

Instructions: This form is to be filled out by the driller or the driller's assistant. It is to be filled out daily during drilling or deepening. It is to be filled out daily during work performed. Number of hours worked during the day is to be reported. Work performed by Production Section A is to be reported on "Interim" sheets until final completion. Report on "Final" form. Submit "Interim" sheets when filled out but not less frequently than every 30 days, or (2) on Wednesday of the week in which the string is set. Submit weekly for workovers and following setting of oil string until completion.

District Western	County or Parish Columbia	State OR
Field Bison	Lease or Unit Columbia County	Well no. 31-27-65

Date and depth as of 6:00 a.m.	Complete record for each day while string or workover in progress
6	<p>August 25, 1987                      TD: 3104'(514') - Drilling (9-7/8" @ 994')                      MUD: 10.4 ppg VIS: 44</p> <p>POOH (tight hole). Bit change. RIH. CBU. Drilled 8-1/2" hole 2590' - 2836'. Wiper trip. Drilled 8-1/2" hole 2836' - 3104'.</p>
7	<p>August 26, 1987                      TD: 3197'(93') - Drilling (9-7/8" @ 994')                      MUD: 10.8 ppg VIS: 44</p> <p>POOH. RIH - tight hole. Worked and reamed 1381' - 3104'. Circulated and conditioned mud. Wiper trip - still tight in spots. RIH. Drilled 8-1/2" hole 3104' - 3197'.</p>
8	<p>August 27, 1987                      TD: 3229'(32') - Drilling (9-7/8" @ 994')                      MUD: 10.8 ppg VIS: 45</p> <p>Drilled 8-1/2" hole 3197' - 3221'. Wiper trip (10 stand). Drilled 8-1/2" hole 3221' - 3223'. POOH. Tight 2101' - 1042'. CBU @ 1682' - 660 units. RIH to TD. CBU. POOH. Bit change. RIH. Drilled 8-1/2" hole 3223' - 3229'.</p>
9	<p>August 28, 1987                      TD: 3276'(47') - RIH core barrel (9-7/8" @ 994')                      MUD: 10.9 ppg VIS: 42</p> <p>Drilled 8-1/2" hole 3229' - 3232'. Bit trip. Drilled 8-1/2" hole 3232' - 3276'. Wiper trip. CBU. POOH. PU core barrel. RIH.</p>
12	<p>August 31, 1987                      TD: 3525'(249') - CBU (9-7/8" @ 994')                      MUD: 10.8 ppg VIS: 42</p> <p>Core #1 3276'-3306'. POOH. (cut 30', recovered 30'-100%). RIH. Drilled 8-1/2" hole 3306'-3347'. Short trip. CBU. POOH. RIH core barrel. Core #2 3347'-3377' POOH (cut 30', recovered 30'-100%). RIH. Drilled 8-1/2" hole 3377'-3525'.</p>
13	<p>September 01, 1987                      TD: 3627'(102') - Drilling (9-7/8" @ 994')                      MUD: 10.8 ppg VIS: 50</p> <p>POOH. RIH core barrel. Core #3 3525'-3555' (30'). POOH. Recovered 29' (97%). Tested BOPE. RIH Drilled 8-1/2" hole 3555'-3627'.</p>

Signature <i>Randy Thomas</i>	Date 3/11/88	Title District Drilling Engineer
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For form preparation and distribution see Procedures Manual Section 10. Drilling, Pages 86 and 87.

Instructions: This form is used to record drilling operations. It is to be filled out by the driller or his assistant. It should be filled out for each day of drilling, including days when drilling was suspended. Number of air stem tests, mud weight, and other data should be recorded. Work performed by Producing Section will be recorded on "Interim" sheets and "Final" completion. Report of loss of circulation or lost circulation "Final" form. Submit "Interim" sheets when filled out, but not less frequently than every 30 days, or (2) on Wednesday of the week in which drilling is set. Submit weekly for workovers and following setting of c/s string, until completion.

District <i>Western</i>	County or Parish <i>Columbia</i>	State <i>OR</i>
Field <i>West</i>	Lease or Unit <i>Columbia County</i>	Well no. <i>31-27-65</i>

Date and depth as of 8:00 a.m. Complete record for each day when drilling or workover in progress

14	September 02, 1987 TD: 3785' (158') - RIH (9-7/8" @ 994') MUD: 10.8 ppg VIS: 42  Drilled 8-1/2" hole 3627'-3785'. CBU. Start to trip out - tight hole 3733'-3562'. Blew kelly hose while working pipe at 3733' - Pipe became free at 3562'. POOH. Replaced kelly hose. RIH.
15	September 03, 1987 TD: 4000'(215') - Drilling (9-7/8" @ 994') MUD: 10.7 ppg VIS: 47  Reamed 3500'-3785'. Drilled 8-1/2" hole 3785'-4000'.
16	September 04, 1987 TD: 4255'(255') - Drilling (9-7/8" @ 994') MUD: 11.1 ppg VIS: 45  Drilled 8-1/2" hole 4000'-4081'. CBU. POOH (tight at 3750'). Bit change. RIH. Drilled 8-1/2" hole 4081'-4235'. Wiper trip (tight 4235'-4135'). Drilled 8-1/2" hole 4235'-4255'.
20	September 08, 1987 TD: 5044'(789') - Drilling (9-7/8" @ 994') MUD: 11.1 ppg VIS: 43  Drilled 8-1/2" hole 4255'-4816' with frequent wiper trips to control tight hole. Bit trip. Drilled 8-1/2" hole 4816'-5044'.
21	September 09, 1987 TD: 5221'(177') - Drilling (9-7/8" @ 994') MUD: 11.1 ppg VIS: 40  Drilled 8-1/2" hole 5044'-5221' with intermittent wiper trips.
22	September 10, 1987 TD: 5408'(187') - Drilling (9-7/8" @ 994') MUD: 11.1 ppg VIS: 47  Drilled 8-1/2" hole 5221'-5408' with intermittent wiper trips.
23	September 11, 1987 TD: 5527'(119') - Drilling (9-7/8" @ 994') MUD: 11.2 ppg VIS: 45  Drilled 8-1/2" hole 5408'-5479'. POOH - hole in good shape. Tested BOPE. RIH. Drilled 8-1/2" hole 5479'-5527'.

The above is correct

Signature <i>[Signature]</i>	Date <i>3/11/88</i>	Title <i>District Drilling Engineer</i>
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For form preparation and distribution see Procedures Manual, Section 10, Drilling, Pages 66 and 67

Instructions: This form is used to report drilling and workover operations. It is to be filled out by the driller or operator, show format of name in recording work performed. Number of bit string tests (including) and depth (in feet) of all cores. Work performed by Producing Section will be recorded on "Interim" sheets until final completion. Report of final or workover test on "Final" form. Submit "Interim" sheets when filled out but not less frequently than every 30 days, or (2) on Wednesday of the week in which bit string is set. Submit weekly for workovers and following setting of oil string until completion.

District <i>Western</i>	County or Parish <i>Columbia</i>	State <i>OR</i>
Field <i>West</i>	Lease or Unit <i>Columbia County</i>	Well no. <i>31-27-65</i>

Date and depth as of 8:00 a.m.	Complete record for each day while drilling or workover in progress
26	<p>September 14, 1987                      TD: 5952'(425') - Drilling (9-7/8" @ 994')                      MUD: 10.9 ppg VIS: 47</p> <p>Drilled 8-1/2" hole 5527'-5952'.</p>
27	<p>September 15, 1987                      TD: 6038'(86') - Drilling (9-7/8" @ 994')                      MUD: 11.0 ppg VIS: 52</p> <p>Drilled 8-1/2" hole 5952'-5977'. Bit trip. Drilled 8-1/2" hole 5977'-6038'.</p>
28	<p>September 16, 1987                      TD: 6184'(146') - Drilling (9-7/8" @ 994')                      MUD: 11.0 ppg VIS: 45</p> <p>Drilled 8-1/2" hole 6038'-6184'.</p>
29	<p>September 17, 1987                      TD: 6346'(162') - Drilling (9-7/8" @ 994')                      MUD: 11.0 ppg VIS: 45</p> <p>Drilled 8-1/2" hole 6184'-6346'.</p>
30	<p>September 18, 1987                      TD: 6526'(180') - Drilling (9-5/8" @ 994')                      MUD: 11.0 ppg VIS: 43</p> <p>Drilled 8-1/2" hole 6346'-6526'.</p>
33	<p>September 21, 1987                      TD: 6700'(174') - POOH (9-5/8" @ 994')                      MUD: 11.0 ppg VIS: 48</p> <p>Drilled 8-1/2" hole 6526'-6700'. <u>Ran DIL/SONIC/CAL 6702'-994' (wireline depth).</u> <u>Ran waveforms 6702'-2350'.</u> <u>Ran FDC/CNL/CAL 6702'-4400'.</u> RIH for wiper trip.</p>
34	<p>September 22, 1987                      TD: 6700'(0') - Run VSP (9-5/8" @ 994')                      MUD: 11.1 ppg VIS: 43</p> <p><u>Ran dipmeter 2400'-994'.</u> <u>Ran two guns of SWC (shot 60 total, recovered 49, 11 misfires).</u> Wiper trip. RIH VSP.</p>

The above is correct

Signature <i>Randy [Signature]</i>	Date <i>3/11/88</i>	Title <i>District Drilling Engineer</i>
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For form preparation and distribution see Procedures Manual Section 10, Drilling, Pages 86 and 87

Instructions: This form is used to record the daily activities of a well during the period of completion. It is to be filled out by the well operator or the well engineer. The information should be recorded on this form as soon as possible after the completion of the well. The information should be recorded on this form as soon as possible after the completion of the well. The information should be recorded on this form as soon as possible after the completion of the well.

District	County or Parish	State
Field	Lease or Unit	Well No.
Date and depth as of 8:00 a.m.	Complete record for each day while drilling or workover in progress	

35 September 23, 1987  
 TD: 6700'(0') - Run VSP (9-5/8" @ 994')  
 MUD: 11.1 ppg VIS: 43  
Ran VSP (50' stations). Stuck wireline at ± 2100' (top of tool 5741'). Strip over wireline to 3543' - wireline free. Pulled tool into overshot. Pull out of rope socket. Chain out of hole. Did not recover fish. RIH overshot. Circ and work over fish 6676'-6678' (had 175 psi increase). POOH (chain out).

36 September 24, 1987  
 TD: 6700'(PBD: 1650') - Lay down drill pipe (9-5/8" @ 994')  
 MUD: 11.1 ppg VIS: 43  
 Chain out - recovered fish. RIH 8-1/2" bit to 1800'. Circ and condition mud. POOH. Ran VSP 1700'-225'. RIH OEDP to 1805'. Lay balanced plug 1805'-1650' with 53 sx class "G" cement with 2% CaCl<sub>2</sub> (mixed at 15.8 ppg). CIP 0038 hr 9/24/87. POOH 3 stands. CBU.

37 September 25, 1987  
 TD: 6700'(PBD: 1600') - ND BOPE (9-5/8" @ 994')  
 Completion Fluid: Fresh water  
 LD drill pipe. RIH 8-1/2" bit. Tag TOC 1690'. Drilled firm cement to 1700'. Circ and cond mud. Wiper trip. CBU. POOH. Ran 40 jt 5-1/2" 17# K-55 casing (shoe at 1690', float collar at 1600'). CBU. Cemented with 300 sx class "G" cement with 5% KCl and 1% Halad 322 (mixed at 16.4 ppg) tailed with 200 sx class "G" cement with 5% KCl, 1% Halad 322 and .2% Super CBL (mixed at 16.8 ppg). Good circ with 3 bbl cement returns. Bumped plug with 1400 psi. Floats held. CIP 0120 hr 9/25/87. Landed casing. Made rough cut.

38-1/2 September 28, 1987  
 TD: 6500'(PBD: 1600') - Rig released (9-5/8" @ 994')  
 NU tubing spool. NU BOPE. RIH bit and scraper to top of float collar at 1600'. CBU. Tested casing to 1000 psi. POOH. RIH 2-3/8" tubing. Landed tubing with tail at 1480'. ND BOPE. NU tree. Test to 5000 psi. RD equipment. Released rig 1500 hr 9/26/87

The above is correct

Signature	Date	Title
<i>[Signature]</i>	3/1/88	District Drilling Engineer

For form preparation and distribution see Procedures Manual Section 10, Drilling, Pages 86 and 87