

DAKOTA RESOURCES
UNIVERSITY EMILIE #3R
560' FEL & 1680' FSL, SEC. 35, BLK. 4
ANDREWS CO., TX
API 42-003-45115
TD: 11,200
AFE: 377 PROP: 000307
PERMIT: 756090

02/01/2013: Surveying, Luchinni & Mertz, University Emilie #3R well to be drilled.

DWC: \$1,500.00

CTD: \$1,500.00

02/05-10/2013: Damages for the University Lands for the drilling of the University Emilie #3.

DWC: \$15,000.00

CTD: \$16,500.00

02/07/2013: Texas Railroad Commission permit for the University Emilie #3.

DWC: \$350.00

CTD: \$16,850.00

02/06-09/2013: Location built by Grimmett Dirt Works.

DWC: \$35,000.00

CTD: \$51,850.00

02/08/2013: Pits lined by Butch's Rathole Service:

DWC: \$6,000.00

CTD: \$57,850.00

02/10/2013: 14' X 40' conductor pipe set by Butch's Rathole Service:

DWC: \$6,000.00

CTD: \$63,850.00

02/11/2013: Move J B Hunt Rig #2- 300' due south to drill University Emilie #3R; RU rig/refab flowline and clutch guard; Center and tighten flow line; Drilling from 40'-530'; Wireline Survey @ 500' @ 0.3"; Drilling from 530'-829':

DWC: \$500.00

CTD: \$64,850.00

02/12/2013: Drilling from 829'-1,001'; Deviation survey 0.5* @ 958'; Drilling from 1,001'-1,469'; Deviation survey 0.5* @ 1,427'; Drilling from 1,469'-1,811'; Circulate @ TD/Pump sweeps/pill; Drop TOTCO and TOH; RD floor and swap over boom; Repair Rig(weld crack on boom head/change out boom bite valve); Per Job Safety Meeting(PJSM)/RU Casing crew; running 8 5/8" CSG; Finish running 8 5/8" CSG as follows: guide shoe, 1 jt. 8 5/8" 24# K-55 ST & C w/float collar, stop collar; ran 42 jts. 24# K-55 ST & C with 8 Centralizers spaced every 5th jt.; OAL 1,800' set @ 1,800'; RD casing crew:

DWC: \$500.00

CTD: \$65,350.00

02/13/2013: Circulate with casing on bottom; Safety meeting regarding cementing/safety procedures; RU cementers and circulate bottoms up cement w/600 sks. Class "C" lite w/2% CACL mixed @ 13.0 lb/gal. followed by 400 sks. class "C" Heavy w/2% CACL mixed @ 14.8 lb/gal., full returns throughout job; circulate 119 sks. to pit; Waiting on cement; Cut off 8 5/8" casing and weld on wellhead; Nipple up

BOP's/test BOP's; bottom flange leaking/tightened, still leaking; nipples down bottom flange and changed out R53 ring; Test Blind/pipe rams, annular, choke at 1000 psi high/250 psi low, Okay; Picked up BHA #2 and TIH; Cut off drilling line at 80'; continued TIH:
DWC: \$500.00 CTD: \$65,850.00

02/14/2013: TIH, tagged cement @ 1,759'; Drilling out cement/plug @ 1,765'-1,811'; drilled plug out; Drilling from 1,811'-3,751';
DWC: \$500.00 CTD: \$66,350.00

02/15/2013: Drlg from 3751' – 4011'; Survey: 1.1 deg. @ 4011'; Drlg from 4011' – 4267'; Drlg from 4267' – 4521'; Survey: .7 deg. @ 4521'; Drlg from 4521' – 5330'.
DWC: \$500.00 CTD: \$66,850.00

02/16/2013: Drlg from 5330' - 5415'; Survey: .2 deg. @ 5415'; Drlg from 5415' - 5888'; Drlg from 5888' - 5970'; Survey: .8 deg. @ 5970'; Drlg from 5970' – 6483'; Survey: .4 deg. @ 6483'; Drlg from 6483' - 6997'. Full returns/no flow.
DWC: \$500.00 CTD: \$67,350.00

02/17/2013: Survey: .5 deg. @ 6997'. Drlg from 6997' – 7511'. Survey: .4 deg. @ 7511'. Drlg from 7511' – 7980'. Survey: 2.3 deg. @ 7980'. Drlg from 7980' – 8023'.
DWC: \$500.00 CTD: \$67,850.00

02/18/2013: Drlg from 8023' – 8495'. Survey: 1.4 deg. @ 8495'. Drlg from 8495' – 8760'. Losses from 8350' – 8650'. No losses as of 6:00 AM.
DWC: \$500.00 CTD: \$68,350.00

02/19/2013: Drlg from 8760' – 8793'. Survey: .7 deg. @ 8793'. Drlg from 8793' – 9092'. Survey: 1.9 deg. @ 9092'. Drlg from 9092' – 9505'. Full Returns / No Losses.
DWC: \$500.00 CTD: \$68,850.00

02/20/13: Drlg from 9505' – 9563'. Survey: 2.2 deg. @ 9563'. Drlg from 9563' – 9734'. Drop TOTCO survey tool and TOH for bit and motor. Full returns / No losses. 205 jts out @ 6:00 AM.
DWC: \$500.00 CTD: \$69,350.00

02/21/2013: Finished TOH and LD BHA @ 8:00 PM. Made up BHA #3 and TIH, Tested motor and Teledrift = OK. TIH and break circ. @ 5000', 6000', 7000', 8000' & 9000'. Wash and ream 5 jts. Drlg from 9734' -9692'. Survey: 2.5 deg. @ 9692'. Drlg from 9692'-9904'. Full returns / No Losses.
DWC: \$500.00 CTD: \$69,850.00

02/22/2013: Drlg from 9904' – 10204'. Survey: 3.3 deg. @ 10204'. Drlg from 10204' – 10374'. Began disp. mud @ 10374' / 11:15 PM. Mud back @ 10415' / 1:00 AM. MW: 10.1 lb/gal. Vis: 42. Drlg from 10374' – 10545'.

DWC: \$500.00

CTD: \$70,350.00

02/23/2013: Drilling from 10545' – 10671'. Survey: 1.0 deg. @ 10671'. Drilling from 10671' – 11101'.

DWC: \$500.00

CTD: \$70,850.00

02/24/2013: Drilling from 11101' – 11144'. Survey: .9 deg. @ 11144'. Drilling from 11144' – 11200'. Pump sweep and circulate bottoms up. Flow check: 40 gpm. Pumped second sweep and circulate bottoms up. Short trip to 9733' and TIH. Pumped third sweep and circulate 2 bottoms up. TOOH and break down BHA. Change pipe rams from 4 ½" to 5 ½". RU casing crew and run 5 ½" csg: FS, 2 jts, FC, 26 jts, MJ, 68 jts, DV tool, 166 jts. Centralizer every third jt: 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67. Centralizer and cement basket on jt 95, DV Tool, cement basket and centralizer on jt 96. Total: 263 jts @ 11200'.

5 ½" casing: \$204,446.00

Permian Power Tong: \$7560.00

DWC: \$212506.00

CTD: \$282,856.00

02/25/2013: RD csg crew and RU Halliburton cmt. Cmt 1st stage w/ 860 sx Versacem - 14.4 lb/gal, class 'H', displaced 110 bbl fresh water and 148 bbl mud, bump plug 500 psi over, 1.5 bbl back, float held. Circ 4 hours and cmt 2nd stage w/ 700 sx Versacem - 11.9 lb/gal, class 'H' lead and 100 sx Halcem - 15.6 lb/gal, class 'H' tail, displaced 166 bbl fresh water, bump plug 1500 psi over, 1.5 bbl back, float held. RD Halliburton, ND BOP, set slips w/ 125k, install wellhead and cap: test @ 1000 psi held, jet pits. Release rig 11 pm.

Halliburton Cement: \$95,005.00

TWS wellhead/cap: \$1435.00

DWC: \$ 96440.00

CTD: \$379,296.00

3/14/13: 10:00 am – Big D backhoe to clean up location

4:00 pm – WLP roustabout put fences for reserve pits on #3R & #4, poured 14 sx of Quickrete in annulus on #3R

7:00 pm – WLP released

DWC:\$1750.00

CTD: \$381,046.00

3/18/13: 7:00 am – MIRU Lucky Services, RIH w 2 7/8" tbg to DO DV tool

3:00 pm – SDFN

T. Bob Amthor: \$35000.00

United Trucking: \$250.00

DWC: \$35250.00

CTD: \$416,296.00

3/19/13: 7:00 am – Finish RIH w tbg to tag DV tool

10:00 am – PSI test csg @ 1000# and held

12:00pm – Finish strapping tbg

1:30 pm – Tagged up @ 7143' (DV Tool)

3:30 pm – DV tool DO, reciprocated several times to ream csg, begin RIH to tag bottom

6:30 pm – Tagged bottom @ 11111', PSI test csg @ 1000# and held

7:00 pm – SDFN

Lucky Services Reverse Unit: \$3488.00

DWC:\$3488.00

CTD: \$419,784.00

3/20/13: 10:00 am – Finished DO to PBTD @ 11134', circ 45 min, TOOH

6:00 pm – 99 jts left in hole, SDFN

DWC: \$0

CTD: \$419,784.00

3/21/13: 7:00 am – Finish TOOH, RDMO to Emilie #4

10:30 am – HES WL on location to run GR/CNL/CBL

5:00 pm – HES WL complete

Lucky Services Rig Time: \$14622.00

Lucky Services Trucking: \$420.00

Bit: \$550.00

HES WL: \$13000

Dakota Resources Consultant: \$4000

DWC: \$32592.00

CTD: \$452,376.00

6/3/13: Currently working on frac design, date TBD.

6/10/13: Currently working on frac design, date TBD.

DAKOTA RESOURCES
UNIVERSITY EMILIE #3R
560' FEL & 1680' FSL, SEC. 35, BLK. 4
ANDREWS CO., TX
LEASE ID API 42-003-45115
Proposed TD: 11,200
AFE: 377 PROP: 000307
PERMIT: 756090

3/5/14: MIRU Lucky PU from Emilie #4 to Emilie #3R. Too windy to rig up SDFN at 12 noon.

DWC: \$1,000

3/6/14: RU Lucky PU and start picking up 2 7/8" tubing. RIH to circulate 169 bbls of 2% KCl and 10 gal of biocide. Tag up at 11,160'. Lay 1 joint down at 11,131'.

DWC: \$6,840

TWC: \$7,840

3/28/14: MIRU Lucky PU. Nipple down. Nipple up wellhead to pump acid. Pump 20 bbls fresh water and 12 bbls of 10% acetic acid. 60.7 bbls displace & spot acid. POH and lay down 2 7/8" tubing string.

DWC: \$12,050

TWC: \$19,890

3/31/14: Pressure up casing to 1000# and run Halliburton bond log. Ran bond log from 7,500' to 11,125'.

DWC: \$20,548

TWC: \$40,438

4/2/14: Run in gauge ring and shot gun. RU pump truck and put away acid. 3800# to break perfs w/ 20 bbls @ 1.3 bbl/min. end of job pressure was 2800#. Waited 15 minutes and pressure dropped to 2000#. Shut in.

MIRU Allied WL. RIH w/ CCL and 3-1/8" guns loaded w/ 19 gm Connex charges. Perforate Strawn at 6 spf on 60 deg phasing as follows:

11,060'-11,062' (18)

11,030'-11,032' (12)

10,986'-10,988' (12) 42 shots total.

POOH w/ WL.

DWC: \$9,750

TWC: \$50,188

5/22/14:

Stage 1-Strawn (10,986'-11,062')

MIRU Halliburton frac crew. MIRU Performance Frac Valve and Goathead

Breakdown perforations @ 5,808 psi. Acidize Strawn w/ 5,255 gals 7.5% HCl, 24,838 gal treated water, 60,942 gal gel, and 40,017 lbs Versalite in 0.5-2.0 ppg stages. ISIP-3,391 psi, ATR-55 bpm, ATP-4,371 psi.

Stage 2-Cline (10,721'-10,938')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. RIH & Set CBP @ 10,968' Perforate Cline Sand at 3-6 spf on 60 deg phasing as follows:

10,936'-10,938' (12)
10,872'-10,874' (10)
10,819'-10,821' (8)
10,775'-10,777' (8)
10,721'-10,723' (6) 44 shots total.

POOH w/ wireline.

Breakdown perfs @ 5,569 psi. Frac Cline w/ 3,017 gals 7.5% HCl, 13,116 gals treated water, 115,666 gals 25# hybor gel, 78,397 lb Versalite in 0.5-2.0 ppg stages. ISIP-3,604 psi, ATR-65.0 bpm, ATP-4,471 psi.

Stage 3- Basal Wolfcamp (10,465'-10,658')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 10,700' Perforate Basal Wolfcamp at 3-6 spf on 60 deg phasing as follows:

10,656'-10,658' (12)
10,613'-10,615' (10)
10,566'-10,568' (8)
10,521'-10,523' (8)
10,465'-10,467' (6) 44 shots total.

POOH w/ wireline.

Could not breakdown perfs. RIH w/ Allied dump bailer w/ 15 % HCl. Breakdown perfs @ 5,192 psi. Frac Basal Wolfcamp w/ 3,048 gals 7.5% HCl, 13,714 gals treated water, 96,964 gals 25# hybor gel, 86,488 gals 17# X-Link gel & 158,450# Premium 30/50 in 1.0-4.0 ppg stages. ISIP-3,137 psi, ATR-65.0 bpm, ATP-4,410 psi.

Stage 4- Lower Wolfcamp (10,258'-10,396')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 10,420'. Perforate Lower Wolfcamp at 3-6 spf on 60 deg phasing as follows:

10,394'-10,396' (13)

10,345'-10,347' (11)
10,297'-10,299' (10)
10,258'-10,260' (9) 43 shots total.

POOH w/ wireline.

5/23/14:

Breakdown perfs @ 5,921 psi. Frac Lower Wolfcamp w/ 3,007 gals 7.5% HCl, 12,536 gals treated water, 70,127 gals 25# hybor gel, & 121,530# Premium 30/50 in 2.0-5.0 ppg stages. ISIP-2,064 psi, ATR-64.0 bpm, ATP-2,848 psi.

Stage 5- Middle Wolfcamp (9,739-9,962')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 10,236'
Perforate Middle Wolfcamp at 3-6 spf on 60 deg phasing as follows:

10,187'-10,189' (12)
10,139'-10,141' (10)
10,099'-10,101' (8)
10,059'-10,061' (8)
10,016'-10,018' (6) 44 shots total.

POOH w/ wireline.

Breakdown perfs @ 5,234 psi. Frac Middle Wolfcamp w/ 3,019 gals 7.5% HCl, 12,960 gals treated water, 100,236 gals 25# hybor gel, & 100,000# CRC Premium 20/40 in 0.5-3.5 ppg stages. ISIP-2,258 psi, ATR-65.0 bpm, ATP-3,308 psi.

Stage 6- Upper Wolfcamp (9,378-9,648')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 9,970'.
Perforate Upper Wolfcamp at 3-6 spf on 60 deg phasing as follows:

9,931'-9,933' (12)
9,881'-9,883' (10)
9,829'-9,831' (8)
9,780'-9,782' (8) changed this interval to: 9,786'-9,788' (8)
9,725'-9,727' (6) 44 shots total.

POOH w/ wireline.

Started pumping and could not breakdown perfs. Bled off pressure and surged 3 times and still couldn't breakthrough. Dump bailed 15 gal of 15% HCl and still no breakthrough. Dump bailed another 15 gal of 15% HCl and still no breakthrough. Decided to dump bail 15 more gal of 15% HCl and reperforate. Breakdown perfs @ 6,088 psi. Frac Upper Wolfcamp w/ 2,014 gals 15% HCl, 14,996 gals treated water, 132,805 gals 25# hybor gel, & 120,000# CRC Premium 20/40 in 0.5 -3.0 ppg stages. ISIP-1,702 psi, ATR-66.0 bpm, ATP-4,347 psi.

5/24/14:

Stage 7- Dean (8,997'-9,195')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 9,704'.
Perforate Dean at 3-6 spf on 60 deg phasing as follows:

9,662'-9,664' (12)
9,616'-9,618' (10)
9,573'-9,575' (8)
9,527'-9,529' (8)
9,434'-9,436' (6) 44 shots total.
POOH w/ wireline.

Breakdown perfs @ 5,352 psi. Frac Dean w/ 2,020 gals 15% HCl, 12,904 gals treated water, 97,134 gals 25# hybor gel, & 140,000# CRC Premium 20/40 in 1.0-4.0 ppg stages. ISIP-1,819 psi, ATR-66.0 bpm, ATP-3,049 psi.

Stage 8- Lower Spraberry (8,997'-9,195')

MU 5.5" Halliburton 10k CBP and 3-1/8" perf guns loaded w/ 19 gm charges. Set CBP @ 9,444'.
Perforate Lower Spraberry at 3-6 spf on 60 deg phasing as follows:

9,193'-9,195' (12)
9,151'-9,153' (10)
9,103'-9,105' (8)
9,037'-9,039' (8)
8,997'-8,999' (6) 44 shots total.

POOH w/ wireline.

Breakdown perfs @ 3,725 psi. Frac Lower Spraberry w/ 1,947 gals 15% HCl, 11,785 gals treated water, 103,593 gals 25# hybor gel, & 139,800# Premium 20/40 in 1.0-4.0 ppg stages. ISIP-1,158 psi, ATR-60.0 bpm, ATP-1,622 psi.

LWTR: 22,182 bbls

5/27/14: MIRU Lucky Well Services pulling unit and reverse unit. Nipple down wellhead and nipple up two flow lines off casing side of tubing spool. Nipple up BOP and stripping rubber. Pick up bit, B.S, 5 drill collars, X.O. and 2 7/8" tubing. Run in hole and tag top plug at 8,713'. Pick up off plug 20' and SDN.
DWC: \$9,200

5/28/14: Rig up power swivel. Break circulation had thick gel for returns. Used 10# brine in reverse pit and drilled top plug at 8,713'. Circulated pieces of plug back but still had unbroken gel in returns. SD and called Halliburton to collect sample to test.

DWC: \$8,600

5/29/14: Open well and gel was no longer cross linked. Shut in casing pressure was 350 psi. Drilled 2nd plug at 9,300' and had 650 psi. Drilled 3rd plug at 9,704' and had 650 psi. Drilled 4th plug at 9,970' and had 650 psi. Drilled 5th plug at 10,236' and had 950 psi. Drilled 6th plug at 10,420' and had 950 psi. Drilled 7th plug at 10,700' and had 950 psi. Circulated bottoms up and pulled out of the hole 63 joints of tubing to the top of the perfs. Flowed well overnight.

DWC: \$9,820

5/30/14: Run in hole to top of last plug at 10,968'. No pressure increase while drilling out plug. The pressure had dropped to 500 psi overnight. Run in hole to 11,094' and tag up and drilling at that depth. Circulated bottoms up for 45 minutes until hole was clean. Pull out of hole 63 joints to top of perfs and rig up choke. Open up choke to 18/64" and flow to reserve pit. Release rig and reverse unit for weekend. Pressure was 260 psi.

DWC: \$7,236

5/31/14: Well flowing to pit on 18/64" choke at 250 psi. Still recovering load water. 1 % oil cut and very little gas. Open well to 32/64" choke. Left flowing overnight. Recovered 511 bbls.

DWC: \$2,500

6/1/14: Well flowing on 32/64" choke with 2% oil cut. Gas increasing. Still recovering load water. Left well flowing overnight and flowing casing pressure is 50 psi.

DWC: 2,500