

Well Name: O'Connor #1-B
Surface Location: Sec. 8 - T24S - R12W
Bottom Location: Sec. 8 - T24S - R12W
License Number: 15-185-24053-0000
Spud Date: 5/18/2019
Region: State of Kansas
Drilling Completed: 5/25/2019
Time: 7:30 AM
Surface Coordinates: 330 FSL & 1545' FEL
Bottom Hole Coordinates: 1885-000
Ground Elevation: 1895.00ft
K.B. Elevation: 1895.00ft
Logged Interval: 2775.00ft To: 4140.00ft
Total Depth: 4245.00ft
Formation: Viola
Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR
Company: Edison Operating Company LLC
Address: 8100 E. 22nd St. North Building 1900 Wichita, KS 67226
Contact Geologist: Derek W. Patterson
Contact Phone Nbr: 316.613.5444
Well Name: O'Connor #1-B
Sec. 8 - T24S - R12W
API: 15-185-24053-0000
Field: Osage South
State: Kansas Country: USA

LOGGED BY
EDISON OPERATING COMPANY, LLC

Company: Edison Operating Company LLC
Address: 8100 E. 22nd St. North Building 1900 Wichita, KS 67226
Phone Nbr: 316.655.8233
Logged By: Geologist Name: Derek W. Patterson

REMARKS

After review of the geologic log, DST reports, and open hole logs for O'Connor #1-B, it was decided upon by operator to deepen the well to a final rotary total depth of 4240' and run 1 1/2" casing for open hole completion as a salt water disposal well in the Arbuckle.
Note: the drill time, gas curves, and DST intervals have been shifted 3' shallow/higher to correspond with the electric log curves. All connection and circulation points have also been moved to match the overall geologic.
The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.
Respectfully Submitted,
Derek W. Patterson

GENERAL INFORMATION

Drilling Contractor: Southwind Drilling - Rig #8
Tool Pusher: Doug Roberts
Daylight Driller: Heraclo Rojas
Eveining Driller: Richard Rickers
Morning Driller: Charles Martinez
Gas Detector: Bluestem Environmental
Engineer: Keith Heavis
DITM: 82.3773 CMC: 34.34
Operational By: 1900'

Table with columns: Depth, Survey, Pipe Strap. Rows for 419', 3887', and RTD - 4140'.

Table with columns: Bit #, Size, Make, Type, Serial Number, Depth In, Depth Out, Feet, Hours. Rows for bits 2, 3, and 4.

5.19.2019 Ran 9 joints of new 2 1/8" 8.5' surface casing, falling 406'. Set @ 417' KB. Cemented with 17.5 sacks C-A-Den followed 175 sacks 60/40 Poz. 4% cc, 2% gel, 1/4" #14 flex flocc. Cement did circulate.
Plug down @ 0715 hrs 5.19.19. By Basic Energy Services.

5.27.2019 Ran 95 joints of new 1 7/8" CRW 5 1/2" J-55 R-1 LTO casing, falling 4064'. Set @ 4074' KB. Cemented with 125 sacks C-TCH, drop survey, strap out of hole for DST #1 1800 hrs 5.23.19. Rig up, make up hole for DST #1. Run 1 1/2" casing for open hole completion as a salt water disposal well in the Arbuckle. Cement did circulate.
Plug down @ 0915 hrs 5.27.19. By Basic Energy Services.

DAILY DRILLING REPORT

5.22.2019 3330' Displace mud system @ 2896'. Drilling and connections upper Pennsylvanian beds. Geologist Derek W. Patterson on location 2140 hrs 5.21.19. Drilling and connections Topeka. Made 818' over past 24 hrs of operations.
WOB: 30k RPM: 90 PP: 1000 SPM: 60
DWC: 15.28' CMC: 34.34

5.23.2019 3805' Drilling and connections Healin, Toron, Douglas and into Brown Limestone. Short trip @ 3487'. 1230 hrs 5.22.19. Conduct 15 stand short trip. OTC, resume drilling following short trip. 1415 hrs 5.22.19. Drilling and connections Lansing-Kansas City and Lansing-Kansas City. CFS @ 3551' (LKC BC). Resume drilling and connections Lansing-Kansas City, Base Kansas City, and into Marmon. Made 475' over past 24 hrs of operations.
WOB: 35k RPM: 90 PP: 1200 SPM: 60
DWC: 15.41433 CMC: 34.54087

5.24.2019 3917' Drilling and connections King Hill and into Kinderhook. CFS @ 3925' to evaluate Marmon. Resume drilling and connections Kinderhook and into Viola. CFS @ 3987' (Viola). Shows warrant test. OTC, conduct 15 stand short trip. OTC, drop survey, strap out of hole for DST #1 1800 hrs 5.23.19. Rig up, make up hole for DST #1. Run 1 1/2" casing for open hole completion as a salt water disposal well in the Arbuckle. Cement did circulate.
Made 475' over past 24 hrs of operations.
WOB: 35k RPM: 90 PP: 1200 SPM: 60
DWC: 15.41433 CMC: 34.54087

5.25.2019 4090' CFS @ 3917' (Viola). Shows warrant test. OTC, TOH for DST #2 0830 hrs 5.24.19. TIH with tool. Conduct DST #2. Test successful. TIH with bit, OTC, resume drilling following DST #2 2100 hrs 5.24.19. Drilling and connections Viola and into Simpson. CFS @ 4037' (Simpson SD). Resume drilling and connections Simpson and into Arbuckle. CFS @ 4074' (Arb). Resume drilling and connections Arbuckle ahead to RTD @ 4140'.
Made 173' over past 24 hrs of operations.
WOB: 35k RPM: 90 PP: 1200 SPM: 60
DWC: 15.28959 CMC: 34.79622

5.28.2019 RTD - 4244' Drilling and connections Arbuckle ahead to RTD @ 4140'. RTD reached. Conduct open hole logging operations. Followed open hole logging operations. TIH with bit, resume drilling ahead to RTD @ 4240'. RTD reached 2325 hrs 5.25.19.
Made 150' over past 24 hrs of operations.
WOB: 35k RPM: 90 PP: 1200 SPM: 60
DWC: 15.15588 CMC: 34.99528

WELL COMPARISON SHEET

Comparison table between Edison O'Connor #1, Barneil O'Connor #1, Barneil O'Connor #2, and Coginger Fleming #1. Columns include Well Name, Sec, SW/SE, SW/NE, SW/SW, SW/NE, and various logs (CFL, SWFL, etc.).

ROCK TYPES

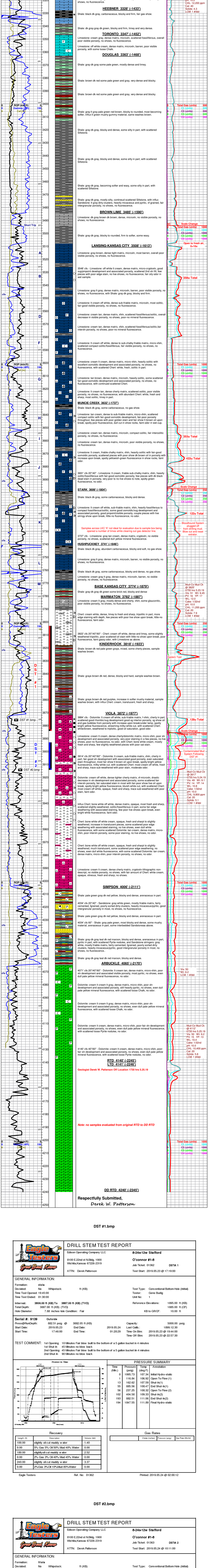
Legend for rock types: LMS1, LMS2, LMS3, LMS4, LMS5, LMS6, LMS7, LMS8, LMS9, LMS10, LMS11, LMS12, LMS13, LMS14, LMS15, LMS16, LMS17, LMS18, LMS19, LMS20, LMS21, LMS22, LMS23, LMS24, LMS25, LMS26, LMS27, LMS28, LMS29, LMS30, LMS31, LMS32, LMS33, LMS34, LMS35, LMS36, LMS37, LMS38, LMS39, LMS40, LMS41, LMS42, LMS43, LMS44, LMS45, LMS46, LMS47, LMS48, LMS49, LMS50, LMS51, LMS52, LMS53, LMS54, LMS55, LMS56, LMS57, LMS58, LMS59, LMS60, LMS61, LMS62, LMS63, LMS64, LMS65, LMS66, LMS67, LMS68, LMS69, LMS70, LMS71, LMS72, LMS73, LMS74, LMS75, LMS76, LMS77, LMS78, LMS79, LMS80, LMS81, LMS82, LMS83, LMS84, LMS85, LMS86, LMS87, LMS88, LMS89, LMS90, LMS91, LMS92, LMS93, LMS94, LMS95, LMS96, LMS97, LMS98, LMS99, LMS100.

ACCESSORIES

Legend for accessories: Mineral (Chert, Heavy dark chert, Heavy light minerals, Pyrite, Silty, Chert White), Fossil (Fossils < 20%, Oolitic, Oolitic), Stringer (Oolitic, Limestone, Sandstone, Siltsstone), Texture (Chalky, Crystalline).

OTHER SYMBOLS

Legend for other symbols: DST, DST1, DST2, DST3, DST4, DST5, DST6, DST7, DST8, DST9, DST10, DST11, DST12, DST13, DST14, DST15, DST16, DST17, DST18, DST19, DST20, DST21, DST22, DST23, DST24, DST25, DST26, DST27, DST28, DST29, DST30, DST31, DST32, DST33, DST34, DST35, DST36, DST37, DST38, DST39, DST40, DST41, DST42, DST43, DST44, DST45, DST46, DST47, DST48, DST49, DST50, DST51, DST52, DST53, DST54, DST55, DST56, DST57, DST58, DST59, DST60, DST61, DST62, DST63, DST64, DST65, DST66, DST67, DST68, DST69, DST70, DST71, DST72, DST73, DST74, DST75, DST76, DST77, DST78, DST79, DST80, DST81, DST82, DST83, DST84, DST85, DST86, DST87, DST88, DST89, DST90, DST91, DST92, DST93, DST94, DST95, DST96, DST97, DST98, DST99, DST100.



Respectfully Submitted,
Derek W. Patterson

DRILL STEM TEST REPORT

Edison Operating Company LLC 8-24-12w Stafford
8100 E22nd at N846 1900 O'Connor #1-B
Wichita, Kansas 67226-2319 Job Ticket: 01362
ATTN: Derek Patterson Test Start: 2019.05.23 @ 17:19:00

GENERAL INFORMATION: Formation: Viola, Deviated: No, Time To Opened: 19:45:00, Interval: 3896.00 ft (KB) To 3897.00 ft (KB) (TVD), Total Depth: 3887.00 ft (KB) (TVD), Hole Diameter: 7.88 inches (w/ Condition: Fair)

Serial #: 9139, Pressure@HoleDepth: 2019.05.24 @ 19:10:00, Outside: 993.32 psig @ 3912.00 ft (KB) (TVD), End Date: 2019.05.24, Start Date: 2019.05.23, End Time: 17:40:00, Last Call: 17:40:30, Capacity: 5000.00 psig, Time On Btm: 2019.05.24 @ 19:44:00, Time Off Btm: 2019.05.24 @ 19:56:30

TEST COMMENT: 1st Opening: 10 Minutes Far bow built to the bottom of a gallon bucket in 4 minutes, 1st Shut in: 45 Minutes No flow back, 2nd Opening: 45 Minutes Far bow built to the bottom of a gallon bucket in 4 minutes, 2nd Shut in: 90 Minutes No flow back

Recovery table: Length (ft), Description, Value (bbl). Rows for 100.00, 180.00, 360.00, and 0.00 ft with descriptions like 'slightly off cut muddy w/ ailer' and '2% Gas 5% Oil 85% Mud 40% Water'.

Gas Rates table: Length (ft), Description, Value (bbl), Flow Rate (bbl/hr), Pressure (psig), Flow Rate (bbl/hr). Rows for 100.00, 180.00, 360.00, and 0.00 ft.

DST #2.bmp

DRILL STEM TEST REPORT

Edison Operating Company LLC 8-24-12w Stafford
8100 E22nd at N846 1900 O'Connor #1-B
Wichita, Kansas 67226-2319 Job Ticket: 01363
ATTN: Derek Patterson Test Start: 2019.05.24 @ 18:06:53

GENERAL INFORMATION: Formation: Viola, Deviated: No, Time To Opened: 11:59:00, Interval: 3896.00 ft (KB) To 3917.00 ft (KB) (TVD), Total Depth: 3917.00 ft (KB) (TVD), Hole Diameter: 7.88 inches (w/ Condition: Fair)

Serial #: 9139, Pressure@HoleDepth: 2019.05.24 @ 19:10:00, Outside: 993.32 psig @ 3912.00 ft (KB) (TVD), End Date: 2019.05.24, Start Date: 2019.05.23, End Time: 17:40:00, Last Call: 17:40:30, Capacity: 5000.00 psig, Time On Btm: 2019.05.24 @ 18:06:53, Time Off Btm: 2019.05.24 @ 18:06:53

TEST COMMENT: 1st Opening: 10 Minutes Far bow built to the bottom of a gallon bucket in 4 minutes, 1st Shut in: 45 Minutes No flow back, 2nd Opening: 45 Minutes Far bow built to the bottom of a gallon bucket in 4 minutes, 2nd Shut in: 90 Minutes No flow back

Recovery table: Length (ft), Description, Value (bbl). Rows for 100.00, 180.00, 360.00, and 0.00 ft with descriptions like 'slightly off cut muddy w/ ailer' and '2% Gas 5% Oil 85% Mud 40% Water'.

Gas Rates table: Length (ft), Description, Value (bbl), Flow Rate (bbl/hr), Pressure (psig), Flow Rate (bbl/hr). Rows for 100.00, 180.00, 360.00, and 0.00 ft.

DST #2.bmp