



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

Well Name: Wood #2-7
Location: Sec. 7 - T21S - R14W , Stafford County, KS
Licence Number: API No.: 15-185-23694-0000
Spud Date: August 1, 2011
Surface Coordinates: 330' FNL & 470' FEL
Region: Frey
Drilling Completed: August 7, 2011

Bottom Hole Coordinates:

Ground Elevation (ft): 1923' K.B. Elevation (ft): 1928'
Logged Interval (ft): 2850' To: 3990' Total Depth (ft): 3990' (RTD)
Formation: Arbuckle
Type of Drilling Fluid: Chemical Gel/Polymer

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

OPERATOR

Company: Hess Oil Company
Address: 2080 E. Kansas
McPherson, KS 67460

GEOLOGIST

Name: Derek W. Patterson
Company: Valhalla Exploration, LLC
Address: 133 N. Glendale
Wichita, KS 67208

REMARKS

After review of the sample evaluations and given the negative structural position for the Wood #2-7, it was decided by operator to run 5 1/2" production casing for open hole completion in the Arbuckle as a Salt Water Disposal Well.

The well samples were saved, and will be submitted and available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully Submitted,
Derek W. Patterson

COMMENTS

No Gas Detector Used

No DSTs

No Open Hole Logging Performed

Hess Oil Company

DAILY DRILLING REPORT

Company: Hess Oil Company
 2080 E. Kansas
 McPherson, KS 67460
 Contact: Bryan Hess (Hess Oil Co)
 Office: 620.241.4640
 David Withrow (Edison Operating Co)
 Cell: 316.613.1544
 Geologist: Derek W. Patterson
 Cell: 316.655.3550
 Office: 316.558.5202

Well: Wood #2-7
 Location: 330' FNL & 470' FEL
 Sec. 7 - T21S - R14W
 Stafford Co., KS
 Elevation: 1923' GL - 1928' KB
 Field: Frey
 API: 15-185-23694-0000
 Surface Casing: 882' of 8 5/8" set @ 889' KB
 Spud Date: August 1, 2011
 Drilling Complete: August 6, 2011

Drilling Contractor: J V Mallard, Inc., Rig - 785.731.5161
 Toolpusher: Levon Urban

DATE	7:00 AM DEPTH	PREVIOUS 24 HOURS OF OPERATIONS
8.6.2011	3730'	Drilling and connections Topeka, Heebner, and into Toronto. Geologist Derek W. Patterson on location, 1155 hrs 8.5.11. Drilling and connections Toronto, Douglas Shale, Brown Lime, Lansing, Base Kansas City, and into Viola. CFS @ 3716' (Viola). Resume drilling and connections Viola and into Simpson. CFS @ 3730' (Simpson). Made 570' over past 24 hrs of operations. DMC: \$1,901.90 CMC: \$7,987.20
8.7.2011	RTD - 3990'	Resume drilling and connections Simpson. CFS @ 3761' (Simpson). Resume drilling and connections Simpson and into Arbuckle. CFS @ 3788' (Arb). Resume drilling and connections Arbuckle ahead to RTD of 3990'. RTD reached, 1930 hrs 8.6.11. CTCH. Short Trip (15 stands), 2100 hrs 8.6.11. CTCH, drop survey, TOH and lay down pipe for casing. Operator opted out from running any open hole logs. Orders received to run 5 1/2" production casing for SWDW completion. Made 260' over past 24 hrs of operations. Geologist Derek W. Patterson off location, 2040 hrs 8.6.11.

Hess Oil Company

WELL COMPARISON SHEET

DRILLING WELL					COMPARISON WELL				COMPARISON WELL				COMPARISON WELL			
Hess Oil Company - Wood #2-7 Sec. 7 - 21S - 14W 330' FNL & 470' FEL 1928 KB					Hess Oil Company - Pfister #1-6 Sec. 6 - 21S - 14W 990' FSL & 470' FEL Oil - Arb Structural 1927 KB Relationship				Hess Oil Company - Pfister #2-6 Sec. 6 - 21S - 14W 330' FSL & 1650' FEL Oil - Arb Structural 1929 KB Relationship				Vickers - Frey #4 Sec. 7 - 21S - 14W NE NW NE Oil - Arb Structural 1929 KB Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Topeka	2907	-979			2896	-969	-10		2904	-975	-4		2907	-978	-1	
Heebner	3259	-1331			3245	-1318	-13		3253	-1324	-7		3256	-1327	-4	
Toronto	3269	-1341			3256	-1329	-12		3264	-1335	-6		3270	-1341	0	
Douglas Shale	3290	-1362			3275	-1348	-14		3282	-1353	-9		3287	-1358	-4	
Brown Lime	3365	-1437			3348	-1421	-16		3355	-1426	-11		3358	-1429	-8	
Lansing	3376	-1448			3357	-1430	-18		3366	-1437	-11		3368	-1439	-9	
Muncie Creek	3496	-1568			3474	-1547	-21		3481	-1552	-16		3486	-1557	-11	
Stark Shale	3556	-1628			3536	-1609	-19		3541	-1612	-16		3545	-1616	-12	
Hushpuckney	3584	-1656			3561	-1634	-22		3568	-1639	-17		3572	-1643	-13	
Base Kansas City	3602	-1674			3578	-1651	-23		3584	-1655	-19		3589	-1660	-14	
Viola	3636	-1708			3611	-1684	-24		3620	-1691	-17		3620	-1691	-17	
Simpson Shale	3723	-1795			3636	-1709	-86		3642	-1713	-82		3647	-1718	-77	
Simpson Sand	3745	-1817			3651	-1724	-93		3659	-1730	-87		3668	-1739	-78	
Arbuckle	3778	-1850			3680	-1753	-97		3690	-1761	-89		3696	-1767	-83	
Total Depth	3990	-2062			3800	-1873	-189		3830	-1901	-161		3710	-1781	-281	

Note: No Open Hole Logs Performed.

BIT RECORD

Bit #	Size	Make	Type	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	Smith	PDC	RR	0'	889'	889'	8.25
2	7 7/8"	Smith	F-27	RR	889'	3990'	3101'	79.3

SURFACE CASING RECORD

8.2.2011 Ran 21 joints of new 23#/ft 8 5/8" casing, tallying 882', set @ 889' KB. Cemented with 375 sacks of common, 3% CC, 2% gel, 1/4# floseal per sack, cement did circulate. Plug down, 0915 hrs 8.2.11

PRODUCTION CASING RECORD

8.7.2011 Ran 91 joints of new 15.5#/ft 5 1/2", set @ 3832' KB. Cemented with 100 sacks AA-2. Plug down, 0645 hrs 8.7.11.

DEVIATION SURVEY RECORD

Depth Survey
889' 3/4°

PIPE STRAP RECORD

Depth Pipe Strap
No Pipe Straps Performed

ROCK TYPES

LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Sltstn
- Shale
- Sandylms
- Lms
- Gry sh
- Dtd
- Dol
- Carb sh
- pipesymbol

FOSSIL

- unknown lith
- Red shale
- Oomoldic
- Fuss
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- MINERAL
- Sity

STRINGER

- Sand
- Dol
- Chlorite
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil

TEXTURE

- Sulphur
- Tuff
- Red shale
- Sh
- Sandylms
- Lms
- Gryslt
- Grysh
- Dol
- Clystn
- Carbsh
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln

OIL SHOW

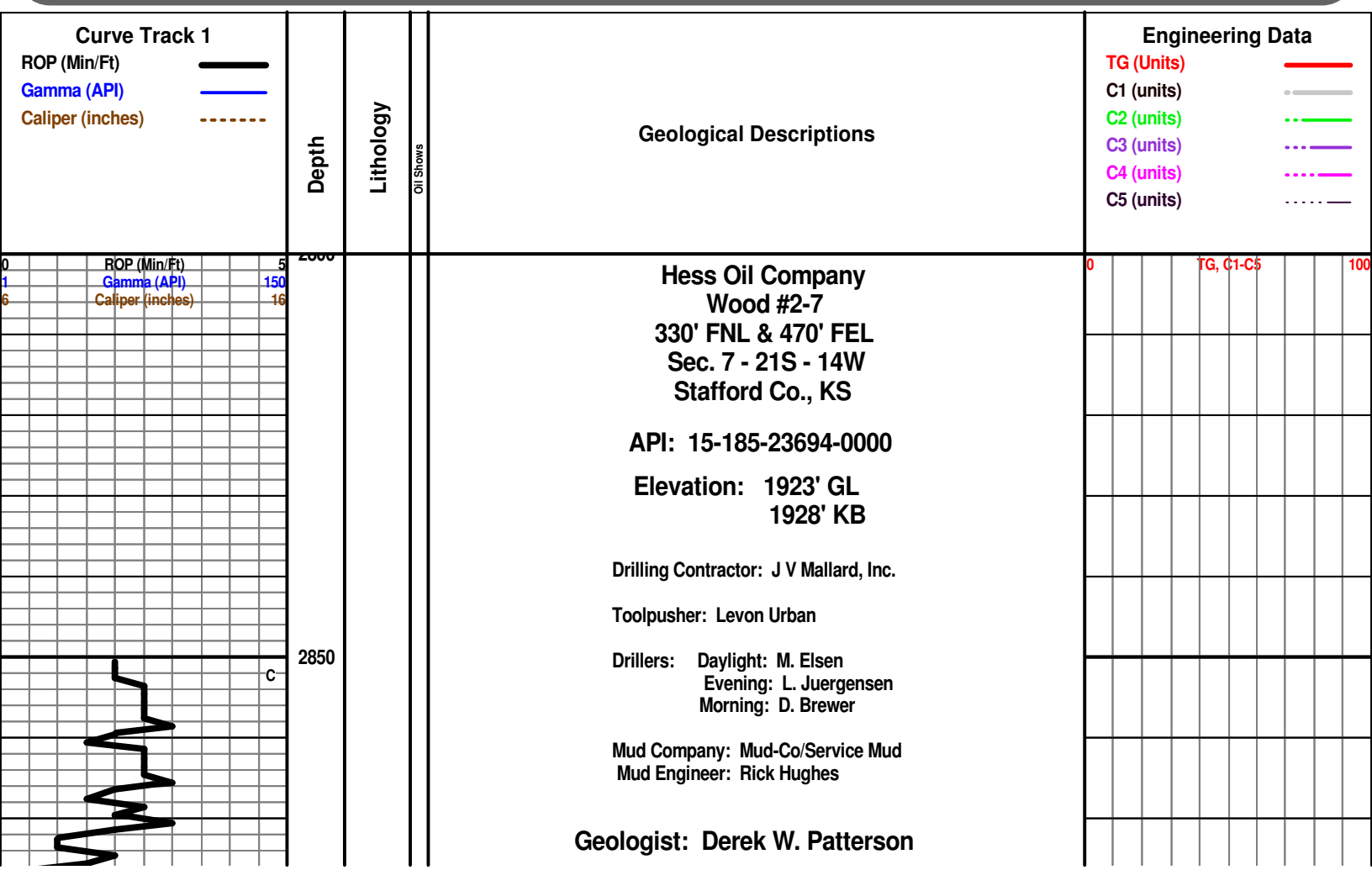
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackst
- Gas show
- Good
- Fair
- Poor
- Dead

INTERVAL

- Dst
- Core
- Dst
- Straddle test

EVENT

- Rft
- Sidewall
- Dst
- Open hole
- Perforations



Severy 2880 (-952)

Shale: gray dk gray brick red, blocky with some rounded, mostly soft with some denser and hard, some fissile.

Topeka 2907 (-979)

Limestone: cream lt cream lt gray, dense matrix, microvxn, sub-fossiliferous in part, poor visible porosity, no shows noted, little-no mineral fluorescence.

Start 20' Wet & Dry Samples @ 2920'
Displace Mud System @ 2922'

Limestone: lt cream lt gray, dense matrix, micro-vfxln, sub-fossiliferous, poor visible porosity, no shows noted, little-no mineral fluorescence, with interbedded Shale: gray dk gray brick red, mostly blocky and hard.

Limestone: gray lt gray some cream, dense matrix, vfxln, fossiliferous, overall poor interxn porosity, no shows noted, little-no mineral fluorescence, with scattered Shale as above.

Limestone: cream lt cream lt gray, dense sub-chalky matrix, micro-vfxln, fossiliferous in part, poor interxn porosity, no shows noted, no fluorescence.

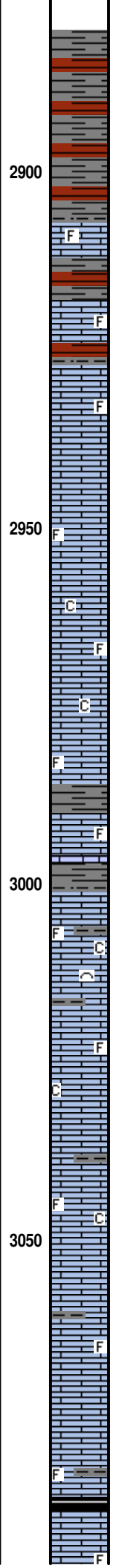
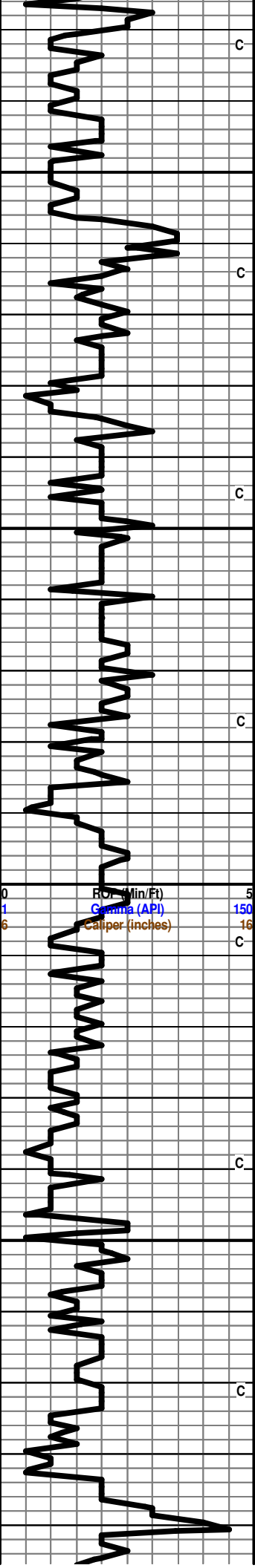
Limestone: gray lt gray lt cream mottled, dense sub-chalky matrix, vf-microxln, fossiliferous, poor interxn porosity, no shows noted, no fluorescence, with scattered Shale in sample.

Limestone: lt cream lt gray mottled, softer sub-chalky matrix, vf-microxln, fossiliferous with trace bioclastic, poor interxn porosity, no shows noted, no fluorescence, with Shale stringers: gray dk gray, mostly blocky and hard.

Limestone: lt cream lt gray lt tan, softer sub-chalky matrix, vf-microxln, fossiliferous, poor interxn porosity, no shows noted, no fluorescence, with continued Shale stringers.

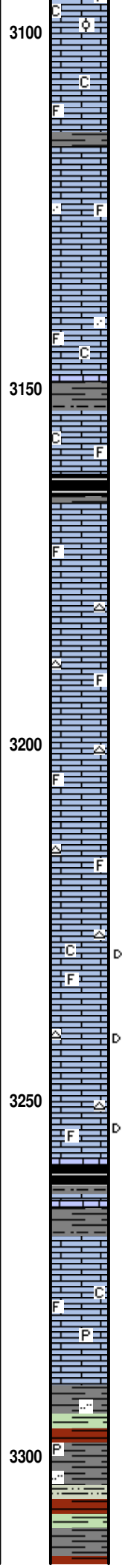
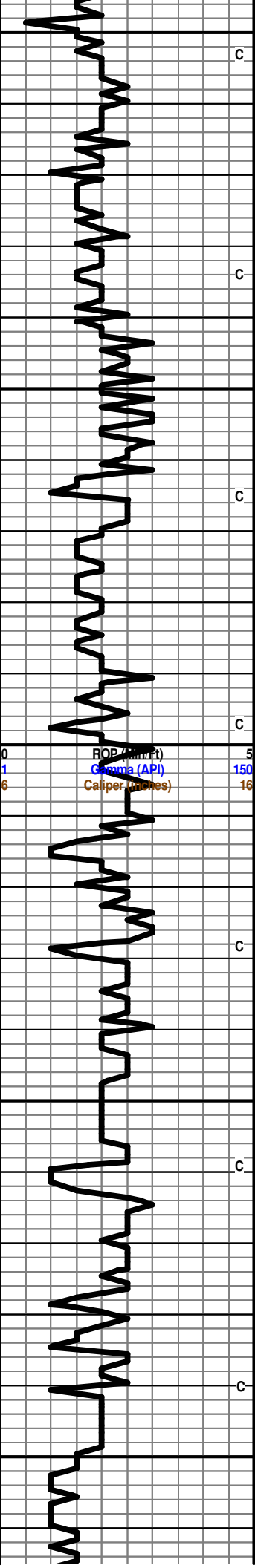
Limestone: lt gray cream tan, dense matrix, micro-vfxln with some cryptoxln, fossiliferous in part, poor interxn porosity, no shows noted, no fluorescence, with scattered Shale.

Shale: black, carbonaceous, blocky and hard, no show gas bubbles.



0 100 TG, C1-C5

Vis: 45
Wt: 8.8
LCM: 0 #/bbl



Limestone: It cream cream It gray, chalky matrix in most pieces, vfxln, some slightly grainy, sub-fossiliferous to fossiliferous with trace sub-oolitic, overall poor visible porosity with few pieces having fair-poor interxln porosity, no shows noted, no fluorescence.

Limestone: It gray It cream, dense sub-arenaceous matrix, vfxln, sub-fossiliferous to barren, poor 2ndary xln along edges, fair-poor interxln porosity, no shows noted, little-no mineral fluorescence.

Limestone: It cream It gray, softer sub-chalky matrix, vfxln, mostly barren, trace arenaceous, overall poor interxln porosity, no shows noted, no fluorescence, with Shale: gray dk gray, blocky to rounded, soft.

Shale: black, carbonaceous, mostly round and soft, waxy in part, no show gas bubbles.

Limestone: cream It cream tan, dense matrix, vf-microxln, heavily fossiliferous, very xln, poor visible porosity, no shows noted, no fluorescence, with trace Chert: It gray smokey gray, fresh and sharp, no shows noted.

Limestone: cream It cream tan, dense matrix, vf-microxln, fossiliferous in part, poor visible porosity, no shows noted, no fluorescence, with scattered Chert: It gray smokey gray cream, fresh and sharp, no shows noted.

Limestone: It cream tan, dense to sub-chalky matrix, micro-cryptoxln, fossiliferous in part, poor visible porosity, few pieces with very poor dk brown-black dead staining along edges, no live shows noted, very poor-no fluorescence, with continued Chert.

Start 10' Wet & Dry Samples @ 3250'
Limestone: It cream tan It brown, dense sub-chalky matrix, vf-microxln, very xln, fossiliferous in part, overall poor visible porosity, decrease in stained pieces above, no live shows noted, no fluorescence, with scattered Chert as above.

Heebner 3259 (-1331)

Shale: black, carbonaceous, mostly blocky and hard with some softer and waxy, no show gas bubbles, with Shale: gray dk gray, blocky and hard.

Toronto 3269 (-1341)

Limestone: off white It cream, vf-microxln with some cryptoxln, dense slightly chalky matrix, fossiliferous to barren, pyritic in part, fair 2ndary xln in most pieces, overall poor visible porosity, no shows noted, little-no mineral fluorescence.

Geologist Derek W. Patterson on location, 1155 hrs 8.5.11

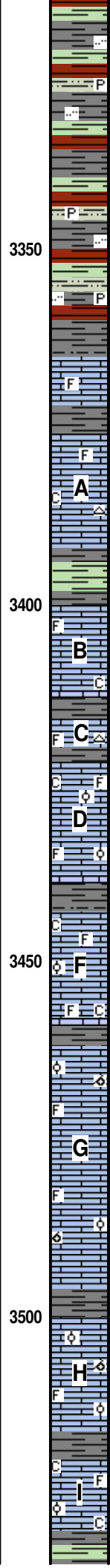
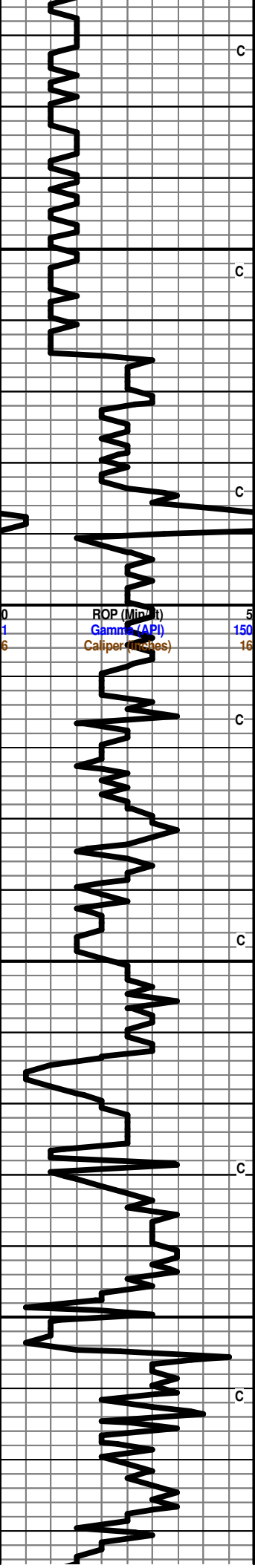
Douglas Shale 3290 (-1362)

Shale: gray dk gray green brick red, mostly blocky, soft to hard, some silty and pyritic, with trace interbedded Siltstone: gray It gray, vf grained, poor visible porosity, pyritic, no shows noted, and loose Pyrite nodules in sample, sample washes brown-gray.

Vis: 45
Wt: 8.9
LCM: 0 #/bbl

0700 hrs, 8.5.11

Mud-Co Mud Ck @ 3197
0 TG, C 0750 hrs 8.5.11 100
Vis 45 Wt 9.1
PV 13 YP 10
WL 9.2 |
Cake 1/32
pH 10.5
CHL 4,900 ppm
Cal 20
Sol 5.4
LCM: 0 #/bbl
DMC: \$866.30
CMC: \$6,085.30



Shale: gray dk gray green trace brick red, mostly blocky with some rounded, soft to hard, silty to micaceous, some scattered pyritic, with continued interbedded Siltstone as above, no shows noted, and loose Pyrite nodules in sample, sample washes gray-dk gray.

3350

Shale: gray dk gray trace green and brick red, round to blocky, mostly soft and waxy, silty to micaceous, some scattered pyritic, with trace interbedded Siltstone: gray lt gray, vf grained, poor visible porosity, pyritic, no shows noted, and trace loose Pyrite nodules in sample, sample washes gray-dk gray.

Brown Lime 3365 (-1437)

Limestone: tan brown lt brown, dense tight matrix, microxln, fossiliferous to heavily fossiliferous, scattered 2ndary xln along edges in few pieces, poor visible porosity, no shows noted, no fluorescence grading to Shale: gray dk gray, mostly blocky and hard.

Lansing 3376 (-1448)

Limestone: off white lt cream, dense sub-chalky to sub-cherty matrix, vf-microxln with some lithographic non-descript, sub-fossiliferous to barren, fair amount of 2ndary xln in most pieces, poor interxln porosity, no shows noted, even dull pale yellow mineral fluorescence.

Shale: gray dk gray dk green, mostly blocky and hard with some rounded and softer.

3400

Limestone: lt cream lt tan, dense chalky matrix, micro-vfxln, fossiliferous to barren, overall poor interxln porosity with some fair pinpoint porosity, very poor show lt brown oil in few pieces with fair increase upon break/left under lamp, poor saturated stain in few pieces, even dull pale yellow fluorescence, fair forced cut fluorescence, faint odor.

Limestone: lt cream lt gray, dense slightly cherty matrix, microxln, fossiliferous in part, abundant 2ndary xln along edges and in porosity, poor interxln porosity, no shows noted, spotty poor dull pale yellow fluorescence.

Limestone: cream tan gray mottled, dense sub-chalky matrix, vfxln, fossiliferous with some oolitic, fair-poor interxln porosity, no shows noted, little-no mineral fluorescence.

Limestone: cream gray mottled, dense matrix, vfxln, fossiliferous with some heavily oolitic, fair-poor interoolitic porosity, no shows noted, little-no mineral fluorescence.

3450

Limestone: lt cream tan off white lt gray, slightly chalky dense matrix, micro-vfxln with some lithographic, fossiliferous with trace oolitic, fair 2ndary xln in most pieces along edges and between faces, poor visible porosity in most pieces with a few having fair pinpoint porosity, no shows noted, little-no fluorescence, with scattered Chalk in sample.

Limestone: lt cream off white, xln matrix, micro-vfxln, sub-fossiliferous with some scattered oolitic, heavily oomoldic with varying small-large molds, fair-good oomoldic porosity with heavy 2ndary xln within, no shows noted, spotty bright yellow mineral fluorescence.

Limestone: cream lt cream, xln matrix, micro-vfxln, sub-fossiliferous with some scattered oolitic, trace sub-oomoldic, heavy 2ndary xln along edges in most, poor oomoldic porosity in few pieces with overall poor interxln porosity, no shows noted, spotty-even dull pale yellow fluorescence.

Muncie Creek 3496 (-1568)

Shale: gray dk gray, blocky, mostly soft, some fissile, silty in part.

3500

Limestone: lt cream off white lt gray, microxln, fossiliferous in part with some sub-oolitic, poor oomoldic development with few pieces having poor oomoldic porosity, overall poor visible porosity, no shows noted, spotty bright pale yellow mineral fluorescence in few pieces, no cut fluorescence

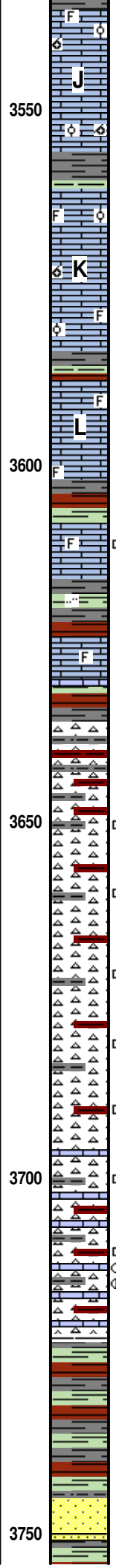
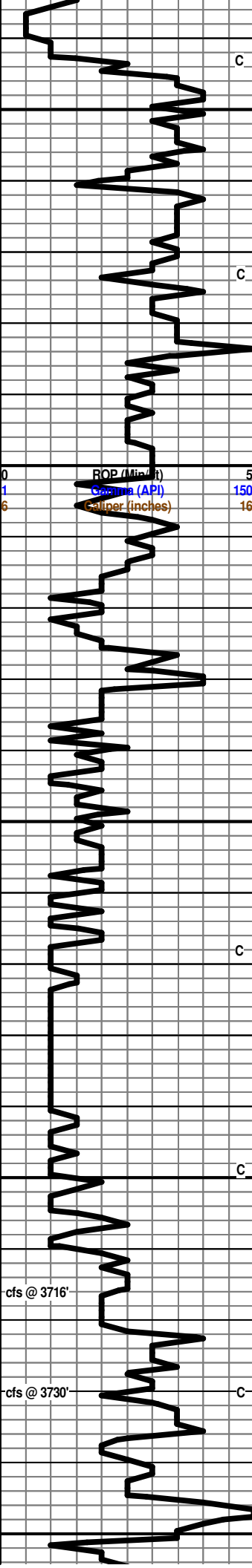
Shale: gray dk gray, blocky and hard, fissile in part.

Limestone: lt cream cream lt tan, slightly dense chalky matrix, vf-microxln, most heavily oolitic fossiliferous, fair-poor interoolitic porosity, few pieces with some heavy dk black dead staining along edges, no live shows noted, very poor fluorescence, no cut fluorescence, with scattered Chalk in sample.

Shale: gray dk gray dk green, mostly blocky, soft to hard, some fissile.

0 TG, C1-C5 100

Vis: 52
Wt: 9.3
LCM: 0 #/bbl



Limestone: cream lt tan, dense matrix, vf-microxln, fossiliferous with oolitic, good oomoldic development, good oomoldic porosity, abundant 2ndary xln in porosity, no shows noted, spotty-even bright yellow mineral fluorescence, no cut fluorescence.

Limestone: lt cream off white lt tan, dense tight matrix, micro-vfxln, fossiliferous with oolitic, scattered sub-oomoldic, overall poor interxln/oomoldic porosity, no shows noted, little-no fluorescence, with scattered Chalk in sample.

Stark Shale 3556 (-1628)

Shale: gray dk gray pale green, blocky, mostly hard with some softer, some fissile.

Limestone: cream tan lt cream, dense tight matrix, micro-vfxln, fossiliferous with oolitic, scattered sub-oomoldic, overall poor interxln/oomoldic porosity and some scattered fair pinpoint porosity, abundant 2ndary xln along edges in most pieces, no shows noted, little-no fluorescence.

Hushpuckney 3584 (-1656)

Shale: gray dk gray dk green brick red, blocky, hard to soft, some fissile.

Limestone: cream tan, dense tight matrix, vf-microxln, very xln with abundant 2ndary xln along edges, sub-fossiliferous, poor visible porosity, no shows noted, little-no fluorescence.

Base Kansas City 3602 (-1674)

Shale: gray dk gray brick red trace dk green, blocky and hard, fissile in part.

Limestone: cream dk cream tan, dense tight matrix, microxln with some cryptoxln, sub-fossiliferous in part with most barren, poor interxln porosity, few pieces with fair amount of dk black dead tarry staining along edges, no live shows noted, no fluorescence.

Shale: gray dk gray brick red brown dk green, blocky, mostly hard with some softer, fissile in part, trace silty, sample washes reddish-brown.

Limestone: off white lt cream lt gray, dense, micro-vfxln with some cryptoxln, fossiliferous in part, scattered 2ndary xln along edges, overall poor interxln/visible porosity, no shows noted, little-no fluorescence.

Shale: gray dk gray brown brick red dk green, blocky, hard to soft, some fissile, silty in part, sample washes reddish-brown.

Viola 3636 (-1708)

Abundant Shale as above, with scattered Chert: yellow cream, fresh and sharp, barren, no shows noted.

Shale: gray dk gray brown brick red, mostly blocky with some rounded, softer, with continued Chert: cream off white pink, fresh and sharp to slightly weathered, couple pieces with dk black dead staining along edges, no live shows noted, very poor pale yellow mineral fluorescence, sample washes reddish-brown.

INFLUX - Chert: cream lt cream off white lt pink, mostly fresh and sharp with trace slightly weathered, trace fossiliferous with most barren, no visible porosity, couple pieces with dk black dead staining along edges, no live shows noted, very poor-no mineral fluorescence, still carrying abundant Shale as above.

Chert: as above with influx Chert: black dk gray, weathered to slightly tripolitic, fair visible porosity, fair amount dk black dead staining along edges, no show free oil or gas, little-no fluorescence, no cut fluorescence, no odor, with continued abundant Shale, sample washes reddish-brown.

Chert: mixed as above, still carrying fair amount of weathered pieces with dk black dead staining, no live shows noted, no fluorescence, no odor, with abundant Shale, sample washes reddish-brown.

3716' cfs 0''/15'' - Chert: cream lt cream off white black dk gray, fresh and sharp to weathered and tripolitic in part, fair porosity in weathered pieces, only notable shows are continued dk black dead staining in weathered pieces, no live shows noted, spotty poor lt yellow fluorescence in few pieces, no odor, with continued abundant Shale, and scattered Limestone: cream lt cream, dense sub-chalky matrix, vf-microxln, mostly barren, poor interxln porosity, no shows noted, sample washes red-brown.

3716' cfs 30''/45'' - Chert: as above, still carrying fair amount of weathered pieces with dk black heavy staining along edges, poor-fair show heavy dk black oil in few pieces upon break, spotty poor lt yellow fluorescence in few pieces, fair forced cut fluorescence, no odor, with continued Shale and Limestone as above, sample washes reddish-brown.

Simpson Shale 3723 (-1795)

3730' cfs 30''/45'' - Shale: gray dk gray brick red purple teal green, mostly blocky, soft to hard, some fissile, only 30% sample Shale, still carrying abundant Chert.

Shale: gray dk gray teal brick red purple maroon, mostly blocky, soft to hard, some fissile, still carrying abundant Chert and Limestone as above (from uphole?).

Simpson Sand 3745 (-1817)

3761' cfs 20'' - Sandstone (trace): clear quartz grains in clear-white pale green matrix, mostly coarse-med grains, sub-rounded to sub-angular, well cemented and sorted, fair intergranular porosity in most, no shows noted, little-no mineral fluorescence, no odor, with abundant Shale as above, sample washes dk reddish-brown

0 TG, C1-C5 100

Vis: 55
Wt: 9.3
LCM: 0 #/bbl

0700 hrs, 8.6.11
Vis: 45
Wt: 9.4
LCM: 0 #/bbl

sample washes air leach brown.

cfs @ 3761'

C

3761' cfs 40" - Shale: teal gray dk gray dk green brick red purple maroon, mostly blocky and hard, some slightly pyritic, fissile in part.

3788' cfs 20" - Shale: teal gray dk gray dk green brick red purple maroon, mostly blocky and hard, some slightly pyritic, fissile in part.

Arbuckle 3778 (-1850)

3788' cfs 40"/60" - (15%) Dolomite: off white lt cream lt gray, coarse-fxlN with some f-vfxln, good-fair rhombic development in most, fair-good rhombic porosity, no shows noted, even bright pale yellow mineral fluorescence, no odor, with abundant Shale (from above?).

Dolomite: off white lt cream clear, coarse-fxlN, good-fair rhombic development in most, fair-good rhombic porosity with abundant 2ndary xln fill in most, no shows noted, even bright pale yellow mineral fluorescence, no odor, with continued Shale.

Dolomite: off white lt cream clear, coarse-fxlN, fair rhombic development in most, fair rhombic porosity with abundant 2ndary xln fill in most, no shows noted, even bright pale yellow mineral fluorescence, no odor, with scattered Shale: teal pale green, blocky and hard, and influx Chert: bone white, fresh and sharp, no shows noted.

Dolomite: lt cream clear, coarse-fxlN, fair rhombic development in most, pyritic in part, fair-poor rhombic/interxln porosity with abundant 2ndary xln and some chalk fill, no shows noted, even bright pale yellow-white mineral fluorescence, no odor, with continued Shale and Chert in sample.

Dolomite: cream tan lt cream, coarse-fxlN, fair-good rhombic development in most, barren, pyritic in part, fair-good rhombic porosity with fair amount of 2ndary xln and chalk fill, no shows noted, even bright pale yellow-white mineral fluorescence, no odor, overall decrease in Shale from above, still carrying scattered Chert: bone white, fresh and sharp, no shows noted.

Dolomite: cream tan, coarse-fxlN, very friable, fair-good rhombic development, trace sub-oolitic in few pieces, pyritic in part, fair-good rhombic porosity with some chalk fill, no shows noted, even bright pale yellow-white mineral fluorescence, no odor, with influx Chert: bone white, fresh and sharp to slightly weathered, some oolitic, no shows noted.

Dolomite: tan dk cream, denser matrix, vf-fxlN, overall poor xln development with some fair rhombic, fair-poor rhombic/interxln porosity, no shows noted, even bright dull white mineral fluorescence, no odor, with Chert: bone white, fresh and sharp with some slightly weathered, some oolitic, no shows noted, and fair amount of Shale: gray dk gray, blocky, hard to soft, some fissile.

Dolomite: cream tan, coarse-fxlN, very friable, fair-good rhombic development, pyritic in part, fair-good rhombic porosity with some chalk fill, no shows noted, even bright pale dull white mineral fluorescence, no odor, with Chert: bone white, fresh and sharp to slightly weathered, some oolitic, no shows noted, some loose Pyrite nodules in sample, and continued Shale.

Dolomite: cream lt tan lt cream, coarse-fxlN, friable, fair-good rhombic development, pyritic in part, fair-good rhombic porosity in most, no shows noted, even dull pale white mineral fluorescence, no odor, with continued Chert and Shale.

Dolomite: tan dk cream lt cream, denser matrix, vf-fxlN, overall poor xln development with some fair rhombic, fair-poor rhombic/interxln porosity, no shows noted, even dull white mineral fluorescence, no odor, with Chert: bone white, fresh and sharp with some slightly weathered, some oolitic, no shows noted, and fair amount of Shale: gray dk gray, blocky, hard to soft, some fissile.

Dolomite: cream lt cream lt tan, denser matrix, vfxln, overall poor xln development, poor interxln porosity, no shows noted, even dull yellow-white mineral fluorescence, no odor, with continued Chert and Shale, and influx Sandstone: clear grains in white clear matrix, f grained, sub-angular to rounded, well cemented and sorted, micaceous, fair intergranular porosity, no shows noted.

Mud-Co Mud Ck @ 3761'
0920 hrs 8.6.11
Vis 52 Wt 9.4
PV 13 YP 12
WL 12.2
Cake 1/32
pH 10.0
CHL 5,000 ppm
Cal 20
Sol 7.5
LCM: 0 #/bbl
DMC: \$1,901.90
CMC: \$7,987.20

0 TG, C1-C5 100

3800

3850

3900

3950

ROP (Min/Ft)
Gamma (API)
Sampler (inches)

5
150
16

cfs @ 3788'

C

C

C

C

C

C

0
1
6

C	
Short Trip, 2100 hrs 8.6.11	
TOH and Lay Down Pipe For Casing	
0	ROP (Min/Ft) 5
1	Gamma (API) 150
6	Caliper (inches) 16

4000



3990' cfs 30"60" - Dolomite: cream tan It cream, denser matrix, f-microxln, overall poor xln development, poor interxln porosity in most, no shows noted, even dull pale yellow-white mineral fluorescence, no odor, with Chert: bone white cream tan, mostly fresh and sharp, barren, no shows noted, and overall decrease in Shale.

Vis: 51
Wt: 9.4
LCM: 4 #/bbl

RTD 3990 (-2062)

Rotary TD @ 3990', 1930 hrs 8.6.11
No Open Hole Logging Performed

Orders Received to Run 5 1/2" Production Casing
For SWDW Completion In The Arbuckle

Geologist Derek W. Patterson off location, 2040 hrs 8.6.11

**Respectfully Submitted,
Derek W. Patterson**

0 TG, C1-C5 100