

END OF WELL SCHEMATIC

Well Name: HOUCK COM 1B
 API #: 30-045-30139

Spud Date: 26-Aug-01

Rig Release Date: 01-Sep-01

7 1/16" 5M x 2 1/16" Tree Adapter/Cap
 11" 3M x 7 1/16" 5M Tubing Head
 11" 3M x 11" 3M Casing Spool
 9-5/8" 8 RD x 11" 3M Casing Head

Surface Casing Date set: 08/27/01 New
 Used
 Size 9 5/8 in
 Set at 313 ft # Jnts: 7
 Wt. 36 ppf Grade J-55
 Hole Size 12 1/4 in
 Wash Out 54 % Csg Shoe 313 ft
 Est. T.O.C. 0 ft TD of surface 315 ft

Cement Date cmt'd: 08/27/2001
 Lead : 139 SX TYPE III, 2% CACL+ 0.25
PPS CELLO FLAKE
 Tail : _____
 Displacement vol. & fluid.: WATER 20 BBLS
 Bumped Plug at: 4:45
 Pressure Plug bumped: 120
 Returns during job: Yes
 Returns to surface: 8 BBLS
 Floats Held: x Yes No
 W.O.C. for 29.5 hrs (plug bump to drig cmt)

Intermediate Casing Date set: 08/29/01 New
 Used
 Size 7 in
 Set at 1884 ft # Jnts: 44
 Wt. 20 ppf Grade J-55
 Hole Size 8 3/4 in
 Wash Out 15 % Csg Shoe 1884 ft
 Est. T.O.C. SURF TD of intermediate 1884 ft

Cement Date cmt'd: 08/29/2001
 Lead : see comments below

 Displacement vol. & fluid.: 75 BBLS WATER
 Bumped Plug at: 19:30:00 PM
 Pressure Plug bumped: 1200
 Returns during job: Y
 Returns to surface: 40 bbbls
 Floats Held: X Yes No
 W.O.C. for 18 hrs (plug bump to drig cmt)

Production Casing Date set: 09/01/01 New
 Used
 Size 4 1/2 in
 Wt. 10.5 ppf Grade J-55 from 0 to 5144 ft
 Wt. _____ ppf Grade _____ from _____ to _____ ft
 Hole Size 6 1/4 in # Jnts: 122 #
 Wash Out: ? %
 Est. T.O.C. 1000 ft
 Marker jnt @ 3763 ft FC 5099 ft
 Csg Shoe 5144 ft

Cement Date cmt'd: 09/01/2001
 Lead : SEE COMMENTS

81 bbbls disp
 Displacement vol. & fluid.: 2 % KCL WATER
 Bumped Plug at: 6:51
 Pressure Plug bumped: 1865
 Returns during job: N
 Returns to surface: *NO
 Floats Held: X Yes No

Mud Wt. @ TD Air ppg TD 5,144 ft

COMMENTS:

Surface: CIRC 8 BBLS CMT TO SURFACE.
 Intermediate: 236 SX PREM LITE+8% GEL +.25 PPS CELLO FLAKE+2%CALC, TAIL-80 SX TYPE III +.25 PPS CELLO FLAKE+2% CACL
 Production: LEAD: 131 SX PREMIUM LITE HIGH STRENGTH+.3 PPS CSE+.15%R3+.25 PPS CELLO FLAKE+.4% FL25+4% PHENO SEAL TAIL: 113 SX PREMIUM HIGH STRENGTH LITE+3 PPS CSE+.1 % R3+.25 PPS CELLO FLAKE+3% CD32+1% FL52+6% GEL+4% PHENO SEAL.

CENTRALIZERS:

Surface: 1,2,4,6 Total: 4
 Intermediate: 1,4,8,12,16,20,24,28,32,36,40 Total: 11
 Production: 1,2,6,10,14,22,26,30,34,38,42,46,50,54,58,62,66,70,74,76,80,82,84 Total: 24

*CBL run