

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

| Name | Top | Bottom |
|-----------|------|--------|
| S.C. Anh. | 1466 | |
| Topeka | 2934 | |
| Heebner | 3139 | |
| Toronto | 3163 | |
| Lansing | 3179 | |
| Arbuckle | 3489 | |
| TD | 3550 | |

DST #1: 3167-3230' - times 30/30/30/30. First open weak blow dead in 8 mins. FP 80/80, SIP 568. Second open no blow. FP 80/80, SIP 410. Recovered 10' slightly oil cut mud.
DST #2: 3246-90' - times 30/30/30/30. First open weak blow dead in 16 mins. FP 50/50, SIP 1078. Second open no blow. FP 50/50, SIP 1010. Recovered 30' mud with light skim of oil.
DST #3: 3290-3348' - times 30/60/90/120. First open weak blow increase to strong blow off bottom in 25 mins. FP 70/120, SIP 1196. Second open blow off bottom in 35 mins. FP 150/280, SIP 1176. Recovered 75' clean oil, 120' oil cut mud (45% oil), 60' oil and water cut mud (10% oil) and 240' water. Sampler rec 2250 cc oil, no water or mud at 600 psi.
DST #4: 3345-3402' - times 30/60/30/60. First open weak blow died in 15 mins. FP 90/90, SIP 677. Second open weak blow died in 3 mins. Flush tool, died in 9 mins. FP 90/90, SIP 400. Recovered 20' slightly oil cut mud, 3% oil, 97% mud. Sampler rec 15 cc oil & 485 cc mud at 125 psi.

| | | | | | |
|-------------------------------------|--|------------|-------------|---------------|---|
| TUBING RECORD | | size 2-3/8 | set at 3332 | packer at | Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Date of First Production 8-28-84 | Producing method <input type="checkbox"/> flowing <input checked="" type="checkbox"/> pumping <input type="checkbox"/> gas lift <input type="checkbox"/> Other (explain) | | | | |
| Estimated Production Per 24 Hours | Oil | Gas | Water | Gas-Oil Ratio | Gravity |
| | 30 Bbls | -0- MCF | 13 Bbls | CFPB | |

Disposition of gas: vented sold
 open hole perforation other (specify)
METHOD OF COMPLETION new used
PRODUCTION INTERVAL 3304-3332'

| 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 |
|-------------------|-------------------|---------------------------|----------------|---------------|----------------------|--------------|----------------------------|
| | | | | | | | |
| Surface | 12-1/4 | 8-5/8 | 24 | 1338 | Howco lite Class "A" | 450 | 2% gel, 3% cc. |
| Production | 7-7/8 | 4-1/2 | 10.5 | 3530 | Surfill | 250 | 2% gel, 3% cc. |

| shots per foot | specify footage of each interval perforated | Acid, Fracture, Shot, Cement Squeeze Record | |
|----------------|---|--|------------|
| | | (amount and kind of material used) | De |
| 4 | 3330-3332' | Acidize with 15000 gallons 15% MCA acid. | 3332-3304. |
| 4 | 3326-3328 | | |
| 4 | 3304-3307 | | |