 4       | 7,342.0    | 7,344.0    |
| 12/15/1997    | Fish                    | 2 3/8   | 7,206.0    | 7,342.0    |

| Proposed Other In Hole |         |            |            |
|------------------------|---------|------------|------------|
| Des                    | OD (in) | Top (ftKB) | Btm (ftKB) |
| Cast Iron Bridge Plug  | 4       | 6,864.0    | 6,866.0    |
| Cement Retainer        | 4       | 3,820.0    | 3,822.0    |
| Cement Retainer        | 4       | 2,240.0    | 2,242.0    |

| Logs      |                     |                |                |
|-----------|---------------------|----------------|----------------|
| Date      | Type                | Top, MD (ftKB) | Btm, MD (ftKB) |
| 1/17/1992 | COMPENSATED DENSITY | 4,330.0        | 7,358.0        |
| 1/17/1992 | INDUCTION           | 533.0          | 7,359.0        |
| 1/23/1992 | CEMENT BOND         | 3,850.0        | 7,311.0        |

| Perforation Data        |                           |            |            |           |
|-------------------------|---------------------------|------------|------------|-----------|
| Linked Zone             | Sum of Entered Shot Total | Top (ftKB) | Btm (ftKB) | Date      |
| NIOBRARA, ORIGINAL HOLE | 8                         | 6,914.00   | 6,930.00   | 1/31/1992 |
| NIOBRARA, ORIGINAL HOLE | 7                         | 6,996.00   | 7,006.00   | 1/31/1992 |
| NIOBRARA, ORIGINAL HOLE | 4                         | 7,073.00   | 7,098.00   | 1/31/1992 |
| CODELL, ORIGINAL HOLE   | 32                        | 7,206.00   | 7,222.00   | 1/25/1992 |
| <b>Total (Sum)</b>      | <b>51</b>                 |            |            |           |

| Proposed Perforations |              |                  |            |           |
|-----------------------|--------------|------------------|------------|-----------|
| Linked Zone           | Sum of En... | Top Depth (ftKB) | Btm (ftKB) | Date      |
|                       | 0            | 2,340.00         | 2,340.00   | 3/27/2018 |
| Linked Zone           | Sum of En... | Top Depth (ftKB) | Btm (ftKB) | Date      |
|                       | 0            | 3,920.00         | 3,920.00   | 3/27/2018 |
| <b>Total (Sum)</b>    | <b>0</b>     |                  |            |           |

| Job Supply Amounts |      |        |              |          |          |
|--------------------|------|--------|--------------|----------|----------|
| Supply Item Des    | Type | Uni... | Job Category | Total... | Total... |