



UL 20 Sunlight #1H

FIELD:	Phantom (Wolfcamp)	API #:	42-495-33775
LOCATION:	31°40'41.74" N, -103°15'21.09" W	AFE #:	O16090
ACTUAL: SL:	X= 1,090,950 Y= 743,549 BHL: X= 1,093,790 Y= 733,829		
CO, ST:	Winkler County, Texas	COMPLETED:	
STATUS:	DRILLED & CASIED	DRLG Permit	821147
LATEST RIG WORKOVER:	Drilled by H&P 490, rig released 3/5/17		
DIAGRAM REVISED:	10/18/17 by: Travis Salinas		

CURRENT WELLBORE DIAGRAM

Surface Casing

Test lines 1,500 psi. Spacer: 20 bbl red dye. Stage 1 Lead: 555 sxs / 187 bbls Halcem, 12.7 ppg, 1.893 yield, w/ 100% Excess. 1.36 gps @ 6 bpm. Tail: Halcem 185 SX / 44 BBL 14.8 ppg, 1.342 cf/sx w/ 0% excess @ 5 bpm. Drop non rotating wiper plug and Displace w/ 107 bbls, land plug w/ 500 psi & held for 5 min. Floats held, bled off. 100% returns through job, circulated 120 bbl to surface.

1st Intermediate CSG

9-5/8" 40.0# N-80 BTC @ 0'-4,980'

Casing centralized at shoe and every 3rd joint back to surface. Spacer: 20 bbl water, 20 bbl gel, Lead Neocem 1,270 sxs / 635 bbls, 11 ppg, 2.81 cf/sx w/ 150% excess pumped @ 6 bpm. Tail Halcem: 34 bbl, 145 sxs, 14.8 ppg, 1.332 cf/sx (25% excess) pumped @ 6 bpm. Displacement: 373 bbls FW. Bump plug 500 psi over = 1,688 psi, hold 5 min, floats holding. Good returns throughout job, 25 BBL cement circulated 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	P-110	Actual TOL
Thread	BTC	BTC	LTC	HY 563	56'
Top	0'	0'	0'	11,044'	10988
Bottom	748'	4,980'	11,986'	21,610'	
Mud wt	10 BR	10 BR	9.4 BR	13.85 OBM	
Burst	3,450	5,750	12,460	12,410	
Collapse	1,950	3,870	10,760	10,670	
Capacity	0.1497	0.0758	0.036	0.0149	

GROUND ELEV: 2,758.0' LOG ELEV: 2,783.0' KB: 25.0'

POP: FTP: 12,051' LTP: 21,511'

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-0.5

COMPLETION HISTORY

Marker Joints: 11,140', 16,376', & 21,106'
20.9' PBR on Top of Liner
4-1/2" Production Liner Top 11,044' MD (xxx' CBL)
Weatherford Wet Shoe Sub @ 21,603'
NAD 27 Coordinate System
See other Worksheets in this file for Directional Surveys and Production Casing Details
See "perf schedule" tab for perforations.
Lateral DLS > 5 @ 12,179' MD, 16,875' MD
Drilling Rig Pressure tested 7" casing to 5,110 PSI on 1/27/17

Entrventure Casing Patch Set from 5,213' to 5,252'
Entrventure Casing Patch SEALS Set from 5,221' & BTM Seal is 5,244'
Entrventure Casing Patch Post Expansion ID is 5.330", see reference sheet
TOL has been consistently Tagged @ 10,988' (56' Higher than Liner Tally)
PBDT was tagged @ 21,537' (66' higher than liner tally)

Total Well FRAC INFO RECAP :

Prod CSG: CBL TOC @ 4,966'

7" 32# HCP-110 LTC @ ~80' @

0'-11,986'

Prior to cement job, no returns, bullhead 200 bbls down backside to induce well. Close annulus and displace heavy slug. Re-gain returns. spacer, Lead: 365 sxs (201 bbl) @ 10.2#, 3.053 cf/sx. Tail: 456 sxs (96 bbl), VersaCem 15.6 ppg, 1.19 cf/sx. Displace 389 bbl. Bump plug to 2,185 psi. Full Returns. Floats holding. Utilized 4 BPM IN / 3 BPM OUT

4-1/2" Production Liner Top 11,044' MD (xxx' CBL)
KOP at 11,181' at 2.5 deg

FIT To 17.5 PPG EMW

For Stages and Cluster Data see Perf Schedule Tab

Toe Up

Weatherford Wet Shoe Sub @ 21,603'
Float shoe @ 21,610'

Test lines to 8,000 psi. Pump 30 bbls of 14.2 ppg tuned spacer, LEAD: Versacem 150 bbls (690 sx) 14.5 ppg, 1.223 Yield, 5.56 gal/Sk Water @ 4 BPM. Drop Wiper dart, pump 20 bbls MMCR & 130 bbls of 2% KCL Substitute, 15 BBL of 14.2# Truned Spacer & 104 bbls of OBM. Bump plug on time @ 1,950 psi @ 2 bpm. Pressur ed up to 2,350 psi, held 5 min. Bled back 1.5 bbls. Floats holding. Full returns throughout cement job. Pressure up to 2,715 psi, Wet Shoe Ruptured and pump 2 bbl @ 1,050 psi. Shut down and held 800 psi for 10 min. flowed back 1/2 bbl. Floats holding. All pump rates @ 2 BPM to maintain low ECD. Set Liner hanger packer and pressure test to 3,000 psi. Circulated a trace of spacer to surface. off liner top.