Betty Radke "A" #1R Drilling Report

KB: 1916

GL: 1907

Russell Oil, Inc. Betty Radke "A" #1R 930'FS & 800'FW Section 31-15S-14W Russell County, Kansas #15-167-23,806

Reference Well A: Russell Oil Neal Nuss #1 2540'FS & 2060'FE Sec 31-15S-14W (oil)

Reference Well B: *H&P* Elsasser "A" #1 NW NW SW Sec 31-15S-14W (dry) **Reference Well C:** Farmer Boxberger #1 NW NE Sec 31-15S-14W (oil)

		<u>A:</u>	<u>B:</u>	<u>C:</u>			
SAMPLE TOPS							
Anhydrite	924 (+992)	flat	+6	+8			
B/Anhydrite	950 (+966)	+4	+10	+13			
Howard	2770 (-854)	-4	+12	NA			
Topeka	2835 (-919)	-1	+17	+10			
Heebner	3064 (-1148)	+1	+15	+9			
Toronto	3080 (-1164)	+1	+17	+10			
Lansing	3125 (-1209)	+1	+17	+10			
Mun Creek	3267 (-1351)	+1	+13	+8			
B/KC	3367 (-1451)	+1	+11	+11			
Arbuckle	3372 (-1456)	+15	+36	+19			
RTD	3430 (-1514)						
		<u>A:</u>	<u>B:</u>	<u>C:</u>			
ELECTRIC 1	LOG TOPS	<u>A:</u>	<u>B:</u>	<u>C:</u>			
ELECTRIC I	LOG TOPS 924 (+992)	<u>A:</u> flat	<u>B:</u> +6	<u>C:</u> +8			
Anhydrite	924 (+992)	flat	+6	+8			
Anhydrite B/Anhydrite	924 (+992) 954 (+962)	flat flat	+6 +6	+8 +9			
Anhydrite B/Anhydrite Howard	924 (+992) 954 (+962) 2771 (-855)	flat flat -5	+6 +6 +11	+8 +9 NA			
Anhydrite B/Anhydrite Howard Topeka	924 (+992) 954 (+962) 2771 (-855) 2840 (-924)	flat flat -5 -6	+6 +6 +11 +11	+8 +9 NA +4			
Anhydrite B/Anhydrite Howard Topeka Heebner	924 (+992) 954 (+962) 2771 (-855) 2840 (-924) 3070 (-1154)	flat flat -5 -6	+6 +6 +11 +11 +9	+8 +9 NA +4 +3			
Anhydrite B/Anhydrite Howard Topeka Heebner Toronto	924 (+992) 954 (+962) 2771 (-855) 2840 (-924) 3070 (-1154) 3086 (-1170)	flat flat -5 -6 -5	+6 +6 +11 +11 +9 +11	+8 +9 NA +4 +3 +4			
Anhydrite B/Anhydrite Howard Topeka Heebner Toronto Lansing	924 (+992) 954 (+962) 2771 (-855) 2840 (-924) 3070 (-1154) 3086 (-1170) 3132 (-1216)	flat flat -5 -6 -5 -5	+6 +6 +11 +11 +9 +11 +10	+8 +9 NA +4 +3 +4			
Anhydrite B/Anhydrite Howard Topeka Heebner Toronto Lansing Mun Creek	924 (+992) 954 (+962) 2771 (-855) 2840 (-924) 3070 (-1154) 3086 (-1170) 3132 (-1216) 3268 (-1352)	flat flat -5 -6 -5 -5 flat	+6 +6 +11 +11 +9 +11 +10 +12	+8 +9 NA +4 +3 +4 +7			

Sample Shows and Drill Stem Tests:

7am 5-26-12: Drilling at 3005'

Topeka Plattsmouth 50' zone:

Circulate 3026'

Trilobite Testing Co., Inc. - Hays

Brian Fairbank: Tester

Limestone, cream; fossiliferous; oolitic, poor to fair interparticle and pinpoint porosity; medium golden brown subsaturated to mostly saturated stain; slight to fair show of free oil on break; good pungent odor. 6' drilling break

Topeka Plattsmouth 30' zone:

Limestone, cream; oolitic, subchalky; poor to fair pinpoint porosity; few pieces dark brown subsaturated stain; no show of free oil on break; fair odor. 3' drilling break

Toronto: Circulate 3096' DST #1

Limestone, cream; fossiliferous; sm pieces very oolitic, poor to fair interparticle; some vugular porosity; medium brown subsaturated stain – some pieces with possible crystalline porosity; slight show of free oil on break; fair odor in 20" circulation sample.4' drilling break

DST #1:

Toronto

3062-3196

1st Op: Tool Slid 15'; No Blow

No Blowback

2nd Op: No Blow; Flush Tool: No Help

No Blowback

Tester picked up one joint after tool slid to tag bottom....will look at test charts for any possible plugging...

Rec:

50' Mud

IFP: 36-37#/30" ISIP: 49#/30" FFP: 36-37#/30" FSIP: 43#/30"

Do not see any plugging on flows...

No pipe strap taken...too windy

Lansing "A": Circulate 3140' **DST #2**

Limestone, cream-white; slightly dolomitic; oolitic; isolated vugular porosity; overall poor interparticle porosity; 2-3 pieces light brown spotty to subsaturated stain; slight to fair show of free oil; one piece with gas on break; no odor. *No drilling break*

Lansing "B": Circulate 3156' **DST #2**

Limestone, cream; fossiliferous; very rare vugular porosity; few pieces light brown spotty stain; slight to fair show of free oil; some gas on break; fair odor on break. 3' drilling break

7am 5-27-12: Tripping out for DST #2 at 3156'

DST #2:

Lansing "A-B":

3094-3156

1st Op: Tool Slid 10'; Weak Bldg 6 ½"

No Blowback

2nd Op: Weak Bldg 6 ½"

No Blowback

Rec:

30' Watery Mud (45%W, 55%M)

120' MW (95%W, 5%M)

150' Total Fluid

IFP: 42-71#/45" ISIP: 589#/45" FFP: 76-105#/60" FSIP: 579#/60" Chlor: 32,000 ppm

Tool continued to slide during test...1' on 1^{st} open; 1' on initial shut-in; 8" on 2^{nd} open; 6" on final shut-in...both opens show hydrostatic and mud pushed ahead of tool; Paul Simpson feels valid test...tore two packers...will add tank mud after DST #2 and circulate longer at test points.

Lansing "C":

Circulate 3173'

DST #3

Trilobite Testing Co., Inc. - Hays

Brian Fairbank: Tester

Limestone, white; dolomitic; oolitic; pelletoid; pieces oolicastic porosity; good amount golden brown spotty to subsaturated stain; slight show of free oil – pinpoint beads on break; slight odor. 4' drilling break

DST #3:

Lansing "C":

3156-3173

1st Op: Weak Bldg 6"

No Blowback

2nd Op: No Blow first 6 minutes, then built 1"

No Blowback

Rec:

1' Free Oil

74' MW (95%W, 5%M)

75' Total Fluid

IFP: 15-46#/45"

ISIP: 577#/45"

FFP: 49-63#/30"

FSIP: 530#/30"

Chlor: 48,000 ppm

7am 5-28-12: Drilling at 3190'

Trilobite Testing Co., Inc. - Hays Brian Fairbank: Tester

Lansing "F":

Circulate 3212'

DST #4

Limestone, cream; suboolitic; some pelletoid; poor interparticle porosity; several pieces golden brown spotty to subsaturated stain in dry sample; no show of free oil, no odor. 2' drilling break

DST #4:

Trilobite Testing Co., Inc. - Hays Brian Fairbank; Tester

Lansing "E-F":

3182-3212

1st Op: No Blow

No Blowback

2nd Op: No Blow; Flush Tool: No Help

No Blowback

Rec:

1' Mud

IFP: 13-15#/30"

ISIP: 49#/30"

FFP: 16-17#/30"

FSIP: 53#/30"

Pipe Strap at 3212': 5.53 Board Short

No show in "G" zone... barren oolicastic porosity...

Lansing "H": DST #5

Limestone, cream-white; slightly fossiliferous; subchalky; poor interparticle porosity;2-3 pieces light brown saturated stain; slight show of free oil; slight odor.

Lansing "I": Circulate 3300' **DST #5**

Limestone, cream; oolitic; some pelletoid; poor interparticle porosity; light brown subsaturated stain; very slight show of free oil – one piece with slight show of gas; slight odor.

Lansing "J": Circulate 3322' **DST #5**

Limestone, cream; few pieces slightly oolicastic; overall dense; poor visible porosity; no show of free oil; no odor.

7am 5-29-12: Tripping out for DST #5 at 3322'

DST #5:

Lansing "H-J":

3264-3322

1st Op: Weak Blow; Died 15 minutes

No Blowback

2nd Op: Dead Blow

No Blowback

Trilobite Testing Co., Inc. - Hays Paul Simpson; Tester Rec:

5' Mud w/oil spots

IFP: 29-31#/20" ISIP: 296#/30" FFP: 32-32#/5" FSIP: 259#/30"

Lansing "K":

Limestone, cream-white; slightly fossiliferous; subchalky; poor interparticle porosity;2-3 pieces light brown saturated stain; slight show of free oil; slight odor.

Lansing "L": Circulate 3372'

Limestone, cream; oolitic; some pelletoid; poor interparticle porosity; light brown subsaturated stain; very slight show of free oil – one piece with slight show of gas; slight odor.

Arbuckle Dolomite 0'-5'in: (-1461) Circulate 3377' **DST #6**

20 minute circulation sample: Dolomite; fine crystalline; poor to scattered fair intercrystalline porosity; scattered pieces light brown saturated stain; slight show of free oil – some gas on break; fair pungent odor.

40 minute circulation sample: Dolomite; fine to medium crystalline; poor to fair intercrystalline porosity; scattered vugular porosity; abundant pieces golden brown saturated stain; slight to fair show of free oil – some gas on break; good gassy pungent odor.

60 minute circulation sample: Dolomite; fine to medium crystalline; poor to fair intercrystalline porosity; scattered vugular porosity; abundant pieces golden brown very rich saturated stain; slight to fair show of free oil – some gas on break; good gassy pungent odor.

DST #6:

Arbuckle 0-5' in (-1461)

3365-3377 1st Op: BOB 30" No Blowback 2nd Op: Weak Bldg 7 ½" No Blowback

Rec: 60' GIP 85' Free Oil (95%O, 5%M) – Gravity 36 30' HOCM (40%O, 60%M)

IFP: 16-38#/30" ISIP: 961#/30" FFP: 40-56#/30"

115' Total Fluid

Trilobite Testing Co., Inc. - Hays Brian Fairbank: Tester FSIP: 844#/30"

Arbuckle Dolomite 5'-13'in: (-1469) *Circulate 3385'* **DST #7**

40 minute circulation sample: Dolomite; medium crystalline; some vugular porosity; poor to fair intercrystalline porosity; very friable; abundant pieces light golden brown subsaturated to saturated stain; fair show of free oil – some gas on break; fair to good gassy pungent odor. *Drilled 1-1-1-2-2-2-1-2*.

60 minute circulation sample: Dolomite; fine to medium crystalline; some pieces appear very dense; poor to fair intercrystalline porosity; many pieces friable; fair amount pieces light golden brown subsaturated to saturated stain; a few pieces subrhombic dolomite with barren or weakened stain; slight to fair show of free oil – some gas on break; fair gassy pungent odor. The last two feet drilled may be water bearing...will run drill stem test to verify this...

7am 5-30-12: Tripping out for DST #7 at 3385'

DST #7:

Arbuckle 5-13' in (-1469)

3377-3385

1st Op: BOB 11"

Surface Blowback; Died 7 minutes

2nd Op: Weak Bldg 5"

No Blowback

Rec:

60' GIP

235' Free Oil – Gravity 37

15' WOCM (37%O, 3%W, 60%M)

250' Total Fluid

IFP: 20-67#/45"

ISIP: 920#/30"

FFP: 70-103#/45"

FSIP: 774#/30"

Chlor: Too Small to Measure

Zones per Microlog:

Plattsmouth 50' zn

Lansing "B"

Lansing "F"

Lansing "I"

Arbuckle

5 ½" production casing will be set Thursday morning...

FINAL REPORT

Trilobite Testing Co., Inc. - Hays Brian Fairbank; Tester