

OPERATOR

Company: Younger Energy Company
 Address: 9415 E. Harry St.
 Suite 403, Bldg 400
 Wichita, KS 67207

Contact Geologist:
 Contact Phone Nbr: 316-681-2542
 Well Name: Jost #1-27
 Location: Sec. 27 - T21S - R15W
 Pool:
 State: Kansas

API: 15-145-21740-0000
 Field: Hurray North
 Country: USA



Scale 1:240 Imperial

Well Name: Jost #1-27
 Surface Location: Sec. 27 - T21S - R15W
 Bottom Location:
 API: 15-145-21740-0000
 License Number: 30705
 Spud Date: 11/16/2013 Time: 10:00
 Region: Pawnee County
 Drilling Completed: 11/24/2013 Time: 01:15
 Surface Coordinates: 875' FSL & 685' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 1961.00ft
 K.B. Elevation: 1972.00ft
 Logged Interval: To: 3985.00ft
 Total Depth: 3985.00ft
 Formation: Arbuckle
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 875' FSL
 E/W Co-ord: 685' FWL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: Keith Reavis, Inc.
 Address: 3420 22nd Street
 Great Bend, KS 67530

Phone Nbr: 620-617-4091
 Logged By: KLG #136 Name: Keith Reavis

CONTRACTOR

Contractor: Duke Drilling Company
 Rig #: 10
 Rig Type: mud rotary
 Spud Date: 11/16/2013 Time: 10:00
 TD Date: 11/24/2013 Time: 01:15
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 1972.00ft Ground Elevation: 1961.00ft
 K.B. to Ground: 11.00ft

NOTES

Due to negative results of DST #1 and DST #3 conducted in the Conglomerate/Viola, as well as low structural position and lack of shows in the Arbuckle, it was determined by all parties that the Jost #1-27 be plugged and abandoned as a dry test.

A Bloodhound gas detection system operated by Bluestem Environmental Engineering was employed on this well. ROP and gas curves were imported from the Bloodhound into this report. Gamma ray and caliper curves were also imported from the electrical log suite. Log tops were generally within a foot or two of ROP/sample tops, therefore, no curves were shifted to provide an exact match, but were left as recorded in the field.

Respectfully submitted,
 Keith Reavis

Younger Energy Company
daily drilling report

DATE	7:00 AM DEPTH	REMARKS
11/21/2013	3161	Geologist Keith Reavis on location @ 1230 hrs, 3285 ft, drilling ahead Queen Hill, Heebner, Toronto, Douglas, Lansing
11/22/2013	3628	drilling ahead, Lansing, BKC, Marmaton, Conglomerate
11/23/2013	3862	drilling Conglomerate, Viola, conduct short trip at 3750, show in Viola chert warrants test, TOH w/bit, in w/tools, conduct and complete DST #1, successful test, TIH w/bit, resume drilling, Simpson, Arbuckle
11/24/2013	3985	rathole ahead to TD in Arbuckle, TD @ 0115 hrs, ctch, TOH for logs, conduct logging operations, run in hole with tools after logs for DST #2 (straddle test of Viola), packer failure, pull tools and reset upper packer, back in hole, conduct DST #3, complete DST #3
11/24/2013	3985	lay down tools, decide to plug well, geologist off location 0200 hrs

Younger Energy Company
well comparison sheet

DRILLING WELL					COMPARISON WELL			
Younger - Jost #1-27					F & M - Jost #1			
875' FSL & 987' FWL					SE SW SW			
Sec. 27-T21S-R15W					Sec. 27-T21S-R15W			
1972 KB					1976 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Queen Hill	3267	-1295	3266	-1294	3261	-1285	-10	-9
Heebner	3372	-1400	3370	-1398	3365	-1389	-11	-9
Douglas	3406	-1434	3404	-1432	3400	-1424	-10	-8
Brown Lime	3478	-1506	3478	-1506	3475	-1499	-7	-7
Lansing	3488	-1516	3488	-1516	3484	-1508	-8	-8
Lansing G	3578	-1606	3580	-1608	3575	-1599	-7	-9
Lansing H	3616	-1644	3614	-1642	3610	-1634	-10	-8
Stark	3669	-1697	3669	-1697	3664	-1688	-9	-9
Base KC	3718	-1746	3720	-1748	3713	-1737	-9	-11
Conglomerate	3806	-1834	3804	-1832	3806	-1830	-4	-2
Viola	3825	-1853	3820	-1848	3824	-1848	-5	0
Simpson	3856	-1884	3858	-1886	3853	-1877	-7	-9
Arbuckle	3910	-1938	3911	-1939	3901	-1925	-13	-14
Total Depth	3985	-2013	3986	-2014	3905	-1929	-84	-85

Drill Stem Test #1

DRILL STEM TEST REPORT

Younger Energy Company
 9415 East Harry Street Suite
 403 Wichita Ks.67207
 ATTN: Keith Reavis

27-21s-15w-Pawnee
Jost 1-27
 Job Ticket: 18464
 Test Start: 2013.11.23 @ 05:22:00
 DST#: 1

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:03:00
 Time Test Ended: 12:40:00

Interval: **3714.00 ft (KB) To 3862.00 ft (KB) (TVD)**
 Total Depth: 3862.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-40
 Reference Elevations: 1972.00 ft (KB)
 1961.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8159 Outside

Press@RunDepth: 478.93 psia @ 3859.87 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.11.23 End Date: 2013.11.23 Last Calib.: 2013.11.23
 Start Time: 05:22:00 End Time: 12:40:00 Time On Btm: 2013.11.23 @ 08:02:30
 Time Off Btm: 2013.11.23 @ 11:03:30

TEST COMMENT: 1st Open 10 minutes Strong blow built to bottom bucket 8 minutes.
 1st Shut in 45 minutes No blow back.
 2nd Open 45 minutes Strong blow built to bottm bucket instantly.
 2nd Shut in 75 minutes No blow back

Pressure vs. Time

PRESSURE SUMMARY

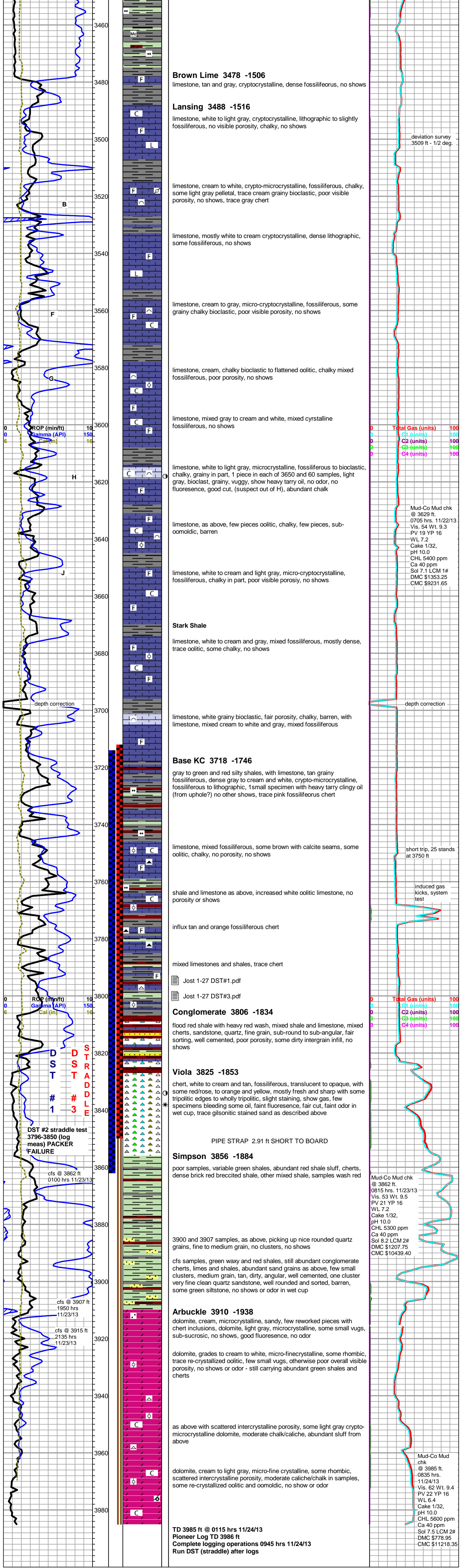
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1988.88	109.32	Initial Hydro-static
1	391.22	108.77	Open To Flow (1)
10	485.79	109.52	Shut-In(1)
56	490.09	110.70	End Shut-In(1)
58	481.63	110.75	Open To Flow (2)
100	478.93	111.75	Shut-In(2)
179	494.27	113.03	End Shut-In(2)
181	1820.39	113.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (HH)

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



Brown Lime 3478 -1506

limestone, tan and gray, cryptocrystalline, dense fossiliferous, no shows

Lansing 3488 -1516

limestone, white to light gray, cryptocrystalline, lithographic to slightly fossiliferous, no visible porosity, chalky, no shows

limestone, cream to white, crypto-microcrystalline, fossiliferous, chalky, some light gray pelletal, trace cream grainy bioclastic, poor visible porosity, no shows, trace gray chert

limestone, mostly white to cream cryptocrystalline, dense lithographic, some fossiliferous, no shows

limestone, cream to gray, micro-cryptocrystalline, fossiliferous, some grainy chalky bioclastic, poor visible porosity, no shows

limestone, cream, chalky bioclastic to flattened oolitic, chalky mixed fossiliferous, poor porosity, no shows

limestone, mixed gray to cream and white, mixed crystalline fossiliferous, no shows

limestone, white to light gray, microcrystalline, fossiliferous to bioclastic, chalky, grainy in part, 1 piece in each of 3650 and 60 samples, light gray, bioclast, grainy, vuggy, show heavy tarry oil, no odor, no fluorescence, good cut, (suspect out of H), abundant chalk

limestone, as above, few pieces oolitic, chalky, few pieces, sub-oolitic, barren

limestone, white to cream and light gray, micro-cryptocrystalline, fossiliferous, chalky in part, poor visible porosity, no shows

Stark Shale

limestone, white to cream and gray, mixed fossiliferous, mostly dense, trace oolitic, some chalky, no shows

limestone, white grainy bioclastic, fair porosity, chalky, barren, with limestone, mixed cream to white and gray, mixed fossiliferous

Base KC 3718 -1746

gray to green and red silty shales, with limestone, tan grainy fossiliferous, dense gray to cream and white, crypto-microcrystalline, fossiliferous to lithographic, 1 small specimen with heavy tarry clingy oil (from uphole?) no other shows, trace pink fossiliferous chert

limestone, mixed fossiliferous, some brown with calcite seams, some oolitic, chalky, no porosity, no shows

shale and limestone as above, increased white oolitic limestone, no porosity or shows

influx tan and orange fossiliferous chert

mixed limestones and shales, trace chert

Conglomerate 3806 -1834

flood red shale with heavy red wash, mixed shale and limestone, mixed cherts, sandstone, quartz, fine grain, sub-round to sub-angular, fair sorting, well cemented, poor porosity, some dirty intergrain infill, no shows

Viola 3825 -1853

chert, white to cream and tan, fossiliferous, translucent to opaque, with some red/rose, to orange and yellow, mostly fresh and sharp with some tripolitic edges to wholly tripolitic, slight staining, show gas, few specimens bleeding some oil, faint fluorescence, fair cut, faint odor in wet cup, trace gilsonitic stained sand as described above

PIPE STRAP 2.91 ft SHORT TO BOARD

Simpson 3856 -1884

poor samples, variable green shale, abundant red shale sluff, cherts, dense brick red brecciated shale, other mixed shale, samples wash red

3900 and 3907 samples, as above, picking up nice rounded quartz grains, fine to medium grain, no clusters, no shows

cfs samples, green waxy and red shales, still abundant conglomerate cherts, limes and shales, abundant sand grains as above, few small clusters, medium grain, tan, dirty, angular, well cemented, one cluster very fine clean quartz sandstone, well rounded and sorted, barren, some green siltstone, no shows or odor in wet cup

Arbuckle 3910 -1938

dolomite, cream, microcrystalline, sandy, few reworked pieces with chert inclusions, dolomite, light gray, microcrystalline, some small vugs, sub-sucrosic, no shows, good fluorescence, no odor

dolomite, grades to cream to white, micro-finecrystalline, some rhombic, trace re-crystallized oolitic, few small vugs, otherwise poor overall visible porosity, no shows or odor - still carrying abundant green shales and cherts

as above with scattered intercrystalline porosity, some light gray crypto-microcrystalline dolomite, moderate chalk/caliche, abundant sluff from above

dolomite, cream to light gray, micro-fine crystalline, some rhombic, scattered intercrystalline porosity, moderate caliche/chalk in samples, some re-crystallized oolitic and oomoldic, no show or odor

TD 3985 ft @ 0115 hrs 11/24/13
Pioneer Log TD 3986 ft
Complete logging operations 0945 hrs 11/24/13
Run DST (straddle) after logs

deviation survey
3509 ft - 1/2 deg.

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Mud-Co Mud chk
@ 3629 ft.
0705 hrs. 11/22/13
Vis. 54 Wt. 9.3
PV 19 YP 16
WL 7.2
Cake 1/32,
pH 10.0
CHL 5400 ppm
Ca 40 ppm
Sol 7.1 LCM 1#
DMC \$1353.25
CMC \$9231.65

depth correction

short trip, 25 stands
at 3750 ft

induced gas
kicks, system
test

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Mud-Co Mud chk
@ 3862 ft.
0815 hrs. 11/23/13
Vis. 53 Wt. 9.5
PV 21 YP 16
WL 7.2
Cake 1/32,
pH 10.0
CHL 5300 ppm
Ca 40 ppm
Sol 8.2 LCM 2#
DMC \$1207.75
CMC \$10439.40

Mud-Co Mud
chk
@ 3985 ft.
0835 hrs.
11/24/13
Vis. 62 Wt. 9.4
PV 22 YP 16
WL 6.4
pH 10.0
CHL 5600 ppm
Ca 40 ppm
Sol 7.5 LCM 2#
DMC \$778.95
CMC \$11218.35

ROP (min/ft)
Gamma (API)
Cal (in)

0 10
6 150
16

H

J

depth correction

ROP (min/ft)
Gamma (API)
Cal (in)

0 10
6 150
16

DST #1
DST #3
STRADDLE

DST #2 straddle test
3796-3850 (log
meas) PACKER
FAILURE

cfs @ 3862 ft
0100 hrs 11/23/13

cfs @ 3907 ft
1950 hrs
11/23/13

cfs @ 3915 ft
2135 hrs
11/23/13