

**ANDREWS UNIVERSITY 20-8 (SPRABERRY/TREND)****DESTA #10****ANDREWS CO., TX**

AFE# 101226

SPUD DATE: 10/24/10

API: 42-003-41885

Prop Num: 03994-008

10/23-24/10

PO: MOVE IN &amp; RU.

CWC \$118,166

10/25/10

DAS 1; **PD 415'**; PO: DRILL F/60'-415', CIRC, SET BACK KELLY, DROP TOTCO. TOH F/CSG, RUN 10 JTS 13 3/8" CSG & CMT. MW 8.4; VIS 29

CWC \$152,863

10/26/10

DAS 2; **PD 733'**; PO: CUT OFF CSG, WELD HEAD, NU BOP & TEST. MU BIT #2, TIH, TAG CMT @ 370', DRILL F/415'-733'. MW 8.8; VIS 34

CWC \$184,072

10/27/10

DAS 3; **PD 2263'**; PO: DRILL F/733'-2263'. MW 9.9; VIS 31

CWC \$215,103

10/28/10

DAS 4; **PD 3435'**; PO: DRILL F/2263'-3435'. MW 10; VIS 29

CWC \$233,366

10/29/10

DAS 5; **PD 4309'**; PO: DRILL F/3435'-4309'. MW 10; VIS 29

CWC \$249,176

10/30/10

DAS 6; **PD 4903'**; PO: DRILL F/4309'-4903'. MW 10; VIS 30

CWC \$267,074

10/31/10

DAS 7; **PD 4965'**; PO: DRILL F/4903'-4965', CIRC & COND MUD. SET KELLY BACK & DROP TOTCO, TOH. LD 8" DCS, SHOCK SUB & BIT, TQ TURN, RUN 8 5/8" CSG. MW 10; VIS 60; FL 10

CWC \$280,934

11/1/10

DAS 8; **PD 4965'**; PO: WASH CSG F/4878'-4926', CIRC, CMT. ND, SET SLIPS, NU BOP & TEST, JET PITS. MU BIT #3, PU BHA & DCS.

CWC \$502,875

11/2/10

DAS 9; **PD 5080'**; PO: TIH, STRAP PIPE, ROT CHAIN & MUD PMP REPAIRS, TEST PIPE RAMS & ANNULAR. DRILL CMT, PLUG, FC & SHOE, DRILL F/4965'-5080'. MW 8.4; VIS 29

CWC \$526,562

11/3/10

DAS 10; **PD 6048'**; PO: DRILL F/5080'-6048'. MW 8.4; VIS 29

CWC \$543,710

11/4/10

DAS 11; **PD 7207'**; PO: DRILL F/6048'-7207'. MW 8.4; VIS 29

CWC \$563,080

11/5/10

DAS 12; **PD 8074'**; PO: DRILL F/7207'-8074'. MW 8.4; VIS 29

CWC \$579,884

11/6/10

DAS 13; **PD 8870'**; PO: DRILL F/8074'-8870'. MW 8.4; VIS 29

CWC \$596,877

11/7/10

DAS 14; **PD 9968'**; PO: DRILL F/8870'-9968'. MW 8.4; VIS 29

CWC \$629,285

11/8/10

DAS 15; **PD 10631'**; PO: DRILL F/9968'-10631'. MW 8.4; VIS 29

CWC \$646,897

11/9/10

DAS 16; **PD 11199'**; PO: DRILL F/10631'-11199'. MW 8.4; VIS 29

CWC \$668,041

11/10/10

DAS 17; **PD 11410'**; PO: DRILL F/11199'-11410', CIRC, SWEEP & SPOT PILL, DROP TOTCO, LDDP. PULL ROT  
HEAD, LDDP & BREAK KELLY, LD DCS, RMRS, MTR & BIT. MW 8.4; VIS 29 CWC \$686,210

**Andrews University 20 #8**

AFE: #101226/New Drlg/\$1,938,300/CWEI GWI: 100%

API: #42-003-41885

- 11-17-10 Mi RU HES Wireline(Ryan Kelly); P/u CSNG/GR/CCL logging tools; TIH to PBTD @ 11,298'; logged fr/ 11,296' to 5000'; POOH; L/d logging tools. P/u RCBL/GR/CNL/CCL logging tools; TIH to PBTD; RU kill truck; Logged fr/ 11,296' to 5000' w/ CNL; To 2550' w/ RCBL/CCL w/ 1000 psi on csg; To surface w/ GR. L/d logging tools; RD release HES Wireline; Est Daily Comp \$270,570
- 12-07-10 AOL @ 7:00 a.m. Finish POOH & L/d tbq. ND BOP Flange up WH; Too windy rig down. SIW SDFN; Est Daily Comp \$4070  
Est Drlg \$954,554; Est Daily Comp \$274,640; Est Tot \$1,229,194
- 12-08-10 WOF; Est Daily Comp \$500
- 12-09-10 MIRU HES WL; PU perf guns; TIH & perf 11,040'-11,043', 11,214'-11,217' w/16 shots perf interval; 11,262'-11,267' w/6 JSPF; POOH RD HES WL; SIW; Est Daily Comp \$1000  
Est Drlg \$954,554; Est Daily Comp \$276,140; Est Tot \$1,230,694
- 12-10-10 NU 7-1/16"x10k frac stack; Est Daily Comp \$2800
- 12-11/12-10 WOF
- 12-13-10 WOF; Est Daily Comp \$750  
Est Drlg \$954,554; Est Daily Comp \$279,690; Est Tot \$1,234,244
- 12-14-10 WOF; Est Daily Comp \$1050  
Est Drlg \$954,554; Est Daily Comp \$280,740; Est Tot \$1,235,294
- 12-15-10 AOL for 11.00 am pump time.  
Stage 1:  
Begin pumping @ 11.10 am. Pumped 85,825 gal total fluid, 4027 gal 15% HCL, and 49,996 lbs of 20/40 China Rainbow prop @ 21 cP vis. Average pressure = 5654 psi @ 52.5 bpm. ISIP = 3664 psi.  
Stage 2:  
TIH w/ CBP and perf guns. Set plug @ 10,950' and perf 10,758'-10,760', 10,844'-10,847', 10,864'-10,867', and 10,902'-10,905', 59 holes total. TOH. Begin pumping @ 1.30 pm. Pumped 74,701 gal total fluid, 1999 gal 15% HCL, and 50,071 lbs 20/40 SLC @ 14 cP vis. Average pressure = 5438 psi @ 62.2 bpm. ISIP = 3306 psi.  
Stage 3:  
TIH w/ CBP and perf guns. Set plug @ 10,170' and perf 10,141'-10,142', 9996'-9999', and 9969'-9971'. Last 3 guns did not fire. TOH and found water in 4th gun. Replace gun and TIH. Perf 9850'-9851', 9881'-9882', and 9908'-9911', 66 holes total. TOH. Begin pumping @ 4.40 pm. Pumped 132,356 gal total fluid, 1991 gal 15% HCL, and 150,854 lbs 20/40 SLC @ 14 cP vis. Average pressure = 5155 psi @ 71.4 bpm. ISIP = 1737 psi.  
Stage 4:  
TIH w/ CBP and perf guns. Set plug @ 9640' and perf 9486'-9488', 9534'-9536', and 9582'-9587', 54 holes total. TOH. Flush acid w/ 3088 gal total fluid and SDFD; Est Daily Comp \$1050  
Est Drlg \$954,554; Est Daily Comp \$280,740; Est Tot \$1,235,294
- 12-16-10 **Stage 4 cont'd:**  
Begin pumping @ 7.35 am. Pumped 60,919 gal total fluid, 2008 gal 15% HCL, 37,440 lbs of 20/40 Ottawa, and 14,155 lbs 20/40 SLC tail (51,555 lbs total) @ 15 cP vis. Average pressure = 3025 psi @ 60.2 bpm. ISIP = 1348 psi.  
**Stage 5:**  
TIH w/ CBP and perf guns. Set plug @ 9160' and perf 8982'-8985', 9002'-9005', 9044'-9047', and 9126'-9130', 69 holes total. TOH. Begin pumping @ 9.05 am. Pumped 73,974 gal total fluid, 2020 gal 15% HCL, 78,017 lbs of 20/40 Ottawa, and 14,823 lbs 20/40 SLC tail (92,840 lbs total) @ 15 cP vis. Average pressure = 2983 psi @ 71.9 bpm. ISIP = 1044 psi.  
**Stage 6:**  
TIH w/ CBP and perf guns. Set plug @ 8910' and perf 8614'-8616', 8712'-8717', 8838'-8841', 8886'-8888', 69 holes total. TOH. Begin pumping @ 10.30 am.

Pumped 59,627 gal total fluid, 1998 gal 15% HCL, 48,944 lbs of 20/40 Ottawa, and 25,075 lbs 20/40 SLC tail (74,019 lbs total) @ 16 cP vis. Average pressure = 3084 psi @ 71.3 bpm. ISIP = 1022 psi.

**Stage 7:**

TIH w/ CBP and perf guns. Set plug @ 8230' and test to 2000 psi. Perf 7933'-7935', 7984'-7986', 8030'-8032', 8094'-8096', 8164'-8165', 8186'-8187', 60 holes total. TOH. Begin pumping @ 11.45 am. Pumped 142,320 gal total fluid, 1988 gal 15% HCL, and 230,741 lbs of 20/40 Ottawa @ 15 cP vis. Average pressure = 2817 psi @ 70.2 bpm. ISIP = 1070 psi.

**Stage 8:**

TIH w/ CBP and perf guns. Set plug @ 7910' and perf 7714'-7716', 7772'-7776', 7819'-7821', 7874'-7878', 69 holes total. TOH. Begin pumping @ 11.45 am. Pumped 139,615 gal total fluid, 2015 gal 15% HCL, and 235,698 lbs of 20/40 Ottawa @ 15 cP vis. Average pressure = 3222 psi @ 70.4 bpm. ISIP = 1311 psi.

**Stage 9:**

TIH w/ CBP and perf guns. Set plug @ 7670' and perf 7444'-7446', 7566'-7569', 7609'-7612', and 7637'-7640', 66 holes total. TOH. Wait for sand to off load (45 min). Begin pumping @ 4.05 pm. Pumped 110,659 gal total fluid, and 197,648 lbs of 20/40 Ottawa @ 15 cP vis. Average pressure = 2711 psi @ 70.5 bpm. ISIP = 1363 psi.

TIH w/ CBP and set cap plug @ 6500'. TOH.

RDMO all equipment @ 5.45 pm.

BLWTR for entire job = 22,118 bbls; Est Daily Comp \$366,500

Est Drlg \$954,554; Est Daily Comp \$647,240; Est Tot \$1,601,794

12-17/20-10 WOR; Est Daily Comp \$4200

Est Drlg \$954,554; Est Daily Comp \$651,440; Est Tot \$1,605,994

12-21/26-10 WOR; Est Daily Comp \$1050

Est Drlg \$954,554; Est Daily Comp \$651,440; Est Tot \$1,605,994

12-29-10 AOL 8:30 am. MI RUPU. ND frac head. Weld bell nipple on 5-1/2 csg. NU well head. NU BOP. Set racks and hydro walk. Moved tbg to racks. Pulled protectors, tally tbg. Ran 4-5/8 hurricane bit, pump open sub, 14 jts 2-7/8 L80 tbg. CWI SD 1:30 pm. Too windy; Est Daily Comp \$11,300

12-30-10 AOL 7:00 am. PU 212 jts 2-7/8 L80 tbg. Tag @ 6420' c/o 30' sand. DP @ 6450'. PU 39 jts. Well flowing 2-3 bpm. CWI SD 5:00 pm; Est Daily Comp \$7300

12-31-10 –

01-02-11 SDFWE & holiday; Est Daily Comp \$2550

Est Drlg \$954,554; Est Comp \$673,640; Est Tot \$1,628,194

01-03-11 AOL 7:00 am. Tag sand @ 7623' c/o 57' sand. DP @ 7680'. RT. Tag @ 7826' c/o 82' sand. DP @ 7818'. Well flowing 1/2 bpm. Had trouble circulating sand out. RT. Tag @ 8208' c/o 30' sand. DP #4 @ 8238'. Well flowing 1-2 bpm. Pull 10 stands. CWI SD 6:30 pm. Hauled 880 bbls from pit; Est Daily Comp \$11,000

Est Drlg \$954,554; Est Comp \$684,640; Est Tot \$1,639,194

01-04-11 AOL 7:00 am. Ran 10 stands. PU 22 jts 2-7/8 L80 tbg. Tag @ 8902' c/o 19' sand. DP @ 8921'. RT. Tag @ 9147' c/o 23' sand. DP @ 9170'. Flowing 2-3 bpm. RT. Tag @ 9629' c/o 21' sand. DP @ 9650'. RT. Tag @ 10136' c/o 39' sand. DP @ 10175'. RT. Tag @ 10929' c/o 39' sand. DP @ 10958'. RT. Tag @ 11293' c/o to 11337' kb. Circulate clean. Pull and LD 40 jts. Stood 42 stands in derrick. CWI SD 6:30 pm. Hauled 850 bbls from pit; Est Daily Comp \$10,500

Est Drlg \$954,554; Est Comp \$695,140; Est Tot \$1,649,694

01-05-11 AOL 7:00 am. Ran 42 stands 2-7/8 tbg from derrick. Pulled and LD 83 jts. Pumped 260 bbls fresh water and 110 bbls. 10# brine. NU well to frac tanks. Left well open on 32/64 choke. SD 3:00 pm due to wind. Hauled 500 bbls from frac pit; Est Daily Comp \$9100

Est Drlg \$954,554; Est Comp \$695,140; Est Tot \$1,649,694

**Andrews University 20 #8**

AFE: #101226/New Drlg/\$1,938,300/CWEI GWI: 100%

API: #42-003-41885

01-06-11 AOL 7:00 am. Open well to pit. Flowing a lot of gas. 1-2 bpm. Pumped 210 bbls. 10# brine. ND stripper. Pulled 125 stands 2-7/8 L80 tbg. Ran BP, 1 MA jt, super perf, TAC ( 2-7/8 x 5-1/2), R.packer, gas seperator, SN @ 7564', 248 jts 2-7/8 L80 tbg. ND BOP. TAC would not set. Flange well up on well head. CWI SD 6:30 pm; Est Daily Comp \$9350  
Est Drlg \$954,554; Est Comp \$711,590; Est Tot \$1,666,144

01-07-11 AOL 7:00 am. Pumped 80 bbls 10# brine down csg, 15 bbls down tbg. Pulled 43 stands 2-7/8 tbg. TAC set. Released TAC and reset. Run tbg back in hole. LD 5 jts. Ran BP, 1 MA jt, super perf, TAC ( 2-7/8 x 5-1/2), R. packer, gas seperater, SN @ 7355', 243 jts. Set anchor (20 pts). ND BOP. Land tbg. NU wellhead. PU 2-1/2" x 1-1/2" x 24' pump, 4- 1-1/2" K bars, 109- 3/4" HS steel rods. Left csg open to frac tank on 32/64 choke. SD 6:30 pm; Est Daily Comp \$13,100

01-08/09-10 SDFWE; Est Daily Comp \$2300  
Est Drlg \$954,554; Est Comp \$726,990; Est Tot \$1,681,544

01-10-11 AOL 7:00 am. PU 86- 78" HS steel rods, 93- 1" HS steel rods, 1- 4', 1- 6', 1- 8' 1" subs, 1-1/2" x 26' polish rod. Spaced out. Hung well on. Well pumped up. Set choke and back pressure valve. RD PU 2:30 pm. Final report. Release to production; Est Daily Comp \$2800  
Est Drlg \$954,554; Est Comp \$729,740; Est Tot \$1,684,294

01-13-11 Pmpd 0 BO + 132 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 132; BLWTR 21,986

01-14-11 Pmpd 0 BO + 186 BW + 0 MCF to frac tnks

01-15-11 Pmpd 0 BO + 157 BW + 0 MCF to frac tnks

01-16-11 Pmpd 0 BO + 258 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 733 (3%); BLWTR 21,385

01-17-11 Pmpd 5 BO + 225 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 958 (4%); BLWTR 21,160

01-18-11 Pmpd 0 BO + 368 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 1326 (6%); BLWTR 20,792

01-19-11 Pmpd 0 BO + 276 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 1602 (7%); BLWTR 20,516

01-20-11 Pmpd 0 BO + 232 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 1834 (8%); BLWTR 20,284

01-22-11 Pmpd 13 BO + 219 BW + 6 MCF to frac tnks

01-23-11 Pmpd 11 BO + 205 BW + 5 MCF to frac tnks  
BLW 22,118; BLWR 2258 (10%); BLWTR 19,860

01-21-11 Pmpd 12 BO + 230 BW + 5 MCF to frac tnks

01-24-11 Pmpd 25 BO + 331 BW + 11 MCF to frac tnks  
BLW 22,118; BLWR 2819 (13%); BLWTR 19,299

01-25-11 Pmpd 13 BO + 245 BW + 6 MCF to frac tnks  
BLW 22,118; BLWR 3064 (14%); BLWTR 19,054

01-26-11 Pmpd 29 BO + 287 BW + 13 MCF to frac tnks  
BLW 22,118; BLWR 3351 (15%); BLWTR 18,767

01-27-11 Pmpd 50 BO + 404 BW + 22 MCF to frac tnks  
BLW 22,118; BLWR 3755 (17%); BLWTR 18,363

01-28-11 Pmpd 0 BO + 218 BW + 0 MCF to frac tnks

01-29-11 Pmpd 19 BO + 187 BW + 8 MCF to frac tnks

01-30-11 Pmpd 12 BO + 244 BW + 5 MCF to frac tnks  
BLW 22,118; BLWR 4404 (20%); BLWTR 17,714

01-31-11 Pmpd 51 BO + 199 BW + 23 MCF to frac tnks  
BLW 22,118; BLWR 4603 (21%); BLWTR 17,515

02-01-11 Pmpd 70 BO + 148 BW + 31 MCF to frac tnks  
BLW 22,118; BLWR 4751 (21%); BLWTR 17,367

02-06-11 Pmpd 0 BO + 106 BW + 0 MCF to frac tnks  
BLW 22,118; BLWR 4857 (22%); BLWTR 17,261

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**Andrews University 20 #8**

AFE: #101226/New Drlg/\$1,938,300/CWEI GWI: 100%

API: #42-003-41885

02-07-11      Pmpd 100 BO + 236 BW + 44 MCF to frac tnks  
                 BLW 22,118; BLWR 5093 (23%); BLWTR 17,025

02-09-11      Pmpd 45 BO + 250 BW + 71 MCF  
                 BLW 22,118; BLWR 5343 (24%); BLWTR 16,775