



## UL 21 Yellowtail #1H

FIELD:	Phantom (Wolfcamp)	API #:	42-495-33769
LOCATION:	31°42'43.60" N, -103°14'54.25" W	AFE #:	O16095
ACTUAL: SL:	X= 1,093,591 Y= 755,797 BHL: X= 1,090,832 Y= 765,586		
CO, ST:	Winkler County, Texas	COMPLETED:	
STATUS:	DRILLED & CASED	DRLG Permit	820434
LATEST RIG WORKOVER:	Drilled by H&P 602, rig release 3/17/17		
DIAGRAM REVISED:	12/26/2017 by: Travis Salinas		

### CURRENT WELLBORE DIAGRAM

#### Surface Casing

Spacer: 20 bbl red dye. Stage 1 Lead: 505 sxs / 170 BBL, 12.9 ppg, 1.893 yield (175% XS) pumped @ 6 BPM. Pump Tail Halcem 185 SX / 44 BBL of 14.8 PPG 1.342 CF/SX (0% XS) @ 5 BPM. Displace w/ 118.5 BBL land plug w/ 400 psi & increase to 900 PSI, held for 5 min. Floats held, bled back 1/2 bbl. 100% returns through job, circulated 205 BBL to surface. Test Casing to 1,500 PSI for 30 min,

#### 1st Intermediate CSG

9-5/8" 40.0# HCL-80 LTC @ 0'-5,070'

Centralizer every 3rd joint to surface. Pump 20 bbl FW Gel spacer, Lead: 1,160 sxs (580 bbl) Neocem (150%XS) @ 11 ppg, 2.809 cf/sx. Tail: 155 sxs (37 bbl), HalCem 14.8 ppg, 1.332 cf/sx (20% XS). Displace 381 bbls of FW. Bump plug @ 3 BPM 1070 psi and raise to 1,200 psi. Hold 5 min, bled back 2 bbl. Floats holding. Full returns throughout job. Circulated 262 SX to surface.

#### CASING

	17-1/2"	12-1/4"	8-3/4"	6"	
Hole					
Casing	13-3/8"	9-5/8"	7"	4-1/2"	
Weight	68#	40#	32#	13.5#	
Grade	J-55	HCL-80	HCP-110	HCP-110	
Thread	BTC	LTC	LTC	Hydrl 563	
Top	0'	0'	0'	10,797'	
Bottom	835'	5,070'	12,211'	21,833'	
Mud wt	8.4 FW	10.2 BR	9.35 BR	13.7 OBM	
Burst	3,450	5,750	12,460	12,410	
Collapse	1,950	3,870	11,890	10,690	
Capacity	0.1497	0.0758	0.036	0.01493	

GROUND ELEV: 2,764.0' LOG ELEV: 2,789.0' KB: 25.0'

POP: FTP: 12,290' LTP: 21,802'

#### WELL HEAD PROGRAM

SECTION A: 13-5/8" 5M  
SECTION B: 13" 5M x 7-1/16" 5M  
SECTION C:  
TUBING HEAD ASSEMBLY: 7-1/16" 5K XO to 7-1/16" 15K  
TREE: 7-1/16" 5K x 2-9/16" 5K EE

#### COMPLETION HISTORY

Marker Joints: 11,225', 17,062.57', & 21,325.59'

20.89' PBR on Top of Liner

4-1/2" Production Liner Top 10,797' MD (xxx' CBL)

Float collar @ 21,824'

Weatherford Wet Shoe Sub set @ 21,824' MD

See other Worksheets in this file for Directional Surveys and Production Casing Details

See "perf schedule" tab for perforations.

Lateral DLS > 5 @ 13,798'

Projected Coordinate System: NAD 27 / Texas Central

Prod CSG: CBL TOC @ X,XXX'

7" 32# HCP-110 LTC @ ~75° @

0'-12,211'

Pump 180 bbl of 9.4 # down backside to induce flow, well flowing @ 4 bpm. Lead @ 7 bpm: 360 sx (196 bbl) @ 10.2#, 3.054 cf/sx. Tail @ : 470 sxs (100 bbl), HalCem H 15.6#, 1.196 cf/sx. Displace 436 bbls. Bump plug @ 1800 psi and raise to 2350 psi. Bled back 4.5 bbl. Full Returns. Displace thru 1" choke - 4 bbl in / 3 out. EST TOC @ 5,070'. Casing test good to

4-1/2" Production Liner Top  
10,797' MD (xxx' CBL)

KOP at 11,315' at 3.48 deg

FIT T/ 16.8 ppg EMW

For Stages and Cluster Data see Perf Schedule Tab

Toe Down

Float collar @ 21,824'  
Float shoe @ 21,833'  
TD 12,002'  
MD 21,843'

lowered OBM MW from 14.75 ppg to 14.3 ppg prior to liner cement job. Pump 30 bbls of 14.3 ppg tuned spacer, Versacem 132 bbls (605 sx) 14.5 ppg, 1.223 Yield, 5.65 gal/Sk Wash Up Lines, Drop DP Wiper dart, pump 20 bbls MMCR & 133 bbls of 2% KCL Substitute., 15 bbl of 14.5 ppg tuned spacer III, 99 bbls of OBM. Pump plug on time, final rate 2 bpm @ 2,800 psi, pressured up to 3,283 psi, bled back 2.5 bbl and floats held. Full returns throughout cement job. Pressured up to 3,700 and open Weatherford Wet Shoe sub w/ 2bbl. final pump in pressure 2,600 psi, shut down and bled back 1.5 bbl, well static. Set packoff, pressure tested to 3,000 psi for 5 min, test good, circulated out cement conventional method @ 5 bpm / 3,800 psi and circulated 35 bbl cement to surface. Reciprocate pipe during cement circulation. Displaced w/ 2% KCL Substitute water. Performed negative test on liner hanger packer for 30 min. Good negative test.