



**UL 18 Dyk #1H**

<b>FIELD:</b>	Phantom (Wolfcamp)	<b>API #:</b>	42-475-37122
<b>LOCATION:</b>	31°32'32.63" N, 103°15'20.49" W	<b>AFE #:</b>	O16064
<b>ACTUAL: SL:</b>	X= 1,089,704 Y= 694,145	<b>BHL: X=</b>	1,087,634 Y= 701,317
<b>CO, ST:</b>	Ward County, Texas	<b>COMPLETED:</b>	
<b>STATUS:</b>	DRILLED & CASED	<b>DRLG Permit</b>	817814
<b>LATEST RIG WORKOVER:</b>	Drilled by H&P 602, rig release 1/28/17		
<b>DIAGRAM REVISED:</b>	2/13/17 by: Travis Salinas		

**CURRENT WELLBORE DIAGRAM**

8.34 PPG PACKER FLUID  
9.2 PPG BRINE

**Surface Casing**

Spacer: 20 bbl red dye. Stage 1 Lead: 540 sxs, 14.68ppg, 1.356 yield, 6.26 gps. Displace w/ 69 bbls, land plug w/ 1,000 psi & held for 5 min. Floats held, bled back 1/2 bbl. 100% returns through job, circulated 59 bbl / 224 sx to surface.

**1st Intermediate CSG**

**9-5/8" 40.0# HCL-80 LTC @ 0'-5,062'**

Pump 20 bbl FW Gel spacer, Lead:1,010 sxs (505 bbl) Neocem (110%XS) @ 11 ppg, 2.81 cf/sx. Tail: 160 sxs (38 bbl), HalCem 14.8 ppg, 1.332 cf/sx (20% XS). Displace 380 bbls of FW. Bump plug @ 3 BPM 700 psi and raise to 1,200 psi. Hold 5 min, bled back 3 bbl. Floats holding. Full returns throughout job. No cement to surface. Calculated TOC 612'

	CASING				Tie Back
Hole	17-1/2"	12-1/4"	8-3/4"	6"	
Casing	13-3/8"	9-5/8"	7"	4-1/2"	5-1/2"
Weight	54.5#	40#	32#	13.5#	23#
Grade	J-55	HCL-80	HCP-110	HCP-110	HCP-110
Thread	STC	LTC	LTC	Hydri 563	Liberty FJM
Top	0'	0'	0'	10,699'	0
Bottom	488'	5,062'	11,672'	18,588'	10,699
Mud wt	8.4 FW	9.1 BR	9.5 BR	14.75 OBM	PKR Fluid
Burst	2,730	5,750	12,460	12,410	14,520
Collapse	1,130	3,870	11,890	10,690	15,310
Capacity	0.1546	0.0758	0.036	0.01493	0.0212

**GROUND ELEV:** 2,716.0' | **LOG ELEV:** 2,741.0' | **KB:** 25.0'

**POP:** | **FTP:** 11,659' | **LTP:** 18,552'

**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: 10,760', 15,016', & 18,082'  
23' PBR on Top of Liner  
4-1/2" Production Liner Top 10,699' MD (xxx' CBL)  
Float collar @ 18,574'  
Weatherford Wet Shoe Sub set @ 181,574' MD  
See other Worksheets in this file for Directional Surveys and Production Casing Details  
See "perf schedule" tab for perforations.  
Lateral DLS > 5 @ 11,842', 11,968', 12,821', 17,933', & 18,218'

Projected Coordinate System: NAD 27 / Texas Central

TIE BACK STRING installed, prior to FRAC, due to USIT LOG Casing Wear Results

**Prod CSG: CBL TOC @ 5,300'**

**7" 32# HCP-110 LTC @ ~80° @**

**0'-11,672'**

Pumped down backside to induce circ. Pump 20 bbl FW Gel spacer, Lead @ 5 bpm:365 sx (198.5 bbl) tuned-light @ 10.2#, 3.053 cf/sx. Tail @ : 400 sxs (85 bbl), HalCem H 15.6#, 1.196 cf/sx. Displace 417 bbls of FW. Bump plug @ 3 BPM 1268 psi and raise to 1768 psi. Bled back 2 bbl. Full Returns. Displace through 1" choke - 4 bbl in / 3 out. No cement to surface. Casing test good to 4,800

4-1/2" Production Liner Top  
10,699' MD (xxx' CBL)

**KOP at 10,771' at 1.96 deg**

**Total Well FRAC INFO RECAP :**

FIT T/ 17.2 ppg EMW

For Stages and Cluster Data see Perf Schedule Tab

**Toe Down**

Float collar @ 18,574'  
Float shoe @ 18,588'

lowered OBM MW from 14.75 ppg to 14.3 ppg prior to liner cement job. Pump 30 bbls of 14.5 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 & 87.3 bbls of 2% KCL Substitute., 15 bbl of 14.5 ppg tuned spacer III, 97.2 bbls of OBM. Pump plug on time, final rate 2 bpm @ 1,200 psi, pressured up to 1,850 psi, bled back 1.5 bbl and floats held. ull returns throughout cement job. Pressured up to 2,400 and open Weatherford Wet Shoe sub w/ 3 bbl. final pump in pressure 1.1100 psi, shut down and bled back 0.5 bbl, well static. Set packoff, pressure tested to 3,000 psi for 5 min, test good, circulated out cement @ 5 bpm and circulated 40 bbl cement to surface. Displaced w/ 2% KCL Substitute water. Performed negative test on linger hanger packer for 30 min. Good negative test.