

# Warren American Oil Company

## University of Texas 245 #6

1058' FWL, 2320' FNL of Survey Lines  
Section 4, Blk. 46; UL Survey  
API #: 42-105-42255  
Crockett County, Texas  
Farmer (San Andres) Field  
Daily Drilling Reports History

### 07-20-2015

**Day #1:** RRC District 7C previously notified of planned spud, Job #6409. Move in Latzell Drilling Rig #1. Rig crew 1 hand short, which prolonged rig move. 1 air compressor and tank truck left to move in. SDFN.

### 07-21-2015

**Day #2: Depth:** 510' BGL; **Ftg Past 24 hrs:** 510'. Finished MIRU Latzell Drilling. KC pipe delivered 22 jts 8-5/8" 24# STC J55 csg, unloaded & tallied (924.2' total). Drilled & set 10' 16" conductor, cmt w/ 10 sks. Installed diverter & blooey line. PU 12-1/4" PDC (Bit #1), bit sub, IBS, drill collar, roller reamer & x-over; MU BHA. Spud @ 12:00 PM, notified RRC of spud & upcoming cement job. Drilled to 510' in 4.5 hrs; limestone from surface to 450', sandstone from 450' to 500', hit redbeds @ 500'. Blew hole clean, TOOH 4 jts. SDFN.

### 07-22-2015

**Day #3: Depth:** 850' BGL; **Ftg Past 24 hrs:** 340'. TIH 4 jts. Resumed drilling @ 8:00 AM, drilled from 510' – 850' (redbeds) in 3.75 hrs; reached surface hole TD @ 11:45. Soaped & blew hole clean, TOOH, at surface @ 12:45 PM, broke off bit, hydraulic pump stopped functioning—low on hydraulic fluid. Waited on hydraulic fluid 1.5 hrs. LD BHA & started running casing @ 2:15 PM. Ran 20 jts 8-5/8" 24# STC J55 csg as follows: Texas pattern shoe, 20 jts csg w/ insert float in 1<sup>st</sup> collar (total length 840.8'), installed centralizers on 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, then every 3<sup>rd</sup> collar (8 total, centralizers @ 793', 753', 669', 543', 417', 290', 164', 37'), ran cmt basket 8 jts down @ 332'. Casing ran smooth until last jt, worked down last jt, PU landing jt & attempted to work down, but couldn't work pipe past 836', pipe started to pull tight while working, broke off & LD landing jt. Csg set @ 836' (14' off btm), finished running csg @ 3:30 PM. Basic Energy Svcs cementers on location @ 1:00 PM missing 1 bulk truck, Basic advised that truck would arrive ~6:00 PM. RU cementers, pumped 54 bbl fresh wtr to load csg & established rate of 6 BPM @ 120 psi & pumped 11 bbl wtr to ensure shoe was not packed off (65 bbl total). SD & waited for bulk truck which arrived @ 6:00 PM. Rig crew moved compressors & other equipment to #5 location. Started cmt job @ 6:00 PM. Pumped 30 bbl fresh wtr spacer. Pumped 230 sks (77 bbl slurry vol) lead slurry: 'Class C Lite' w/ ¼# celloflake; mixed @ 12.9 ppg, SY 1.88 cuft/sk. Pumped 200 sks (47 bbl slurry vol) tail slurry: 'Class C' w/ 2% CaCl & ¼# celloflake; mixed @ 14.8 ppg, SY 1.34 cuft/sk. Dropped plug & displaced w/ 51 bbl fresh wtr & bumped plug to 550 psi, pressure held; plug landed @ 6:50 PM. Had no returns thru job. Bled off pressure & checked float, very slight flow, SI cmt head. RDMO cementers. Notified RRC District 7C that cement did not circulate. Set up temp survey for tomorrow morning. SDFN.

### 07-23-2015

**Day #4: Depth:** 850' BGL; **Ftg Past 24 hrs:** 0'. MIRU Casparis Wireline. Ran temperature survey, est TOC 250'. Notified RRC District 7C of TOC & inspector approved topping out. RDMO Latzell Drilling. Ran 220' 1" PVC. Plan to top out cement after #5 surface job.

### **07-24-2015**

**Day #5: Depth:** 850' BGL; **Ftg Past 24 hrs:** 0'. MIRU Basic Energy Svcs cementers, tied into 1" PVC. Mixed & pumped 100 sks (24 bbl slurry vol) 'Class C' w/ ¼# celloflake; mixed @ 14.8 ppg, SY 1.34 cuft/sk. Cmt came up to ~30' from surface at the end of the job, then started to fall back. Washed out cmt unit to pit, RDMO cementers.

### **07-27-2015**

**Day #6: Depth:** 850' BGL; **Ftg Past 24 hrs:** 0'. Cut conductor, cut 8-5/8" csg, weld on slip-on collar 1' 10" BGL (F&M Welding). Topped out behind surface csg w/ 20 sks quikrete. Drop from report pending move in of Blue Line Drilling.

DROP FROM REPORT UNTIL FURTHER DRILLING ACTIVITY

### **08-05-15 (Report Date 08-04-15)**

**Day #7: Depth:** 990'; **Ftg Past 24 Hrs:** 140' in 2.5 hrs drilling; **Present Activity:** Drilling Ahead: 14k# WOB, 65 RPM, 60 SPM on pump #1 (368 GPM), 420 psi SPP; **Daily Activity:** MIRU Blue Line Drilling Rig #1 (Hauled 7 loads to loc 8-3). Filled pits & wtr tank w/ fresh wtr. RU Geosite mudlogger. Weld on riser from BOP, NU BOP. PU 7- 7/8" Baker Hughes T605X Serial # 7156326 w/ 5-14s (Bit #2), MU bit onto DC, PU & TIH bit, 16 6" DC, 4-1/2" DP. Took survey. TIH & tag cmt @ 790'. PU kelly & break circ, test BOP. Started drilling cmt @ 1:30 AM, drilled 1.75 hrs. Started drilling out of csg @ 3:15 AM, drilled from 850' to 916', 1.25 hrs, took survey, drilled from 916' to 990', 1.25 hrs. Surveys: 0.5° @ 475', 0.5° @ 916'.

### **08-06-15 (Report Date 08-05-15)**

**Day #8: Depth:** 2075'; **Ftg Past 24 Hrs:** 1085' in 21.75 hrs drilling; **Present Activity:** Drilling Ahead: 18k# WOB, 65 RPM, 60 SPM on pump #1 (368 GPM), 610 psi SPP; **Daily Activity:** Drilled from 990' to 1100', worked on flowline. Drilled from 1100' to 1425', took survey. Drilled from 1425' to 1776', pump #1 went down, swapped to pump #2, serviced rig, repaired pump #1. KC Pipe delivered 59 jts + marker jt + ldg jt 5-1/2" 15.5# LTC J55 csg. Unloaded, & tallied csg: 2452.39' total. Drilled from 1776' to 1885', worked on auto-driller—not maintaining WOB. Drilled from 1885' to 1900', service rig, drilled from 1900' to 2075'; slow drilling due to auto-driller issue, tech arrived on location & repaired auto-driller @ 3:30 AM. Lith: 100% Dolomite; BG 40 units, 240 unit gas show @ 2033'. Surveys: 0.5° @ 1388', 0.5° @ 1860'.

### **08-07-15 (Report Date 08-06-15)**

**Day #9: Depth:** 2343'; **Ftg Past 24 Hrs:** 268' in 6.75 hrs drilling; **Present Activity:** Running csg @ 1500'; **Daily Activity:** Service rig. Drilled from 2075' to 2343', reached TD of 2343' @ 1:00 PM. 10 ppg MW & 36 visc @ TD. Pumped sweep, circulated hole clean (3 bottoms up), ratholed kelly & prepared floor for short trip. Made 10 stand short trip, w/ no issues. Picked up kelly, pumped polymer sweep, circ 2 bottoms up, spotted visc pill, ratholed kelly. TOOH, broke bit. RU Tucker Wireline @ 5:00 PM, ran quint-combo, logs on bottom @ 6:15 PM (logger's TD: 2344'). Logged to csg shoe, POOH. WL engineer noted problem w/ log data; ran logs back in past csg shoe, ID'd problem as faulty gamma tool, POOH. C/O logging tools, Run logs back to TD, logged out, RDMO Tucker, loggers RD @ 11:15 PM. MU bit #2 & TIH, broke circ & circ bottoms up, TOOH LDDP, LD DCs. At surface @ 2:45 AM, waited on csg crew until 3:45 AM. RU Byrd csg crew & started running csg @ 4:30 AM. Running 5-1/2" csg @ report time.

### **08-08-15 (Report Date 08-07-15)**

**Day #9: Depth:** 2343'; **Ftg Past 24 Hrs:** TD'd; **Present Activity:** Rigging Down; **Daily Activity:** Finished running csg, PU ldg jt & landed csg, dropped ball, broke circ, circulating w/ full returns @ 6:40 AM. Ran 57 jts 5-1/2" 15.5# LTC J55 csg as follows: guide shoe, 12 jts csg w/ insert auto-fill float in 1<sup>st</sup> collar, marker jt, 44 jts (total

length 2317.06), installed centralizers above shoe, then every other collar to jt #15, then on jt #19, 23, 27, 35, 39 (13 total, centralizers @ 2284', 2202', 2119', 2037', 1956', 1875', 1818', 1735', 1571', 1408', 1243', 913' 748'), ran cmt basket on jt # 14 @ 1777'. Casing ran smooth. Csg landed @ GL (9' Below KB). Csg set @ 2326'. RD csg crew. RU Basic Energy Svcs cementers. Loaded plug & installed cmt head. Started cmt job @ 7:25 AM. Pumped 12 bbl mud flush, 10 bbl fresh wtr spacer. Pumped 110 sks (40 bbl slurry vol) lead slurry: 'Class C Lite' w/ ¼# celloflake; mixed @ 12.5 ppg, SY 2.06 cuft/sk. Pumped 150 sks (35 bbl slurry vol) tail slurry: 'Class C' w/ 2% CaCl & ¼# celloflake; mixed @ 14.8 ppg, SY 1.34 cuft/sk. Washed out lines, dropped plug & displaced w/ 54 bbl 2% KCL & bumped plug to 1500 psi, pressure held; plug landed @ 8:00 AM. Had full returns thru job w/ good lift pressure, did not circ cmt. Bled off pressure & checked float, float held. Washed up, RD Basic. Broke off cmt head, removed flowline, attempted to loosen companion flange prior to ND BOP, unable to break companion flange. ND BOP & set slips, broke off ldg jt. Attempted to break off companion flange w/ no success, flange was crossthreaded onto wellhead, appeared that flange had not been properly tightened when NU BOP. Welder was on location working on rig, welder heated up flange, attempted to loosen with no success, welder cut off flange. Inspected csg head, no thread damage, packed off head after it cooled down. Jetted pits, started rigging down, inspected collars. Rig released @ 12:00 PM. Rig set to move Monday 8-10 to University of Texas 245 #5.

**DROP FROM REPORT UNTIL COMPLETION ACTIVITY**