

Harvey E. Yates Co., Inc.
Cedar Hills Unit No. 2
Down Hole Equipment Changes

Tubing Installation March 9, 1977:

Top To Bottom:

KB to tubing flange:	16.00'
1 - jt. 2 7/8", 6.50#, N-80, EUE tubing:	29.66
1 - sub, 2 7/8", N-80	4.16
1 - sub, 2 7/8", N-80:	8.25
380 - jts., 2 7/8", N-80 tubing:	11,193.59
1 - Otis, OSTD, 5 1/2" x 2" with 2" "X" profile - 1.875" I.D.:	1.36
381 - Joints Total:	<u>11,253.02'</u>

Tubing landed on O.S.T.D. mandrel on 5 1/2" Otis R.H. packer at 11,254 KB. with 15,000# compression. O.S.T.D. overshot run with locking lugs - lugs did not engage on mandrel.

Detail of down hole equipment below 11,254':

KB to Otis R.H. packer:	11,254.00
1 - Otis 5 1/2" x 2" R.H. packer (1.93" I.D.)	4.11
2 - jts. 2 3/8", 4.70#, N-80, EUE tubing:	63.19
2 - blast joints, 3 1/16" x 2 3/8"	39.97
1 - jts. 2 3/8", N-80 tubing:	31.67
3 - 2 3/8", N-80 subs (6'-4'-8');	18.50
2 - blast joints, 3 1/16" x 2 3/8";	39.86
1 - 2 3/8", N-80 sub:	8.24
1 - Otis 2 3/8" XO sleeve:	2.45
1 - 2 3/8", N-80 sub:	7.92
1 - Otis 5 1/2" x 2 3/8" O.S.T.D. with 1.791" no-go "N" profile;	1.12
1 - 2 3/8" x 2 7/8" swedge	0.40
1 - Baker 5 1/2" Lok-Set packer:	<u>3.45</u>

Landing Depth:	11,474.68'
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