



### UL 21 Yellowtail #3H

FIELD:	Phantom (Wolfcamp)	API #:	42-495-34040
LOCATION:	31.714701° N, 103.23444° W	AFE #:	4629
ACTUAL: SL:	X= 1,097,959 Y= 756,626	BHL: X=	1,094,722 Y= 766,732
CO, ST:	Winkler County, Texas	COMPLETED:	
STATUS:	DRILLED & CASED	DRLG Permit	835055
LATEST RIG WORKOVER:	Drilled by H&P 602, rig release 7/20/18		
DIAGRAM REVISED:	6/13/18 by: Travis Salinas		

#### CURRENT WELLBORE DIAGRAM

##### Surface Casing

Spacer: 20 bbl red dye. Stage 1 Lead: 480 SX / 162 BBL Econocem, 12.9 PPG, 1.894 yield @ 175% XS @ 6 BPM. Halcem Tail: 185 SX / 44 BBL 14.8 PPG, 1.348 yield w/ 0% XS @ 5 BPM. Drop plug, Displace w/ 115 BBL, land plug w/ 260 PSI and increase to 800 PSI & held for 5 min. Floats held, bled back 1 BBL. 100% returns through job, circulated 90 BBL to surface.

##### 1st Intermediate CSG

9-5/8" 40.0# HCL-80 BTC @ 0'-5,114'

Pump 20 bbl FW Gel dyed spacer, Lead: 1,165 SX (582 BBL) Neocem Lead @ 11 PPG, 2.806 CF/SX (150% XS) pumped @ 6 BPM. Tail: 155 SX (37 BBL), HalCem 14.8 PPG, 1.334 CF/SX (20% XS) pumped @ 5 BPM. Displace 385 BBL of FW. Bump plug @ 3 BPM 1,300 PSI and raise to 1,820 PSI. Hold 5 min, bled back 1.5 BBL. Floats holding. Full returns throughout job. Circ 65 BBL / 130 SX cement to surface. Prior to drilling out w/ 8-3/4" bit, performed casing test to 2,700 PSI for 20 min, test good. Perform FIT to 10.1# EMW, pressure to 263 PSI. and bled off

##### 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	P-110	HCP-110
Thread	BTC	LTC	LTC	VAM HTTC
Top	0'	0'	0'	11,262'
Bottom	785'	5,114'	12,242'	22,456'
Mud wt	8.4 FW	10.3 BR	9.4 BR	13.1 OBM
Burst	3,450	5,750	12,460	12,410
Collapse	1,950	4,600	10,780	11,620
Capacity	0.1497	0.0758	0.0361	0.01493

##### TUBING

GROUND ELEV: 2,767.0' LOG ELEV: 2,792.0' KB: 25.0'

POP: FTP: 12,311' LTP: 22,397'

##### 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 EE-NL  
TREE: 7-1/16" 5K x 2-9/16" 10K EE NL

##### COMPLETION HISTORY

Marker Joints: 11,329', 17,422', & 21,973'  
16.18" PBR on Top of Liner  
4-1/2" Production Liner Top 11,262' MD (X,XXX' CBL)  
Float collar @ 22,420'  
Landing Collar @ 22,419'  
No Toe Valve  
See other Worksheets in this file for Directional Surveys and Production Casing Details  
See "perf schedule" tab for perforations.  
Lateral DLS > 5 @ 15,627', 16,195', MD  
Projected Coordinate System: NAD 1927 Texas  
7" casing shoe depth corrected from 11,861' to 11,836' (25') after drilling rig tagged up and drilled out shoe

##### Prod CSG: CBL TOC @ 5,485'

0'-12,023'

Induced flow on backside by bullheading 160 bbl of 9.4 ppg down backside. Slug H2S scavenger, Pump 48 bbl reactive spacer, 20 bbl FW gel spacer, Lead : 6 bpm: 405 sx / 203 bbl Neocem @ 11#, 2.808 cf/sx, 120% XS. 6 BPM Tail : 605 sx / 129 bbl, HalCem H 15.6#, 1.196 cf/sx w/ 0% XS @ 5 bpm. Displace 440 bbl of 9.4 PPG brine. Bump plug. Final Circ 2,000 PSI @ 3 bpm bump to 2,500 psi. WOC. Bled back 5 bbl, floats not holding. Full Returns. Displace through 1" choke - 5 bbl in / 5 out. Last 100 bbl displacement was 3 bbl in / 2 bbl out. 10 - 12' flare throughout job. Calc TOC @ 3,000'. Pressure test casing to 4,500 PSI for 30 min, test good.

4-1/2" Production Liner Top  
11,262' MD (X,XXX' CBL)

KOP at 11,409' at 4 deg

FIT T/ 16.5 ppg EMW, 12.8 ppg mud t

For Stages and Cluster Data see Perf Schedule Tab

Toe Up

Landing Collar @ 22,419'  
Float collar @ 22,420'  
Float shoe @ 22,456'

Pump 80 bbl of 13.7 PPG tuned spacer III, Pump Versacem 205 BBL (940 SX) versacem H 14.5 PPG, 1.223 Yield, 5.6 gal/SX @ 4 BPM. Wash Up Lines, Drop Halliburton DP Wiper dart, pump 20 bbls MMCR & 140 bbls of FW, 20 BBL Sugar Water, 30 BBL 13.7# Tuned Spacer III, 70 BBL 13# OBM from Pits, total of 280 BBL. Final rate @ 3 BPM & 5,000 PSI. Bumped plug on time. Bled back 3 BBL and floats held. Rotation during parts of cement job @ 20 RPM, TRQ 7-11K. Torqued up and stalled with 150 bbl of displacement left to pump. Full returns throughout cement job. Expand Liner Hanger (8,900 PSI) Pull Test liner hanger to 250K, test good and release off hanger. Conventional circulated 80bbls of spacer & trace cmt. off liner top. Test liner top packer to 3,000 PSI for 10 min, test good. Displace OBM from TOL to surface w/ 2% KCL water. Perform negative test for 30 min, test good.