

WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



Scale 1:240 (5"=100') Imperial

Well Name: GANTZ #2-32
Location: S2 NE NE SE Sec. 32-17s-24w
Licence Number: API: 15-135-25360
Spud Date: February 25, 2012
Surface Coordinates: 2270' FSL & 330' FEL

Region: Ness Co., Kansas
Drilling Completed: March 5, 2012

Bottom Hole Coordinates:	Vertical Hole
Ground Elevation (ft): 2333'	K.B. Elevation (ft): 2345'
Logged Interval (ft): 3600'	To: RTD Total Depth (ft): 4343'
Formation: Mississippi	
Type of Drilling Fluid: Chemical Premix (Displaced)	

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company: Carmen Schmitt, Inc.
Address: P.O. Box 47
Great Bend, KS 67530

DRILLING CONTRACTOR:

Southwind Drilling, LLC, Rig #70
Kelly bushing 12' above ground level. Tim Fabricus (tool pusher).

SURFACE CASING:

Set 8-5/8" casing at 223.82' (23#)

CIRCULATION SYSTEM:

Pump: Brewster, duplex, 6 x 16, 58 spm, Chemical, premix, earth pits, Mud- Co/Service Mud, Inc.

DRILL STEM TEST #1:

Ft. Scott: 4230-4280 (50'): Blow: 1/2" IFP, no RB, no blow at 2nd open, then weak surf blow after 10 min; no RB; 15-30-15-30; Recovery: 10' mud w/oil spots in tool; HP: 2074-2061: SIP: 1024-728; FP: 20-22, 23-24; BHT: 109 F; dual packers, jars, joints, Trilobite Testing, Inc., Scott City, KS, Chuck Smith.

DRILL STEM TEST #2:

Cherokee Sand: 4276-4330 (54'): Weak 1/2" blow IFP, no RB, no blow 2nd open; 15-30-15-TOH; Recovery: 5' mud w/oil spots in tool; HP: 2094-2055, SIP: 43-22; FP: 19-20, 20-21; BHT: 105 F; dual packers, jars, joints, Trilobite Testing, Inc., Scott City, KS, Chuck Smith.

DRILL STEM TEST #3:

Cherokee Sand: 4275-4337 (62'); Blow weak incr 3" IFP, no RB, incr 11" FFP, weak RB died 5 min; 15-30-45-60; Recovery: 139' TF, 105' GIP, 15' GO (2%G, 98%O, 35 Grav.), 62' GMCO (5%G, 20%M, 75%O), 62' SOCM (5%O, 95%M); HP: 2101-2097, SIP: 1073-1057, FP: 21-32, 34-68, BHT 109 F; dual packers, jars, joints, Trilobite Testing, Inc., Scott City, KS, Chuck Smith.

DRILL STEM TEST #4:

Cherokee Sand: 4276-4343 (67'): Packer failure; Recovery: 248' mud w/oil spots in tool; HP: 2106-2071; dual packers, jars, joints, Trilobite Testing, Inc., Scott City, KS, Chuck Smith.

DRILL STEM TEST #5:

Cherokee Sand: 4295-4343 (48'): Blow; BOB/2 min IFP, 8" RB, BOB 2.75 min FFP; 15-30-5-TOH; pulled 60k over string wt coming off bottom, stuck for about 2 min, sprung free; Recovery: 849' TF, 261' GIP, 415 GMCO (5%M, 35%G, 60%O, 35 Grav.), 310' GMCO (20%G, 30%M, 50%O), 124' GOCM (15%G, 30%O, 55%M); HP: 2101-2045, SIP: 930; FP: 162-300, 326-353; BHT: 123 F; dual packers, jars, joints, Trilobite Testing, Inc., Scott City, KS, Chuck Smith.

OPEN HOLE LOGS:

None.

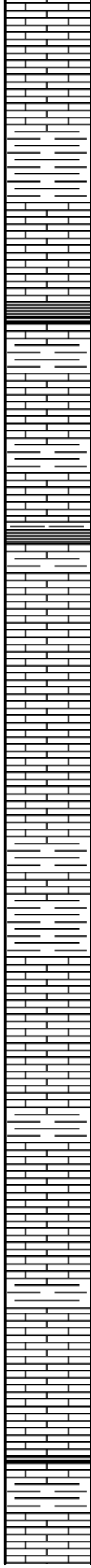
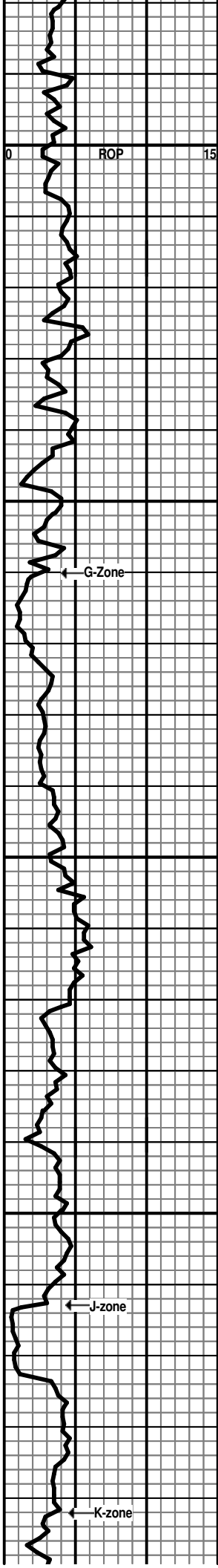
COMPLETION:

Cherokee Sand Well.

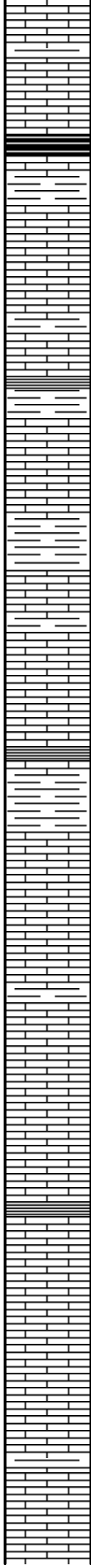
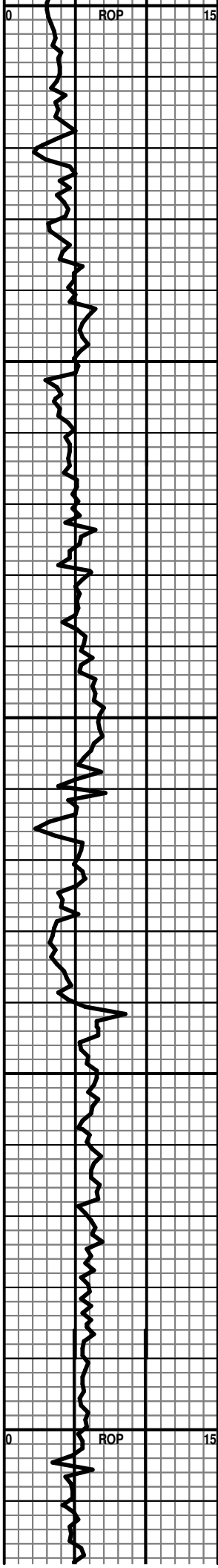
7AM DAILY ACTIVITY:

02/23: MIRT
02/24: Repairs
02/25: SPUD 10:00 am
02/26: 543' Drilling
02/27: 1948' Drilling
02/28: 2729' Drilling
02/29: 3231' Drilling
03/01: 3745' Drilling
03/02: 4099' Drilling
03/03: 4280' DST #1
03/04: 4330' DST #2
03/05: 4343' DST #4
03/05: Released 5:19 pm

<div style="text-align: right; margin-right: 5px;">ROP</div> <div style="text-align: right; margin-right: 5px;">ROP (min/ft) ———</div>	DST	Lithology	Depth <small>Porosity and Show</small>	Geological Descriptions	Total Gas
			<div style="text-align: right; margin-right: 5px;">3600</div> <div style="text-align: right; margin-right: 5px;">3650</div> <div style="text-align: right; margin-right: 5px;">3700</div> <div style="text-align: right; margin-right: 5px;">3750</div>	<p>LS: mostly lt brn, some lt-gray; vf-xtal; dense; poor apparent porosity; N.S.</p> <p>LS: lt-brn, lt gray; vf-xtal; dense; platey; trc gray, opa q chert; no visible porosity; N.S.</p> <p>LS: lt brown w/scattered dk brn or dk gray grains; fos; chalky; poor apparent porosity; N.S.</p> <p>LS: lt-md grayish brn; vf-xtal; chalky to argill in part; sli fos; fair vugular porosity in part; N.S.</p> <p>LS: lt-grayish brn, off white; mic-vf xtal; soft chalk; scattered vugular porosity; N.S.</p> <p>LS: lt-brown w/scattered dk brown specks & streaks; vf-xtal; sli fos; no apparent porosity; N.S.</p> <p>HEEBNER SH 3704 (-1359) Shale: black; carbon; sli gassy; 3720. LS: lt-grayish brown; vf-xtal; dense; N.S. Shale: gray, green;</p> <p>TORONTO 3722 (-1377) LS: white, lt brown; mic-vf xtal; dense; smooth; no apparent porosity; N.S. LS: white, lt brown; mic-vf xtal; dense to chalky in part; trc lt bluish chert; no apparent porosity; N.S.</p> <p>LANSING 3745 (-1400) LS: lt-brown; vf-xtal; mostly dense; some sli chalky; poor apparent porosity; N.S.</p> <p>LS: lt-brown; vf-xtal; mostly dense; sli cherty; poor apparent porosity; N.S.</p> <p>LS: dk gray; vf-xtal; shaley in part; trc dark chert; no visible porosity; N.S.</p>	<p>REFERENCE LOG: FOXFIRE EXPLORATION, MICHAELIS #1, SE SW NE SEC 32-17S-24W.</p> <p>SAMPLES WERE REQUESTED BY KGS AND WERE SUBMITTED.</p>



3800
 LS: lt-brown; mic-vf xtal; dense; no visible porosity; N.S.
 LS: lt-brown; vf-xtal; trc white opa chert; poor apparent porosity; N.S.
 LS: lt brn - lt gray; mic-vf xtal; dense to sli chalky; no visible porosity; N.S.
 LS: md brown; vf-xtal; dense; no visible porosity; N.S.
 Shale: mostly green, gray;
 3850
 LS: lt-brown; mic-vf xtal; chalky; poor vugular porosity; N.S.
 LS: lt-brown; vf-xtal; rough textured; coarse calcites; trc oomoldic, fair vug & int xtal porosity; N.S. 3880, 3890.
 LS: lt-brown; vf-xtal; dense to chalky; includes white opa chert; poor apparent porosity; N.S.
 LS: as above;
 3900
 LS: lt-brown; vf-xtal; dense to sli chalky; crinoids; poor apparent porosity; N.S.
 LS: lt-brown, vf-xtal; lt gray; vf-xtal; poor apparent porosity; N.S.
 LS: lt-brown; vf-xtal; sli shaley in part; no apparent porosity; no shows.
 3950
 LS: lt-brown, lt gray; vf-xtal; sli granular; poor apparent porosity; N.S.
 LS: as above.
 LS: lt brown; vf-xtal; ool-oom, md-crs oomoldic porosity; N.S. 3980, incr 3990.
 LS: gray, brown; vf-xtal; mostly dense; some scattered oom porosity; N.S.
 10
 LS: lt-brown, lt grayish-brown; vf-xtal; sli fos; dense; trc chert; poor-fair oomoldic porosity; N.S.



400
4050
4100
4150
4200

LS: as above.

HUSHPUCKNEY 4018 (-1673)

Shale: black; carbon; 4030, 4040.
LS: md-dk brn; vf-xtal; dense; N.S.

LS: lt-md brown; vf-xtal; dense to chalky in part; oolitic; no visible porosity; N.S.

LS: lt-md brown; vf-xtal; dense; no visible porosity; N.S.

LS: mostly brown, some gray; vf-xtal; no visible porosity; N.S.

Shale/Marl: red, maroon; washes red; soft; 4090.

LS: lt grayish brown; vf-xtal; dense; sli cherty; no visible porosity; N.S.

LS: as above.

Shale: gray, green; silty in part;

LS: lt grayish brown; vf-xtal; sli fos; dense to chalky in part; no visible porosity; N.S.

LS: lt-grayish brown; mic-vf xtal; dense; trc orange chert; no visible porosity; N.S.

LS: lt grayish- brown, md brown in part; vf-xtal; dense; no visible porosity; N.S.

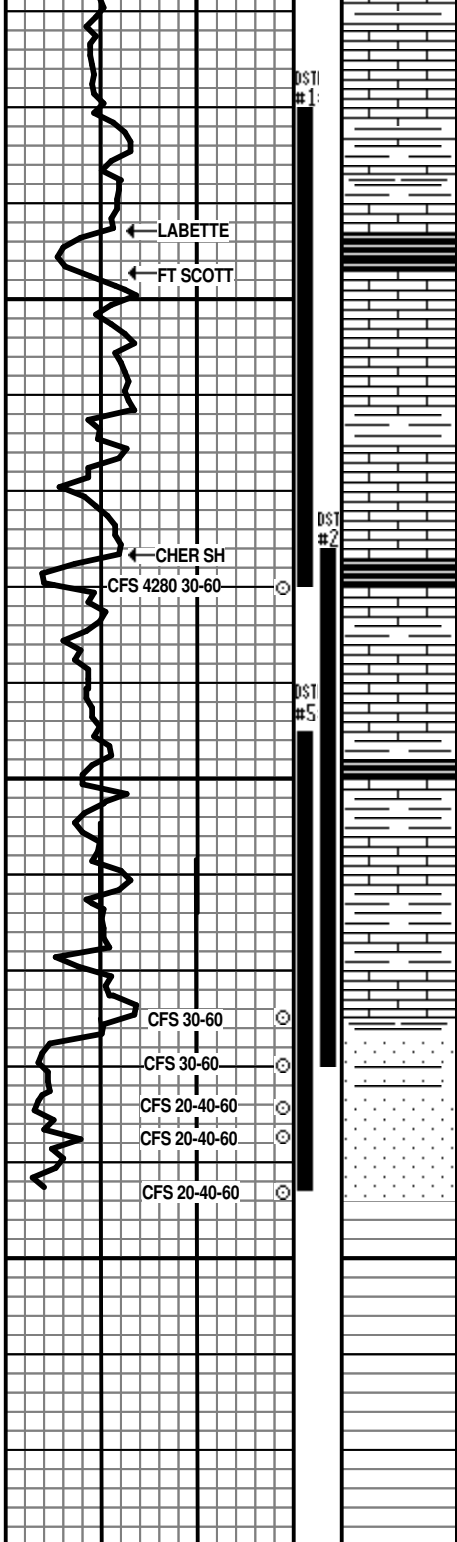
LS: lt grayish-brown; vf-xtal; sli fos; no visible porosity; N.S.

PAWNEE 4170 (-1825)

LS: lt-grayish brown; vf-xtal; dense; earthy; no visible porosity; N.S.

LS: grayish-brown; vf-xtal; dense to sli chalky; no visible porosity; N.S.

LS: as above w/incr dk gray shale.



LS: as above;

Shale: gray to dark gray; calcareous;

Shale: black; carbon; 4260.

FT. SCOTT 4247 (-1902)

LS: lt-grayish-brown; vf-xtal; fine vugular & int xtaline porosity; bright yel-white fluor; mostly spotted w/trace sat light stain; sli show clear-lt brn oil; faint odor; trc 4260, incr 4270.

LS: lt-grayish brown; vf-xtal; gray, opa q chert; scattered pin point & int xtal porosity; bright yel-white fluor; spotted stain; sli show lt-md brn oil; faint odor; 4280, 4280-30

CHEROKEE SH 4277 (-1932)

LS: lt brown; vf-xtal; dense to chalky in part; sli ool; poor apparent porosity; N.S.

LS: lt-brown; vf-xtal; chalky; poor apparent porosity; N.S.

Marl: gray; soft; sticky, 4320.

LS: lt-brown; vf-xtal; dense to sli chalky; no visible porosity; N.S.

Marl: gray; soft, sticky, 4325-60.

CHEROKEE SAND 4327 (1982)

Sand: qtz; f-grain; silty; pyritic; glauc; mod-cem; friable; trc free m-c sub-rnd qtz; even bright yel fluor; crush sli oil, no odor 4330-60. Sli cleaner 4334-60. Incr vol, improv friability, cleaner, bleeds 4334-60. Continued even fluor; sat stain & S.O., no bleed; no odor; 4343-60.

ROTARY TOTAL DEPTH 4343 (-1998)

15 STAND SHORT TRIP AT 4280; PULLED TIGHT ON STANDS 4 & 6; WORKED FREE; CIRC 90 MIN BEFORE T.O.H.

DST #1: FT. SCOTT: 4230-4280: WEAK BLOW; 15-30-15-30; 10' MUD; SIP: 1024-728; FP: 20-22, 23-24.

BOARD: 4300.75, STRAP 4302.81, STRAP WAS LONG 2.06'

DST #2: CHER SD: 4276-4330: WEAK BLOW; NO BLOW 2ND OP; 15-30-15-T.O.H.; 5' MUD; SIP: 43-22, FP: 19-20, 21-22.

DST #3: CHER SD: 4275-4337: BLOW 3" IFP, 11" FFP; 15-30-45-60; 105' GIP, 15' GO, 62' GMCO, 62' SOCM; SIP: 1073-1057, FP: 21-32, 34-68.

DST #4: CHER SD: 4276-4343: PACKER FAILURE. 248' MUD.

DST #5: CHER SD: 4295-4343: BOB 2 MIN IFP, 8" RB; 15-30-5-TOH; 725' GMCO, 124 GOCM; SIP: 930; FP: 162-300, 326-353.

PULLED 60k OVER STRING WT WHEN COMING OFF BOTTOM WITH DST #5.

NO LOGS.