

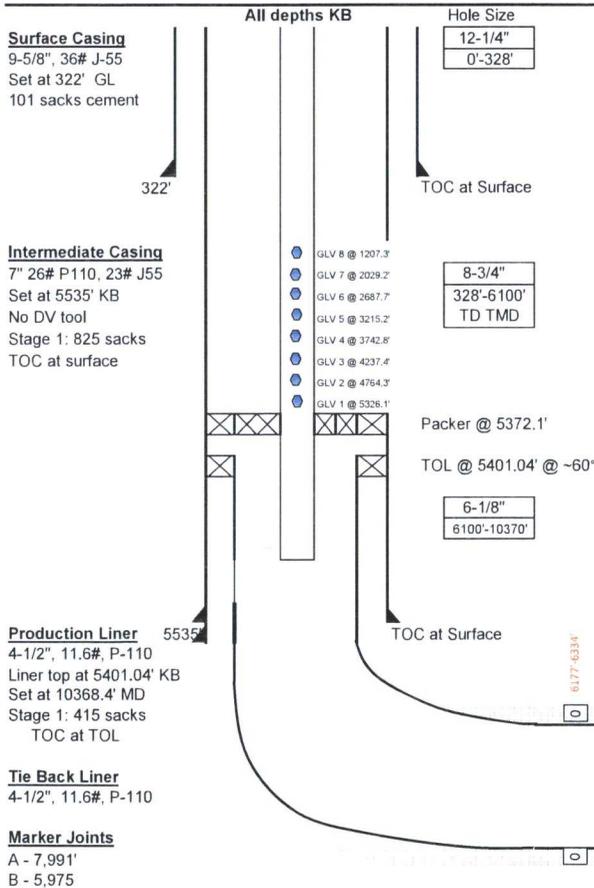


Wellbore Schematic

Well Name: Heros 2308 09L Com 2H
 Location: Sec 9, T23N, R8W, 147E FSL & 240' FWL
 County: San Juan
 API #: 30-045-35687
 Co-ordinates: 36.238493° N, 107.694840° W
 Operator: Logos Operating, LLC

Ground Elevation: 6913'
 KB Elevation: 6938'
 TVD: 5290'
 MD: 10371'
 PBD: 10324'
 Target Zone TVD: 5291'
 Length of Lateral: 4107'

Date Prepared: 6/5/2018
 Last Updated: 8/13/2018 RS
 Spud Date: 4/25/2018
 Completion Date: 7/15/2018
 Last Workover Date: 7/29/2018



Surface Casing/Cement: (4/25/18)
 Drilled a 12-1/4" surface hole to 328'. Ran 15 jts 9-5/8", 36#, J-55 casing at 322' GL. Cemented with 101 sx Class Halcem Cement; circulated 8 bbls of cement to surface.

Intermediate Casing/Cement: (5/21/18)
 Drilled a 8-3/4" intermediate hole to 6100' TMD. Ran 25 jts. of 7" 26# P110, 107 jts 7" 23# J55 LTC casing and set @ 5535' TMD. No DV tool.
 Stage 1 cemented lead w/ 545 sx (189 bbls) Halcem class G cement mixed @ 12.3 ppg. 1.95 yield. Tail w/ 280 sx (65 bbls) Varicem Cement mixed @ 13.5 ppg. 1.3 yield. Circulated 40 bbls of cement to surface.

Production Liner: (6/5/18)
 Drilled a 6-1/8" production liner hole to 10,370'. Set 113 jts of 4.5" P-110 11.60# casing @ 10,368.4'. TOL @ 5,401.04'. Stage 1 cemented with 415 sx (113.8 bbls) 13.3 ppg 1.36 yield Extendacem System. Circulated 26 bbls cement to liner top.

Tie Back Liner: (6/21/18)
 4-1/2", 11.6#, P-110 BTX, TOL @ 5401.04'. 4-1/2" psi test to 1500 psi recorded on chart for 30 minutes, test good. Increased psi to 4000# and recorded for 30 mins. test good. 4-1/2" x 7" casing was psi tested to 1500 psi on chart for 30 minutes, test was good. **POOH w/Tie Back Liner on 7/29/2018**

Completion:
 *See Completions tab.

Tubing Design: (7/29/18)		Gas Lift Valves:	
2-3/8" HALF MULE	1.55	Screened Orifice	4.1
2-3/8"-4.7#-J55 TAILPIPE	31.5	2-7/8"-6.5#-L80 TUBING	32.73
1.875" XN-NIPPLE	1	2.313" X-NIPPLE	1.25
2-3/8"-4.7#-J55 TAILPIPE	442.65	2-7/8"-6.5#-L80 TUBING	523.67
2-3/8" x 2-7/8" X-OVER	0.4	Gas Lift Valve	4.1
7.0" AS1-X CARBIDE PKR	7.4	2-7/8"-6.5#-L80 TUBING	522.79
ON/OFF TOOL W/2.25" F	1.8	Gas Lift Valve	4.1
4.20" PUP JOINT	4.2	2-7/8"-6.5#-L80 TUBING	490.48
2-7/8"-6.5#-L80 TUBING	32.71	Gas Lift Valve	4.1
		2-7/8"-6.5#-L80 TUBING	1177.36
		Gas Lift Valve	4.1
		2-7/8"-6.5#-L80 TUBING	523.5
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