

# Joshua R. Austin

# Petroleum Geologist report for

# Lebsack Oil Production, Inc.



COMPANY: LEBSACK OIL PRODUCTION INC.

LEASE: North River #6

FIELD: GROVE

SURFACE LOCATION: S2-N2-N2-NW (440' FNL & 1320' FWL)

SEC: <u>34</u> TWSP: <u>20s</u> RGE: <u>10w</u>

COUNTY: RICE STATE: KANSAS

KB: <u>1729'</u> GL: <u>1718'</u>

API # 15-159-22835-00-00

CONTRACTOR: STERLING DRILLING COMPANY (Rig #4)

Spud: <u>12/09/2016</u> Comp: <u>12/16/16</u>

RTD: 3250 LTD: 3249

Mud Up: 2636' Type Mud: Chemical was displaced

Samples Saved From: 2400' to RTD

Geological Supervision From: 2750'to RTD

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 269'

Production Casing: 5 1/2" @ 3232'

#### **NOTES**

On the basis of the positive sturctural position, drill stem test and after reviewing the electric logs, it was recommended by all parties involved in the North River #6 to run 5 1/2" production casing to further test the Lansing zone.

# Lebsack Oil Production Inc. well comparison sheet

DRILLING WELL

COMPARISON WELL

COMPARISON WELL

		North R	iver 6			North R	iver 1			North I	River 5	
	1729	KB			1729	KB	Struct		1725	KB	Struct	ural onship
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Howard	2445	-716	2443	-714	2448	-719	3	5	2442	-717	1	3
Topeka	2547	-818	2544	-815	2546	-817	-1	2	2543	-818	0	3
Heebner	2832	-1103	2830	-1101	2830	-1101	-2	0	2828	-1103	0	2
Douglas	2856	-1127	2853	-1124	2853	-1124	-3	0	2855	-1130	3	6
Brown Lime	2969	-1240	2966	-1237	2965	-1236	-4	-1	2960	-1235	-5	-2
Lansing	2983	-1254	2982	-1253	2988	-1259	5	6	2976	-1251	-3	-2
"F" Zone	3068	-1339	3065	-1336	3062	-1333	-6	-3	3058	-1333	-6	-3
Total Depth	3250	-1521	3249	-1520	3137	-1408			3248	-1523		



# DRILL STEM TEST REPORT

Lebsack Oil Productions Inc.

34/20S/10W/Rice

PO Box 354

North River #6

Reference Bevations:

Chase, Kansas 67524

Job Ticket: 63688 DST#:1

1729.00 ft (KB)

1718.00 ft (CF)

ATTN: Josh Austin Test Start: 2016.12.13 @ 04:34:00

GENERAL INFORMATION:

Formation: Lansing zone C

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 06:32:30 Tester: Ken Swinney
Time Test Ended: 10:28:30 Unit No: 72 Great Bend/50

Interval: 3018.00 ft (KB) To 3038.00 ft (KB) (TVD)

Total Depth: 3038.00 ft (KB) (TVD)

Hole Diameter: 7.80 inchesHole Condition: Poor KB to GR/CF: 11.00 ft

Serial #: 6999 Inside

Press@RunDepth: 60.37 psig @ 3034.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2016.12.13
 End Date:
 2016.12.13
 Last Calib.:
 2016.12.13

 Start Time:
 04:34:05
 End Time:
 10:28:29
 Time On Btm:
 2016.12.13 @ 06:31:30

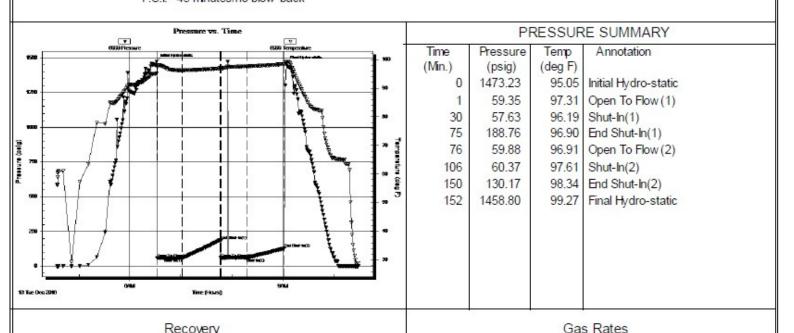
Time Off Btm: 2016.12.13 @ 09:03:30

TEST COMMENT: I.F. 30 minutes/tool slide 10 foot/Blow at 6 inches at open built to 7 1/2 inches

I.S.I. 45 minutes/no blow back

F.F. 30 minutes/w eak intermittent surface blow /flush tool no help/ blow died in 13 minutes

F.S.I. 45 minutes/no blow back



Length (ft)	Description	Volume (bbl)
70.00	Mud with show of oil	0.34
		es.

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
		7/223	



# DRILL STEM TEST REPORT

Lebsack Oil Productions Inc.

PO Box 354

Chase, Kansas 67524

ATTN: Josh Austin

34/20S/10W/Rice

North River #6

Job Ticket: 63689

DST#: 2

Test Start: 2016.12.13 @ 19:15:00

#### GENERAL INFORMATION:

Formation:

Lansing zone F

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:50:30 Time Test Ended: 00:53:00

3065.00 ft (KB) To 3080.00 ft (KB) (TVD) Interval:

Total Depth: 3080.00 ft (KB) (TVD)

7.80 inchesHole Condition: Fair

Test Type: Conventional Bottom Hole (Initial) Tester: Ken Swinney

Unit No: 72 Great Bend/50

Reference Bevations: 1729.00 ft (KB)

1718.00 ft (CF)

KB to GR/CF: 11.00 ft

#### Serial #: 6999 Inside

Press@RunDepth:

Hole Diameter:

34.45 psig @ 2016.12.13

3076.00 ft (KB) End Date:

2016.12.14

Capacity: Last Calib.:

8000.00 psig 2016.12.14

Start Date: Start Time:

19:15:05

Fnd Time:

00:52:59

Time On Btm:

2016.12.13 @ 20:49:00

Time Off Btm:

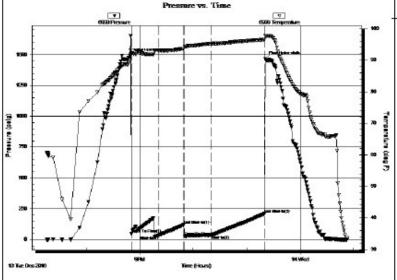
2016.12.13 @ 23:20:30

TEST COMMENT: LF. 30 minutes/Light surging build to 5 1/2 inches/ Strong surge at 25 minutes to BOB

30 minutes/Light surface blow back

FF 30 minutes/Surging build to BOB in 17 minutes

F.S.I. 60 minutes/No blow back



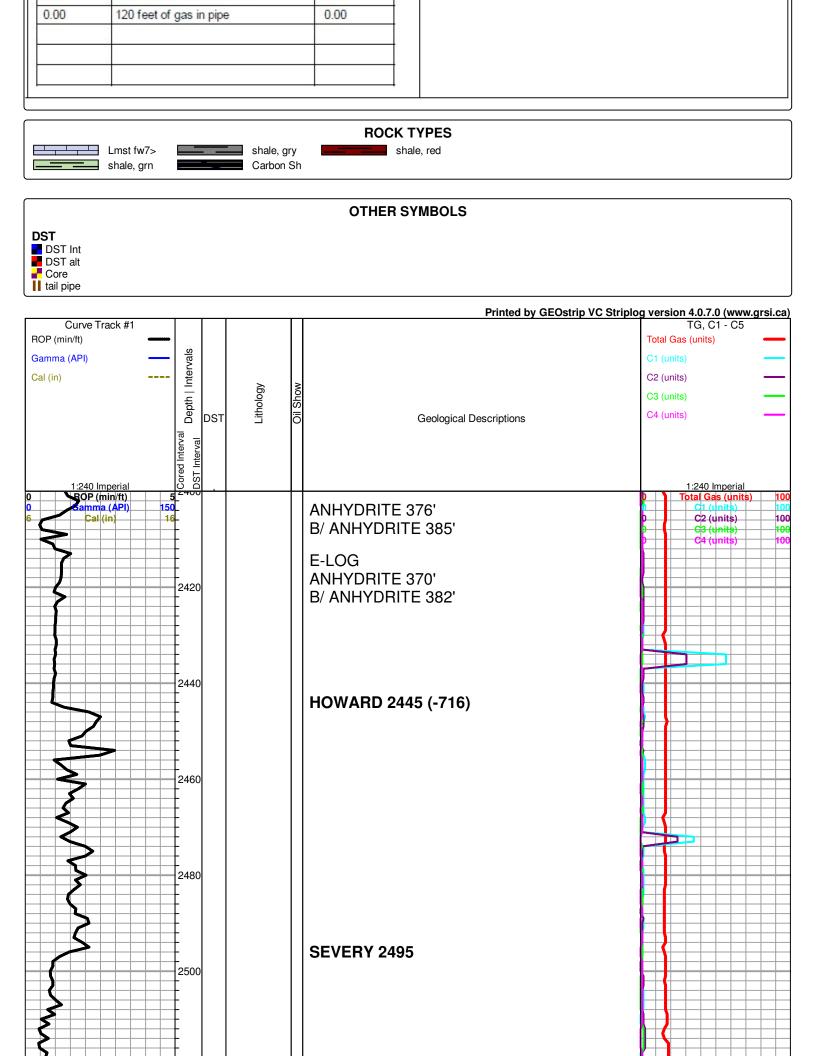
#### PRESSURE SUMMARY Annotation Time Pressure Temp (Min.) (psig) (deg F) 91.84 Initial Hydro-static 0 1491.64 2 49.96 92.23 Open To Flow (1) 32 30.99 93.21 Shut-In(1) 61 93.62 End Shut-In(1) 120.05 62 27.52 94.35 Open To Flow (2) 91 34.45 95.28 Shut-In(2) 96.59 End Shut-In(2) 151 211.33 152 1463.76 97.70 Final Hydro-static

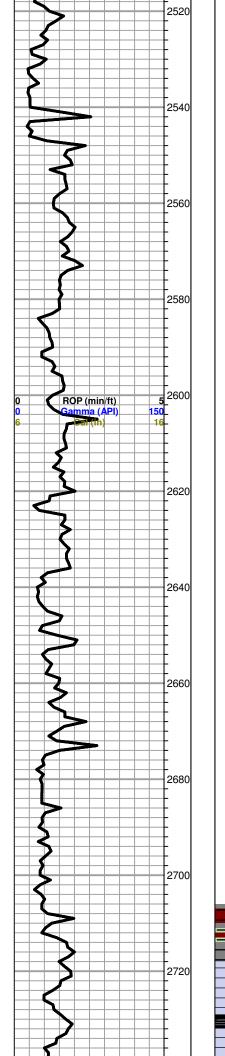
C-- D-4--

# Recovery

Length (ft)	Description	Volume (bbl)
60.00	Gassy Emulsified Oily Mud	0.30
0.00	Gas 20% Oil 20% Mud 60%	0.00

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



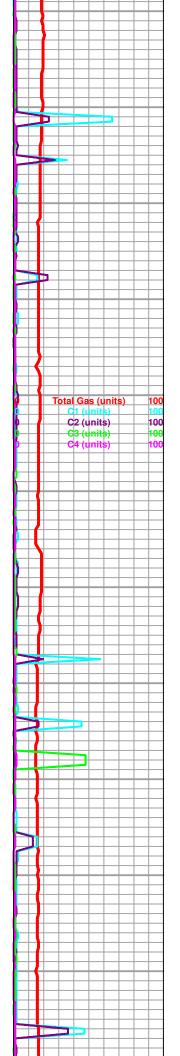


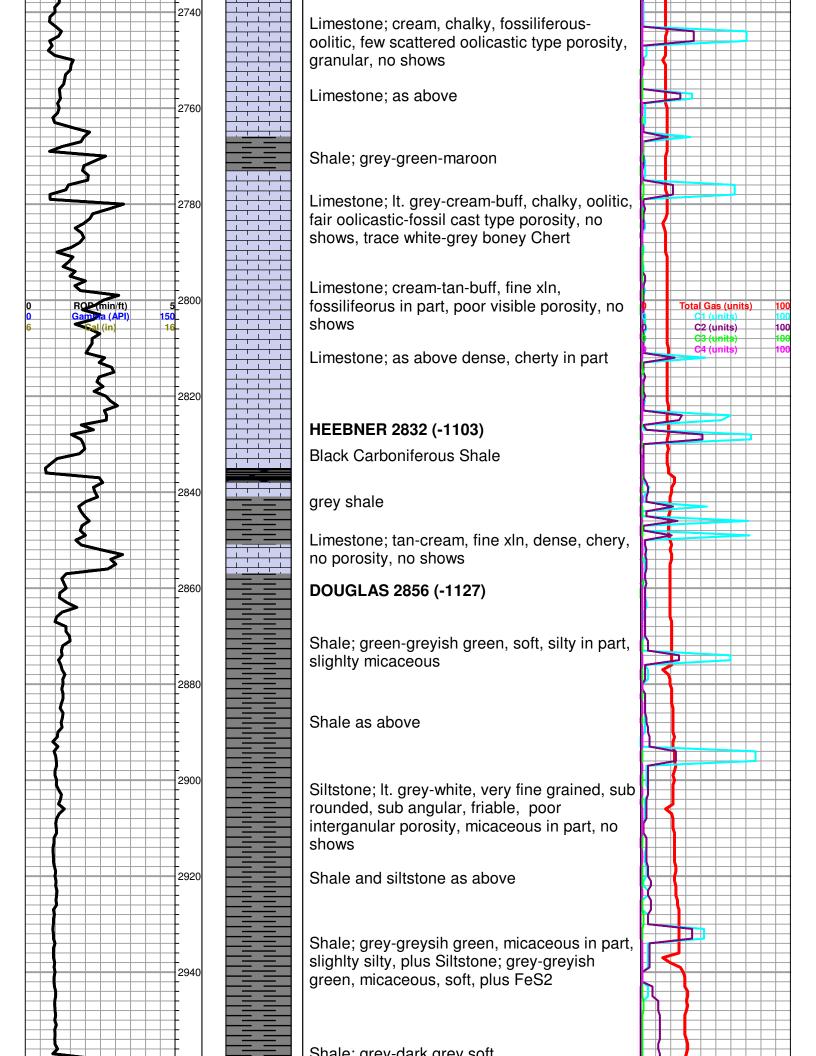
**TOPEKA 2547 (-818)** 

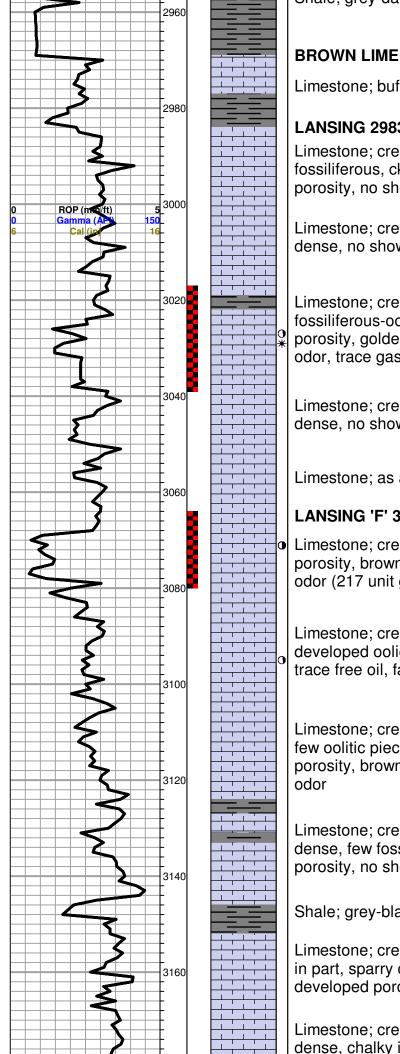
grey-maroon-brick red Shale

Limestone; cream, fine xln, chalky, no porosity

trace black carboniferous shale







## **BROWN LIME 2969 (-1240)**

Limestone; buff-grey, fine xln, cherty, dense

### **LANSING 2983 (-1254)**

Limestone; cream-lt. grey, fine xln, fossiliferous, ckalky, dense in part, poor porosity, no shows

Limestone; cream-lt.grey, fine xln, chalky, dense, no shows

Limestone; cream-white, chalky, slighlty fossiliferous-oolitic, fair intercystalline porosity, golden brown stain, slight SFO, faint odor, trace gas bubbles

Limestone; cream-lt.grey, fine xln, chalky, dense, no shows

Limestone; as above fossiliferous-oolitic

# LANSING 'F' 3068 (-1339)

Limestone; cream-tan, oolitic, fair oomoldic porosity, brown stain, spotty SFO, fair-good odor (217 unit gas kick)

Limestone; cream-buff, highly oolitic, poorly developed oolicastic porosity, It. brown stain, trace free oil, faint odor

Limestone; cream-buff-grey, fine xln, chlky, few oolitic pieces, trace sub oomoldic porosity, brown spotty stain, NSFO, very faint

Limestone; cream-grey-buff, fine xln, chalky, dense, few fossiliferous/oolitic, no visible porosity, no shows

Shale; grey-black

Limestone; cream-white, chalky, fossiliferous in part, sparry calcite inclusions, poorly developed porosity, no shows

Limestone; cream-lt. grey, fine xln, chalky, dense, chalky in part, poor visible porosity,

