

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

Cathodic  Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

Deepening  Re-perf.  Conv. to EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Recompletion Date \_\_\_\_\_ Date Reached TD \_\_\_\_\_ Completion Date or Recompletion Date \_\_\_\_\_

API No.: \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Deutsch Oil Company

**8-26s-11w**

8100 E. 22nd st N. BLDG 600 Wichita KS  
67226+2307

**Jorus #3-8**

ATTN: Aaron Young

Job Ticket: 65715

**DST#: 1**

Test Start: 2019.12.10 @ 08:27:00

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:29:20

Time Test Ended: 16:51:20

Test Type: Conventional Bottom Hole (Initial)

Tester: Benny Mulligan

Unit No: 66

**Interval: 4149.00 ft (KB) To 4207.00 ft (KB) (TVD)**

Reference Elevations: 1862.00 ft (KB)

Total Depth: 4207.00 ft (KB) (TVD)

1855.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6772 Inside**

Press@RunDepth: 33.28 psig @ 4150.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.12.10

End Date:

2019.12.10

Last Calib.:

2019.12.10

Start Time: 08:27:01

End Time:

16:51:20

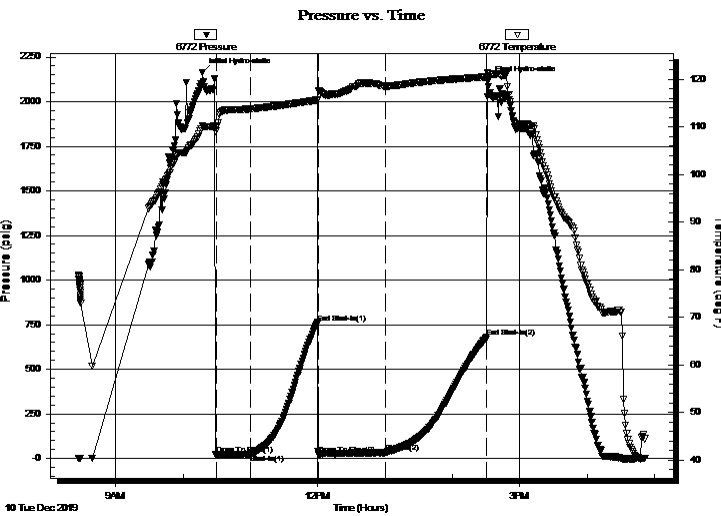
Time On Btm:

2019.12.10 @ 10:17:10

Time Off Btm:

2019.12.10 @ 14:31:50

**TEST COMMENT:** IF-30- built to 5"  
ISI-60- no blow back  
FF-60- built to 4 1/2"  
FSI-90- no blow back



## PRESSURE SUMMARY

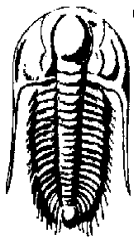
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2163.52	110.20	Initial Hydro-static
13	22.12	109.99	Open To Flow (1)
43	23.86	113.77	Shut-In(1)
103	762.07	115.64	End Shut-In(1)
104	23.32	117.57	Open To Flow (2)
163	33.28	118.57	Shut-In(2)
253	678.80	120.51	End Shut-In(2)
255	2119.04	121.14	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	Mud 100%M	0.56
0.00	GIP 20'	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Deutsch Oil Company

8-26s-11w

8100 E. 22nd st N. BLDG 600 Wichita KS  
67226+2307

**Jorus #3-8**

ATTN: Aaron Young

Job Ticket: 65715

**DST#: 1**

Test Start: 2019.12.10 @ 08:27:00

### GENERAL INFORMATION:

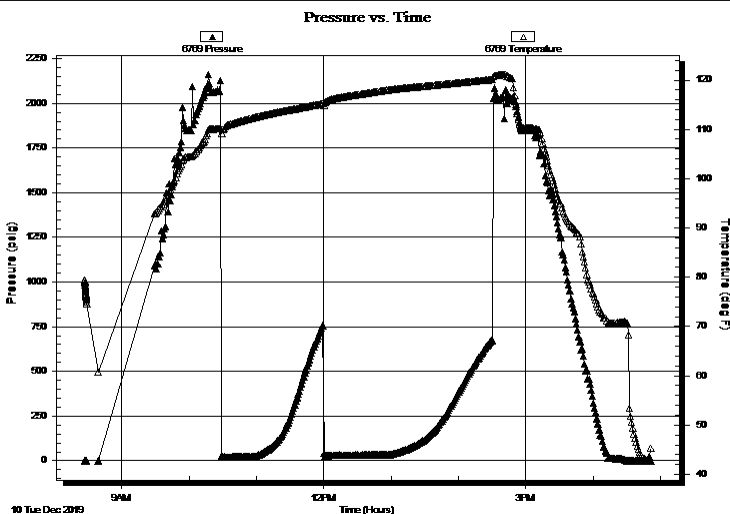
Formation:	<b>Mississippi</b>			Test Type:	Conventional Bottom Hole (Initial)
Deviated:	No	Whipstock:	ft (KB)	Tester:	Benny Mulligan
Time Tool Opened:	10:29:20			Unit No:	66
Time Test Ended:	16:51:20				
<b>Interval:</b>	<b>4149.00 ft (KB) To 4207.00 ft (KB) (TVD)</b>			Reference Elevations:	1862.00 ft (KB)
Total Depth:	4207.00 ft (KB) (TVD)				1855.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition:	Fair	KB to GR/CF:	7.00 ft

**Serial #: 6769**

**Outside**

Press@RunDepth:	psig @	4150.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2019.12.10	End Date:	2019.12.10	Last Calib.:	2019.12.10
Start Time:	08:27:01	End Time:	16:51:30	Time On Btm:	
				Time Off Btm:	

**TEST COMMENT:** IF-30- built to 5"  
ISI-60- no blow back  
FF-60- built to 4 1/2"  
FSI-90- no blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)
40.00	Mud 100%M	0.56
0.00	GIP 20'	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Deutsch Oil Company

**8-26s-11w**

8100 E. 22nd st N. BLDG 600 Wichita KS  
67226+2307

**Jorus #3-8**

Job Ticket: 65715

**DST#: 1**

ATTN: Aaron Young

Test Start: 2019.12.10 @ 08:27:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Mud 100%M	0.561
0.00	GIP 20'	0.000

Total Length: 40.00 ft      Total Volume: 0.561 bbl

Num Fluid Samples: 0

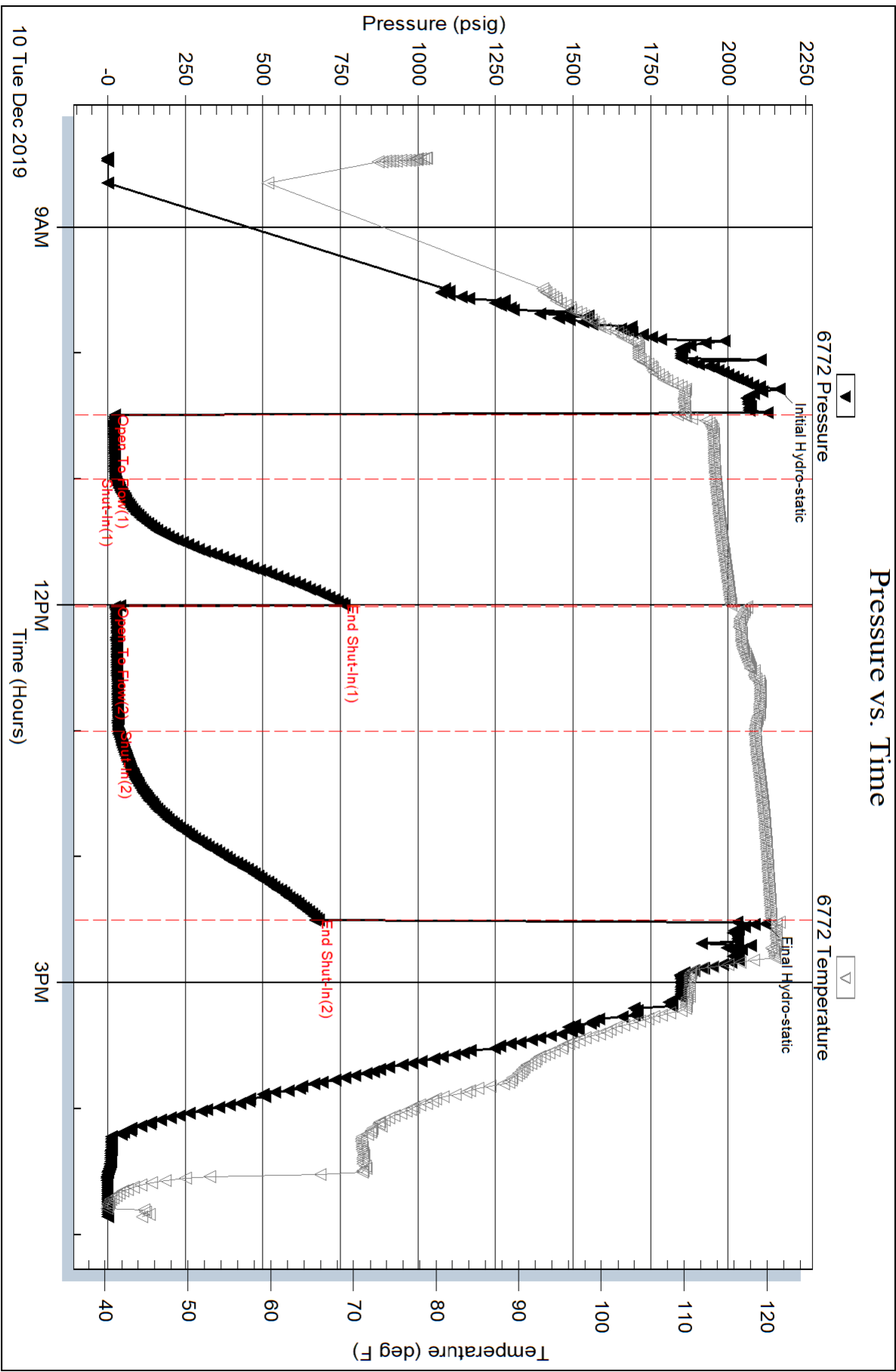
Num Gas Bombs: 0

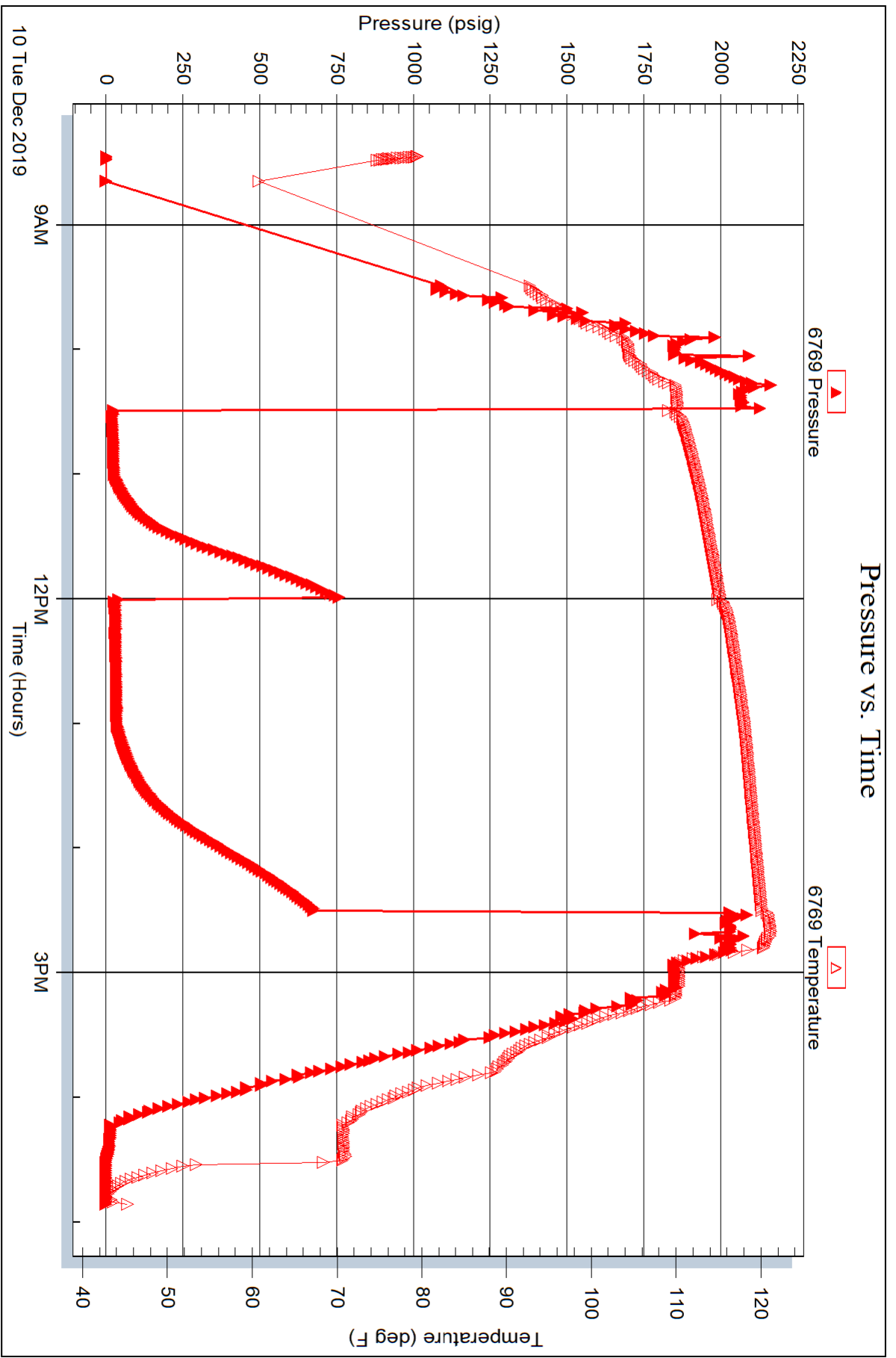
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







Geologic Report  
**Aaron L. Young**

Drilling Time and Sample Log

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

Well Name: Jorns #3-8  
API: 15-151-22508  
Location: Section 8 - T26S - R11W  
License Number: 3180  
Spud Date: 12 / 04 / 2019  
Surface Coordinates: 330' FSL and 330' FWL  
Approx. SW - SW - SW  
Region: Pratt Co., KS  
Drilling Completed: 12 / 11 / 2019  
Bottom Hole Coordinates:  
Ground Elevation (ft): 1855' K.B. Elevation (ft): 1862'  
Logged Interval (ft): 3200' To: 4307' Total Depth (ft): 4307'  
Formation: Kinderhook  
Type of Drilling Fluid: Mud-Co

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

**OPERATOR**

Company: Deutsch Oil Company  
Address: 8100 E 22nd St N, Bldg 600  
Wichita, KS 67226

**GEOLOGIST**

Name: Aaron L. Young, M. S. & Logan Walker  
Company: Young Consulting LLC  
Address: 100 S Main Ste 505  
Wichita, KS 67202

**General Info**

**CONTRACTOR:** Pickrell Drilling, Rig #10

**BIT RECORD:**

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	RR	15-15-15	263'	263'	5.00
2	7-7/8	HA20C	14-14-16	4207'	3944'	98.00
3	7-7/8	HA20C RR	14-14-16	4307'	100'	10.00

Surveys: 263'-.75, 775'-.75, 4207'-1

**GENERAL DRILLING AND PUMP INFORMATION:**

Drilling with 38,000 -40,000 lbs. on bit and approx 70-80 RPM.  
Running 7.5 stands of collars; 447.92'  
Pumping approx 850-900 psi at standpipe; 60 SPM

## Daily Status

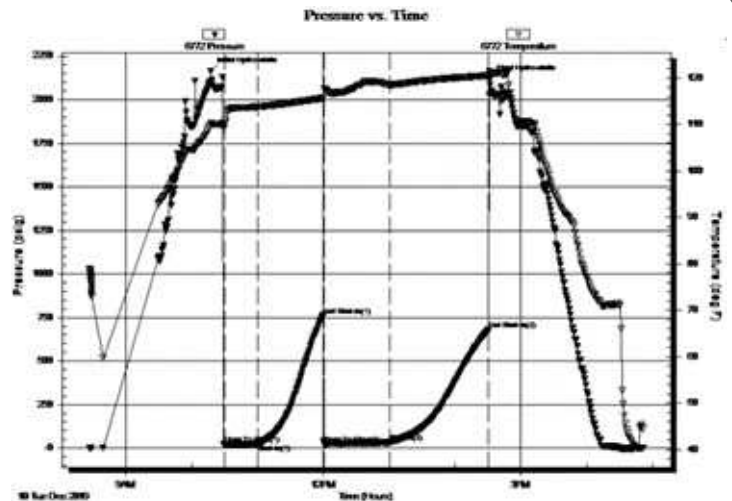
- 12-04-19 Finish moving Pickrell Drilling Rig #10 to location. Rig up. Spud well at 3:00 pm. Drilled 12 1/4" surface hole to 263 ft. Ran 6 jts. of new 8 5/8" 23# surface casing. Set at 263 ft., cemented with 325 sx. Common, 2% gel, 3% CC. Plug down at 12:00 am. Quality ticket #7287. WOC.
- 12-05-19 W.O.C. (waiting on cement) at 7:00 am.
- 12-06-19 Drilling at 1635 ft. at 7:00 am.
- 12-07-19 Drilling ahead at 2501 ft. at 7:00 am.
- 12-08-19 Drilling ahead at 3232 ft. at 7:00 am.
- 12-09-19 Drilling ahead at 3858 ft. at 7:00 am.
- 12-10-19 4207 ft. at 7:00 am. Tripping out of hole for DST #1, Mississippi, 4149'-4207', 30"-60"-60"-90", 1st flow: blow built to 5", 2nd flow: blow built to 4.5#. HP: 2163#-2119#. IFP22#-23#, ISIP: 762#, FFP: 23#-33#, FSIP: 679#. Recovered: 20 ft. Gas In Pipe, 40 ft. Mud.
- 12-11-19 TD: 4307 ft. at 7:00 am. Preparing to run e-Logs. After reviewing the e-Logs it was determined that the Mississippi formation is mostly water bearing. Therefore we will plug the well. Plugged well as follows: 50 sx. @ 690 ft., 50 sx. @ 300', 20 sx. @ 60 ft, 20 sx. in RH. 60/40 poz mix, 4% gel. Plug down at 8:30 m. (12/11/19). Release rig.

**DST #1 MISSISSIPPI**  
4149'-4207'  
30"-60"-60"-90"

IF: Built to 5"  
ISI: No blow back  
FF: Built to 4.5"  
FSI: No blow back

Rec'd: 40' Mud (100% M), 20' GIP

SIP: 762-679#  
FP: 22-24#, 23-33#  
HP: 2164-2119#



## ROCK TYPES

	Anhy
	Bent
	Brec
	Cht
	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta
	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Sltst
	Ss
	Till
	Carb sh
	Dol
	Dtd
	Gry sh

	Sandylms
	Shale
	Sltstn
	Shlyslts
	SltysH
	Lms

### ACCESSORIES

#### MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr



- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Silty

#### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram



- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

#### STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh



- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

#### TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

### OTHER SYMBOLS

#### POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

#### SORTING

- Well
- Moderate
- Poor

#### ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

#### OIL SHOWS

- Even
- Spotted
- Ques
- Dead
- Gas show

#### INTERVALS

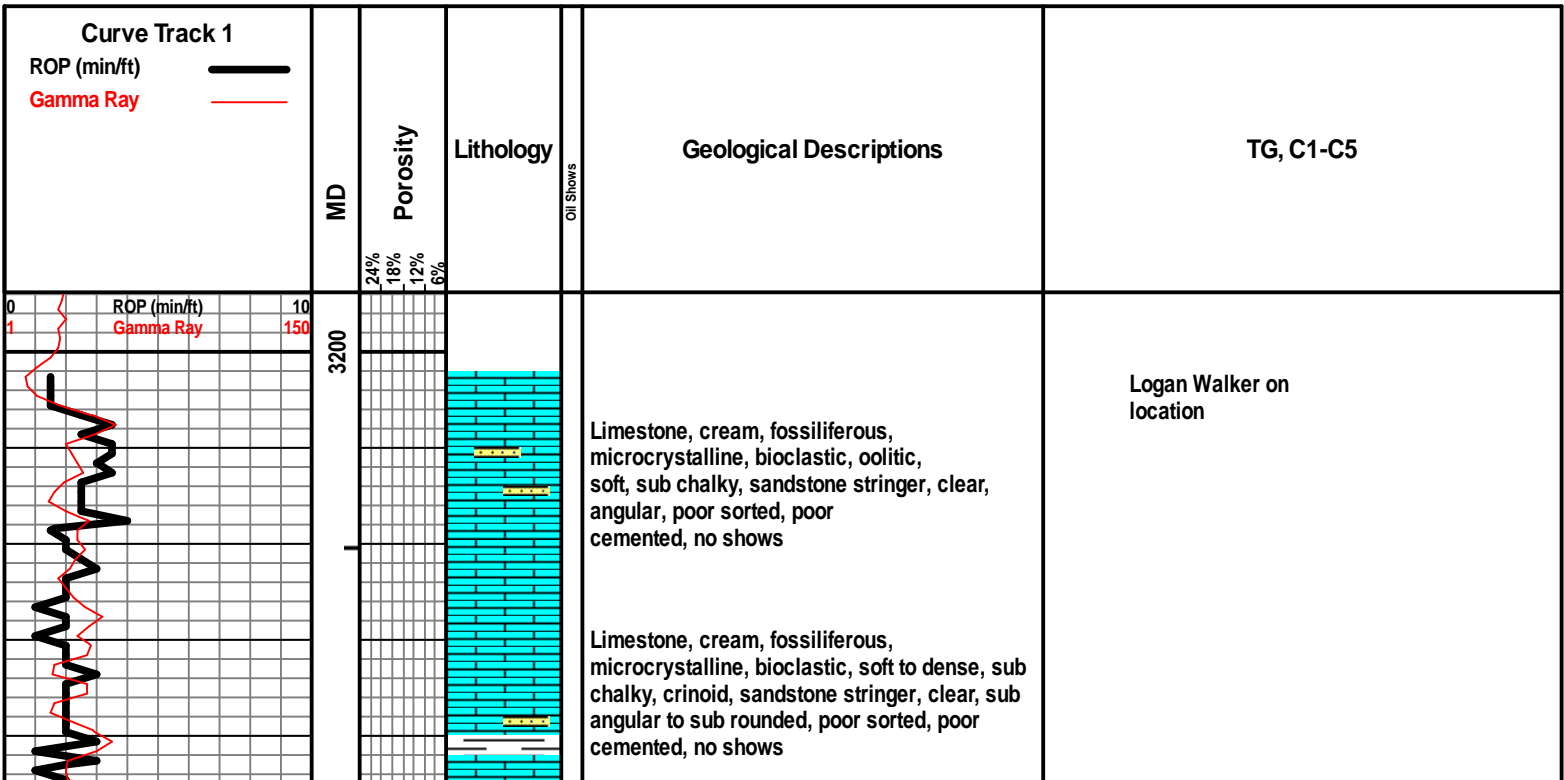
- Core
- Dst

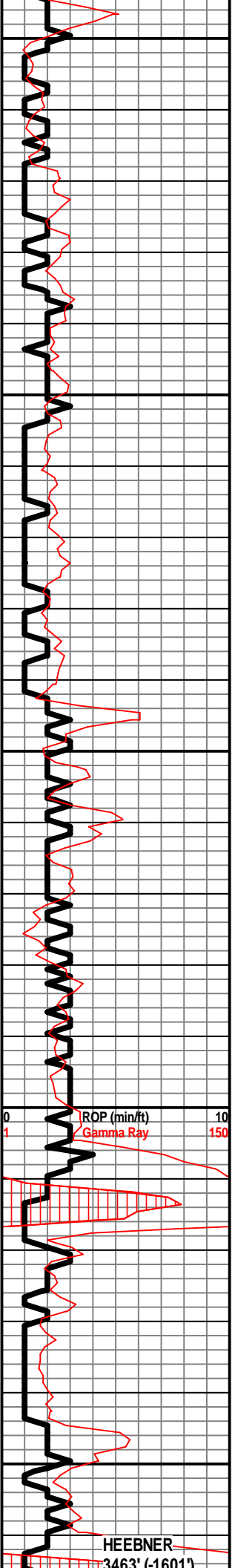


Dst

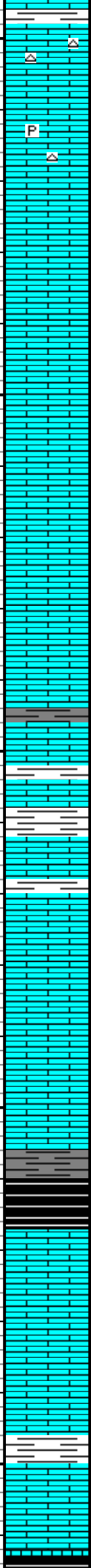
#### EVENTS

- Rft
- Sidewall
- Conn





3250  
3300  
3350  
3400  
3450



Limestone, cream to tan, fossiliferous, microcrystalline, bioclastic, soft to dense, sub chalky, brown opac chert, no shows

Limestone, cream to tan to gray, fossiliferous, microcrystalline, sub bioclastic, soft to dense, sub chalky, whit opac chert, pyritic, no shows

Limestone, white to cream, fossiliferous, microcrystalline, bioclastic, pin hole vugs, poor posity, soft to dense, brown opac chert, sub chalky, questionable dead oil stain to possible gas bubble on break, no odor

Limestone, white to cream, fossiliferous, microcrystalline, bioclastic, pin hole vugs, poor posity, soft to dense, sub chalky, no shows

Limes same as above, no shows

Limes same as above, no shows

shale, gray, prytitic, no shows

Limestone, cream, fossiliferous, microcrystalline, soft to dense, sub chalky, no show

Limestone, white to cream, fossiliferous, microcrystalline, bioclastic, pin hole vugs, poor posity, soft to dense, surface etching, sub chalky, no shows

Shale, gray with trace of red, silty

Limestone, cream to tan, fossiliferous, microcrystalline, soft to dense, sub chalky, no shows

Shale, black carbonaceous, prytic

Limestone, white to cream, fossiliferous, microcrystalline, bioclastic, pin hole vugs, poor posity, soft, surface etching, chalky, brown opac chert, no shows

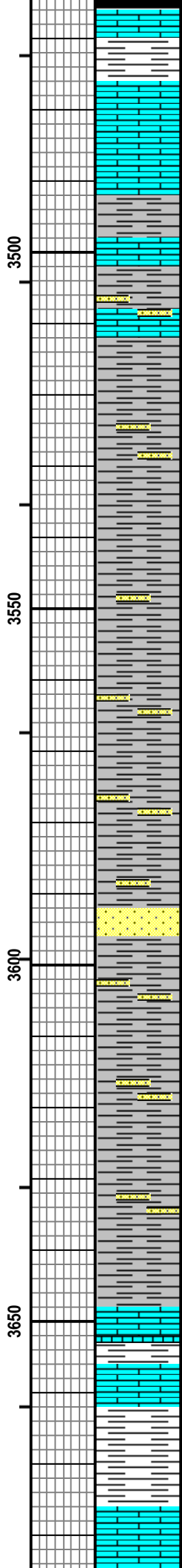
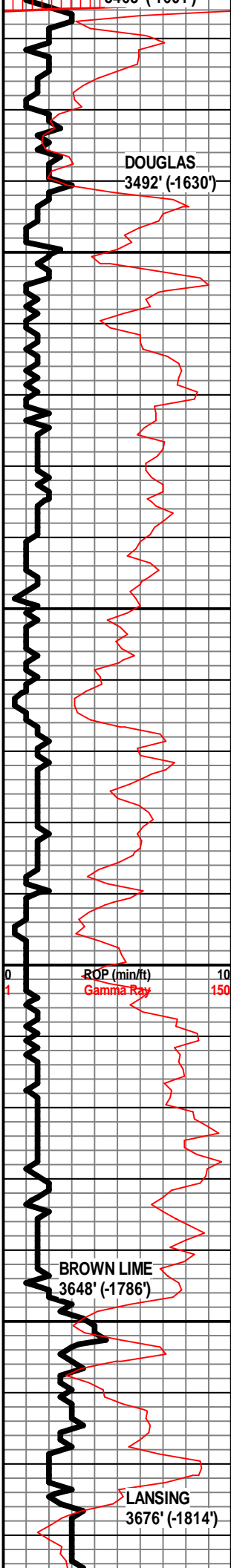
Limestone, tan to brown, fossiliferous, microcrystalline, dense, sub chalky, no shows

Shale, black carbonaceous

WT 8.5  
VIS 49  
LCM 2#

ROP (min/ft) 10  
Gamma Ray 150

HEEBNER  
3463' (-1601')



Limestone, white to cream, fossiliferous, microcrystalline, soft to dense, surface etching, sub chalky, no shows

Limestone, brown, fossiliferous, microcrystalline, dense, cubic prytic, no shows

Limestone, cream, fossiliferous, microcrystalline, soft to dense, surface etching, Shale, gray, silty, sandstone, mod. cemented, mod. sorting, sub round to sub angular, glauconite, poor porosity, sub chalky, no shows

Shale, gray, silty to gummy

Shale, gray, silty to gummy, prytic, sandstone, mod. cemented, mod. sorting, sub round to sub angular, poor porosity, no shows

Shale, gray, silty to gummy

Shale same as above

Shale, gray, silty to gummy, prytic, sandstone, mod. cemented, mod. sorting, sub round to sub angular, poor porosity, no shows

Shale same as above

Shale, gray, silty to sub gummy, prytic, sandstone, opac to gray mod. cemented, mod. sorting, sub round to sub angular, poor porosity, no shows

Shale same as above

Shale, gray, silty, sandstone, opac to gray mod. cemented, mod. sorting, sub round to sub angular, poor porosity, sub glauconite, no shows

Shale same as above

Shale, gray, silty, sandstone, opac to gray mod. cemented, mod. sorting, sub round to sub angular, poor porosity, sub glauconite, no shows

Limestone, brown, fossiliferous, microcrystalline, dense, no shows

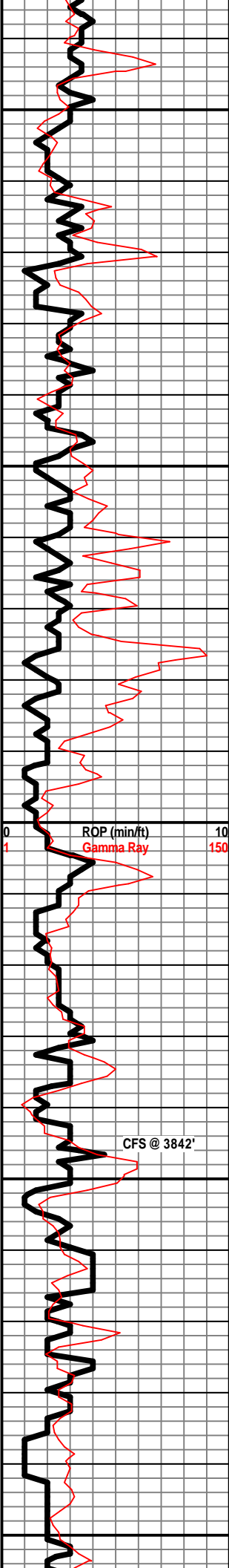
Shale, gray to red, silty to gummy

Limestone, cream, microcrystalline, fossiliferous, soft to dense, no shows

WT 8.7  
VIS 50  
LCM 2#

WT 9.0  
VIS 48  
LCM 1.5#

WT 9.1  
VIS 60  
LCM 2#



ROP (min/ft)  
Gamma Ray

CFS @ 3842'

Limestone, cream, microcrystalline, fossiliferous, soft to dense, prytic, sub chalky, Fleeting odor

Limestone, cream to tan, microcrystalline, fossiliferous, soft to dense, prytic, pin hole vug, poor poroity, questional staining, questional gas bubble on break, Fleeting odor

Limestone, cream, microcrystalline, fossiliferous, sub bioclastic, sharp, soft to dense, opac chert, prytic, sub chalky, no shows

Limestone, same as above

Limestone, cream to tan, microcrystalline, fossiliferous, sub bioclastic, surface etching, soft to dense, prytic, sub chalky, no show

Limestone, tan, microcrystalline, fossiliferous, soft to dense, brown opac chert, prytic, sub chalky, no shows

Limestone, cream to tan, microcrystalline, fossiliferous, soft to dense, sub chalky, no shows

Limestone, cream, microcrystalline, fossiliferous, sub bioclastic, soft to dense, surface etching, chalky, prytic, no shows

Limestone, cream, microcrystalline, fossiliferous, white opac chert, soft to dense, sub chalky, no shows

Limestone, cream, microcrystalline, fossiliferous, sub bioclastic, poor porosity, tight pin hole vugs, soft to dense, sub chalky, no shows

Limestone, white to cream, microcrystalline, fossilifouss, gray opac chert, soft to dense, intercrystalline, pin hole vugs, visible porosity, questionable oil stain, small to questionable gas bubbles on break, sub fleeting odor

Limestone, cream to tan, microcrystalline, fossiliferous, soft to dense, sub chalky, sharp opac chert no shows

Limestone, cream to tan, microcrystalline, fossiliferous, sub bioclastic, sub pin hole vugs, soft to dense, sub chalky, sharp opac chert, no shows

Limestone, cream, microcrystalline, fossiliferous, sub bioclastic, sub pin hole vugs, soft to dense, sub chalky, no shows

Limestone, cream, microcrystalline, fossiliferous, oolitic, pin hole vugs, small gas bubble on break, soft to dense, tan opac sharp chert, sub chalky, faint odor after shaking cup

Limestone, cream, microcrystalline, fossiliferous, oolitic, pin hole vugs, dense, sub chalky, small gas bubble on

3700  
3750  
3800  
3850  
3900

STARK  
3913' (-2051')

HUSHPUCKNEY  
3952' (-2090')

BKC  
4014' (-2100')

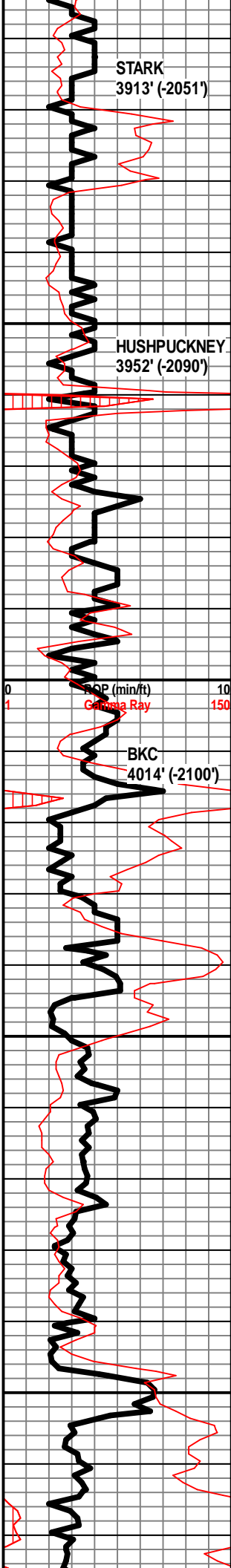
3950

4000

4050

4100

ROP (min/ft)  
Gamma Ray



Shale, black carbonaceous

Limestone, cream, microcrystalline, fossiliferous, dense, sub chalky, oolitic fragments, intercrystalline, small gas bubble on break, questionable oil staining after break, faint fleeting odor after shaking cup

Limestone, cream, microcrystalline, fossiliferous, dense, sub chalky, oolitic fragments, intercrystalline, small gas bubble on break, trace free oil bleed oil after break, faint fleeting odor after shaking cup

Shale, black carbonaceous

Limestone, cream to tan, microcrystalline, fossiliferous, soft to dense, sub chalky, intercrystalline porosity, gray opac sharp chert, small gas bubble on break, faint fleeting odor after shaking cup

Limestone, cream, microcrystalline, fossiliferous, sub bioclastic, soft to dense, sub chalky, no shows

Limestone, cream, micro crystalline, fossiliferous, sub bioclastic, fragments, pin hole vugs, soft to dense, sub chalky, gas on break, spotty slow bleed oil on brak, fleeting odor.

Shale, Black carbonaceous, gray gummy

Limestone, cream, micro crystalline, fossiliferous, pin hole vugs, soft to dense, sub chalky, gas on break, spotty bleed oil on brak, fleeting odor.

Limestone, cream to Lt. gray, microcrystalline, fossiliferous, soft to dense, brown opac chert, no shows

Shale, multi-colored, silty to sandy

Limestone, cream, microcrystalline, fossiliferous, soft to dense, sub chalky, opac chert, oolitic, gas bubbles on break from fractures, questionable staining, no odor

Limestone, oolitic to ooliticmodic, slow bleeding gas buubbles, gas bubbles on break from fractures, questionable staining, no odor

LS - CRM / TAN, VF / F XLN, P INTERXLN POR IN PT, NSFO, SLI OIL SHEEN, W/ CHT - TAN, PRED FRSH, VP POR IN PT, SLI STN, NSFO

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY

LS - CRM, F XLN, MOD DNS / DNS, CHTY, V CHTY IN PT, NO VIS POR, NS

SH - PRED RD, GRN / GY IN PT, W/ LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, CHKY IN PT

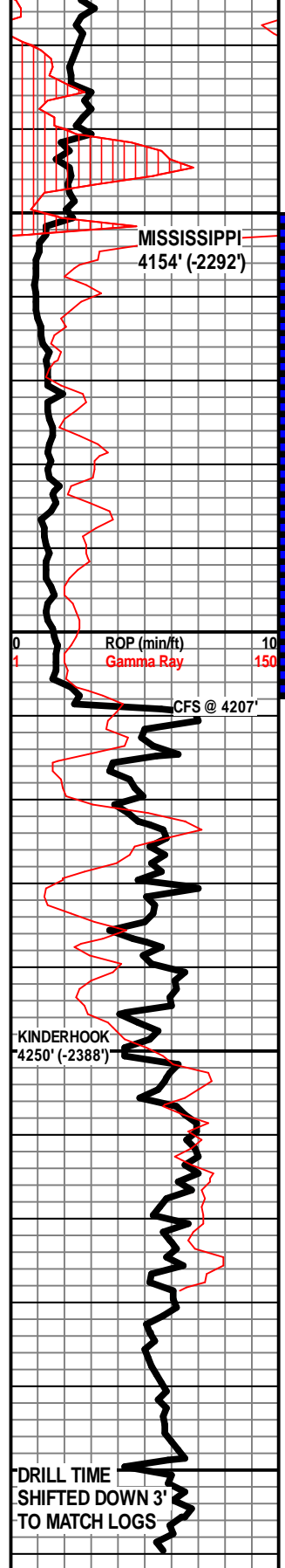
SH - RD / RDISH-BRN / GRN / TURQ / PURP

WT 9.3  
VIS 54  
LCM 3#

WT 9.3  
VIS 58  
LCM 3#

Aaron Young on Location

WT 9.4  
VIS 59  
LCM 3#



SH - RD, SOFT

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS IN PT, W/ SH - RD / GRN / GY

SH - RD / GRN / GY / BRN / MAR

✕ CHT - WHT / CRM, 50% WEATH / 50% FRSH, F / G WEATH POR, VSSFO, ABUND OIL SHEEN, G SHOW GAS, BRI YEL-GRN FLUOR, SLI CUP ODOR

● CHT - WHT / CRM, 40% WEATH / 60% FRSH, F WEATH POR, VSSFO, ABUND OIL SHEEN, G SHOW OF GAS, BRI YEL-GRN FLUOR, F CUP ODOR

✕ CHT - PRED FRSH, WEATH IN PT, P / F WEATH POR, F OIL SHEEN, SLI SHO GAS, BRI YEL-GRN FLUOR

SH - DK GRN / GRN / GY

SH - TURQ GRN, WAXY

LS - WHT / CRM, V CHKY, W/ SH - RDISH-BRN / LT GRN / LT GY, V SOFT

LS - WHT / CRM / TAN, V CHKY, SUBCHKY IN PT, W/ SH - GY / DK GY

LS - WHT / CRM, V CHKY, CHTY IN PT

LS - WHT / LT GY, V CHKY, CHTY IN PT

SH - LT GY, SOFT

SH - LT GY, V SOFT

SH - LT GY SOFT, W/ SH - DK GY, MOD DNS

SH - GY / DK GY

DST #1 MISSISSIPPI  
4149'-4207'  
30"-60"-60"-90"

IF: Built to 5"  
ISI: No blow back  
FF: Built to 4.5"  
FSI: No blow back

Rec'd: 40' Mud (100% M), 20' GIP

SIP: 762-679#  
FP: 22-24#, 23-33#  
HP: 2164-2119#

WT 9.4  
VIS 73  
LCM 3#

WT 9.4  
VIS 74  
LCM 2.5#

WT 9.5  
VIS 72  
LCM 2.5#

WT 9.5  
VIS 72  
LCM 2.5#

WT 9.6  
VIS 60  
LCM 2#

RTD 4307'

DRILL TIME  
SHIFTED DOWN 3'  
TO MATCH LOGS



# QUALITY WELL SERVICE, INC.

7287

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410  
Fax 620-672-3663

Rich's Cell 620-727-3409  
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish		
12-4-19	8	26S	11W	PRATT	Ks				
Lease	JOHNS		Well No.	3-9				Location	PRESTON, KS. 2 N to 100' S
Contractor	Pickrell Oil & R.O.			Owner	1/3 E into				
Type Job	SURFACE			To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.					
Hole Size	12 1/4	T.D.	263'						
Csg.	8 5/8 23#	Depth	263'		Charge To	DEUTSCH OIL CO			
Tbg. Size		Depth			Street				
Tool		Depth			City	State			
Cement Left in Csg.		Shoe Joint	20		The above was done to satisfaction and supervision of owner agent or contractor.				
Meas Line		Displace	15.5		Cement Amount Ordered	325 x Common			
<b>EQUIPMENT</b>					2 1/2 GAL 3 1/2 CC 1/2" PS				
Pumptrk	8	No.		Common	325 x				
Bulktrk	11	No.		Poz. Mix					
Bulktrk		No.		Gel.	611 #				
Pickup		No.		Calcium	917 #				
<b>JOB SERVICES &amp; REMARKS</b>					Hulls				
Rat Hole					Salt				
Mouse Hole					Flowseal 162.5 #				
Centralizers					Kol-Seal				
Baskets					Mud CLR 48				
D/V or Port Collar					CFL-117 or CD110 CAF 38				
Run 6 5/8 8 5/8 23" CSG SET @					Sand				
START CSG CSG ON BOTTOM					Handling 349				
HOOK UP TO CSG & BREAK CIRC W/ RIG					Mileage 20 / 6980				
START PUMPING 10 BBLs H2O					<b>FLOAT EQUIPMENT</b>				
START MIX / PMP 325 x Common					Guide Shoe				
2 1/2 GAL 3 1/2 CC 1/2" PS @ 14.8 #/AL					Centralizer				
START DISP					Baskets				
PLUG DOWN 12:00 AM 100'					AFU Inserts				
GOOD CIRC THRU JOBS					Float Shoe				
CIRC CMT TO CELLAR					Latch Down				
CLOSE VALVE ON CSG					Service Spv 1 EA				
					LMV 20				
THANK YOU					Pumptrk Charge Surface				
PLEASE CALL AGAIN					Mileage 40				
TODD TJ JAKE									
X Signature <i>Todd Tucker</i>					Tax				
					Discount				
					Total Charge				