

Zone: War-wink Cherry Canyon

Sec 31 Blk 17 University Land

TD: 7250'

Rig: Union Drilling Rig 229

Ward County, TX

Status: WOC

GL: 2723' KB: 2744'

Spud Date: 2/14/2013 RR Date: 3/2/2013 First Sales:

District: Ardmore

AFE: \$1,393,293.00 DHC: \$761,963.00 WI:

Engineer: Steve Plunkett

Notes:

Workover:

Date	Activity
11/20/2012	11/20/12 Building location, construction crews hauling caliche TC \$37,835
11/21/2012	11/21/12 Building location and reserve pits. TC \$37,835
11/26/2012	11/26/12 Building location and reserve pits. TC \$37,835
11/27/2012	11/27/12 Building location and reserve pits. TC \$37,835
11/28/2012	11/28/12 Building location and cutting pits. Pit will be lined over the weekend. TC \$37,835
11/29/2012	11/29/12 Location 75% finished, currently cutting pits. Will finish location and line pits over weekend. TC \$37,835
11/30/2012	11/30/12 Continue building pit. TC \$37,835
12/3/2012	12/3/12 Finish building location and pits. Pits will be lined and water line laid to University SWD tank battery today. TC \$37,835
12/4/2012	12/4/12 Fas-Line lay poly water line from SWD to pit, wind to strong to line pits, will line Thursday. Drop from report until pits are lined. DC \$2875; TC \$40,710
2/5/2013	2/5/13 MIRU Butch's Rat Hole and Anchor Service. Drill and set 60' of 20" conductor w/ 7 yds cmt, drill rat and mouse hole, Fas-Line lined pit and began transferring water. DC \$78,788; TC \$119,498 Drop from report until rig move
2/13/2013	2/13/13 Moving rig in. DC \$16,174; TC \$135,672

2/14/2013 2/14/13
 Rigging up UDI Rig 229
 13 hrs - Move rig & RU. 100% rig on new location. 75% rigged up (Should spud this evening)
 11 hrs - Security watch
 24 hrs - TOTAL HOURS

DC \$88,081; TC \$223,753

2/15/2013 2/15/13 Day 1
 MD 375', made 303' in 7.5 hrs
 Activity at report time: Drilling
 Bit #1 (12.25 HTC GXC09 Serial #5218984) in @ 72' has made 303' in 7 hrs, WOB 35K,
 RPM 70-100
 MW 8.9, Vis 41, Ph 11.0
 PP #1 950, SPM 75, GPM 305, Str 10, Lnr 6.50
 PP #2 950, SPM 75, GPM 305, Str 10, Lnr 6.50

BHA:
 Bit 12.25" - 1.50
 Shock sub - 10.40
 8" collar - 30.95
 12.25 IBS - 8.09
 8" Collar - 30.33
 12.25 IBS - 8.07
 4 - 8" Collars - 120.48
 XH Sub - 4 - 6" collars - 123.60
 Total Length - 333.42

HOURS:
 12.0 - Rigging up
 2.00 - Unload csg, load racks w/collars and strap BHA
 2.50 - Mixing spud mud, pickup BHA
 7.50 - Spud well @ 22:30 on 2/14/13. Drilling surface.
 24.0 - TOTAL HOURS

DC \$53,706; TC \$277,459

2/16/2013 2/16/13 Day 2
 MD 1220', made 845' in 22.5 hrs
 Activity at report time: Drilling
 Bit #1 has made 1148' in 30 hrs, WOB 20-30, RPM 70-100
 MW 8.8, Vis 41, PV 4.0, YP 32, Gels 12/15/18, pH 11.0, WL n/a, Cake 2, Sol 3.4
 PP #1 & 2 1700, SPM 75, GPM 305, Str 10, Lnr 6.5
 Remarks: Lost partial returns from 755' To T.D. [about 200 BBLS total.]

HOURS:
 3.00 - Drill f/375' to 466'
 0.50 - Dev. Survey @ 423' 0.15deg [service rig]
 5.50 - Drill f/466' to 675'
 0.50 - Dev. Survey @ 632' 0.25deg
 6.25 - Drill f/675' to 889'
 0.25 - Dev. Survey @ 844' .52deg
 3.50 - Drill f/889' to 1080'
 0.25 - Dev. Survey @ 1032' .76deg
 4.25 - Drill f/1080' to 1220'
 24.0 - TOTAL HOURS

Surveys:
 Depth Inclination
 210 0.40
 423 0.15
 632 0.25
 844 0.52
 1032 0.76

DC \$31,535; TC \$309,562

2/17/2013

2/17/13 Day 3

MD 1258', made 38' in .50 hrs

Activity at report time: NU BOP

Bit #1 in @ 72' out @ 1258', made 1186' in 30.50 hrs, WOB 20-30, RPM 43.0

MW 9.4, Vis 33, PV 5.0, YP 17, Gels 21/24/26, pH 7.0, WL n/c, Cake 2, Sol 4.2, Chl 56900.0

HOURS:

0.50 - Drill f/1220' to 1258'

1.00 - Circ. pump sweeps for wiper trip

2.00 - Wiper trip to 8" collars

1.00 - Circ. and pump loss circulation slug

1.00 - Dev. survey and trip out to 8" collars

1.00 - Hold safety meeting with laydown crew and rig up laydown machine

1.00 - Lay down 8" collars, reamers, and shock sub

0.50 - Hole safety meeting with casing crew and rig up tongs

1.50 - Run 30 jts of 8-5/8" 24# J-55 csg, 1,261' overall set @ 1,258'

1.00 - Circ while rigging down casing crew and rig up Halliburton

1.50 - Cement surface casing lead with 520sks EconoCem - HLTRRC 12.90lb/gal, 1.84 cuft/sk, tail with 360sks HalCem - C14.80lb/gal, 1.35 cuft/sk, full returns throughout job. Rec'd 80 bbls cement to surface.

1.00 - Bump plug @18:00 [976 psi hold for 5 min. check floats. Held OK.] Rig down Halliburton.

4.00 - Wait on cement

5.00 - Cut off conductor pipe, casing. Smooth cut 8-5/8" casing, weld on head. Test to 1,200 psi

2.00 - Nipple up BOP

24.0 - TOTAL HOURS

DC \$96,595; TC \$406,157

2/18/2013

2/18/13 Day 4

MD 1830', made 572' in 11 hrs

Activity at report time: Drilling

Bit #2 7-7/8" HTC T606X SN 7141091 in @ 1258', has made 572' in 11 hrs, WOB 12K, RPM 180

MW 9.2, Vis 30, PV 2.0, YP 1, Gels 1/1/1, pH 7.0, Sold 0.2, Chl 92975.0

PP #1 & 2 1650, SPM 64, SPM 264, Str 10, Lrn 6.50

BHA:

Mud motor 6-1/2" - 28.35

Flow drift sub 6-1/2" - 4.05

DC 6-1/4" - 30.44

Stabilizer 6-1/4" - 5.57

DC 6-1/4" - 30.96

Stabilizer 6-1/4" - 5.37

13 DC 6-1/4" - 387.41

DC & drilling jars 6-1/4" - 122.55

Total length - 615.59

HOURS:

3.00 - Nipple up BOP

4.50 - Test BOP, and choke manifold [500 psi low, 3,000 psi high.] Test OK

1.00 - Pick up and strap BHA

2.00 - Trip in hole

0.50 - Test casing to 1,200 psi. test good

1.00 - Wash through cement stringers f/1,133' to 1,217'

1.00 - Drill float equipment and cement

11.0 - Drilling f/1,258' to 1,830'

24.0 - TOTAL HOURS

Surveys:

Depth Inclination

1252 0.70

1346 0.50

1141 0.20

1536 0.70

1631 0.80

1723 1.30

DC \$44,418; TC \$450,575

2/19/2013 2/19/13 Day 5
MD 2970', made 1140' in 23.5 hrs
Activity at report time: Drilling
Bit #2 has made 1712' in 34.5 hrs, WOB 12K, RPM 165
MW 9.8, Vis 30, PV 2.0, YP 1, Gels 1/1/1, pH 9.0, Cake 1, Sol 4, Chl 16000.0
PP #1 & #2 1925, SPM 126, GPM 518, Str 10, Lnr 6.50

HOURS:
8.00 - Drill f/1,830' to 2,305'
0.50 - Service rig
15.5 - Drill f/2,305' to 2,970'
24.0 - TOTAL HOURS

Surveys:
Depth Inclusion
1822 1.20
2043 0.80
2138 1.70
2329 2.30
2463 3.00
2613 3.00
2708 3.50
2898 3.90

DC \$26,268; TC \$476,843

2/20/2013 2/20/13 Day 6
MD 3572', made 602' in 23.5 hrs
Activity at report time: Drilling
Bit #2 has made 2314' in 58 hrs, WOB 12K, RPM 165
MW 10.0, Vis 30, PV 2.0, YP 1, Gels 1/1/1, pH 10.0, Cake 1, Sol 0.3, Chl 186500.00
PP #1 2000, SPM 122, GPM 512, Str 10, Lnr 6.5

HOURS:
9.00 - Drill /2,970' to 3,255'
0.50 - Service rig
14.5 - Drill f/3,255' to 3,572'
24.0 - TOTAL HOURS

Surveys:
Depth Inclusion
3190 4.20
3310 5.10
3406 5.40
3501 4.40

DC \$27,019; TC \$503,862

2/21/2013 2/21/13 Day 7
MD 4168', made 596' in 23 hrs
Activity at report time: Drilling
Bit #2 has made 2910' in 81 hrs, WOB 12K, RPM 165
MW 10.0, Vis 30, PV 2.0, YP 1, Gels 1/1/1, pH 10.0, Cake 1, Sol 0.7
PP #1 2050, SPM 120, GPM 490, Str 10, Lnr 6.5

HOURS:
1.00 - Drill f/3,572' to 3,580'
0.50 - Replace valve springs in #1 pump
8.50 - Drill f/3,580' to 3,826'
0.50 - Service rig
13.5 - Drill f/3,826' to 4,168'
24.0 - TOTAL HOURS

Surveys:
Depth Inclination
3570 3.90
3665 4.40
3728 4.60
3849 4.50
3912 4.70
4103 4.00

DC \$25,974; TC \$529,836

2/22/2013 2/22/13 Day 8
MD 5008', made 840' in 23.5 hrs
Activity at report time: Drilling
Bit #2 has made 3750' in 104.5 hrs, WOB 5-16K, RPM 165
MW 10.0, Vis 30, PV 2.0, YP 1, Gels 1/1/1, pH 11.0, WL n/c, Cake 1, Sol 0.7, Chl 187100.00
PP # 2 2360, SPM 120, GPM 418, Str 10, Lnr 6.5

HOURS:
11.0 - Drill f/4168' to 4586'
0.50 - Service rig
12.5 - Drill f/4586' to 5008'
24.0 - TOTAL HOURS

Surveys:
Depth Inclination
4267 3.80
4394 4.20
4521 4.00
4768 4.00
4832 3.60
4895 3.30
4959 2.90

DC \$50,426; TC \$580,262

2/23/2013 2/23/13 Day 9
MD 6085', made 1077' in 23.5 hrs
Activity at report time: Drilling
Bit #2 has made 4827' in 128 hrs, WOB 5-13K, RPM 160
MW 10.0, Vis 31, PV 2.0, YP 1, Gels 1/1/1, pH 10.5, WL 34.0, Cake 1, Sol 0.3
PP #1 2450, SPM 117, GPM 476, Str 10, Lnr 6.5

HOURS:
10.5 - Drilled f/5008' - 5537'
0.50 - Service rig
13.0 - Drilled f/5537' - 6085'
24.0 - TOTAL HOURS

Surveys:
Depth Inclinaton
5028 2.50
5091 2.30
5154 2.20
5218 2.30
5281 2.30
5345 2.10
5408 2.20
5471 1.80
5592 1.70
5782 1.60
5845 1.50
5908 1.30
5971 1.50
6036 1.50

DC \$33,220; TC \$613,482

2/24/2013

2/24/13 Day 10

MD 6455', made 370' in 8 hrs, WOB 5-17K, RPM 160

Activity at report time: Building mud volume

Bit #2 in @ 1258' out @ 6455', made 5197' in 136.0 hrs, WOB 5-17K, RPM 160

Bit #3 7-7/8" HTC T606X SN 7141772, in @ 6455'

MW 10.3, Vis 38

HOURS:

4.50 - Drilled f/6085' - 6265'

0.50 - Tightened binders and turnbuckles on BOP stack

0.50 - Drilled f/6265' - 6297'

0.50 - Retightened binders and turnbuckles on BOP stack

3.00 - Drilled f/6297' - 6455'. Started experiencing drag up to 45k over string weight and excessive torque. When torque would be release drillpipe would back lash to left

1.00 - Working tight spot at 6420', laid down 1 jt of drillpipe/washing and reaming from 6382' to 6455'. Still experiencing excessive torque and drag, pump pressure increased from 2450 psi to 2600+ with high torque

0.50 - Pumped sweep that was in slug pit. Built slug

3.00 - Slugged drillpipe and pooh strapping drillpipe. No problems or drag while POOH

0.50 - Removed rotating head

2.00 - Finished pooh with BHA. Laid down bit #2 and stabilizers. Bit #2 was undergaged 1/16" of an inch. Stabilizer blades damaged and cracked

3.00 - Made up new mud motor and bit #3, 7-7/8" HTC T606X SN 7141772 (re-run Univeristy 31E #4). Waited on replacement stabilizers. Strapped and calipered stabilizers

1.50 - Trip in hole with BHA and 7 stands of drillpipe

0.50 - Laid down 3 joints of drillpipe, bit at 1253'

3.00 - No returns were encountered while tripping in hole, filled backside with 80 bbls mud. Build up mud volume

24.0 - TOTAL HOURS

Surveys:

Depth Inclination

6104 1.30

6168 1.20

6231 1.00

6294 1.20

6358 1.00

DC \$54,415; TC \$667,897

2/25/2013

2/25/13 Day 11

MD 6581', Made 126' in 6 hrs

Activity at report time: Circulating

Bit #3 has made 126' in 6 hrs, WOB 5-16K, RPM 131

MW 10.1, Vis 33, PV 3.8, YP 8, Gels 4/6/8, pH 10.0, WL 28.0, Cake 3, Sol 2.2

PP #2 1160, SPM 75, GPM 306, Str 10, Lnr 6.5

HOURS:

1.50 - Built up surface mud volume and pumping lcm pills

1.00 - POOH and laid down Totco Flo-drift survey sub

4.00 - TIH to 1250', filled drillpipe, continued trip in to 2650' and filled drillpipe, continued trip in hole to 4900' and filled drillpipe

2.50 - Pumped 55 bbls LCM pill mixed at 50 ppb lcm products and regained circulation

1.50 - Trip in hole with 15 additional stands from derrick breaking circulation at 8 stands in hole and at 7 stands in hole. Trip in hole to 6290'

0.50 - Washed and reamed from 6290' to 6455' with full returns. When bit tagged TD at 6455' lost complete returns

1.00 - Pumped LCM pill mixed at 50 ppb and regained circulation

1.00 - Attempt to drill. Drilled from 6455' to 6470' and lost returns

1.00 - Pumped LCM pill mixed at 30 ppb and regained circulation

2.00 - Dry drilled from 6470' to 6530' with no returns

3.50 - Regain circulation, build volume in pits and reserve

3.00 - Dry drill f/6518' to 6581'

0.50 - Trip out of hole 5 stands

1.00 - Mix LCM pills to regain circulation

24.0 - TOTAL HOURS

DC \$56,726; TC \$724,623

2/26/2013

2/26/13 Day 12

MD 7152', made 571' in 6 hrs

Activity at report time: Drilling

Bit #3 has made 697' in 24 hrs, WOB 5-16K, RPM 131

MW 10.0, Vis 31, PV 3.0, YP 7, Gels 3/5/7, pH 9.0, WI 64.0, Cake 3, Solids 1.4

PP #1 1550, SPM 85, GPM 350, Str 10, Lnr 6.50

HOURS:

4.50 - Build volume, circulate and mix LCM, lower mud weight

1.00 - Trip in hole 5 stands PU kelly

5.50 - Drill f/6,581' to 6,772'

0.50 - Service rig

12.5 - Drill f/6,772 to 7,152'

24.0 - TOTAL HOURS

DC \$68,847; TC \$793,470

2/27/2013

2/27/13 Day 13

MD 7250', made 98' in 4.5 hrs

Activity at report time: Circulating 11.5 ppg pill

Bit #3 has made 795' in 28.5 hrs, WOB 5-16K, RPM 131

MW 10.3+, Vis 33, PV 2.0, YP 9, Gels 4/5/6, pH 9.00, WL 44.0, Cake 3, Sol 1.5

PP #2 950, GPM 204, SPM 50, Str 10, Lnr 6.5

HOUR:

4.50 - Drilled f/7152' - 7250'

1.00 - Circulated and condition for wiper trip

1.50 - Slugged drill pipe and made 14 stand wiper trip up to 5920', trip back in hole with no problems

1.00 - Circulated and conditioned for logging

2.00 - Dropped Totco survey instrument, slugged drill pipe and POOH with 13 stands, well started swabbing, went back in hole to TD

4.50 - Circulated 10.1 ppg mud weight. Checked for flow, well was flowing

4.00 - Circulated and condition mud weight from 10.1 ppg to 10.3 ppg. Check for flow, well flowing

4.00 - Continued circulating while mixing 11.5 ppg weighted pill. Attempt to pump 77 bbls of 11.5 ppg from 7250' up to 6000' and failed. Weighted spacer was pumped to active mud system. Mud weight in active was increased from 10.3 ppg to 10.6 ppg. Reduced mud back to 10.3 ppg with fresh water. Continued circulating while trouble shooting mud system

1.50 - Mixed and pumped 77 bbls of 11.5 ppg weight pill and displaced with 79 bbls of 10.3 ppg mud. Weighted pill spotted from 7250' to 6000'. Monitored wellbore, wellbore had slight flow

24.0 - TOTAL HOURS

DC \$27,822; TC \$821,292

2/28/2013

2/28/13 Day 14

MD 7250'

Activity at report time: LD drill pipe

Bit #3 in @ 6455' out @ 7250' made 795' in 28.5 hrs, WOB 5-16K, RPM 131

MW 10.5, Vis 36, PV 4.0, YP 19, Gels 16/21/25, pH 9.0, WL 64.0, Cake 7, Sol 7.6

BHA:

15 6-1/4" DCs - 421.81

6-1/4" Drilling jars + 3 DCs - 122.55

Total BHA: 544.36

HOURS:

1.50 - POOH with 15 stands to 5885', monitored well, well flowing

1.00 - Circulated and conditioned at 5885'

0.50 - TIH to 7250'

5.50 - Circulated and conditioned mud weight to 10.5 ppg at 7250'

4.50 - Slugged drill pipe and POOH. LD stabilizers, mud motor and bit

1.00 - Nipped up wireline lubricator and Baker Atlas Logging Services

5.00 - Went in hole with Dual Laterolog/Mirco Laterolog/Gamma Ray Log/Compensated Z-Densilog/Compensated Neutron Log/Digital Spectralog/Caliper and tagged at 7250'. Logged well, POOH with logging tools

1.50 - Rigged down Baker Atlas Logging Services and loaded out same

3.50 - Make up bit and trip in hole to lay down drill pipe. [Bit depth @ 06:00 @ 4,000']

24.0 - TOTAL HOURS

DC \$69,642; TC \$890,934

3/1/2013 3/1/13 Day 15
MD 7250'
Activity at report time: Circ & cond hole to cement csg
MW 10.1, Vis 34
PP #1 570, GPM 338, SPM 83, Str 10, Lnr 6.5

HOURS:

- 2.50 - TIH to 7250' w/no problems
- 1.00 - Circ & cond wellbore for casing
- 7.50 - Slugged drillpipe POOH LD drillpipe, BHA & breaking out kelly
- 1.00 - Removed wear bushing, cleared rig floor for running 5-1/2" casing
- 1.00 - RU Pipe Pros Casing Crew, held safety meeting with crews
- 7.00 - Ran 170 jts of 5-1/2" N80 17 ppf LTC casing. Installed 2 Weatherford DV Tools, placement at 6401.68' and 5306.84'. Total length of casing string 7263.50'. Full pipe displacement were encountered while running casing.
- 1.00 - RD Pipe Pro Casing Crew and pick up/lay down machine. Installed Halliburton cement head and pump lines.
- 3.00 - Circ & cond wellbore for cement and reducing mud weight from 10.5+ ppg to 10.1 ppg

DC \$202,422; TC \$1,093,356

3/2/2013 3/2/13 Day 16
MD 7250'
Activity at report time: Setting casing slips

HOURS:

- 1.00 - Circulated and conditioned wellbore and mud weight to 10.1 ppg
- 2.00 - Stage #1 test lines to 5000 psi. Mixed and pumped lead cement 50 sx Versacem-H @ 14.4 ppg 1.24 yld, mixed and pumped tail cement 190 sx Versacem-H @ 14.4 ppg 1.25 yld, dropped plug displaced with 168 bbls of 10.1 ppg mud @ 4 bpm w/290 psi, bumped plug to 987 psi, lift pressure at 420 psi, check floats, 1 bbl back. Dropped bomb and opened DV Tool with 675 psi
- 5.00 - Circulated and conditioned wellbore and mud weight to 10.1 ppg
- 2.00 - Stage #2 test lines to 5000 psi. Pumped 10 bbls freshwater spacer, mixed and pumped lead cement 140 sx Versacem-H @ 11.9 ppg 2.27 yld, mixed and pumped tail cement 215 sx Versacem-H @ 14.4 ppg 1.27 yld, dropped plug and displaced with 149 bbls of 10.1 ppg mud @ 5 bpm w/135 psi. Closed DV Tool @ 2015 psi, lift pressure at 495 psi
- 7.50 - Circulated and conditioned wellbore and mud weight to 10.1 ppg. Continued circulating treating 10.1 ppg mud with Bariod Biocide, attempt to spot 55 bbls of 12.7+ ppg pill down casing, derrickman pumped pill in frac tank contaminating cement mix water. Continued circulating wellbore while waiting on freshwater and barite for building another 12.7+ ppg pill. Barite arrived on location mixed 60 bbls of 12.7+ ppg weighted pill and pumped 55 bbls down 5-1/2" casing.
- 1.00 - Stage #3 test lines to 5000 psi, pumped 10 bbl freshwater spacer. Mixed and pumped lead cement 100 sx Versacem C @ 11.9 ppg 2.29 yld, mixed and pumped tail cement 205 sx Halcem C @ 14.8 ppg, 1.33 yld, dropped plug and displaced with 123 bbls freshwater at 6 bpm w/249 ps. Closed DV tool, lift pressure at 961 psi, checked float 1.5 bbls returns, full returns encountered on all 3 cement stages
- 4.50 - Closed annular preventer and waited on cement
- 1.00 - Opened annular and monitored wellbore, well static, no flow. Set casing slips with 105k lbs on 5-1/2" casing
- 24.0 - TOTAL HOURS

DC \$102,666; TC \$1,196,022

3/3/2013 3/3/13 Day 17
Activity at report time: Rig released

HOURS:

- 1.50 - Raised BOP stack & made rough cut on 5-1/2" production csg
- 1.00 - Made final cut on 5-1/2" csg & installed 11' x 3M tbg spool
- 0.50 - Test tbg spool void to 3000psi, test good. Union Drilling Rig 229 off day rate at 0900 hrs 3/2/13
- 3.00 - TOTAL HOURS

DC \$21,343; TC \$1,217,365

3/7/2013 3/7/13 COMPLETION
Covered mouse hole/rat hole. Filled cellar and leveled location. MIRU WOR and reverse unit/pit. ND DH flange. NU BOP. PU and TIH w/ 4.75" bit, bit sub, 6 X 3 1/2" DCs and 156 jts 2 7/8" L-80 tubing. Tagged DV tool at 5309'. RU stripper head to BOP and PS. Will drill out DV tools in AM.

DC \$13,998; TC \$1,231,363

3/8/2013 3/8/13
Poured rope socket. RU Rev. unit. Drilled out DV tool @ 5,307'. Took 1-1/2 hrs. , fell free. Ran 4 to 5 points on bit. RIH & tagged 2nd DV tool @ 6,402'. Drilled 2nd. DV tool @ 6402'. Took 2 1/2 hrs. to drill out 2nd. DV tool. RIH & tagged PBTD @ 7204'. Circulated clean. POOH w/tbg., collars & bit. one cone came slightly loose. Started back in hole w/ tapered mill. On 1st.
Stand of collars Hyd. Hose broke on tongs. SDFD.
Cost: Rig-3,750., Supervisor-1,000., Basic Rev. rig-7,597., BOP-800.
Daily Cost: \$13,147.00
Cum Cost: \$27,145.00

3/9/2013 3/9/13
SIFWE

DC \$0; TC \$27,145

3/10/2013 3/10/13
SIFWE

DC \$0; TC \$27,145

3/11/2013 3/11/13
RIH to 4767' w/ 4.767 OD, mill took 8 points weight at DV tool. Worked & reamed thru and cleared up. Lowered thru 2nd. DV tool @ 6402' w/o tagging. RIH to 7204' PBTD. Circulate hole w/ 2% KCL. RD swivel. Start OOH, laying down tbg. Loggers on loc. FOOH standing back & laid down BHA. RU Capatain WL. Ran CBL & CCL & GR logs. Corrected
PBTD @ 7178'. Ran logs to 3550'. TOC @ 3900'. Re-ran log w/ 1000# psi. on csg. RDWL RIH w/ 100jts. 2 7/8" tbg. SDFD.
Cost: Rig-3,200., Basic Rev. rig-(stand-by)-2,100, Supervisor-1,000., Capitan WL-4,874. Truck & water-900.
Daily Cost: \$12,074.00
Cum cost: \$39,219.00

3/12/2013 3/12/13
Lay down 2 7/8" L80 work string, ND BOP, NU WH. NU pump to casing load hole w/8 bbls 2% Kcl, pressure up on casing to 3000# for 10 min. no psi change test good. Released psi, rigged down and released all equipment.

DC \$6,600; TC \$45,819

Temp drop from report pending frac

6/1/2013 6/1/13
MIRU basic rig, tally 2 7/8 tbg and wait 2 1/2 hours on Captain WL truck. RU WL truck and GIH w/ 3 1/8 gun and perforate 7,124'-7,134' 11 holes, 7,080'-7,090' 11 holes. GIH with 2nd gun and perforate 6,336-6,341' 6 holes, 6,282'-6,292' 11 holes, 6,223'-6,233' 11 holes. RD MOL captain WL. PU 2 7/8x 5 1/2 arrow set PKR w/ frac hardened 2.313 x-profile, ON/OFF tool, and GIH w/20 joints 2 7/8 tbg. Shut well in and SDFD.
Basic Rig-\$3,463.00, Don-Nan-\$1,136.00, Jerry Anderson-\$700.00, Allen's Construction-\$1,100.00, 225-joints 2 7/8 L-80 TBG-\$47,589.00 trucking-\$1,800.00, BOP-\$86.00, Fork Lift-\$800.00, Capitan WL-\$4,682.00, Weyman-\$1,000.00, Frac tanks-\$570.00
Daily Cost: \$62,926
Cum Completion Cost: \$108,745
Cum Well Cost: \$1,326,110

6/2/2013 6/2/13
 Finish GIH w/TBG and PKR would not set below perforations. Lay down 18 joints PKR still wouldn't set. POOH w/TBG and change out PKR. GIH w/10 stands and this one wouldn't set either. POOH, change PKR, try it again 10 stands in and set it. GIH, set PKR at 7,169', test TBG and PKR to 2,500 PSI and it held good. Release pressure and move PKR up the hole to 6,587'. Set PKR in 15K compression w/2.313 x-profile 400' from surface. NU stripping head on BOP. Hook up pressure truck to TBG, break down perforations at 2,250 PSI, drop to 1,650 PSI. Pumped 10 barrels 2% KCL, 1,650 PSI at 2 ½ BPM. ISIP-1,000 PSI, 5 minute SIP-0 PSI. RD PT MOL.
 Basic Rig-\$4,940.00, Mesquite Tools-\$982.00, M&W pump truck-\$1,508.00, Weyman-\$1,000.00, FRAC tanks-\$180.00
 Daily Cost: \$8,610
 Cum Completion Cost: \$117,355
 Cum Well Cost: \$1,334,720

6/3/2013 6/3/13
 TBG Pressure-Vacuum, MIRU Pumpco and FRAC Perforations-7,080'-7,090', 7,124'-7,134'. Break down at 2,160 PSI, pump acid 6.2 BPM at 2,300 PSI, spacer 6.2 BPM at 1,000 PSI, pad 6.3 BPM at 810 PSI, 1# sand 6.2 BPM at 940 PSI, 2# sand 6.3 BPM at 950 PSI, 3# sand 6.1 BPM at 1,500 PSI, 4# sand 6.1 BPM at 1,290 PSI, 10# sand 6.3 BPM at 960 PSI. Flushed beginning of 10# sand stage to top perf for a sand plug @ 6.4 BPM, 450 PSI. ISIP 440 PSI, 15 minute SI 320 PSI. Total barrels pumped 457. Sand was used 23,620# of 20/40 resin-coated sand and an additional 3450# of 20/40 white sand for sand plug. Wait 1 hour, 1 hour SI 140 PSI. Pump 10 barrels 5 BPM at 950 PSI, sand plug didn't hold. Release PKR, POOH w/39 joints and PKR hung up at 5,314'. Turn and work TBG to get free. We could not go up, but we could go down. Rig up King swivel and spun TBG with tongs, couldn't get through 5,314' spot. (DV TOOL at 5,308') Shut well in SDFD. We are going to rig up pump truck, circulate and wash down in the morning.
 Basic Rig- \$4,490.00, 1,500 barrels 2% KCL- \$4,840.00, M&W pump truck-\$1,516.00, Mesquite Tools-\$1,200.00, Weyman- \$1,000.00, FRAC Tanks-\$180.00, BOP-\$172.00, Pumpco 1st Stage FRAC-\$32,125.00
 Daily Cost- \$45,523.00
 Cum Cost- \$162,878.00
 CWC- \$1,380,243.00

6/4/2013 6/4/13
 Hook up Pump Truck, pump 35 barrels at 4 BPM and got circulation. Try to work PKR through 5,314' area, pkr still hanging up on DV tool. GIH w/TBG, tag sand at 7,125'. Wash down, circulate sand out to 7,196'. Released on/off tool and left pkr on bottom, top of PKR at 7,188'. New PBDT is 7,188'. POOH w/219 joints 2 7/8 and on/off tool. GIH w/RBP, 195 joints 2 7/8 and set plug at 6,378'. POOH w/7 joints 2 7/8, retrieving head at 6,159', dump 2 sacks sand on top of plug. Shut well in. SDFD We will MIRU Pumpco FRAC equipment in the morning. Basic Rig- \$5,540.00, BOP- \$686.00, Trailer House- \$1,095.00, Mesquite Tools-\$982.00, S&W 2% KCL-\$1,200.00, FRAC Tanks- \$180.00, Weyman- \$1,000.00
 Today's Cost- \$10,683.00
 ACC. Cost- \$173,561.00
 TWC-\$1,390,926

6/5/2013 6/5/13
 MIRU PUMPCO, circulated the hole full, closed in annulus and FRAC Cherry Canyon perms. 6,223' to 6,341' OA down 2 7/8 tubing w/1000 gal 15% HCl acid, 425 bbls 20# Borate XL and 24,240# 20/40 Resin-coated sand in concentrations from 1 to 4#/gal. AP-1373#, AP-10 BPM. ISIP-649 PSI, 5min 497 PSI, 10 min- 460 PSI, 15 min-440 PSI, TLTR-449. RDMO PUMPCO. 1 hour SI, open well, 0# pressure and no flow. Wash down and circulate sand off plug, retrieve RBP, POOH w/2 7/8 tubing. Lay RBP down shut well in SDFD. Basic Rig- \$4,780.00, Pumpco-\$26,668.00, Frac Tanks- \$180.00, Mesquite Tools-\$4,710.00, M&W Pump Truck-\$1,501.00, Trailer House-\$730.00,
 Today's Cost- \$38,569.00
 ACC Cost- \$212,130
 TWC \$1,429,495

6/6/2013 6/6/2013
 RIH w/ production string as follows:
 KB - 21.00'
 185-jts 2 7/8 N80 EuE 8Rd. Tbg - 6,038.40'
 1-2 7/8x51/2 TAC w/30K shear pins - 3.00'
 32- jts 2 7/8 N80 EuE 8Rd. Tbg - 1,044.48'
 1 - 2 7/8"x 2 1/4" SN - 1.10'
 1 - 2 7/8"x 4' perf sub. - 4.00'
 1 - 2 7/8 mud jt. w/BP - 33.00'
 TAC @ - 6,059.40'
 SN @ - 7,106.88'
 EOT @ - 7,144.98'
 NDBOP, set TAC w/ 12 points tension, NUWH. RU swab, run swab, FL @ 850'.
 Made 10 runs, rec. 58 bbls water, ending FL @ 1800', SDFD. LTR 1065 bbls.
 Cost: super-\$1000, basic rig-\$4,430,BOP-\$86,Don Nan-\$1395,Light tower-\$60
 Daily Cost: \$6,971.00
 Cum Cost: \$219,101.00
 CWC Cost: \$1,436,466.00

6/7/2013 6/7/13
 SITP-70#, SICP-vac. Run swab. FL @ 1,250'made 31 swab runs. FL@ 2,000', 1 %
 oil cut & gas in swab run. Rec. 209bbls. water. SICP 400#. SDFD.
 LTR: 856 bbls.
 Cost: Rig-3,750., Supervisor-1,000., Mats-115., LTGB-60., S&W truck-400.

 Daily Cost: - \$5,325.00
 Cum Cost: - \$224,426.00
 CWC: - \$1,441,791.00

6/8/2013 6/8/13
 SIFWE

 Cum Cost: - \$224,426.00
 CWC: - \$1,441,791.00

6/9/2013 6/9/13
 SIFWE

 Cum Cost: - \$224,426.00
 CWC: - \$1,441,791.00

6/10/2013 6/10/13
 SITP 220#, SICP 1300#, blew down tbg 0# pressure, 0 fluid, blew csg to 500#, RIH rods &
 pump as follows:
 □60- 1 1/4" FG rods
 □16- 1 1/4" FG w/ rod guides
 □76- 7/8" Norris D 90 rods w/ guides
 □78- 7/8" Norris D 90 rods
 □12- 1 1/2" sinker bars
 1-□3/4" shear tool
 1-□2 1/2 x 1 1/2 x 20' pump w/ 6' gas anchor
 Seated pump & spaced out to 41' above pump. Built & tied in flow line. SDFD.
 Cost: super-\$1000, DonNan(steel rods)-\$26094, DonNan(FB)-\$21176, DonNan(supplies)-
 \$3906, LTGB-\$60, Rig-\$4,300.

 Daily Cost: \$56,536.00
 Cum Cost: \$280,962.00
 CWC cost: \$1,498,327.00

6/11/2013 6/11/13
 0# TP 700# csg. Loaded tbg w/ 7 BW, psi. tested to 200#. Long stroked pump & psi. to 500#,
 held ok. SD & moved rig off loc. Cost: super-\$1000, basic pump-\$400, basic
 rig-\$2075.

 DC: \$3,475.00
 Cum Cost: \$284,437.00
 CWC Cost: \$1,501,802.00

6/12/2013	6/12/13 SITP 220#, SICP 800#. Hook up well head & tie in flow line, open tbg & csg to production equipment. Build pad & set pumping unit concrete base. Set pumping unit, weld engine skid rails & set engine. Set propane tank & hooked up fuel gas to engine. Bridle on unit too short to hang off rods & took bridle in to replace cable. SDFD. Cost: Gang-\$600, super-\$1000. (no cost for Nolen Brunson, pump jack, or trucking) Daily Cost: \$1600 Cum Cost: \$286,037 CWC Cost: \$1,503,402
6/13/2013	6/13/13 Install new bridle on PU. Changed stroke length & engine sheave. PWOH pumping 10 spm. X 85" stroke. Holding 75 to 150" BP. Making 100% water. David W. will night watch well. Prod. Through test heater. Cost: supervisor-\$1000, Roust.-\$400, (no cost for Nolan Brunson) Daily Cost: \$1,400.00 Cum Cost: \$287,437.00 CWC Cost: \$1,504,802.00
6/14/2013	6/14/13 120 water. LTR-743. Daily Cost: \$0 Cum Cost: \$287,437.00 CWC Cost: \$1,504,802.00
6/15/2013	6/15/13 10 oil, 155 water, 0 gas. LTR- 588 Daily Cost: \$0 Cum Cost: \$287,437.00 CWC Cost: \$1,504,802.00
6/16/2013	6/16/13 8 oil, 123 water, 0 gas. LTR-465. Unit down 8 hours. Daily Cost: \$0 Cum Cost: \$287,437.00 CWC Cost: \$1,504,802.00
6/17/2013	6/17/13 4 oil, 88 water, 0 gas, 200 tbg, 170 csg. LTR-377, 14 hrs production Cost: Nolan Brunson - \$16,325 Daily Cost: \$16,325.00 Cum Cost: \$303,762.00 CWC Cost: \$1,521,127.00 Lease compressor is down and waiting repair
6/18/2013	6/18/13 10 oil, 177 water, 0 gas, 175 tbg, 60 csg. LTR: 200, 12 hrs production Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost: \$1,521,127.00
6/19/2013	6/19/13 6 Oil, 67 water, 16 mcf, 170# PTP, 45# FCP. Well down for 12 hours w/ engine problems. Calling mechanic to fix. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost: \$1,521,127.00
6/20/2013	6/20/13 14 oil, 73 water, 16 gas, 170 tbg, 40 csg. LTR: 60. Well down 9 hours w/ engine problem...repairing today. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost: \$1,521,127.00
6/21/2013	6/21/13 8 oil, 35 water, 10 mcf, 170# TP, 40# FCP. LTR 25. Down time 12 hrs rain storm. Daily Cost: \$0 Cum Cost: \$303,762 CWC Cost: \$1,521,127

6/22/2013	6/22/13 8 oil, 100 water, 16 gas, 170 tbg, 40 csg. LTR: -75 Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/23/2013	6/23/13 8 oil, 116 water, 16 gas, 170 tbg, 20 csg. LTR: -191 Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/24/2013	6/24/13 0 oil, 0 water, 0 gas, 0 tbg, 0 csg. LTR: -191 Radiator problem. Down for 24 hours. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/25/2013	6/25/13 6 oil, 111 water, 10 gas, 170 tbg, 20 csg. LTR: -302 14 hr. test Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/26/2013	6/26/13 6 oil, 140 water, 10 gas, 170 tbg, 20 csg. LTR: -442 Produced 24. Report 19 hr test. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/27/2013	6/27/13 16 oil, 161 water, 14 gas, 170 tbg, 20 csg. LTR: -603 24 hr test. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/28/2013	6/28/13 16 oil, 192 water, 14 gas, 175 tbg, 18 csg. LTR: -795 24 hr test. Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/29/2013	6/29/13 32 oil, 180 water, 20 gas, 175 tbg, 20 csg. LTR: -975 Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
6/30/2013	6/30/13 36 oil, 192 water, 20 gas, 175 tbg, 20 csg. LTR: -1167 Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
7/1/2013	7/1/13 18 oil, 104 water, 8 gas, 175 tbg, 20 csg. LTR: -1271 11 hrs down. Rain storm Daily Cost: \$0 Cum Cost: \$303,762.00 CWC Cost; \$1,521,127.00
7/2/2013	7/2/13 20 oil, 191 water, 28 gas, 175 tbg, 14 csg. LTR: -1595 Daily Cost: \$0 Cum Cost: \$303,762 CWC Cost: \$1,521,127

7/3/2013 7/3/13
20 oil, 191 water, 28 gas, 175 tbg, 14 csg. LTR: -1595

Daily Cost: \$0
Cum Cost: \$303,762
CWC Cost: \$1,521,127

7/4/2013 7/4/13
22 oil, 197 water, 27 mcf

Daily Cost: \$0
Cum Cost: \$303,762
CWC Cost: \$1,521,127

7/5/2013 7/5/13
26 oil, 190 water, 20 mcf

Daily Cost: \$0
Cum Cost: \$303,762
CWC Cost: \$1,521,127

7/6/2013 7/6/13
24 oil, 190 water, 22 mcf

Daily Cost: \$0
Cum Cost: \$303,762
CWC Cost: \$1,521,127

7/7/2013 7/7/13
22 oil, 186 water, 20 mcf

Daily Cost: \$0
Cum Cost: \$303,762
CWC Cost: \$1,521,127

FINAL REPORT

