

NOVEMBER 22, 1982

GEOLOGICAL WELL REPORT

Brunson Production, Inc.

#2 Willems SE NW NW

Section 34-T21S-R.3W.,

Hollow-Nikkal Area, McPherson  
County, Kansas

Contractor: Blackstone Drilling, Inc.

Spud: November 9, 1982

8 5/8" Surface Casing @ 326'

5 1/2" Production Casing @ 3512'

Rotary Completion: Nov. 16, 1982

Total Depth: 3515'

BRUNSON PRODUCTION, INC.  
Corporate Place Suite 200  
125 N. Emporia  
Wichita, Kansas 67202

Gentlemen:

Listed below are the pertinent geologic tops, an evaluation of the porosities encountered and a record of all tests made at the captioned well.

I arrived at the location at a depth of 3135' and witnessed the drilling from that point to TD 3515. Samples were examined from 3100-3515 TD. The hole was not logged mechanically before being cased but logging is planned before completion is attempted. Two drill stem tests were taken, results enclosed.

Enclosed herewith is a copy of the plotted drilling time log which also includes lithology, porous zones, tops, tests and other pertinent data.

SAMPLE TOPS

ELEVATION: 1435 KB

MISSISSIPPIAN CHERT 3117 (-1682)

3119-26 Chert, white tripolitic and white vitreous. Scattered good cavernous porosity in tripolitic chert and scattered oil staining, fair odor, no free oil.

DRILL STEM TEST #1 3095-3135

30" @ 30" - 60" - 45"

Strong blow immediately. Max. gauge 59 MCF, Stabilized at 41 MCF.

Recovered: 285 feet of fluid including 190 feet of heavily oil and gas cut mud, 60 feet as above plus show of water and 25 feet free oil

IFP 98#-157#

ISIP 781#

FFP 98#-176#

FSIP 742#

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MISSISSIPPIAN CHERT (Continued)

- 3136-47 Chert, white tripolitic, scattered buff, sucrosic dolomite.  
Fair porosity, no show.
- 3156-89 Chert - white, tripolitic and vitreous. Some flaky, finely  
crystalline limestone. Scattered buff, sucrosic dolomite.  
Zones of good porosity, no show.

KINDERHOOK SHALE

3341 (-1906)

MISENER SANDSTONE

3466-68

HUNTON

3468 (-2033)

- 3468-76 Dolomite, tan, coarsely crystalline to brown, finely crystal-  
line. Excellent coarse cavernous porosity with good staining  
and odor. No free oil.

DRILL STEM TEST #2 3470-85

30" - 30" - 60" - 45"

Strong blow from start continuing through first open period.

Blow decreasing to very weak at end of test.

Recovered: 2505 feet of fluid including 190 feet of slightly  
oil out muddy water;  
240 feet of almost clear water with oil specks.  
Reversed out 2075 feet of oil specked water.

IFP	20# - 986#	FFP	986#-1147#
ISIP	1147#/30 mins.	FSIP	1147#/45 mins.

MAQUOKETA

3476 (-2041)

TOTAL DEPTH:

3515

Conclusions & Recommendations

This well checks 13 feet lower than your #1 well to the northwest 1/4 mile on the top of the Hunton and yielded a hole full of water from that horizon having probably been drained from adjacent producers.

At the Mississippian Chert, this well checks 18 feet lower than the #1 well but yielded sufficient oil and gas on drill stem test to warrant casing to test. On a log comparison of the #1 and #2 wells, the Mississippian porosity development is similar in each well.

Yours very truly,

### DRILLING PROGRESS

11/9/82	Spud	
11/10	320	
11/11	1690	1720
11/12	2815	2615
11/13	3135	
11/14	3340	
11/15	3485	
11/16	3515 TD	WOC 5 1/2"

### BIT RECORD

SMITH	DTJ (Retip)	226 - 885
SECURITY	M 89	885 -1415
SMITH	F 2	1415 -3135
SECURITY	M 84	3135 -3515 TD

# HALLIBURTON SERVICES JOB LOG

WELL NO. #2 LEASE WILLEMS TICKET NO. 029929  
 CUSTOMER BRUNSON Production Inc. PAGE NO. \_\_\_\_\_  
 JOB TYPE OHF #2 HUNTON DATE 11-15-82

FORM 2015 R-2

CHART NO.	TIME	RATE (GPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2030							Called out For job
	2215							Out of yard
	0035							ON LOC. Drill Pipe ON BANK
	0052							MAKE UP TOOL
	1329							Tool In Rig Table
	0244							Tool ON Bottom
	0250							TOOL OPEN (30 min) Instant Strong Blow
	0257							Blow OFF Bottom of Bucket Strong -
	0320							CLOSE IN - (30 min)
	0350							OPEN TOOL - (60 min) Instant Blow - OFF Bottom of Bucket - Fair building -
	0401							Very weak Blow in bucket - Ice in blow hose - do have Fair blow on bottom of bucket - building -
	0449							Decrease in blow in bucket - dead at 2" in bucket - on Dec.
	0449							Very weak blow on top of bucket
	0450							Close Tool in (45 mins)
	0703							Drop bar to circ. out. see Recovery:
								Recovery: 2055 Ft. Fluid
								Slight oil cut muddy water 190'
								Almost clear water - oil spots - 240'
								Rev. out 2075 Ft - H <sub>2</sub> O: Oil spots -
								IHP - 1792.0
								IFP 20.2
								FFP 986.0
								FCIP 1146.9
								IFP 986
								FFP 1146.9
								SCIP 1146.9
								FHMP 1751.6
								TEMP 110°

CUSTOMER

2505  
420  
2075

## JOB LOG

Tom Wright - 66460157

FORM 2013 R-2 MISSISSIPPI

WELL NO. #2

LEASE WILLERNS

TICKET NO. 541871

CUSTOMER BRUNSON PRODUCTION, INC.

PAGE NO. 1

JOB TYPE OPEN HOLE DUAL PACKER, DST #1

DATE 11-12-82

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
11/12	1910							CALLED OUT
	2145							LEFT CAMP
11/13	0035							ON LOCATION - RIG RUNNING SHORT TRIP
	0255							STARTED CLOCKS
	0305							PICKED-UP TOOL
	0325							TOOL @ TABLE
	0345							TOOL THRU TABLE
	0447							TOOL ON BOTTOM - TOOL SLID ABOUT 4 FT
	0450							INITIAL OPENING - STRONG BLOW
								OFF BOTTOM OF BUCKET IMMEDIATELY
								GAS TO SURFACE IN 30 MINUTES
	0520							INITIAL SHUT-IN PERIOD
	0550	CHOKE	PSI			1165/845		FINAL OPENING - GAS TO SURFACE IMMEDIATELY
	0605	1/2	3.0			59.2		
	0615	1/2	2.5			53.4		
	0625	1/2	2.0			47.7		
	0635	1/2	1.5			41.0		
	0645	1/2	1.5			41.0		
	0650	1/2	1.5			41.0		FINAL SHUT-IN PERIOD
	0735							TOOL OFF BOTTOM - BY-PASS OPEN
	0920							TOOL @ TABLE
	0945							TOOL LAID DOWN
								RECOVERY: 190 FT HEAVY OIL & GAS CO. MUD
								60 FT HEAVY OIL & GAS CO. MUD
								FIXED WITH WATER
								25 FT FREE OIL
								285 FT TOTAL RECOVERY
								TESTED INTERVAL: 3095' - 3135'
								TIME INTERVAL: 30-30-60-45
								TEMP: 100°
								IHSP: 1558
								IFP: 98-151
								ISP: 781
								FFP: 98-176
								FSP: 742
								FHSP: 1539

CUSTOMER