Discovery Operating, Inc.
University 11A #9
1400' FNL & 1050' FEL
Section 10, Block 11, ULS
A-U330
Ground Elevation: 3319'
Andrews County, Texas

May 15, 2012 - Tuesday
Day 1
Depth: 1504' (1504') – TOH
Mud Data: Wt: 9.4 Vis: 33 pH: 8.0
Bit Data: #1 – 12 ¼" Z05 (SN DA 332) in @ 0', out @ 1504' (made 1504' in 18 hrs)
BHA: bit, bit sub, 2- 8" DC's, XO, 18- 6" DC's = 584.87'
Deviation Survey: ¼° @ 235', ¾° @ 733', ¾° @ 1125'
RPM: 110-120 SPM: 58 PP: 1050 WOB: 10-45K
Materials: 5 sx lime, 9 sx paper, 65 sx FW gel, 5 gals MF-55, 520 bbls FW, 420 bbls BW
Time Distribution: 2 hrs start up motors, 1 ½ hrs mix spud mud, 2 ¾ hrs drlg, ¼ hr survey, 5 hrs drlg, ½ hr survey, 5 ½ hrs drlg, ¼ hr survey, 4 ¾ hrs drlg, 1 hr circulate, ½ hr drop TOTCO, TOH
Miscellaneous: Spud well @ 9:30 AM on 05/14/12.
Daily Cost: $66,820

May 16, 2012 - Wednesday
Day 2
Depth: 1504' (0') – TIH
Mud Data: Wt: 10.0 Vis: 29 pH: 8.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504'
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1 ¼° @ 1473'
RPM: SPM: 58 PP: 1050 WOB:
Materials: None reported
Time Distribution: 2 ½ hrs TOH, LD 8" DC's, 1 ½ hrs RU csg crew, 3 ½ hrs run 52 jts of 8 ⅝" surface csg, 5 ½ hrs circulate, w/o cementers, 1 ½ hrs cement, 4 hrs WOC, 1 ½ hrs weld on csg head, 2 hrs NU BOP, ½ hr function test BOP, ½ hr test BOP (1000#), 1 hr PU BHA & TIH
Miscellaneous: Run 52 jts of 8 ⅝" surface csg & set @ 1504'. Cement w/ 495 sx EconoCem + 200 sx Halcem C. Circulated 200 sx to surface. Bump plug @ 8:20 PM on 05/15/12.
Daily Cost: $62,400
Cum: $129,220

May 17, 2012 - Thursday
Day 3
Depth: 2569' (1065') – Drlg
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 1065' in 19 ½ hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1 ¼° @ 1867', 1 ½° @ 2183'
RPM: 80-85 SPM: 58 PP: 650 WOB: 10-20K
Materials: 25 sx lime, 11 sx paper, 15 gals C202, 20 gals MF-55, 480 bbls FW
Time Distribution: 1 ½ hrs cut drlg line, ½ hr test BOP, 1 ½ hrs drlg cement & plug, 9 hrs drlg, ½ hr survey, 4 ½ hrs drlg, ½ hr survey, 6 hrs drlg
Daily Cost: $13,650
Cum: $142,870

May 18, 2012 - Friday
Day 4
Depth: 3715' (1146') – Drlg Anhy Salt @ 50 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 2211' in 42 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1 ¼° @ 2627', 1° @ 3038', 1° @ 3388'
RPM: 80-85 SPM: 58 PP: 800 WOB: 15-20K
Materials: 20 sx lime, 8 sx paper, 15 gals C202, 15 gals MF-55
Time Distribution: 1 ½ hrs drlg, ½ hr survey, 8 ½ hrs drlg, ½ hr survey, 7 hrs drlg, ½ hr survey, 5 ½ hrs drlg
Daily Cost: $42,140
Cum: $185,010

May 19, 2012 - Saturday
Day 5
Depth: 4550' (835') – Drlg Anhy Dolo @ 36 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 3046' in 65 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1° @ 3831', 1 ¼° @ 4241'
RPM: 80-85 SPM: 58 PP: 900 WOB: 25K
Materials: 22 sx lime, 12 sx paper, 15 gals C202, 13 gals MF-55
Time Distribution: 3 ½ hrs drlg, ½ hr survey, 11 ½ hrs drlg, ½ hr survey, 8 hrs drlg
Daily Cost: $14,150
Cum: $199,160

May 20, 2012 - Sunday
Day 6
Depth: 5545' (995') – Drlg Dolo @ 44 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 4041' in 87 ½ hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1 ½° @ 4652', 1 ¾° @ 5062', ¾° @ 5444'
RPM: 80 SPM: 58 PP: 950 WOB: 25K
Materials: 23 sx lime, 9 sx paper, 10 gals C202, 13 gals MF-55
Time Distribution: 3 hrs drlg, ½ hr survey, 6 ½ hrs drlg, ½ hr survey, 11 hrs drlg, ½ hr survey, 2 hrs drlg
Daily Cost: $14,250
Cum: $213,410

May 21, 2012 - Monday
Day 7
Depth: 6075' (530') – Drlg Dolo @ 30 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 4571' in 105 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: ¼° @ 5855'
RPM: 80 SPM: 58 PP: 1050 WOB: 25K
Materials: 16 sx lime, 11 sx paper, 10 gals C202, 15 gals MF-55
Time Distribution: 8 ½ hrs drlg, ½ hr pump softline, 3 hrs TOH for in DP (57 stds slip area), 2 ½ hrs TIH, 2 ½ hrs drlg, ½ hr survey, 6 ½ hrs drlg
Daily Cost: $14,250
Cum: $227,660

May 22, 2012 - Tuesday
Day 8
Depth: 6728' (653') – Drlg Dolo @ 33 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 5224' in 125 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: ½° @ 6265', ¾° @ 6616'
RPM: 80 SPM: 58 PP: 1150 WOB: 25K
Materials: 8 sx lime, 6 sx paper, 10 gals C202, 5 gals MF-55
Time Distribution: 6 ½ hrs drlg, ½ hr survey, 11 ½ hrs drlg, ½ hr survey, 2 hrs drlg, ½ hr pump softline, 1 hr TOH top 21st stand slip area, ½ hr PU kelly, check psi, 1 hr TIH
Daily Cost: $14,150
Cum: $241,810

May 23, 2012 - Wednesday
Day 9
Depth: 7222' (494') – Drlg Dolo @ 25 fph
Mud Data: Wt: 10.0 Vis: 29 pH: 10.0
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504' (made 5718' in 142 ½ hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1° @ 7024'
RPM: 80 SPM: 58 PP: 1200 WOB: 25K
Materials: 11 sx lime, 5 sx paper, 15 gals C202, 15 gals MF-55
Time Distribution: ½ hr TIH, ½ hr wash 30' to bottom, 1 ½ hrs drlg, ½ hr pump softline, 2 hrs TOH for hole in DP top 56th std, ½ hr PU kelly, check psi, 2 hrs TIH, 10 hrs drlg, ½ hr survey, 6 hrs drlg
Daily Cost: $14,150
Cum: $255,960

May 24, 2012 - Thursday
Day 10
Depth: 7718' (496') – Circulate
Mud Data: Wt: 10.1 Vis: 36 W.L.: 12 pH: 10.0 FC: 1/32
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504', out @ 7718' (made 6214' in 160 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1° @ 7436'
RPM: 70 SPM: 58 PP: 1000 WOB: 25K
Materials: 8 sx lime, 6 sx paper, 341 sx SW gel, 10 gals C202, 5 gals MF-55
Time Distribution: 8 hrs drlg, ½ hr survey, 9 ½ hrs drlg, 6 hrs circulate & condition mud
Daily Cost: $14,450
Cum: $270,410

May 25, 2012 - Friday
Day 11
Depth: 7718' (0) – Laydown Pipe
Mud Data: Wt: 10.1 Vis: 36 W.L.: 12 pH: 10.0 FC: 1/32
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504', out @ 7718' (made 6214' in 160 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: 1° @ 7436'
RPM: 70 SPM: 58 PP: 1000 WOB: 25K
Materials: 150 sx SW gel, 75 sx starch
Time Distribution: 1 ½ hrs trip 20 stands; ½ hr wash to bottom; 1 hr circulate; ½ hr drop Totco; 4 ½ hrs TOH for logs; 1 hr rig up loggers; 8 hrs log well; 3 ½ hrs TIH; 1 hr. circulate, RU LD TRK; 2 ½ hrs laydown pipe
Daily Cost: $14,450
Cum: $284,860

May 26, 2012 - Saturday
Day 12
Depth: 7718' – Rig Down
Mud Data: Wt: 10.1 Vis: 36 W.L.: 12 pH: 10.0 FC: 1/32
Bit Data: #2 – 7 ⅞" U616MS (SN 13549) in @ 1504', out @ 7718' (made 6214' in 160 hrs)
BHA: bit, bit sub, 6" DC, IBS, 6" DC, IBS, 16- 6" DC's = 534.70'
Deviation Survey: None reported
RPM: SPM: 58 PP: 1000
Time Distribution: 4 hrs lay down drill pipe & drill collars; 7 ½ hrs run 4 ½" csg; ½ hr circulate csg; 1 ½ hrs cement csg; 2 ½ hrs ND BOP, set slips, cut off csg; 8 hrs rig down
Miscellaneous: Run 192 jts of 4 ½" production csg & set @ 7718'. Cement w/230 sx VersaCem H (lead) + 600 sx VersaCem H (tail). Bumped plug @ 7:30 p.m., 05/25/12. Rig released @ 10:00 p.m., 05/25/12.
Daily Cost: $91,400
Cum: $376,260

University 11A #9
Completion

July 6, 2012 – Friday
Carlos Sanchez

Road rig from JW 16 #7 at 7:30 am. AOL @ 9:00 am. Spotted rig. Put wellhead on wellbore. RU PU. Waited on BOP. Greased rig & repaired miscellaneous. NU BOP. Cut off bad spot on sandline. Poured new rope socket. Close well in & SDFN @ 1:30 pm.

Cost:
DOI Rig #1 (8 hrs) $2,600

July 9, 2012 – Monday
Christian Cotton / Wes Hanna

AOL @ 8:00 am and RU Halliburton wireline. RIH w/ guns and perforate Wichita Albany @ 7405', 7406', 7407', 7420', 7421', 7446', 7447', 7448', 7498', 7499', 7510', 7511', 7512', 7516', 7517', 7518', 7520', 7521', 7522', 7535', 7537', 7566', 7567', 7568', 7569', 7571', 7572' (27 total). POOH and RD Halliburton. Forklift on location 4 hrs late. Unload 240 joints of 2 ⅜" 4.7# J-55 yellow band tubing from Smith Pipe in Abilene. Pick up Model R packer and tally tubing going in hole. Leave packer swinging @ 7296' and SDFN @ 6:00 pm.

Cost:

DOI #1 (13 hrs)	$4,300	
Odessa Packers (Hand + Tools)	2,300	
Supervision (250 miles)	1,200	
	$7,800	Cum: $10,400

July 10, 2012 – Tuesday
Christian Cotton / Wes Hanna / Grey Sparks

AOL @ 7:00 am. RIH w/ packer to 7577'. Mix and titrate 8000 gals of 15% acid. RU Halliburton and spot 150 gals 15% Ferchek acid across perfs. Pull up 10 jts. Pump 3 bbls of P/W reverse with no returns to clear out any acid above packer. Set packer @ 7262' in 20 points compression. Load backside w/ 10 bbls P/W, and SI with 500 psi. Acid treat formation as follows:

Stage	Vol (Gal)	Cum Vol (Gal)	Balls	Total Balls	Ball Action	Rate (BPM)	Pressure (psi)
1	750	750	2	2		3.6	2700
2	400	1150	2	4		4.0	2750
3	400	1550	2	6		4.0	2650
4	400	1950	2	8		4.0	2200
5	400	2350	2	10	Slight Ball Action	4.0	2070
6	400	2750	2	12		4.0	1990
7	400	3150	2	14	Ball Action	4.0	1870
8	400	3550	2	16	Ball Action	4.0	1860
9	400	3950	2	18		4.0	1820
10	400	4350	2	20	Ball Action	4.0	1760
11	400	4750	2	22	Good Ball Action	4.0	1950
12	400	5150	2	24	Good Ball Action	4.0	2150
13	400	5550	2	26	Good Ball Action	4.0	2350
14	400	5950	2	28	Slight Ball Action	4.0	1750
15	400	6350	2	30	Ball Action	4.0	1840
16	400	6750	2	32	Good Ball Action	4.0	2230
17	400	7150	2	34	Ballout @ 4600	3.0	0
18	400	7550	5	39		3.0	0
19	300	7850	6	45		3.0	0

Ballout @ 4600 psi w/ 1050 gals of acid left in transport. When tubing pressured up, saw backside pressure gradually increase to 1500 psi. Try to surge balls several times, and ball sealers would not drop. Bled off some pressure on backside. When pressuring up on tubing to pressures > 2000 psi, we saw backside pressure gradually increase. When we surged the tubing pressure back, we saw a slight drop in the casing pressure, but it would stabilize and hold pressure. We believe we could have developed a high pressure leak in our packer or tubing when we balled out. Halliburton carefully drained acid in lines. SI TIW valve on tubing and RD Halliburton valve. Place hose on tubing to divert any flow to pit. Pick up and unset PKR. Saw fluid u-tube up the backside. Pumped 3 bbls of P/W down tubing to avoid any acid getting on crew. RIH w/ 5 stands to 7577' to knock balls off formation. Well went on a vacuum when we reached the perfs. Pull PKR back up to 7262' and reverse out 3 bbls P/W (no returns). Set PKR in 20 pts compression. Begin pumping remaining acid and flush. Did not catch pressure while pumping remaining acid or flush. RD Halliburton and RU swab equipment. Swabbing went as follows:

Run	Fluid Level	Pulled From	bbls Recovered	Oil Cut (%)	Comments
1	3700	4900	4.6	0	Water
2	3700	4900	9.3	0	Water
3	2500	4000	15.1	0	Water/Acid Gas
4	4400	5900	20.9	Skim	Water/Acid Gas/Skim Oil
5	3600	5100	26.7	5	Water/Spent Acid/Skim Oil
6	3600	5100	32.5	20	Water/Spent Acid/Oil
7	3300	4800	38.3	20	Water/Spent Acid/Oil
8	3800	5300	44.1	40	Water/Spent Acid/Oil
9	3600	5100	49.9	30	Water/Spent Acid/Oil
10	3300	4800	55.7	40	Water/Spent Acid/Oil
11	3800	5300	61.5	40	Water/Spent Acid/Oil
12	3400	4900	67.3	30	Water/Spent Acid/Oil
13	3600	5100	73.1	45	Water/Spent Acid/Oil
14	3600	5100	78.9	45	Water/Spent Acid/Oil
15	3500	5000	84.8	40	Water/Spent Acid/Oil

Swabbed an estimated 85 bbls. SI well and leave location at 7:45 PM.

Cost:

DOI Rig#1 (15 hrs)	$ 5,000	
Halliburton	26,500	
Odessa Packers (Hand)	800	
Water Truck	1,000	
Supervision (250 miles)	1,200	
	$34,500	Cum: $44,900

July 11, 2012 – Wednesday
Wesley Hanna

AOL @ 7:30 AM. SITP = 300 psi, SICP = 0 psi. Blow down tubing and make 3 more swab runs. Swabbing went as follows:

Run	Fluid Level	Pulled From	bbls Recovered	Oil Cut (%)	Comments
16	3300	5100	91.7	60	Water/Oil
17	4200	6000	98.7	60	Water/Oil
18	3600	5400	105.7	50	Water/Oil

Recovered an estimated total of 105 bbls of fluid. Production Specialties delivered wellhead equipment. John Crane delivered pump, rods and equipment. RD swab equipment. POOH w/ PKR. Inspected packer and did not see any evidence of wear on the rubber elements. Found a collar with 2 threads showing. Marked stand on the way out.

RIH w/ production tubing. Tubing sting design is as follows:

Tubing String Design: 07/11/12

1	- 2 ⅜" x 4 ½" 30K TAC w/ closed BP	3.20'
1	- 2 ⅜" Perforated Sub	4.00'
1	- 2 ⅜" SN	1.10'
237	- 2 ⅜" J- 55 8rd EUE	7597.19'
1	- KB Adjustment	10.00'
		7615.49'

LD 2 joints that made up the bad connection. Collar looks good, but pin appears to be threaded longer than the other joints. ND BOP, set TAC w/ 18 pts tension and NU WH. Prepare steel rods. Change over tools. RIH w/ pump and begin RIH w/ steel rods. Left location at 4:00 PM to take BOP to Geronimo 15-6. Crew ran steel rods in.

Cost:

DOI Rig#1 (14 hrs)	$ 4,600	
Odessa Packers (Hand)	800	
Production Specialties	3,500	
John Crane	22,000	
Supervision (125 miles)	1,000	
	$31,900	Cum: $76,800

July 12, 2012 – Thursday
Carlos Sanchez

AOL @ 7:00 am. Bled well down. LD PR. Cont. to PU rods off ground. Rod design as follows:

1	-	2" x 1 ½" x 20' RXBC pump (DIS A05) w/ 1" x 6' GA
1	-	4' Stabilizer bar w/ guides
1	-	⅞" Grade D rod
1	-	21K Shear Tool
19	-	⅞" Grd D rods
116	-	¾" Grd D rods
84	-	⅞" Grd D rods
54	-	1" FG rods
2	-	1" x 3' x 18' FG pony rods
1	-	1 ¼" x 26' PR w/ 1 ½" x 12' liner

Spaced well out. Loaded tbg w/ 15 bbls & pressured up to 500 psi, ok. Released pressure. Pressured up to 500 psi to double check tbg, was ok. Long-stroked well to 500 psi (4 strokes). Hung well on. RD & cleaned up location. Road rig to the TXLV 5 #1 @ 11:30 am.

Cost:

DOI Rig #1 (5 ½ hrs)	$1,800	
Water Truck	1,000	
	$2,800	Cum: $79,600