



**GEOLOGICAL REPORT  
ALBIN UNIT #1-2  
GOVE COUNTY, KANSAS**

Operator: Presley Operating LLC – (Formerly: Brito Oil Company)  
Well Name: Albin Unit #1-2  
Location: C S/2 Section 2-T15S-R26W  
Date Spudded: September 4, 2019  
Surface Casing: 8-5/8" @ 267', 23#  
Hole Size: 7-7/8"  
Total Depth Reached: September 13, 2019 @ 4325'  
Drilling Contractor: Southwind Drilling, Inc.; Rig #1  
Wellsite Geologist: Robert Hendrix  
Status: Pipe Set  
Logging Services: Pioneer: DIL/GR; 250'-4328'  
CDL/CNL/GR; 3400'-4300'  
ML/GR; 3400'-4328'  
SL/GR; 250-4317'

Elevations: **GL:** 2297' **DF:** NA **KB:** 2307'

<u>Formation Tops</u>	<u>Depth</u>	<u>Subsea</u>
Anhydrite	1783	+524
Heebner Shale	3579	-1272
Lansing A	3620	-1313
Lansing B	3654	-1347
Lansing C	3668	-1361
Lansing E	3693	-1386
Lansing F	3710	-1403
Lansing G	3726	-1419
Muncie Creek Shale	3766	-1459
Lansing H	3784	-1477
Lansing I	3806	-1499
Lansing J	3846	-1539
Stark Shale	3860	-1553
Marmaton	3922	-1615
Pawnee	4055	-1748
Ft. Scott U	4118	-1811
Ft. Scott L	4134	-1827
Cherokee	4146	-1839
Mississippi	4220	-1913



**Mississippi Warsaw**

The top of the Mississippi was encountered at 4220' (-1913). It was described as a tan dolomite, fine crystalline to granular, fair pinpoint porosity to vuggy porosity grading to a white to tan dolomite, slightly chalky with good intercrystalline porosity with 10% remnant fossiliferousness. The samples exhibited good light to dark saturated stain, fair show of free oil, good odor, with a bright yellow fluorescence. There was no continuous hotwire/gas chromatograph recorded during the drilling of the Albin Unit #1-2. Drillstem test performed over this zone as follows:

- DST #2 4170'-4227'; packer failure
- DST #3 4158'-4227'; 30-60-30-60; rec 2' clean oil, 20' mud; FP 23-24#, 23-23#; SIP 1214-1063#.
- DST #4 4222'-4237'; 30-60-30-60; rec 190' clean gassy oil 30/70, 60' mud cut oil 20/80; FP 47-66#, 74-103#; SIP 1003-927#.
- DST #5 4238'-4252'; 30-30-30-30; rec 3' mud; FP 3-22#, 24-19#; SIP 27-23#.

Summary Open Hole log calculations as follows (see attached detail log analysis):

4220'-4222'	2 porosity feet*	13% Øcp	39% Sw
4222'-4224'	2 porosity feet*	14.5% Øcp	31% Sw
4224'-4226'	2 porosity feet*	14.5% Øcp	33% Sw
4226'-4229'	tite	5% Øcp	
4229'-4230'	1 porosity foot*	17% Øcp	28% Sw
4230'-4232'	2 porosity feet*	17.5% Øcp	36% Sw
4232'-4234'	2 porosity feet*	21% Øcp	35% Sw
4234'-4236'	2 porosity feet*	20% Øcp	35% Sw
4236'-4238'	2 porosity feet*	23.5% Øcp	28% Sw
4238'-4239'	<u>1 porosity foot*</u>	<u>22.5% Øcp</u>	<u>28% Sw</u>
	16 porosity feet	18% Avg Ø	32% Avg Sw

\*Microlog perm exhibited  
Øcp – crossplot porosity

Evaluation of samples, shows, drillstem tests results, Open Hole log calculations, structural position and correlative relationship to offset productive well analogies indicate the **Mississippi zone should be commercially productive and merits testing.**

**Lower Fort Scott**

The top of the Lower Fort Scott was encountered at 4134' (-1827). It was described as a tan limestone, fine crystalline, chalky, fossiliferous with poor intercrystalline porosity. The samples exhibited light saturated stain, slight show of free oil, fair odor and fair yellow fluorescence. The results of a straddle packer drillstem test over this zone as follows:

- DST #6 4125'-4164' (footage includes Upper Ft. Scott); 30-30-5-out; rec 10' mud; FP 14-18#, 16-18#; SIP 833#.



Summary Open Hole log calculations as follows (see attached detail log analysis):

4136'-4138'	2 porosity feet	8.5% Øcp	46% Sw
4138'-4140'	<u>2 porosity feet*</u>	<u>8.5% Øcp</u>	<u>46% Sw</u>
	4 porosity feet	8.5% Avg Ø	46% Avg Sw

\*Microlog perm exhibited

Evaluation of samples, shows, structural position and Open Hole log calculations indicate the **Lower Fort Scott merits testing**.

### Upper Fort Scott

The top of the Upper Fort Scott was encountered at 4118' (-1811). It was described as a tan to brown limestone, fine crystalline, oolitic, pelletoidal, fossiliferous with poor oolitic porosity. The samples did not exhibit any shows. The results of a straddle packer drillstem test over this zone as follows:

DST #6 4125'-4164' (footage includes Lower Ft. Scott); 30-30-5-out; rec 10' mud; FP 14-18#, 16-18#; SIP 833#.

Summary Open Hole log calculations as follows (see attached detail log analysis):

4124'-4126'	2 porosity feet	10% Øcp	52% Sw
4126'-4127'	<u>1 porosity foot</u>	<u>10% Øcp</u>	<u>52% Sw</u>
	3 porosity feet	10% Avg Ø	52% Avg Sw

Evaluation of samples, Open Hole log calculations, and the lack of shows indicate the Upper Fort Scott does not merit testing.

### Lansing J

The top of the Lansing J was encountered at 3846' (-1539). The samples were described as a tan to light grey limestone, fine crystalline, chalky, oolitic, slightly cherty, fossiliferous with poor intercrystalline porosity. The samples exhibited poor staining, slight show of free oil, no odor with faint yellow fluorescence. The results of a drillstem test over this zone as follows:

DST #1 3759'-3847' (footage includes Lansing H, I, J); 30-30-30-30; rec 3' clean oil, 30' heavy oil cut mud (40% oil); FP 18-32#, 19-27#; SIP 770-361#.

Open Hole log calculations indicate a tight limestone, as follows (see attached detail log analysis):

3846'-3848'	tite	6% Øcp
3848'-3850'	tite	4% Øcp



3850'-3852'	tite	3% Øcp
3852'-3856'	tite	<u>1% Øcp</u>
		3.5% Avg Ø

Evaluation samples, Open Hole logs and limited shows indicate the Lansing J is tight and does not merit testing.

### Lansing I

The top of the Lansing I was encountered at 3806' (-1499). The samples were described as a tan to brown limestone, fine to medium crystalline, slightly cherty, oolitic, fossiliferous with good oolitic porosity. The samples exhibited spotty stain, slight show of free oil, no odor with faint yellow fluorescence. The results of a drillstem test over this zone as follows:

DST #1 3759'-3847' (footage includes Lansing H, I, J); 30-30-30-30; rec 3'  
clean oil, 30' heavy oil cut mud (40% oil); FP 18-32#, 19-27#; SIP 770-361#.

Summary Open Hole log calculations as follows (see attached detail log analysis):

3816'-3818'	2 porosity feet*	10.5% Øcp	38% Sw
3818'-3820'	<u>2 porosity feet*</u>	<u>10.5% Øcp</u>	<u>39% Sw</u>
	4 porosity feet	10.5% Avg Ø	38% Avg Sw

\*Microlog perm exhibited

Evaluation of samples, Open Hole log calculations, shows, and structural relationship to offset wells indicate the **Lansing I merits testing**.

### Lansing H

The top of the Lansing H was encountered at 3784' (-1477). The samples were described as a tan limestone, fine to medium crystalline, slightly cherty, oolitic in parts, fossiliferous with poor vugular porosity. The samples exhibited light to dark spotty stain, slight show of free oil, faint odor and dull yellow fluorescence. Drillstem test performed over this zone is as follows:

DST #1 3759'-3847' (footage includes Lansing H, I, J); 30-30-30-30; rec 3'  
clean oil, 30' heavy oil cut mud (40% oil); FP 18-32#, 19-27#; SIP 770-361#.

Open Hole log calculations as follows (see attached detail log analysis):

3734'-3736'	tite	6% Øcp
3736'-3738'	tite	5% Øcp
3738'-3740'	tite	1% Øcp
3740'-3748'	tite	2% Øcp



Evaluation of samples, drillstem test and Open Hole logs indicate the Lansing H is tight and does not merit testing.

### Lansing G

The top of the Lansing G was encountered at 3726' (-1419). It was described as a tan to light brown limestone, fine crystalline, very oolitic with good oolitic porosity. The samples did not exhibit any shows. Summary Open Hole log calculations as follows (see attached detail log analysis):

3734'-3736'	2 porosity feet*	20% Øcp	24% Sw
3736'-3738'	2 porosity feet*	26% Øcp	17% Sw
3738'-3740'	<u>2 porosity feet*</u>	<u>21% Øcp</u>	<u>20% Sw</u>
	4 porosity feet	22% Avg Ø	20% Avg Sw
3740'-3742'	tite	6% Øcp	
3742'-3744'	tite	6% Øcp	
3744'-3746'	2 porosity feet*	8% Øcp	72% Sw
3746'-3748'	2 porosity feet*	8% Øcp	72% Sw
3748'-3750'	2 porosity feet*	10% Øcp	58% Sw
3750'-3752'	2 porosity feet*	10% Øcp	58% Sw

Evaluation of samples (described with good oolitic porosity) and Open Hole log calculations indicates the **porosity interval from 3734'-3740' with 22% Avg Ø and 20% Avg Sw merits testing**. The lower Lansing G interval from 3744'-3752' calculates wet.

### Lansing F

The top of the Lansing F was encountered at 3710' (-1403). It was described as a tan to brown limestone, fine crystalline, chalky, oolitic, cherty, fossiliferous with poor oolitic porosity. The samples did not exhibit any shows. Summary of Open Hole log calculations as follows (see attached detail log analysis):

3714'-3716'	2 porosity feet*	17% Øcp	68% Sw
3716'-3718'	2 porosity feet*	18.5% Øcp	76% Sw
3718'-3720'	2 porosity feet*	15% Øcp	94% Sw
3720'-3722'	<u>2 porosity feet*</u>	<u>14% Øcp</u>	<u>76% Sw</u>
	8 porosity feet	16% Avg Ø	78% Avg Sw

\*Microlog perm exhibited

Evaluation of Open Hole logs and lack of sample shows indicate the Lansing F is wet and does not merit testing.



**Lansing E**

The top of the Lansing E was encountered at 3693' (-1386). It was described as a tan to light grey, very fine crystalline, dense hard and slightly fossiliferous. The samples did not exhibit any shows. Summary of Open Hole log calculations as follows (see attached detail log analysis):

3696'-3698'	2 porosity feet*	11% Øcp	43% Sw
3698'-3700'	2 porosity feet*	11% Øcp	45% Sw
3700'-3702'	tite	6% Øcp	
3702'-3704'	tite	4.5% Øcp	
3704'-3706'	<u>tite</u>	<u>4% Øcp</u>	
	4 porosity feet	11% Avg Ø	<u>44% Avg Sw</u>

\*Microlog perm exhibited

Evaluation of Open Hole logs indicate the ***Lansing E merits testing.***

**Lansing A**

The top of the Lansing A was encountered at 3620' (-1313). It was described as a white to tan limestone, fine crystalline, chalky, cherty, fossiliferous with poor pinpoint porosity. The samples did not exhibit any shows. Summary of Open Hole log calculations as follows (see attached detail log analysis):

3622'-3624'	2 porosity feet	10% Øcp	70% Sw
3624'-3626'	<u>2 porosity feet</u>	<u>10% Øcp</u>	<u>70% Sw</u>
	4 porosity feet	10% Avg Ø	70% Avg Sw

Evaluation of samples and Open Hole logs calculations indicate the Lansing A is wet and does not merit testing.

**Summary**

Evaluation was made of all potential zones penetrated in the Albin Unit #1-2. The primary objective, Mississippi, should be commercially productive. Secondary zones that will merit testing include: Lower Fort Scott, Lansing I, Lansing G and the Lansing E. The original operator elected NOT to run pipe, therefore, Presley Operating LLC assumed operations and ran pipe to testing the above outlined zones.

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