

**Willett 1**  
**40.616686 / -103.994599**  
**05-123-14040**

**Willett 1 Procedure**

1. Survey and locate plugged wellbore. Set a stake and record as-drilled GPS coordinates.
2. Excavate around wellbore to expose the top of the surface casing.
3. Cut existing cap off wellbore. Weld a slip collar to 8-5/8" casing and necessary length of casing to reach ground level. Weld another 8-5/8" slip collar.
4. MIRU workover rig.
5. Install wellhead and BOP. Test BOP.
6. PU and RIH with 6-1/4" tricone bit, 10 3-1/2" drill collars, and 2-7/8", 6.5#, L80, EUE workstring.
7. Drill out 1st surface cement plug and circulate hole clean.
8. Continue drilling or RIH to top of 2<sup>nd</sup> surface casing plug. Record depth of plug.
9. Pressure test surface casing to 250 psi. If surface casing fails pressure test, contact engineer and hunt holes.
10. After pressure test of surface casing, drill out surface casing plug. If pressure is encountered below surface casing plug, circulate hole with mud or kill fluid until well is dead or blown down.
11. POOH and LD 6-1/4" tricone bit.
12. PU and RIH with mule shoe and 2-7/8" L80 tubing down to 6184'.
13. RU cement crew, pressure test lines to 4,500 psi, and spot plug from 6184'-5884' with class G cement (100 sks) to cover the Niobrara formation.
  - **FROM THIS POINT MOVING FORWARD:** Must wait a sufficient time on all subsequent plugs to confirm static conditions. If at any time after placing this plug there is evidence of pressure or of fluid migration, contact engineer before continuing operations.
  - **IF CIRCULATION IS NOT MAINTAINED WHILE PUMPING PLUG:**
    - i. POOH to surface casing. Wait 4 hours and tag TOC. Record tag depth. If tag is deeper than 5984', contact engineer.
14. POOH and spot plug from 1591'-1441' with class G cement (50 sks) to cover the Pierre formation.
15. POOH to surface casing. Wait 4 hours and tag TOC. Record tag depth. If tag is deeper than 1491', contact engineer.
16. POOH and spot plug from 556' to surface with class G cement (186 sks).
17. POOH and wait 4 hours. Tag TOC if not set at surface. Record tag depth. If tag is deeper than 272', contact engineer.
18. RDMO. Top off cement after rig has moved, if necessary.
19. After surface plug has set, cut casing to 5' below ground level and weld on a plate to seal the well.
20. Inscribe the well's legal location, well name and number, and API number on the plate as shown:

1980' FSL, 660' FEL, NESE Sec 32, T8N, R59W
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21. Photograph welded name plate and send to engineer before proceeding.
22. After confirmation from engineer is received, backfill hole and reclaim surface to original conditions.
23. Cover up the well and remediate the disturbed area.

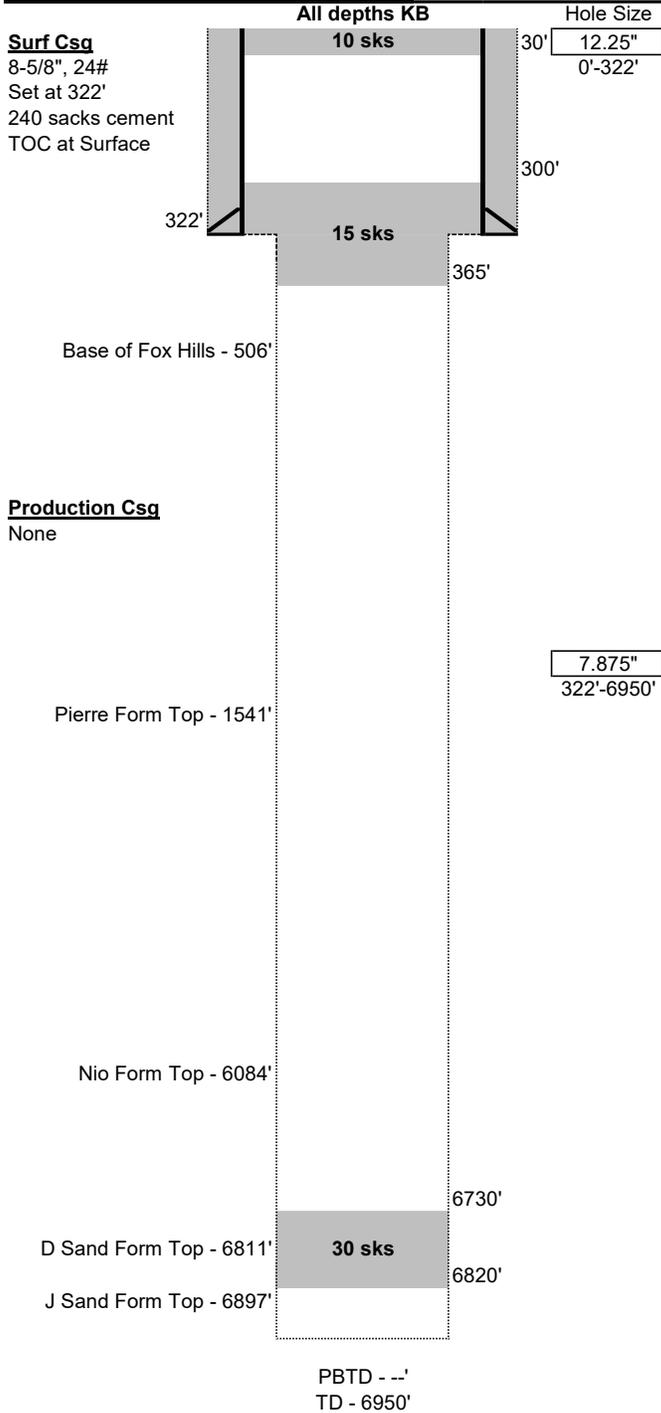
## Willett 1 Cement Plug Table

CEMENT PLUG TABLE													
Plug Number	Plug Status	Plug Location	Formation	Plug Bottom Depth	Plug Top Depth	Cement Class	Yield (ft <sup>3</sup> /sk)	Number of Sacks		Must Be Tagged?	Maximum Tag Depth	New Sks Required	New Sks Required w/ (10% SF)
1	Existing	Open Hole	D Sand	6820'	6730'	Unknown	Unknown	30		No	N/A	336	370
2	New	Open Hole	Niobrara	6184'	5884'	G	1.15	100		Possibly	5984'		
3	New	Open Hole	Pierre	1591'	1441'	G	1.15	50		Yes	1491'		
4.1	New	Open Hole	Fresh Water	556'	322'	G	1.15	76	186	Possibly	272'		
4.2	New	Casing	Fresh Water	322'	Surface	G	1.15	110					

### Current Wellbore Schematic

Well Name: Willett 1  
 Location: 1980' FSL, 660' FEL, NESE Sec 32, T8N, R59W  
 County: Weld  
 API #: 05-123-14040  
 Co-ordinates: 40.616686 / -103.994599  
 Elevations:       GROUND: 5000'  
                       KB: 5010'  
 Depths (KB):       PBTD: --  
                       TD: 6950'

Date Prepared: 4/26/2024  
 Last Updated: 4/26/2024  
 Spud Date: 8/27/1988  
 Completion Start Date: 9/2/1988  
 Last Workover Date: 9/3/1988  
 Prepared by: Jake Van Bramer  
 Updated by: --



**Surface Casing:**  
 Drilled 12-1/4" surface hole to 322'  
 Set 8-5/8", 24# casing at 322'  
 Cemented with 240 sks  
 TOC at Surface

**Production Casing:**  
 Drilled 7-7/8" production hole to 6,950'  
 No casing set

**Open Hole:**  
 7-7/8" Open Hole from 322'-6,950', expected to be washed out

**Tubing:**  
 None

**Rods:**  
 None

**Perforations:**  
 None

**P&A Plugs:**  
 1. 10 sks from 30' to surface  
 2. 15 sks from 300'-365'  
 3. 30 sks from 6,730'-6,820'

**Additional Notes:**

**Initial Potential Test:**

**Formation Tops:**

Base of the Fox Hills	506'
Pierre	1541'
Niobrara	6084'
D Sand	6811'
J Sand	6897'

### Proposed Wellbore Schematic

Well Name: Willett 1  
 Location: 1980' FSL, 660' FEL, NESE Sec 32, T8N, R59W  
 County: Weld  
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 Elevations: GROUND: 5000'  
                   KB: 5010'  
 Depths (KB): PBTD: --  
                   TD: 6950'

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