| Company: Address: Contact Geologist: Contact Phone Nbr: Well Name: Location: Pool: State: | OPERATOR Hutchinson Oil Co. P.O. Box 521 Derby, KS 67037 316-788-5440 Schlochtermeier #2-24 8 5/8" @ 334' Kansas, Stafford Co. | API: Field: Country: | 15-185-23755-00-00 Wildcat USA |
|--|--|----------------------------|--------------------------------------|
| J.M. | usgr | CORF | ROLEUM PORATION lin, Kansas |
| Well Name: Surface Location: Bottom Location: API: License Number: Spud Date: Region: Drilling Completed: Surface Coordinates: Bottom Hole Coordinates: Ground Elevation: K.B. Elevation: Logged Interval: Total Depth: Formation: Drilling Fluid Type: | Scale 1:240 Imperial Schlochtermeier #2-24 8 5/8" @ 334' 15-185-23755-00-00 6/22/2012 SE-SE-NW-SE 24-23s-13w 6/28/2012 1475' From South Line & 1605' I 1878.00ft 1885.00ft 1885.00ft 2800.00ft 3956.00ft Lansing Chemical mud was displaced at | To: | 3:34 PM 8:50 PM 3956.00ft |
| Well Type: Longitude: N/S Co-ord: E/W Co-ord: | SURFACE CO-ORDINAT Vertical 1475' From South Line 1605' From East Line | ES Latitude: | |
| | LOGGED BY | | |
| Company: Address: | Musgrove Petroleum Corp. 212 Main St. Claflin, KS 67525 | | |
| Phone Nbr: Logged By: | 620-546-3960 Geologist | Name: | Josh Austin |
| Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release: | CONTRACTOR Royal Drilling Inc 1 6/22/2012 6/28/2012 | Time: Time: Time: | 3:34 PM 8:50 PM |
| K.P. Elevetion | ELEVATIONS | nd Flowations | 1070 004 |

Ground Elevation: 1878.00ft

K.B. Elevation: 1885.00ft

NOTES

On the basis of the positive structural position, drill stem test and after reviewing the electric logs, it was recommended by all parties involved to run 4 1/2" production casing to further test the following zones: Simpson Sand, Viola, Lansing zones.

| | | le effe | | | | | | |
|---------------|--------|--------------|---------|------------|-------|----------|----------|------|
| | 1 | -lutc | nii | 150 | n U | | 0. | |
| | | wel | | nparia | son s | heet | | |
| | | | | pant | | | | |
| | | | | | | | | |
| | | DRILLING | WELL | | | COMPARIS | SON WELL | |
| | Se | chlochterm | eier 2- | 24 | Sch | lochtern | neier 1- | 24 |
| <u>[</u> | | | | | | | | |
| <u>.</u> | 8 | | | - | | | Struct | ural |
| | 1885 | KB | | | 1891 | KB | Relatio | |
| Formation | Sample | Sub-Sea | Log | Sub-Sea | Log | Sub-Sea | Sample | Log |
| Anhydrite | 729 | 1156 | | | 727 | 1164 | -8 | |
| Heebner | 3269 | -1384 | 3270 | -1385 | 3278 | -1387 | 3 | 2 |
| Toronto | 3287 | -1402 | 3290 | -1405 | 3296 | -1405 | 3 | 0 |
| Douglas | 3305 | -1420 | 3307 | -1422 | 3314 | -1423 | 3 | 1 |
| Brown Lime | 3407 | -1522 | 3406 | -1521 | 3417 | -1526 | 4 | 5 |
| Lansing | 3430 | -1545 | 3432 | -1547 | 3439 | -1548 | 3 | 1 |
| Base KC | 3696 | -1811 | 3695 | -1810 | 3705 | -1814 | 3 | 4 |
| Marmaton | 3716 | -1831 | 3710 | -1825 | 3724 | -1833 | 2 | 8 |
| Viola | 3766 | -1881 | 3770 | -1885 | 3779 | -1888 | 7 | 3 |
| Simpson Shale | 3853 | -1968 | 3860 | -1975 | 3867 | -1976 | 8 | 1 |
| Simpson Sand | 3880 | -1995 | 3884 | -1999 | | | | |
| Simpson Dol. | | | | | 3891 | -2000 | 8 | |
| Arbuckle | 3918 | -2033 | 3920 | -2035 | | | | |
| Total Depth | 3956 | -2071 | 3958 | -2073 | 3928 | -2037 | | |

| | | DRILL STEM TEST RE | PORT | | | | |
|-------------------|---------------------|----------------------------|------------------------|---------------------------|--|--|--|
| | | Hutchinson Oil Corp | 24-23s-13w | | | | |
| ESTING , INC | | FU DUX 321 | Schlochtermeier#2-24 | | | | |
| | | Derby KS 67037 | Job Ticket: 47558 | DST#: 1 | | | |
| | | ATTN: Steve Hutchinson/ Jo | Test Start: 2012.06.26 | @ 20:12:00 | | | |
| GENERAL INFO | ORMATION: | | | | | | |
| Formation: | Lansing F | | | | | | |
| Deviated: | No Whipstock: | ft (KB) | Test Type: Convention | nal Bottom Hole (Initial) | | | |
| Time Tool Opened: | 22:04:30 | | Tester: Chris Staa | ats | | | |
| Time Test Ended: | 02:54:45 | | Unit No: 47 | | | | |
| Interval: 34 | 90.00 ft (KB) To 35 | 13.00 ft (KB) (TVD) | Reference Elevations: | 1885.00 ft (KB) | | | |
| Total Depth: | 3513.00 ft (KB) (T) | /D) | | 1878.00 ft (CF) | | | |
| Links Discussion | 7.00 : | Oran dilliona Entire | KD to ODIOD | 7 00 4 | | | |

| Serial #: 6773 | Outside | | | | | | | |
|-----------------------|-------------------------------------|--|------------|----------|------------------------|--------------|----------------|--------------------|
| Press@RunDepth: | 148.78 psig | @ 3491.00 ft (KB) | | Capacity | - | | 8000.00 | nsia |
| Start Date: | 2012.06.26 | End Date: | 2012.06.27 | Last Cal | | | 2012.06.27 | Poid |
| Start Time: | 2012:00:20 | End Time: | 02:54:44 | Time On | | 2012 06 26 | @ 22:01:30 | |
| Mart fille. | 20.12.03 | Lid fille. | 02.34.44 | Time Off | | | @ 01:04:45 | |
| TEST COMMENT: | ISI: Weak blow b FF: Strong blow | 3OB 30 sec GTS 3 min { see gas ack 2 " BOB 2 sec { see gas flow repor Back BOB 12 min | | | | | | |
| | Pressure vs. T | | 204 | P | RESSUR | RE SUMN | IARY | |
| 6772 Press | | 5773 Temperature | Time | Pressure | Temp | Annotati | ion | |
| 020 | | 15 Par 4-00-100 | (Min.) | (psig) | (deg F) | | | |
| **** 1 | | | 0 | 1699.74 | 108.55 | Initial Hydr | ro-static | |
| | | 10 | 3 | 133.17 | 109.41 | Open To F | Flow (1) | |
| 200 | VV | | 29 | 85.70 | 105.61 | | | |
| | | 【號 1 | 76 | 821.59 | | End Shut- | | |
| m A | | | 78 122 | 126.16 | | Open To F | | |
| | a survey | | 122 | 148.78 | 110.06 | Shut-In(2) | | |
| ~ ~ ~ | | | 181 | 780.08 | 113.99 | End Shut- | ln(2) | |
| m r | | | 3 184 | 1656.49 | 114.49 | Final Hydr | ro-static | |
| 20 | Terr To Faces | | | | | | | |
| 0 | 20 | | | | | | | |
| Tue Jan 2012 | Time (Haam) | | _ | | | | | |
| | Recovery | | | | - | s Rates | | |
| Length (ft) | Description | Volume (bbl) | | | Choke (| | sure (psig) Ga | as Rate (Mcf/d) |
| 0.00 3481 | GIP | 0.00 | First Ga | s Rate | | 0.50 | 6.00 | 137.61 |
| 200.00 Clean | Oil 100% | 2.81 | Last Ga | s Rate | | 0.25 | 8.00 | 35.54 |
| 120.00 G,O,W | ,M 10%gas 10% o | il 30% w ater 50'1.68 id | Max. Ga | as Rate | | 0.75 | 15.00 | 459.22 |
| | | | | | | | | |
| | | | | | | | | |
| | 1 | | | | | | | |
| ON TRI | OBITE | DRILL STEM TES | ST REP | ORT | | | | |
| | STING , INC. | Hutchinson Oil Corp | | 24- | 23s-13w | | | |
| | oring, ind. | Po Box 521 Derby KS 67037 | | | hlochter Ticket: 47 | rmeier#2 | -24 DST#: 2 | |
| | | ATTN: Steve Hutchinson/ Jo | | 1.000 | |)12.06.27 @ | | |
| | ATION: | | | | | | | |
| | | | | | | | | |
| | ising H-I | £ (175) | | | Turne | Convertie | al Dattara II. | o (Decett |
| Veviated: No | Whipstock: | ft (KB) | | | | | al Bottom Hol | e (Reset) |
| ime Tool Opened: 13:3 | | | | | | Chris Staats | S | |
| ime Test Ended: 18:1 | 15:13 | | | Unit | No: | 47 | | |
| | 0 ft (KB) To 359 | 95.00 ft (KB) (TVD) | | Ref | erence 🖽 | evations: | 1885.00 | ft (KB) ft (CE) |

Interval: 3560.00 ft (KB) To 3595.00 ft (KB) (TVD) Reference Elevations: Total Depth: 3595.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: Outside 172.00 psig @ 3561.00 ft (KB) Serial #: 6773

Press@RunDepth:

Capacity:

8000.00 psig

1878.00 ft (CF)

7.00 ft

| Start Date: | 2012.06.27 | End Date: | 2 | 012.06.27 | Last Ca | | 20102420242 | 2012.06. | |
|---|---|--|------------------|-------------|--------------------|------------------|-------------------------------|----------------------------|---------------------------------|
| Start Time: | 12:08:03 | End Time: | | 18:15:12 | Time On Time Of | | | 27 @ 13:19: 27 @ 16:31: | |
| TEST COM | MENT: IF: Strong blow B ISI: Weak blow ba FF: Strong blow I FSI: Strong blow | ack 1" BOB 2 sec | ee gas flov | v report} | | | | | |
| | Pressure vs. Ti | | | | P | RESSUR | RE SUM | MARY | |
| 780 | 6772 Friedgare | 8773 Temperature | a † | Time | Pressure | Temp | Annota | 1000000 | |
| | radesente I Ég | | - 15 | (Min.) 0 | (psig) 1601.36 | (deg F) | Initial Hv | dro-static | |
| **** | | | | 17 | 181.86 | 104.33 | | Flow (1) | |
| 220 | | | - 110 | 38 | 162.54 | 105.27 | Shut-In(| 1) | |
| 8 100 | | Super- | - 125 g | 85 | 985.91 | 112.79 | | | |
| | | | Temperature (deg | 86 129 | 196.29 172.00 | 102.31 106.79 | | Flow (2) 2) | |
| 2 70 - PT-8 | | | 100 (in g | 191 | 936.90 | 113.85 | 1 | Contraction of the second | |
| 500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | an Te Inel O | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | | 192 | 1681.04 | 112.30 | Final Hy | dro-static | |
| | Recovery | | | | | Ga | s Rates | | |
| Length (ft) | ft) Description Volume (bbl) | |) | | | | | | Gas Rate (Mct/d) |
| 0.00 | 3542 GIP | GIP 0.00 | | First Gas | s Rate | | 1.00 9.00 | | 672.72 |
| 20.00 | Clean oil | 0.28 | _ | Last Gas | | - | 0.75 | 13.00 | 427.98 |
| 90.00 | W,O,M,G 5% w ater 15% | 011 30%mud50%(1.26 | | Max. Ga | s Rate | (| 0.75 | 16.00 | 474.84 |
| * Recovery from mu | ltiple tests | | | | | | | | |
| 100 | RILOBITE | DRILL STEM | 1 TES | T REP | ORT | | | | |
| (141) | | Hutchinson Oil Corp | | | 24 | -23s-13w | 1 | | |
| | ESTING , INC. | Po Box 521 Derby KS 67037 | | | | b Ticket: 4 | | 2-24 DST | #• 3 |
| | | ATTN: Steve Hutchins | son/ Jo | | | | | @ 01:19:00 | |
| GENERAL | INFORMATION: | | | | | | | | |
| Formation: | Lansing J-K | | | | | | | | |
| Deviated: | No Whipstock: ened: 02:54:00 | ft (KB) | | | Te | ster: | Conventio Chris Staa 47 | | Hole (Reset) |
| Interval: Total Depth: Hole Diameter: | | 'D) | | | Re | ference Be | evations: to GR/CF: | 1878. | 00 ft(KB) 00 ft(CF) 00 ft |

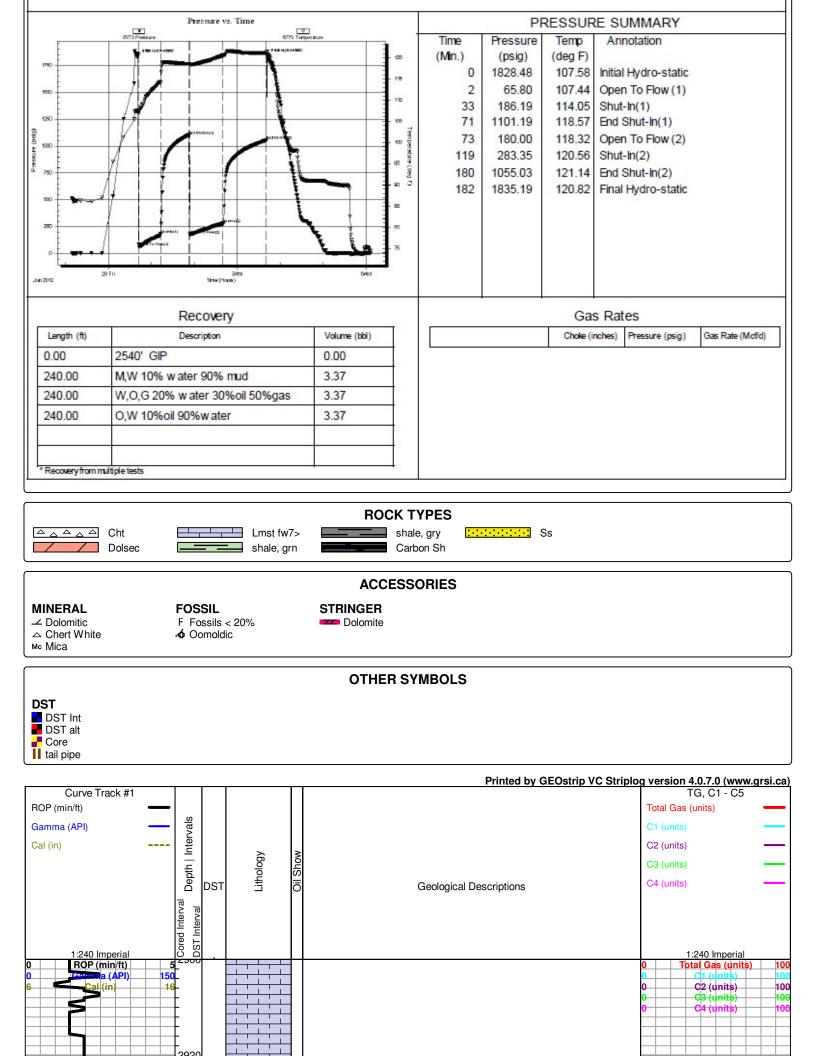
Serial #: 6773 Outside Press@RunDepth: 873.49 psig @ 3596.00 ft (KB) Capacity: Start Date: 2012.06.28 2012.06.28 End Date: Last Calib .: Start Time: 01:19:05 End Time: 07:26:59 Time On Btm: Time Off Btm:

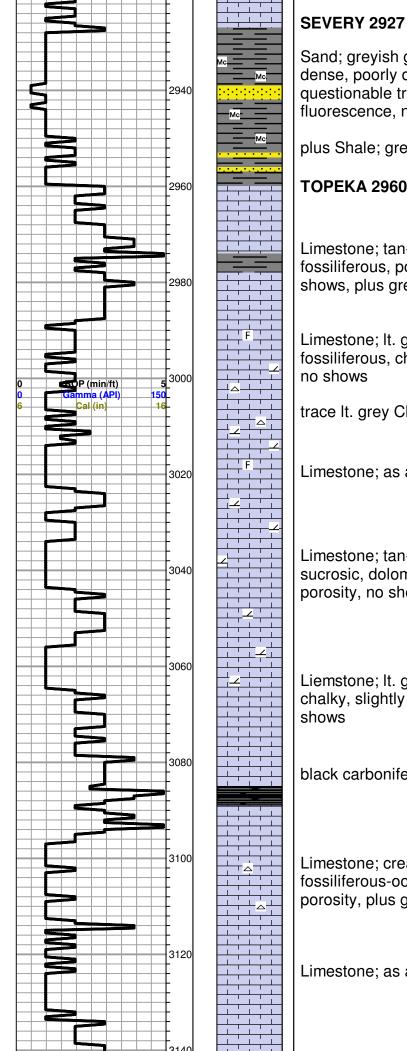
8000.00 psig 2012.06.28 2012.06.28 @ 02:49:30 2012.06.28 @ 06:00:45

| TEST COM | ISI: Weak blow b | BOB 2 sec { see gas flow report] | | | | | |
|--------------------|---------------------|-----------------------------------|----------------|-------------------|---|--------------------------------|------------------|
| | Pressure vs. T | | | D | DESSIID | E SUMMARY | |
| | 0772 Pressure | 8773 Temperate | True | | | | |
| ÷ | | | Time (Min.) | Pressure | Temp (deg E) | Annotation | |
| 770 | N ~~~ | | (1911.) | (psig) 1730.50 | (deg F) | Initial Hydro-static | |
| 800 | | 31 | | | | | |
| E | | | 5 34 | 822.88 847.42 | 114.87 | Open To Flow (1) Shut-In(1) | |
| | | | 78 | 1074.65 | | End Shut-In(1) | |
| E | // paneso | | 80 | 881.42 | 116.12 | Open To Flow (2) | |
| 1000 | 1/1 | | 123 | 873.49 | | Shut-In(2) | |
| 790 | and the second | | | 1072.06 | 118.06 | End Shut-In(2) | |
| 700 | | | 192 | 1449.54 | 000000000000000000000000000000000000000 | Final Hydro-static | |
| 5 The Jan 2012 | Recovery | Dired. | | | Gas | Rates | |
| Length (ft) | Description | Volume (bbl) | | | Choke (in | | Gas Rate (Mct/d) |
| 0.00 | 3605' GIP | 0.00 | First Ga | s Rate | 1 | .00 130.00 | 4151.33 |
| 62.00 | G,M,W 20%gas 40%mud | 40%w ater w ith0.87p | Last Ga | s Rate | 1 | .00 150.00 | 4726.31 |
| | | | Max. Ga | is Rate | 1 | .00 150.00 | 4726.31 |
| * Recovery from mu | ultiple tests | | | | | | |
| (On | RILOBITE | DRILL STEM TES | T REP | ORT | | | |
| | | Hutchinson Oil Corp | | 24- | 23s-13w | | |
| 目 | ESTING , INC. | Po Box 521 | | Sc | hlochter | neier#2-24 | |
| | 6536 | Derby KS 67037 | | | Ticket: 475 | | #:4 |
| 150 | | ATTN: Steve Hutchinson/ Jo | | Tes | t Start: 201 | 12.06.28 @ 23:09:1 | 0 |

GENERAL INFORMATION:

| Formation: | Viola | | | | | | |
|-------------------|-------------------------|------------------|------------|---------------|--------------|------------|----------|
| Deviated: | No Whipstock: | ft (KB) | | Test Type: | Conventiona | Bottom Ho | e (Reset |
| Time Tool Opened: | 00:42:40 | | | Tester: | Chris Staats | | |
| Time Test Ended: | 06:05:55 | | | Unit No: | 47 | | |
| Interval: 37 | 30.00 ft (KB) To 3810.0 | 00 ft (KB) (TVD) | | Reference I | Bevations: | 1885.00 | ft (KB) |
| Total Depth: | 3810.00 ft (KB) (TVD) | | | | | 1878.00 | ft (CF) |
| Hole Diameter: | 7.88 inches Hole Co | ndition: Fair | | KE | B to GR/CF: | 7.00 | ft |
| Serial #: 6773 | Outside | | | | | | |
| Press@RunDepth: | 283.35 psig @ | 3731.00 ft (KB) | | Capacity: | | 8000.00 | psig |
| Start Date: | 2012.06.28 | End Date: | 2012.06.29 | Last Calib .: | 1 | 2012.06.29 | |
| Start Time: | 23:09:15 | End Time: | 06:05:54 | Time On Btm: | 2012.06.29 (| @ 00:40:40 | |
| | | | | Time Off Btm: | 2012.06.29 (| @ 03:41:55 | |
| TEST COMME | NT: IF: Strong blow BOB | 1 min | | | | | |
| | ISI: Fair blow back 5' | | | | | | |
| | FF: Strong blow BOE | 3 2 min | | | | | |
| | FSI: Fair blow back 5 | | | | | | |





SEVERY 2927 (-1042) Sand; grevish green, very fine grained, dense, poorly developed porosity, micaceous, questionable trace gas bubble, dull grey fluorescence, no odor plus Shale; grey-dark grey, soft, micaceous TOPEKA 2960 (-1075)

Limestone; tan-grey, fine xln, slightly fossiliferous, poor visible porosity, dense, no shows, plus grey boney Chert

Limestone; It. grey-buff, fine-medium xln, fossiliferous, chalky, fossil cast type porosity,

trace It. grey Chert

Limestone; as above

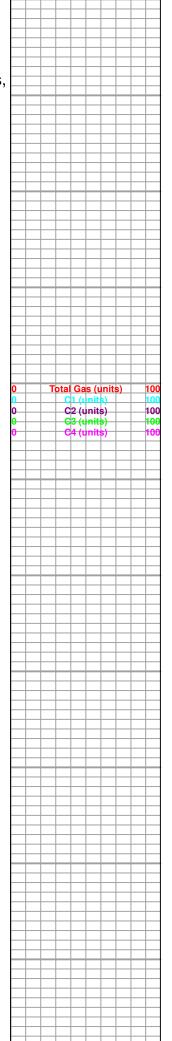
Limestone; tan-buff-lt. grey, fine xln, slightly sucrosic, dolomitic in part, few scattered porosity, no shows

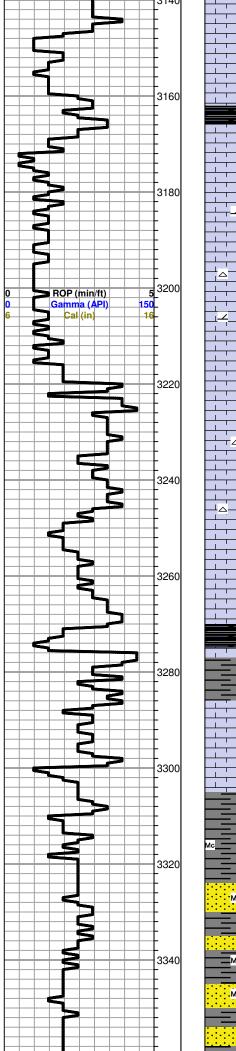
Liemstone; It. grey-buff, fine-medium xln, chalky, slightly fossiliferous, fair porosity, no

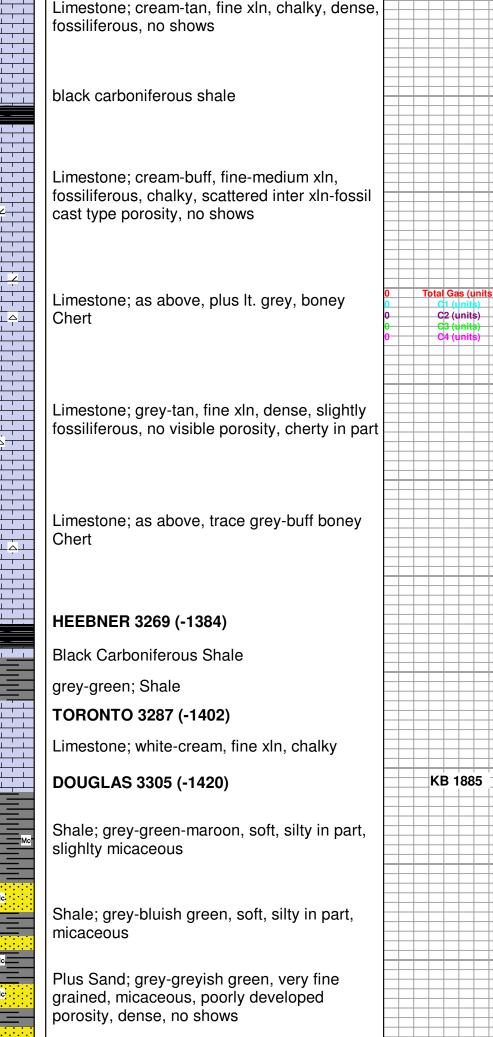
black carboniferous shale

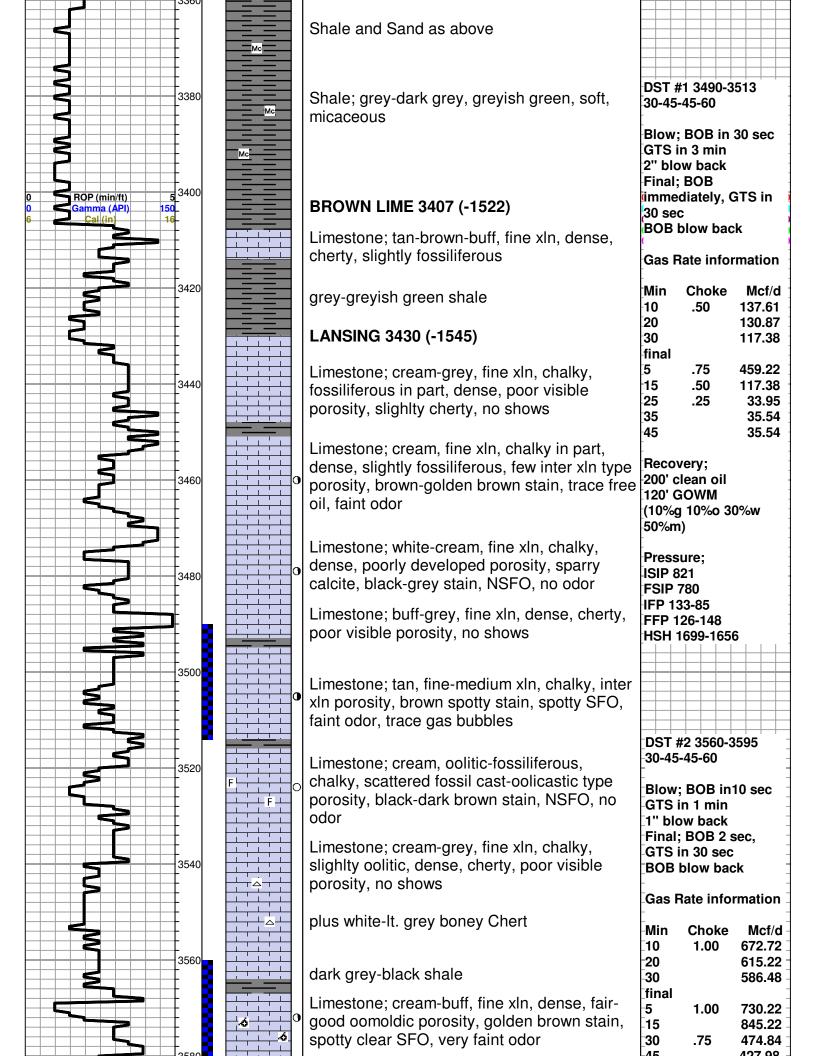
Limestone; cream-lt. grey, fine xln, slightly fossiliferous-oolitic, chalky, scattered porosity, plus grey boney Chert

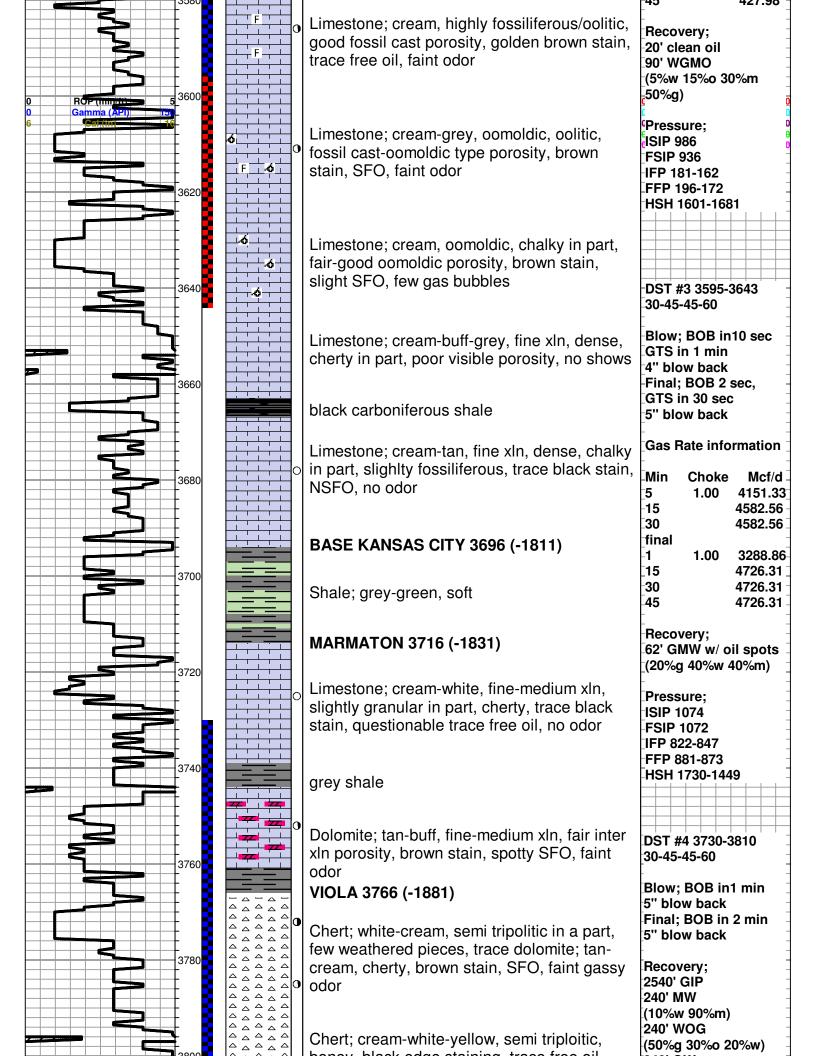
Limestone; as above

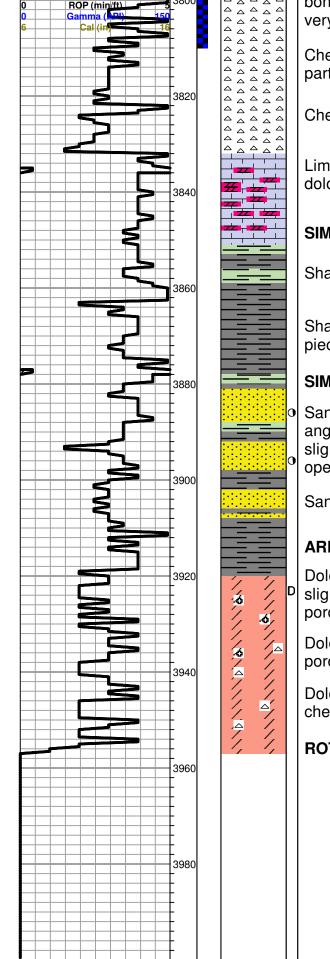












| | | very faint odor | (10%o 90%w) | | | | | |
|--|--------|--|---|---|--|--|--|--|
| | | Chert; cream-It. grey, boney, semi tripolitic in part | Pressure; ISIP 1101 FSIP 1055 IFP 65-186 | | | | | |
| | | Chert; as above | FFP 180-283 HSH 1828-1835 | | | | | |
| | | Limestone; cream, fine xln, sucrosic, dolomitic in part, no shows | | | | | | |
| | | SIMPSON SHALE 3853 (-1968) | | | | | | |
| | | Shale; grey-green, waxey | | | | | | |
| | | Shale; variety of colors, soft/gummy, few silty pieces | | | | | | |
| _ | | SIMPSON SAND 3880 (-1995) | | | | | | |
| | 0 0 | Sand; clear-grey, very fine grained, sub angular, sub rounded, friable, black stain, slight spotty SFO, faint-fair odor when broke open | | | | | | |
| | | Sand and Shale as above | | | | | | |
| | | ARBUCKLE 3918 (-2033) | | | | | | |
| -//// \$ | D | Dolomite; pink-cream-It. grey, fine xln, dense, slightly sucrosic in part, cherty, poor visible porosity, trace black stain, NSFO, no odor | | | | | | |
| ., , , , , , , , , , , , , , , , , , , | | Dolomite; as above, scattered oomoldic type porosity, (barren) | | | | | | |
| / <u>4///////////////////////////////////</u> | | Dolomite; pinkish grey-cream, fine xln, dense, cherty, poor visible porosity, no shows | | | | | | |
| 1, | | ROTARY TOTAL DEPTH 3956 (-2071) | | | | | | |
| | | | | | | | | |
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