

Instructions: This form is to be filled out by the driller or his representative. It is to be filled out daily and submitted to the District Drilling Engineer. It is to be filled out daily and submitted to the District Drilling Engineer.

District Western	County Columbia	State Oregon
Field Mist	County Columbia	Well No. 31-27-65
Author of A.O.C. AFE - R46575,	Title DRILL	

SHL: 1050'S and 1650'W of the NE Corner, S27./T6N/R5W MDB&M, Columbia County

Operator ARCO Oil and Gas Co.	ARCO No. 100
Spudded or W.C. begun Spudded	Date 8/19/87
	Hour 1130 Hrs.
Date and hour as of 8:00 a.m.	Program No. of A.O.C.

- 1 August 21, 1987  
TD: 784' (744') - Drilling 12-1/4" hole (13-3/8" @ 40')  
MW: 9.4 VIS: 48 WL: 6.0  
  
Finish RU. Spudded 1130 hrs. 8-19-87. Drilled 12-1/4" hole to 784'. Survey: 1/4° @ 507'. Final survey location: 1842.07' W and 762.15' S from NE corner, Sec 27 T6N R5W. GLE = 748.39'
- 2 August 21, 1987  
TD: 996' (212') - Welding on 9-7/8" casing head (9-5/8" @ 994')  
MW: 9.4 VIS: 48 WL: 6.0  
  
Continued drilling 12-1/4" hole to 996' and CBU. Made wiper trip to surface due to excess drag, and recovered large clay ball around bit. TIH, CBU, and made short trip, OK. RU and ran 26 jts 9-5/8", 36 #/ft K-55 STC casing with FS @ 994' and FC @ 946'. Cemented casing with 428 sx "G" + 2% CaCl<sub>2</sub> + 1/4 #/sx Flocele, mixed @ 15.8 ppg. Full returns and reciprocated casing throughout cementing operation. Approximately 6 bbls cement returned to surface and floats held, OK. CIP @ 2121 hrs, 8/20/87. WOC for 2 hrs, cut off 9-5/8" stub and set 9-5/8" X 11" 3000# SOW casing head. Survey: 1-1/4° @ 965'.
- 5 August 24, 1987  
TD: 2590'(1594') - Circulate @ 1909' (9-5/8" @ 994')  
MUD: 10.2 ppg VIS: 39  
  
NU BOPE. Tested same. RIH 8-1/2" bit. Clean out float equipment and cement (casing tested to 1000 psi). Drilled 8-1/2" hole 996'-1006'. Circulated and conditioned mud. PIT 15.0 ppg EMW. Drilled 8-1/2" hole 1006'-1527'. Wiper trip (tight). Drilled 8-1/2" hole 1527'-1690'. (290 units @ 1565', estimated top Clark & Wilson 1555'). Both pumps down. Pull into shoe. Repaired pump. RIH. Drilled 8-1/2" hole 1690'-2020'. Wiper trip. Drilled 8-1/2" hole 2020'-2526'. POOH to 2114' for wiper trip (tight). RIH. Drilled 8-1/2" hole 2526'-2590'. Stage out of hole to 1909'(tight hole).

The above is correct

Signature <i>[Signature]</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.