STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

FORM OGC-3

# APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

CONFIDENTIAL until 10-16-08

☒ APPLICATION TO DRILL ☐ DEEPEN ☐ PLUG BACK ☐ FOR AN OIL WELL ☒ OR GAS WELL

| NAME OF COMPANY OR OPERATOR | | | DATE |
|---|---|---|---|
| PR Operating L.P. | | | 10/10/2007 |
| ADDRESS | CITY | STATE | ZIP CODE |
| 11730 W. 135th St Suite 14 | Overland Park | KS | 66221 |

## DESCRIPTION OF WELL AND LEASE

| NAME OF LEASE | WELL NUMBER | ELEVATION (GROUND |
|---|---|---|
| Jacobs | 24-1 | 1030' |

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

2100 ft. from ☒ North ☐ South section line 700 ft. from ☐ East ☒ West section line

| WELL LOCATION | LATITUDE | LONGITUDE | COUNTY |
|---|---|---|---|
| Sec. 24 Township 42 North Range 33 ☐ East ☒ West | 38.435652 | -94.524809 | Bates |

NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE 700 FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED – FOR WELL ON THE SAME LEASE na FEET

| PROPOSED DEPTH | DRILLING CONTRACTOR, NAME AND ADDRESS | ROTARY OR CABLE TOOLS | APPROX. DATE WORK WILL START |
|---|---|---|---|
| 900 ft | Kansas Geological Survey | Rotary | 9/24/2007 |

NUMBER OF ACRES IN LEASE: 240

NUMBER OF WELLS ON LEASE INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR 0

NUMBER OF ABANDONED WELLS ON LEASE 0

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?

NAME _____

ADDRESS _____

NO. OF WELLS PRODUCING ____ INJECTION ____ INACTIVE ____ ABANDONED ____

| STATUS OF BOND | ☐ SINGLE WELL AMOUNT $ ____ | ☒ BLANKET BOND AMOUNT $ 20000.00 | ☒ ON FILE ☐ ATTACHED |
|---|---|---|---|

REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING/INJECTION ZONE AND EXPECTED NEW INJECTION ZONE; USE BACK OF FORM IF NEEDED)

3 1/8" core hole to be drilled and plugged back upon completion STRAT Test

| PROPOSED CASING PROGRAM | | | | APPROVED CASING – TO BE FILLED IN BY STATE GEOLOGIST | | | |
|---|---|---|---|---|---|---|---|
| AMOUNT | SIZE | WT/FT | CEMENT | AMOUNT | SIZE | WT/FT | CEMENT |
| | | | | Drill | core hole | 3 1/8 | to |
| | | | | | | | |
| | | | | be plugged from | TD | to Surface w/ Portland | |
| | | | | | | | |

I, the Undersigned, state that I am the Vice President of the PR Operating,LP (Company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.

SIGNATURE Brian Lukowski DATE 10/11/07

PERMIT NUMBER 20369

APPROVED DATE 10-16-07

APPROVED BY

☒ DRILLER'S LOG REQUIRED
☒ CORE ANALYSIS REQUIRED IF RUN
☐ SAMPLES REQUIRED
☒ SAMPLES NOT REQUIRED
☐ WATER SAMPLES REQUIRED AT

☒ E-LOGS REQUIRED IF RUN
☒ DRILL SYSTEM TEST INFO REQUIRED IF RUN

RECEIVED
OCT 25 2007

**NOTE ▶** THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION.

APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE

MO Oil & Gas Council

I, _____ of the _____ (Company), confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.

DRILLER'S SIGNATURE DATE

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

FORM OGC-4

# WELL LOCATION PLAT

OWNER'S NAME
P.R. OPERATING, L.P

LEASE NAME
JACOBS 24-1 #20369 Strat Test

COUNTY
BATES

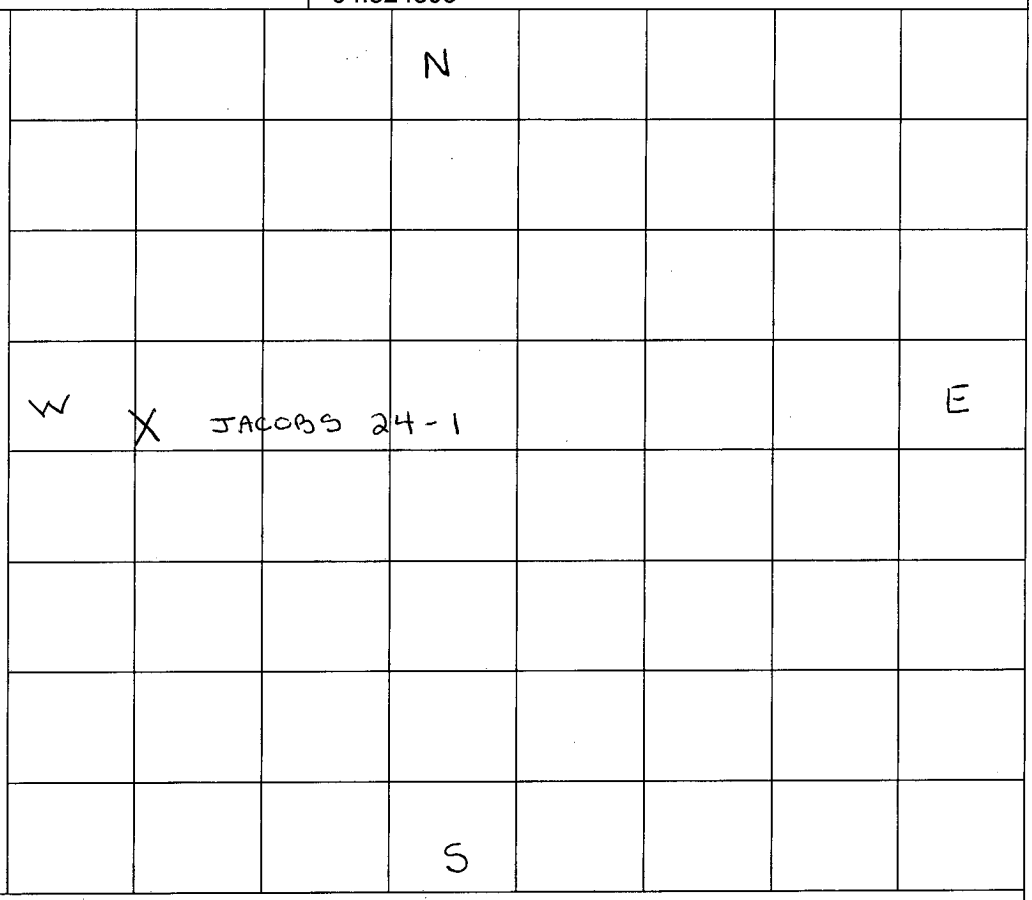
WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

2100 ft. from ☒ North ☐ South from section line 700 ft. from ☐ East ☒ West from section line

WELL LOCATION
Sec. 24 Township 42 North Range 33 ☐ East ☒ West

LATITUDE
38.435652

LONGITUDE
-94.524809




REMARKS

RECEIVED
OCT 25 2007
Mo Oil & Gas Council

**INSTRUCTIONS**

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements. Lease lines must be marked.

This is to certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

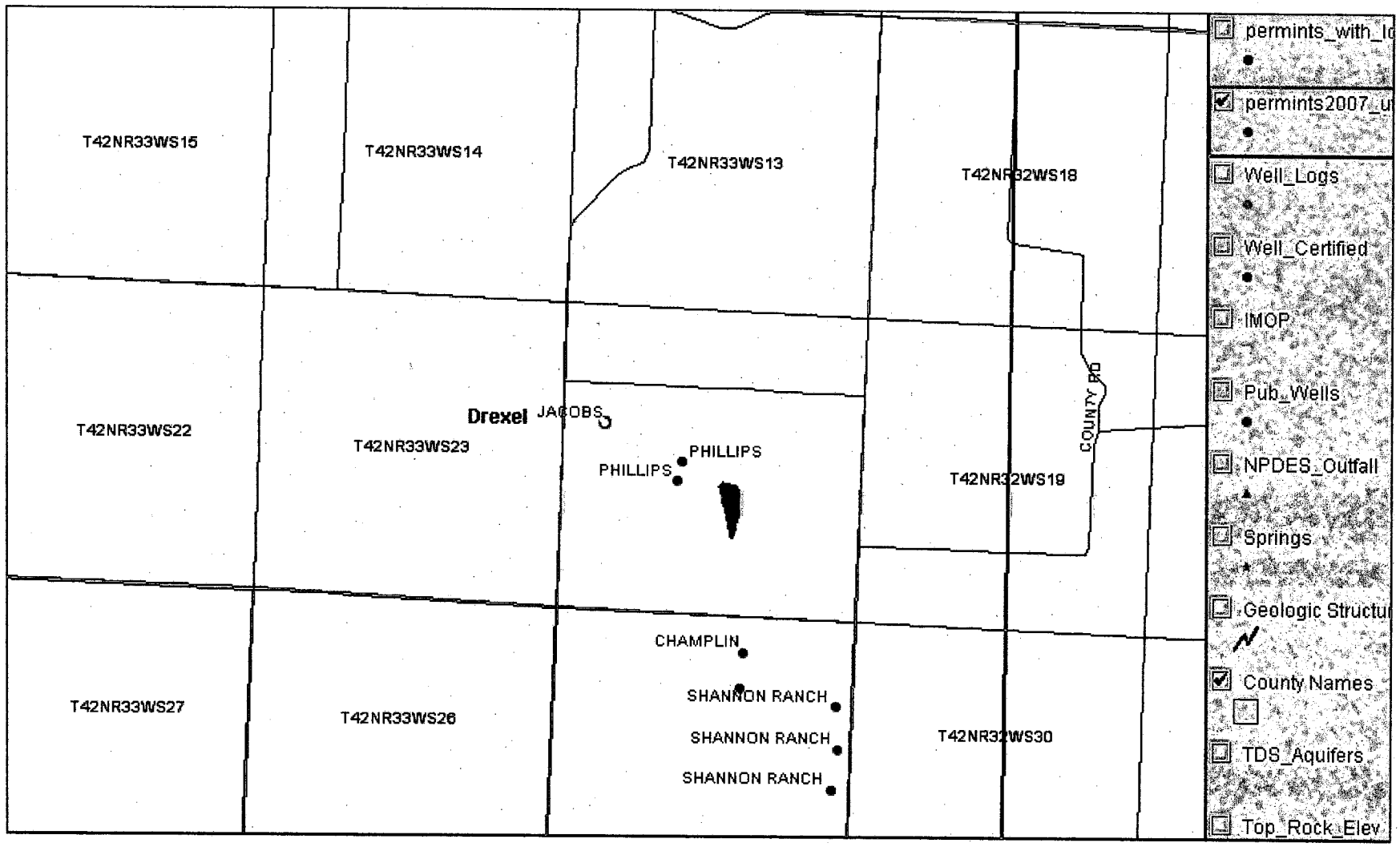
~~REGISTERED LAND SURVEYOR~~

Brian J. Lankford

~~NUMBER~~

**REMIT TWO (2) COPIES TO:**
**GEOLOGICAL SURVEY PROGRAM**
**PO BOX 250, ROLLA, MO 65402-0250 (573) 368-2143**
**ONE (1) COPY WILL BE RETURNED**

MO 780-0213 (6-06)


T42NR33WS15
T42NR33WS14
T42NR33WS13
T42NR32WS18
T42NR33WS22
T42NR33WS23
Drexel
JACOBS
PHILLIPS
PHILLIPS
COUNTY RD
T42NR32WS19
T42NR33WS27
T42NR33WS26
CHAMPLIN
SHANNON RANCH
SHANNON RANCH
SHANNON RANCH
T42NR32WS30
permints_with_lo
permints2007_u
Well_Logs
Well_Certified
IMOP
Pub_Wells
NPDES_Outfall
Springs
Geologic Structu
County Names
TDS_Aquifers
Top_Rock_Elev

1" = 2280

RECEIVED

JUL 08 2008

Mo Oil & Gas Council

FORM OGC-5

Until 7-8-09

CONFIDENTIAL

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

# WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☐ OIL ☐ GAS ☐ DRY

| OWNER | ADDRESS |
|---|---|
| P.R. Operating L.P. | 11730 W. 135th St., # 14 Overland Park, KS 66221 |
| LEASE NAME | WELL NUMBER |
| Jacobs | 24-1 |

| LOCATION OF WELL SEC TWN RNG OR BLOCK AND SURVEY | LATITUDE | LONGITUDE |
|---|---|---|
| Sec. 24 Twp 42 North, Rng 33 ☐East ☒West OR ____ ft. from ☐North ☐South ____ ft. from ☐East ☐West | 38.43565 | -94.524809 |

| COUNTY | PERMIT NUMBER (OGC-3 OR OGC-31) |
|---|---|
| Bates | 29-013-20369 |

| DATE SPUDDED | DATE TOTAL DEPTH REACHED | DATE COMPLETED READY TO PRODUCE OR INJECT | ELEVATION (DF, RKR, RT, OR Gr.) FEET | ELEVATION OF CASING HD. FLANGE |
|---|---|---|---|---|
| 10/25/2007 | 10/29/2007 | N/A | 1030'GR | N/A FEET |

| TOTAL DEPTH | PLUG BACK TOTAL DEPTH |
|---|---|
| 717' | Surf to TD |

| PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION | ROTARY TOOLS USED (INTERVAL) | CABLE TOOLS USED (INTERVAL) |
|---|---|---|
| Corehole | 0 TO TD<br>DRILLING FLUID USED Water | - |

| WAS THIS WELL DIRECTIONALLY DRILLED? | WAS DIRECTIONAL SURVEY MADE? | WAS COPY OF DIRECTIONAL SURVEY FILED? | DATE FILED |
|---|---|---|---|
| ☐ Yes ☒ No | ☐ Yes ☒ No | ☐ Yes ☒ No | - |

| TYPE OF ELECTRICAL OR OTHER LOGS RUN (JUST LOGS FILED WITH THE STATE GEOLOGIST) | DATE FILED |
|---|---|
| GR | Attached |

## CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL – CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.

| PURPOSE | SIZE HOLE DRILLED | SIZE CASING SET | WEIGHT (LB. FT) | DEPTH SET | SACKS CEMENT | AMOUNT PULLED |
|---|---|---|---|---|---|---|
| Core Hole | | | | | | |
| | | | | | | |
| | | | | | | |

## TUBING RECORD

| SIZE | DEPTH SET | PACKER SET AT | SIZE |
|---|---|---|---|
| INCH | FEET | FEET | INCH |

## LINER RECORD

| TOP | BOTTOM | SACKS CEMENT | SCREEN |
|---|---|---|---|
| FEET | FEET | | FEET |

## PERFORATION RECORD

| NUMBER PER FEET | SIZE AND TYPE | DEPTH INTERVAL |
|---|---|---|
| N/A | | |
| | | |

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

| AMOUNT AND KIND OF MATERIAL USED | DEPTH INTERVAL |
|---|---|
| | |
| | |

## INITIAL PRODUCTION

| DATE OF FIRST PRODUCTION OR INJECTION | PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING – IF PUMPING, SHOW SIZE AND TYPE OF PUMP.) |
|---|---|
| N/A | |

| DATE OF TEST | HOURS TESTED | CHOKE SIZE | OIL PRODUCED DURING TEST | GAS PRODUCED DURING TEST | WATER PRODUCED DURING TEST | OIL GRAVITY |
|---|---|---|---|---|---|---|
| | | | BBLS | MCF | BBLS | API (CORR.) |

| TUBING PRESSURE | CASING PRESSURE | CALCULATED RATE OF PRODUCTION PER 24 HOURS | OIL | GAS | WATER | GAS OIL RATIO |
|---|---|---|---|---|---|---|
| | | | BBLS | MCF | BBLS | |

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

METHOD OF DISPOSAL OF MUD PIT CONTENTS

Water evaporated, cuttings buried on location

**CERTIFICATE:** I, the Undersigned, state that I am the V.P. of the P.R. Operating L.P. (Company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

| DATE | SIGNATURE |
|---|---|
| 7/1/08 | Brian J. Lankenau |

| DATE | SIGNATURE |
|---|---|
| | |

MO 780-0215 (8-06) REMIT TWO (2) COPIES TO: GEOLOGICAL SURVEY PROGRAM, PO BOX 250, ROLLA, MO 65402 (573) 368-2143. ONE (1) COPY TO BE RETURNED. (REV 8-06)

**INSTRUCTIONS:** Attach drillers log or other acceptable log of well.

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**DETAIL OF FORMATIONS PENETRATED**

| FORMATION | TOP | BOTTOM | DESCRIPTION (SEE * ABOVE) |
|---|---|---|---|
| | | | |

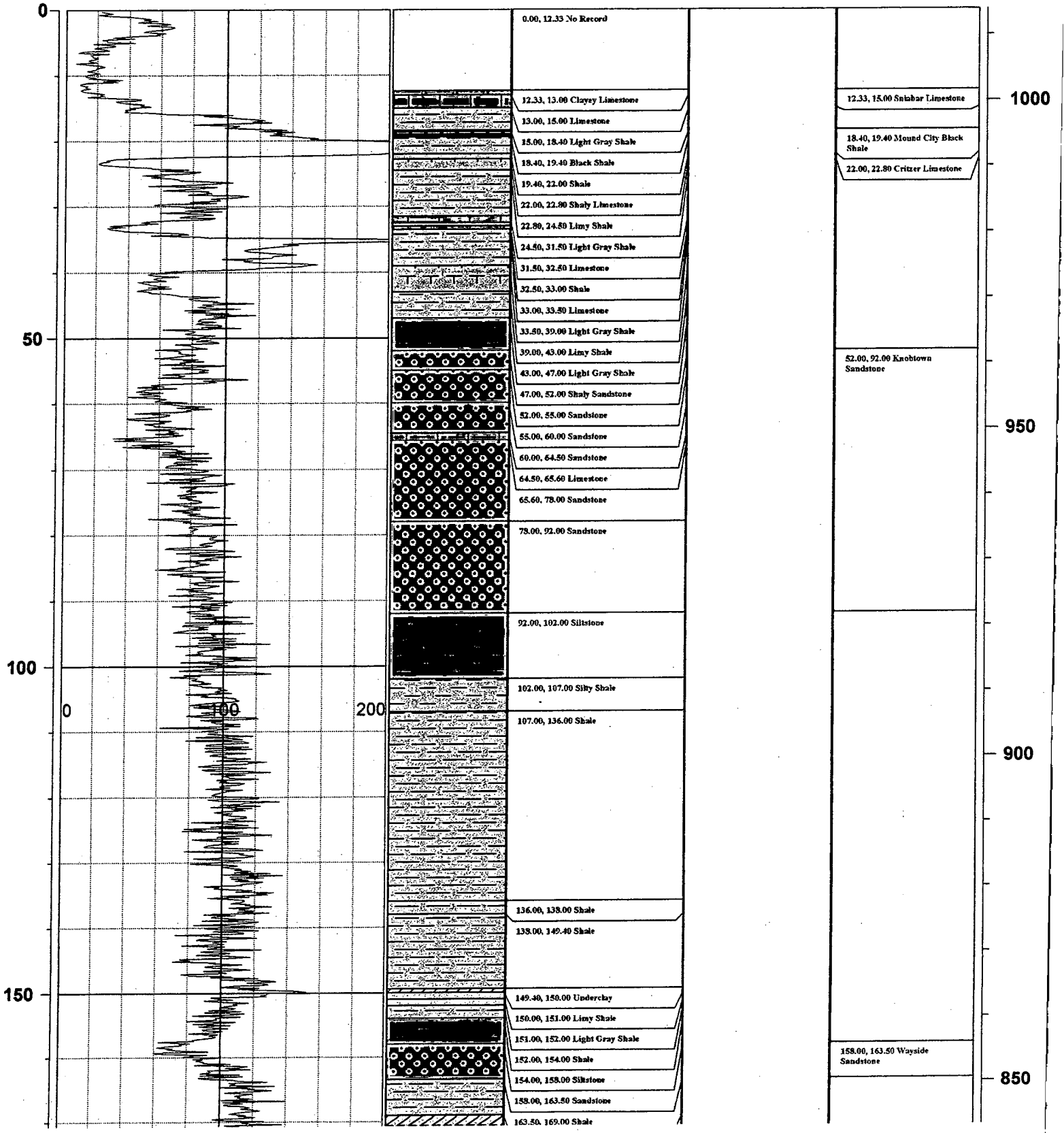
CONFIDENTIAL
Until 7-8-09

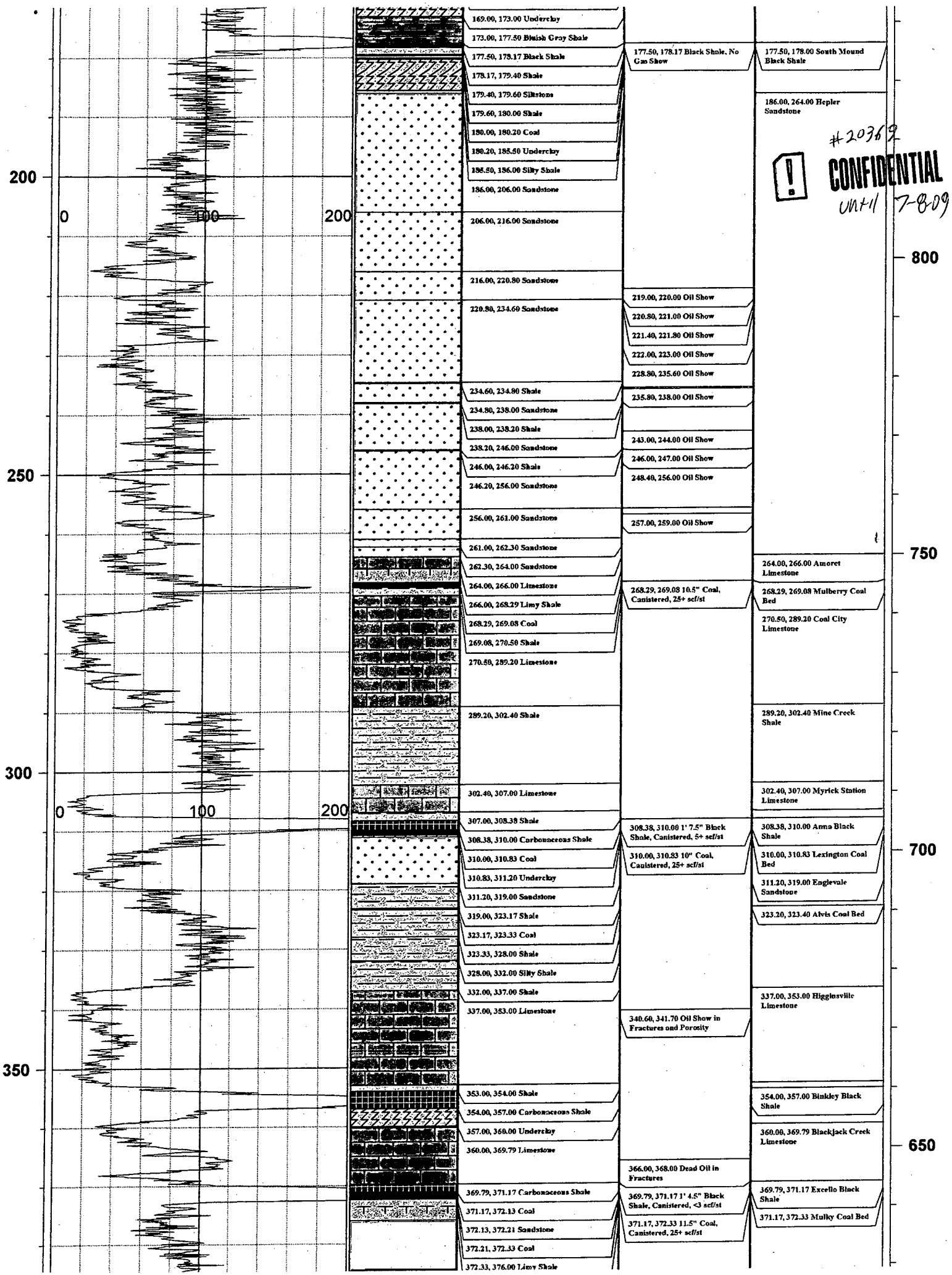
SEE ATTACHED

BATES COUNTY, MISSOURI
P R OPERATING COMPANY NO. 1 JACOBS
NE SW NW Sec. 24, T. 42 N., R. 33 W.
FNL FWL
API NO: 29-013-20369
SPUD SEPTEMBER 26, 2007

UNIQUE ID: 423324003
GL ELEVATION 1014 FT FROM DREXEL TOPO MAP
GPS LAT 38.43566241 N, LONG -94.52467823 W
GPS 781 FNL 768 FWL
717 FT TOTAL DEPTH
TD OCTOBER1, 2007

until 7-8-09
CONFIDENTIAL





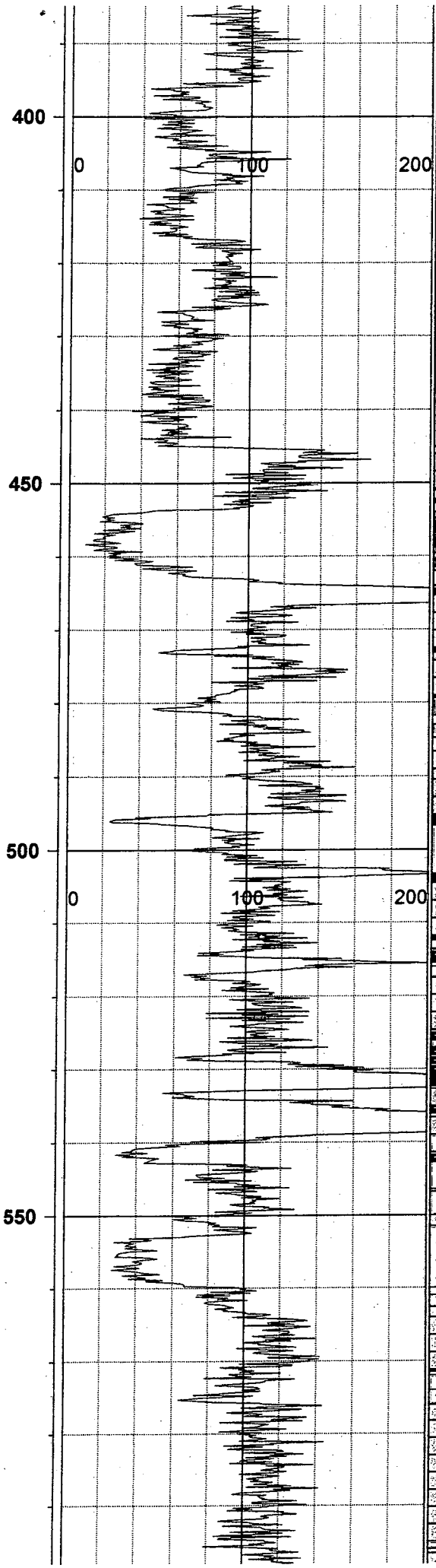

#20362

CONFIDENTIAL

UNTIL 7-8-09

#20369

CONFIDENTIAL
until 7-8-09

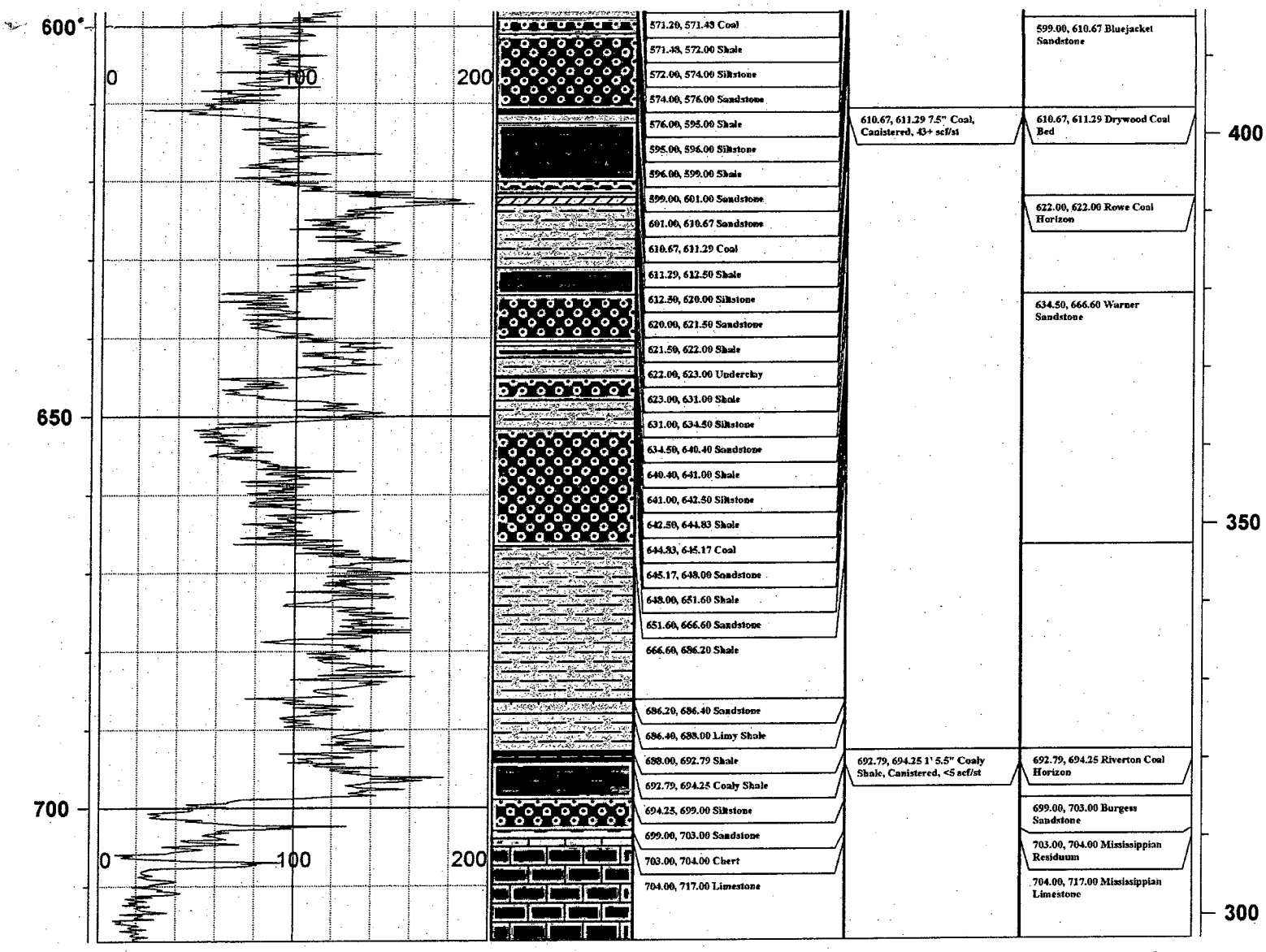



376.00, 396.00 Siltstone
396.00, 404.00 Sandstone
404.00, 408.00 Siltstone
408.00, 415.00 Sandstone
415.00, 425.00 Siltstone
425.00, 445.00 Sandstone
445.00, 450.80 Shale
450.80, 451.00 Limestone
451.00, 452.25 Shale
452.25, 452.75 Coal
452.75, 454.00 Limy Shale
454.00, 462.00 Limestone
462.00, 464.00 Limy Shale
464.00, 465.25 Carbonaceous Shale
465.25, 472.50 Shale
472.50, 473.17 Coal
473.17, 479.00 Shale
479.00, 481.75 Limestone
481.75, 483.00 Shale
483.00, 484.75 Limestone
484.75, 489.00 Light Gray Shale
489.00, 495.25 Dark Gray Shale
495.25, 496.75 Coal
496.75, 503.33 Siltstone
503.33, 504.46 Coal
504.46, 511.80 Shale
511.80, 512.40 Black Shale
512.40, 513.60 Limy Shale
513.60, 515.00 Black Shale
515.00, 515.03 Coal
515.03, 515.50 Black Shale
515.50, 516.00 Shale
516.00, 517.50 Siltstone
517.50, 524.58 Shale
524.58, 526.06 Black Shale
526.06, 527.00 Limestone
527.00, 530.67 Black Shale
530.67, 532.42 Coal
532.42, 535.08 Shale
535.08, 536.00 Black Shale
536.00, 536.08 Coal
536.08, 539.00 Shale
539.00, 541.33 Sandstone
541.33, 542.75 Black Shale
542.75, 542.83 Coal
542.83, 546.40 Siltstone
546.40, 546.80 Dark Gray Shale
546.80, 550.00 Siltstone
550.00, 551.50 Shale
551.50, 560.00 Sandstone
560.00, 561.00 Siltstone
561.00, 562.60 Sandstone
562.60, 571.20 Shale

402.60, 403.50 Oil Show
408.40, 415.00 Bleeding Oil and Gas
472.50, 473.17 8" Coal, Canistered, 60+ scf/st
490.29, 491.29 1' Dark Gray Shale, Canistered, <3 scf/st
495.25, 496.75 1' 6" Coal, Canistered, 40+ scf/st
503.33, 504.46 1' 1.5" Coal, Canistered, 40+ scf/st
524.58, 526.06 1' 5.5" Black Shale, Canistered, <5 scf/st
529.42, 530.67 1' 3" Black Shale, Canistered, 10+ scf/st
530.67, 532.42 1' 9" Coal, Canistered, 70+ scf/st
535.08, 536.00 11" Black Shale, Canistered, <5 scf/st
541.33, 542.75 1' 5" Black Shale, Canistered, <5 scf/st

396.00, 404.00 Upper Squirrel Sandstone
408.00, 415.00 Middle Squirrel Sandstone
425.00, 445.00 Lower Squirrel Sandstone
452.25, 452.75 Wheeler Coal Bed
454.00, 462.00 Ardmore Limestone
464.00, 465.25 Oakley Black Shale
472.50, 473.17 Croweburg Coal Bed
481.75, 481.75 Fleming Coal Horizon
495.25, 496.75 Mineral Coal Bed
503.33, 504.46 Scammon Coal Bed
512.40, 512.40 Lower Scammon Coal Horizon
512.40, 513.60 Tiawah Limestone Horizon
515.00, 515.03 Tebo Coal Bed
530.67, 532.42 Weir-Pittsburg Coal Bed
536.30, 536.50 Cainsville Coal Bed
539.00, 541.50 Middle Bartlesville Sandstone
542.75, 542.83 Princeton Coal Bed
551.50, 562.60 Lower Bartlesville Sandstone
571.20, 571.48 Lower Weir Coal Bed

600
550
500
450




#20369

**P R OPERATING COMPANY NO. 1 JACOBS**

**Lithologic Log and Correlations by David C. Smith, Geologist, February 4, 2008**

**From Gamma Ray Log and Graphic Core Log by K. David Newell, Geologist**

CONFIDENTIAL
until 7-8-09

Schlumberger BlueView :

RECEIVED

JUL 08 2008

Oil & Gas Council

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

FORM OGC-5

CONFIDENTIAL

# WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☐ OIL ☐ GAS ☐ DRY

| OWNER | ADDRESS |
|---|---|
| P.R. Operating L.P. | 11730 W. 135th St., # 14 Overland Park, KS 66221 |
| LEASE NAME | WELL NUMBER |
| Jacobs | 24-1 |

| LOCATION OF WELL SEC TWN RNG OR BLOCK AND SURVEY | LATITUDE | LONGITUDE |
|---|---|---|
| Sec. 24 Twp 42 North, Rng 33 ☐East ☒West OR ____ ft. from ☐North ☐South ____ ft. from ☐East ☐West | 38.43565 | -94.524809 |

| COUNTY | PERMIT NUMBER (OGC-3 OR OGC-31) |
|---|---|
| Bates | 29-013-20369 |

| DATE SPUDDED | DATE TOTAL DEPTH REACHED | DATE COMPLETED READY TO PRODUCE OR INJECT | ELEVATION (DF, RKR, RT, OR Gr.) FEET | ELEVATION OF CASING HD. FLANGE |
|---|---|---|---|---|
| 10/25/2007 | 10/29/2007 | N/A | 1030'GR | N/A FEET |

| TOTAL DEPTH | PLUG BACK TOTAL DEPTH |
|---|---|
| 717' | Surf to TD |

| PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION | ROTARY TOOLS USED (INTERVAL) | CABLE TOOLS USED (INTERVAL) |
|---|---|---|
| Corehole | 0 TO TD<br>DRILLING FLUID USED Water | - |

| WAS THIS WELL DIRECTIONALLY DRILLED? | WAS DIRECTIONAL SURVEY MADE? | WAS COPY OF DIRECTIONAL SURVEY FILED? | DATE FILED |
|---|---|---|---|
| ☐ Yes ☒ No | ☐ Yes ☒ No | ☐ Yes ☒ No | - |

| TYPE OF ELECTRICAL OR OTHER LOGS RUN (JUST LOGS FILED WITH THE STATE GEOLOGIST) | DATE FILED |
|---|---|
| GR | Attached |

## CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL – CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.

| PURPOSE | SIZE HOLE DRILLED | SIZE CASING SET | WEIGHT (LB. FT) | DEPTH SET | SACKS CEMENT | AMOUNT PULLED |
|---|---|---|---|---|---|---|
| Core Hole | | | | | | |
| | | | | | | |
| | | | | | | |

## TUBING RECORD

| SIZE | DEPTH SET | PACKER SET AT | SIZE |
|---|---|---|---|
| INCH | FEET | FEET | INCH |

## LINER RECORD

| TOP | BOTTOM | SACKS CEMENT | SCREEN |
|---|---|---|---|
| FEET | FEET | | FEET |

## PERFORATION RECORD

| NUMBER PER FEET | SIZE AND TYPE | DEPTH INTERVAL |
|---|---|---|
| N/A | | |
| | | |

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

AMO

Duplicate for PR 5-7-09

PR out of business

Wait for good mailing address

## INITIAL PRODUCTIO

| DATE OF FIRST PRODUCTION OR INJECTION | PRODUCING METHOD (INDICATE IF FLOWING, GA |
|---|---|
| N/A | |

| DATE OF TEST | HOURS TESTED | CHOKE SIZE | OIL PRODUCED DURING TEST | GAS PRODUC |
|---|---|---|---|---|
| | | | BBLS | MC |

| TUBING PRESSURE | CASING PRESSURE | CALCULATED RATE OF PRODUCTION PER 24 HOURS | OIL |
|---|---|---|---|
| | | | BBLS |

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

METHOD OF DISPOSAL OF MUD PIT CONTENTS

Water evaporated, cuttings buried on location

**CERTIFICATE:** I, the Undersigned, state that I am the V.P. of the P.R. Operating L.P. (Company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

| DATE | SIGNATURE |
|---|---|
| 7/1/08 | Brian J. Lankenau |

| DATE | SIGNATURE |
|---|---|
| | |

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**INSTRUCTIONS:** Attach drillers log or other acceptable log of well.

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**DETAIL OF FORMATIONS PENETRATED**

| FORMATION | TOP | BOTTOM | DESCRIPTION (SEE * ABOVE) |
|---|---|---|---|

#20369

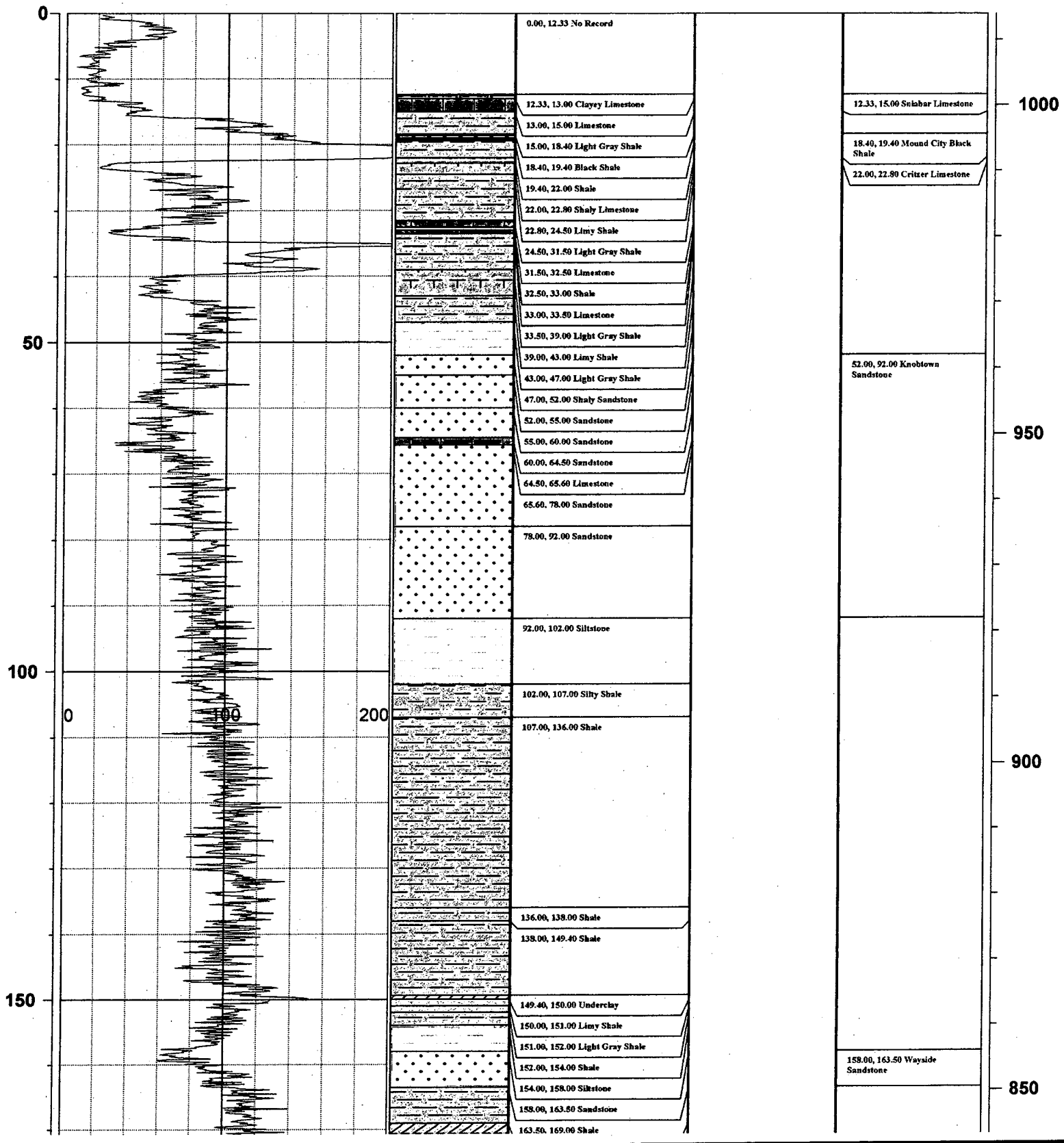
CONFIDENTIAL

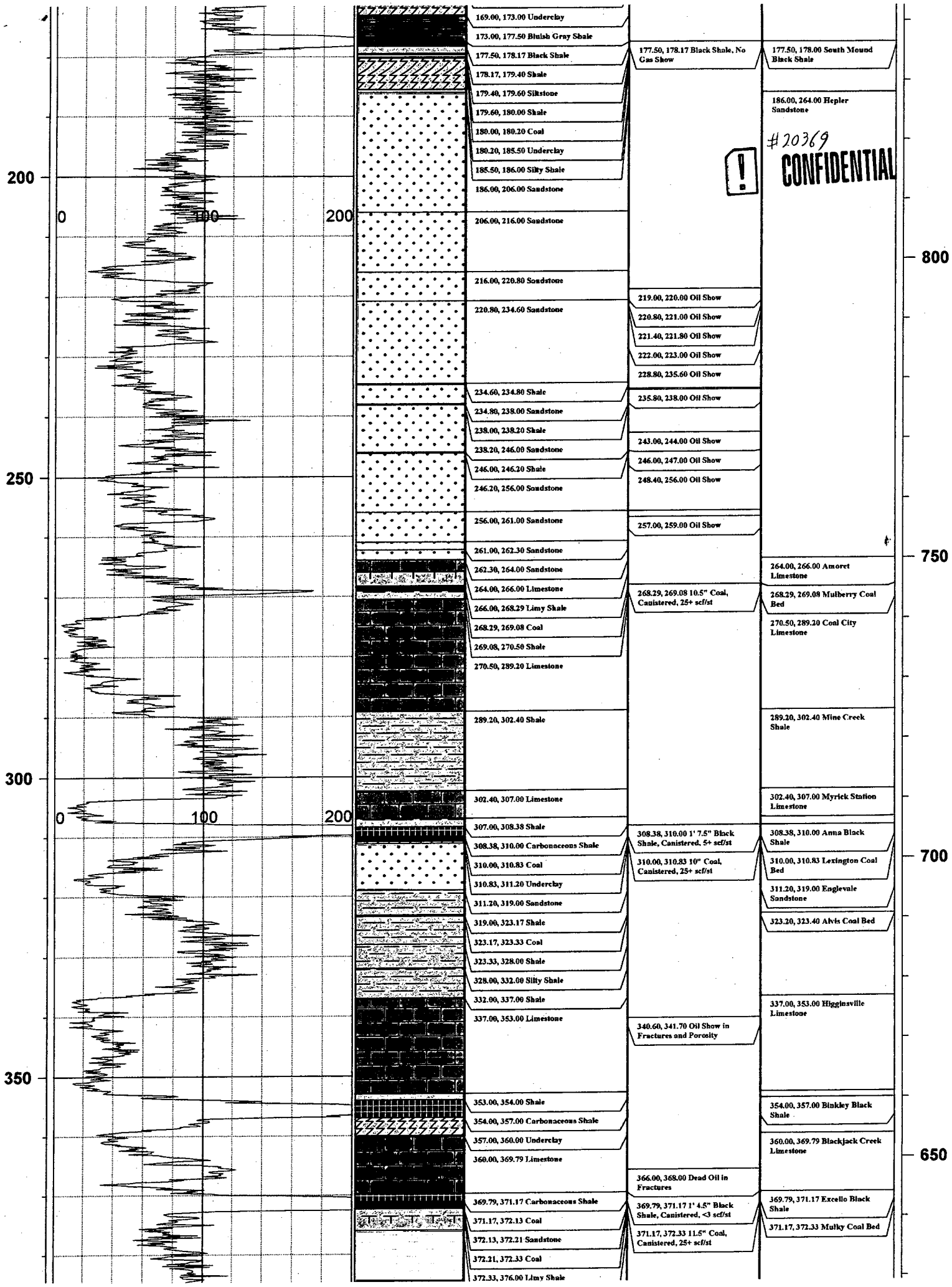
SEE ATTACHED

BATES COUNTY, MISSOURI
P R OPERATING COMPANY NO. 1 JACOBS
NE SW NW Sec. 24, T. 42 N., R. 33 W.
FNL FWL
API NO: 029-013-20369
SPUD SEPTEMBER 26, 2007

UNIQUE ID: 423324003
GL ELEVATION 1014 FT FROM DREXEL TOPO MAP
GPS LAT 38.43566241 N, LONG -94.52467823 W
GPS 781 FNL 768 FWL
717 FT TOTAL DEPTH
TD OCTOBER1, 2007

CONFIDENTIAL




200
250
300
350
0
100
200
0
100
200
169.00, 173.00 Underclay
173.00, 177.50 Bluish Gray Shale
177.50, 178.17 Black Shale
178.17, 179.40 Shale
179.40, 179.60 Siltstone
179.60, 180.00 Shale
180.00, 180.20 Coal
180.20, 185.50 Underclay
185.50, 186.00 Silty Shale
186.00, 206.00 Sandstone
206.00, 216.00 Sandstone
216.00, 220.80 Sandstone
220.80, 234.60 Sandstone
234.60, 234.80 Shale
234.80, 238.00 Sandstone
238.00, 238.20 Shale
238.20, 246.00 Sandstone
246.00, 246.20 Shale
246.20, 256.00 Sandstone
256.00, 261.00 Sandstone
261.00, 262.30 Sandstone
262.30, 264.00 Sandstone
264.00, 266.00 Limestone
266.00, 268.29 Limy Shale
268.29, 269.08 Coal
269.08, 270.50 Shale
270.50, 289.20 Limestone
289.20, 302.40 Shale
302.40, 307.00 Limestone
307.00, 308.38 Shale
308.38, 310.00 Carbonaceous Shale
310.00, 310.83 Coal
310.83, 311.20 Underclay
311.20, 319.00 Sandstone
319.00, 323.17 Shale
323.17, 323.33 Coal
323.33, 328.00 Shale
328.00, 332.00 Silty Shale
332.00, 337.00 Shale
337.00, 353.00 Limestone
353.00, 354.00 Shale
354.00, 357.00 Carbonaceous Shale
357.00, 360.00 Underclay
360.00, 369.79 Limestone
369.79, 371.17 Carbonaceous Shale
371.17, 372.13 Coal
372.13, 372.21 Sandstone
372.21, 372.33 Coal
372.33, 376.00 Limy Shale
177.50, 178.17 Black Shale, No Gas Show
219.00, 220.00 Oil Show
220.80, 221.00 Oil Show
221.40, 221.80 Oil Show
222.00, 223.00 Oil Show
228.80, 235.60 Oil Show
235.80, 238.00 Oil Show
243.00, 244.00 Oil Show
246.00, 247.00 Oil Show
248.40, 256.00 Oil Show
257.00, 259.00 Oil Show
268.29, 269.08 10.5" Coal, Canistered, 25+ scf/st
308.38, 310.00 1' 7.5" Black Shale, Canistered, 5+ scf/st
310.00, 310.83 10" Coal, Canistered, 25+ scf/st
340.60, 341.70 Oil Show in Fractures and Porosity
366.00, 368.00 Dead Oil in Fractures
369.79, 371.17 1' 4.5" Black Shale, Canistered, <3 scf/st
371.17, 372.33 11.5" Coal, Canistered, 25+ scf/st
177.50, 178.00 South Mound Black Shale
186.00, 264.00 Hepler Sandstone
#20369
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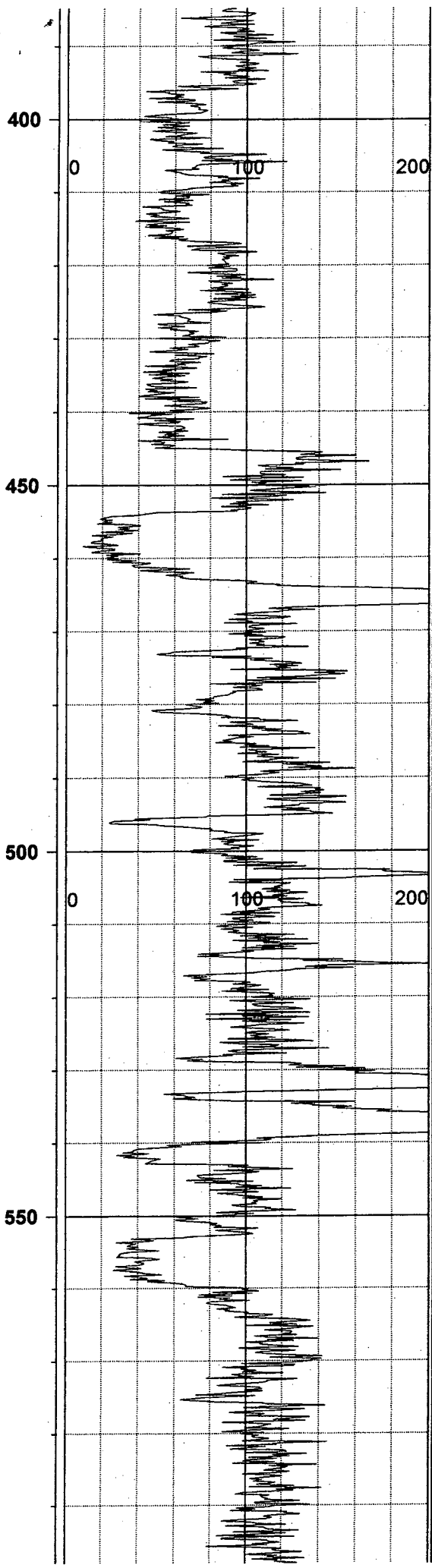
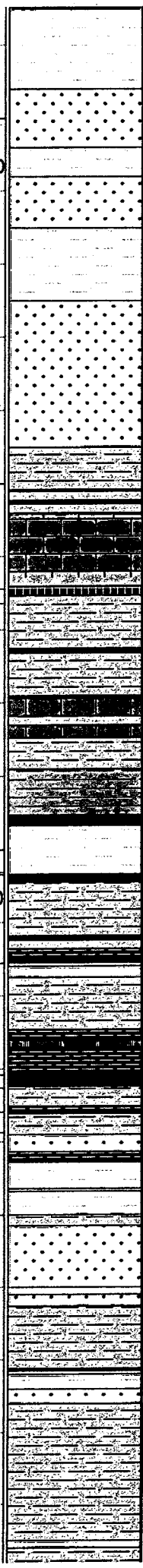
264.00, 266.00 Amoret Limestone
268.29, 269.08 Mulberry Coal Bed
270.50, 289.20 Coal City Limestone
289.20, 302.40 Mine Creek Shale
302.40, 307.00 Myrick Station Limestone
308.38, 310.00 Anna Black Shale
310.00, 310.83 Lexington Coal Bed
311.20, 319.00 Englevale Sandstone
323.20, 323.40 Alvis Coal Bed
337.00, 353.00 Higginsville Limestone
354.00, 357.00 Binkley Black Shale
360.00, 369.79 Blackjack Creek Limestone
369.79, 371.17 Excello Black Shale
371.17, 372.33 Mulky Coal Bed
800
750
700
650



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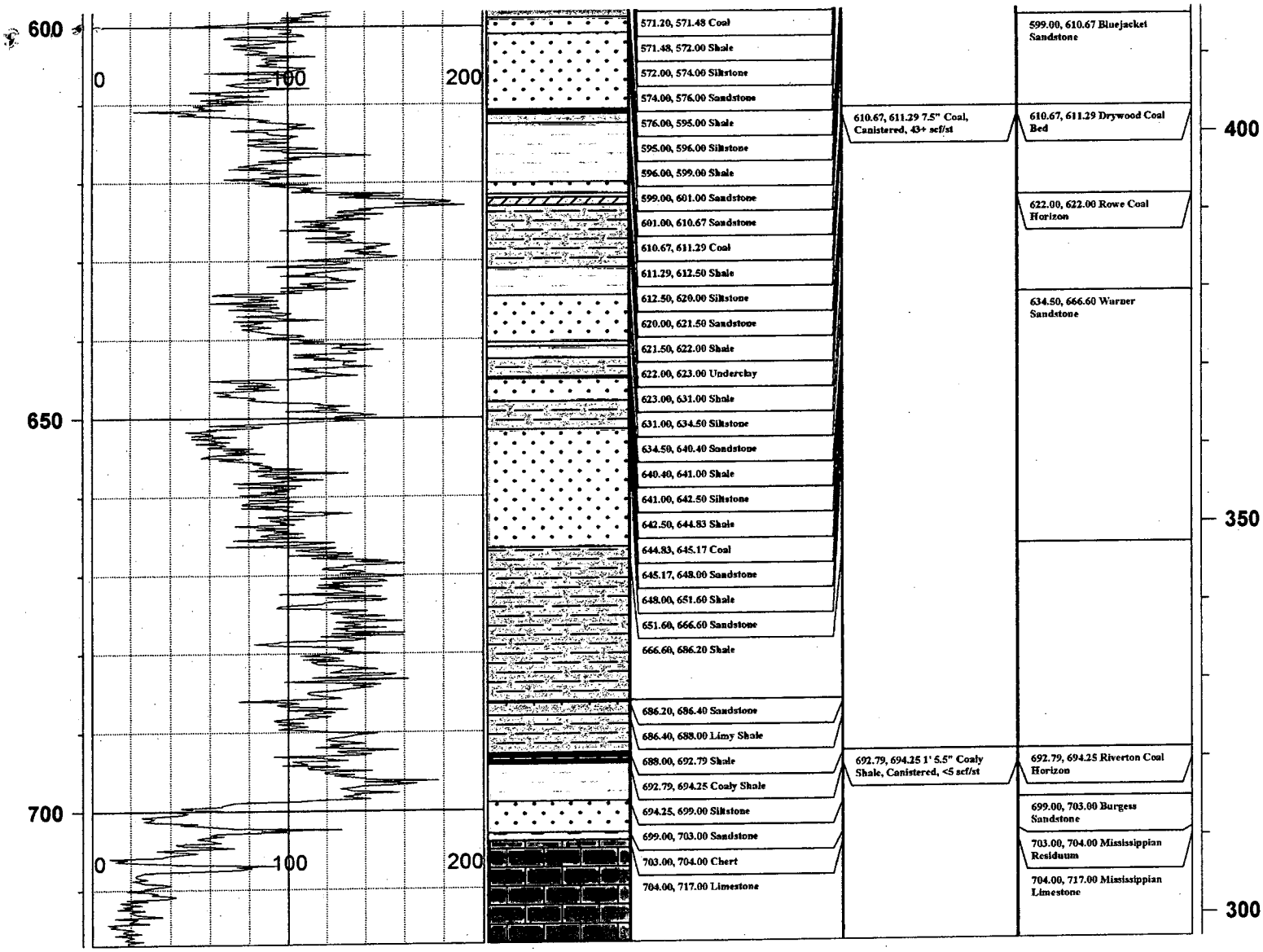
| | | |
|---|---|---|
| 376.00, 396.00 Siltstone | | |
| 396.00, 404.00 Sandstone | | 396.00, 404.00 Upper Squirrel Sandstone |
| 404.00, 408.00 Siltstone | 402.60, 403.50 Oil Show | |
| 408.00, 415.00 Sandstone | 408.40, 415.00 Bleeding Oil and Gas | 408.00, 415.00 Middle Squirrel Sandstone |
| 415.00, 425.00 Siltstone | | |
| 425.00, 445.00 Sandstone | | 425.00, 445.00 Lower Squirrel Sandstone |
| 445.00, 450.80 Shale | | |
| 450.80, 451.00 Limestone | | |
| 451.00, 452.25 Shale | | 452.25, 452.75 Wheeler Coal Bed |
| 452.25, 452.75 Coal | | 454.00, 462.00 Ardmore Limestone |
| 452.75, 454.00 Limy Shale | | |
| 454.00, 462.00 Limestone | | 464.00, 465.25 Oakley Black Shale |
| 462.00, 464.00 Limy Shale | | |
| 464.00, 465.25 Carbonaceous Shale | | |
| 465.25, 472.50 Shale | 472.50, 473.17 8" Coal, Canistered, 60+ scf/st | 472.50, 473.17 Croweburg Coal Bed |
| 472.50, 473.17 Coal | | |
| 473.17, 479.00 Shale | | 481.75, 481.75 Fleming Coal Horizon |
| 479.00, 481.75 Limestone | | |
| 481.75, 483.00 Shale | | |
| 483.00, 484.75 Limestone | 490.29, 491.29 1' Dark Gray Shale, Canistered, <3 scf/st | |
| 484.75, 489.00 Light Gray Shale | | |
| 489.00, 495.25 Dark Gray Shale | 495.25, 496.75 1' 6" Coal, Canistered, 40+ scf/st | 495.25, 496.75 Mineral Coal Bed |
| 495.25, 496.75 Coal | | |
| 496.75, 503.33 Siltstone | 503.33, 504.46 1' 1.5" Coal, Canistered, 40+ scf/st | 503.33, 504.46 Scammon Coal Bed |
| 503.33, 504.46 Coal | | |
| 504.46, 511.80 Shale | | |
| 511.80, 512.40 Black Shale | | 512.40, 512.40 Lower Scammon Coal Horizon |
| 512.40, 513.60 Limy Shale | | 512.40, 513.60 Tiawah Limestone Horizon |
| 513.60, 515.00 Black Shale | | |
| 515.00, 515.03 Coal | | 515.00, 515.03 Tebo Coal Bed |
| 515.03, 515.50 Black Shale | 524.58, 526.06 1' 5.5" Black Shale, Canistered, <5 scf/st | |
| 515.50, 516.00 Shale | | |
| 516.00, 517.50 Siltstone | 529.42, 530.67 1' 3" Black Shale, Canistered, 10+ scf/st | 530.67, 532.42 Weir-Pittsburg Coal Bed |
| 517.50, 524.58 Shale | 530.67, 532.42 1' 9" Coal, Canistered, 70+ scf/st | |
| 524.58, 526.06 Black Shale | | 536.30, 536.50 Cainsville Coal Bed |
| 526.06, 527.00 Limestone | 535.08, 536.00 11" Black Shale, Canistered, <5 scf/st | 539.00, 541.50 Middle Bartlesville Sandstone |
| 527.00, 530.67 Black Shale | 541.33, 542.75 1' 5" Black Shale, Canistered, <5 scf/st | 542.75, 542.83 Princeton Coal Bed |
| 530.67, 532.42 Coal | | |
| 532.42, 535.08 Shale | | 551.50, 562.60 Lower Bartlesville Sandstone |
| 535.08, 536.00 Black Shale | | |
| 536.00, 536.08 Coal | | |
| 536.08, 539.00 Shale | | |
| 539.00, 541.33 Sandstone | | |
| 541.33, 542.75 Black Shale | | |
| 542.75, 542.83 Coal | | 571.20, 571.48 Lower Weir Coal Bed |
| 542.83, 546.40 Siltstone | | |
| 546.40, 546.80 Dark Gray Shale | | |
| 546.80, 550.00 Siltstone | | |
| 550.00, 551.50 Shale | | |
| 551.50, 560.00 Sandstone | | |
| 560.00, 561.00 Siltstone | | |
| 561.00, 562.60 Sandstone | | |
| 562.60, 571.20 Shale | | |

600
550
500
450




#20369

**P R OPERATING COMPANY NO. 1 JACOBS**

**Lithologic Log and Correlations by David C. Smith, Geologist, February 4, 2008**

**From Gamma Ray Log and Graphic Core Log by K. David Newell, Geologist**

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Schlumberger BlueView :

RECEIVED

JUL 08 2008

Mo Oil & Gas Council

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

# PLUGGING RECORD

FORM OGC-7

until 7-8-09

CONFIDENTIAL

| | | | |
|---|---|---|---|
| OWNER'S NAME: PR Operating L.P. | | ADDRESS: 11730 W. 135th St., #14 Overland Park, KS 66221 | |
| NAME OF LEASE: Jacobs | | WELL NUMBER: 24-1 | PERMIT NUMBER (OGC-3 OR OGC-31 NUMBER): 29-013-20369 |
| LOCATION OF WELL SEC TWN RNG OR BLOCK AND SURVEY: Sec. 24 Township 42 North Range 33 ☐ East ☒ West | | LATITUDE: 38.435652 | LONGITUDE: -94.524809 / COUNTY: Bates |
| APPLICATION TO DRILL THIS WELL WAS FILED IN NAME OF: PR Operating L.P. | HAS THIS WELL EVER PRODUCED OIL OR GAS? ☐ Yes ☒ No | CHARACTER OF WELL AT COMPLETION (INITIAL PRODUCTION) OIL (BBLS/DAY): - | GAS (MCF/DAY): - / DRY? ☐ Yes ☐ No |
| DATE OF ABANDONMENT: 11/6/2007 | TOTAL DEPTH: 717' | AMOUNT WELL PRODUCING PRIOR TO ABANDONMENT OIL (BBLS/DAY): - | GAS (MCF/DAY): - / WATER (BBLS/DAY): - |

| Name of each formation containing oil or gas. Indicate which formation open to well bore at time of abandonment | Fluid content of each formation | Depth interval of each formation | Size, kind, and depth of plugs used, giving amount of cement. |
|---|---|---|---|
| Corehole plugged | | | |
| back to surface with | | | |
| 29 sks Portland | | | |
| Cement | | | |

| SIZE PIPE | PUT IN WELL (FT) | PULLED OUT (FT) | LEFT IN WELL (FT) | GIVE DEPTH AND METHOD OF PARTING CASING (SHOT, RIPPED, ETC.) | PACKERS AND SHOES |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

WAS WELL FILLED WITH MUD-LADEN FLUID? ☐ Yes ☒ No

INDICATE DEEPEST FORMATION CONTAINING FRESH WATER

## NAME AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

| NAME | ADDRESS | DIRECTION FROM THIS WELL |
|---|---|---|
| Charles Huppe | | East |
| Jerry Highfill | | South |
| Russell Scott | | West |
| Donald Jacobs | | North |

**METHOD OF DISPOSAL OF MUD PIT CONTENTS:** water evaporated, cuttings buried on location

**NOTE** FILE THIS FORM IN DUPLICATE WITH: (USE REVERSE SIDE FOR ADDITIONAL DETAIL)

**CERTIFICATE** I, the undersigned, state that I am the V.P. of the PR Operating L.P. (Company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

SIGNATURE: Brian J. Lankford

DATE: 7/1/08

MO 780-0217 (6-06)

REMIT TWO (2) COPIES TO: GEOLOGICAL SURVEY PROGRAM, PO BOX 250, ROLLA, MO 65402 573/ 368-2143.
ONE (1) COPY WILL BE RETURNED.

DETAIL OF FORMATIONS PENETRATED

| FORMATION | TOP | BOTTOM | DESCRIPTION (SEE * BELOW) |
|---|---|---|---|
| | | | |

CONFIDENTIAL
#20369
until 7-8-09

# SEE ATTACHED

on OGC-5

| | |
|---|---|
| **NOTE** | * Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open flowing and shut-in pressures, and recoveries. |
| **INSTRUCTIONS** | Attach drillers log or other acceptable log of well if available.<br>This Well Completion or Recompletion report and well log shall be filed with the Missouri State Geologist not later than 30 days after project completion. |

MO 780-0217 (6-06)

BATES COUNTY, MISSOURI
P R OPERATING COMPANY NO. 1 JACOBS
NE SW NW Sec. 24, T. 42 N., R. 33 W.
FNL FWL
API NO: 29-013- 20369
SPUD SEPTEMBER 26, 2007

UNIQUE ID: 423324003
GL ELEVATION 1014 FT FROM DREXEL TOPO MAP
GPS LAT 38.43566241 N, LONG -94.52467823 W
GPS 781 FNL 768 FWL
717 FT TOTAL DEPTH
TD OCTOBER1, 2007

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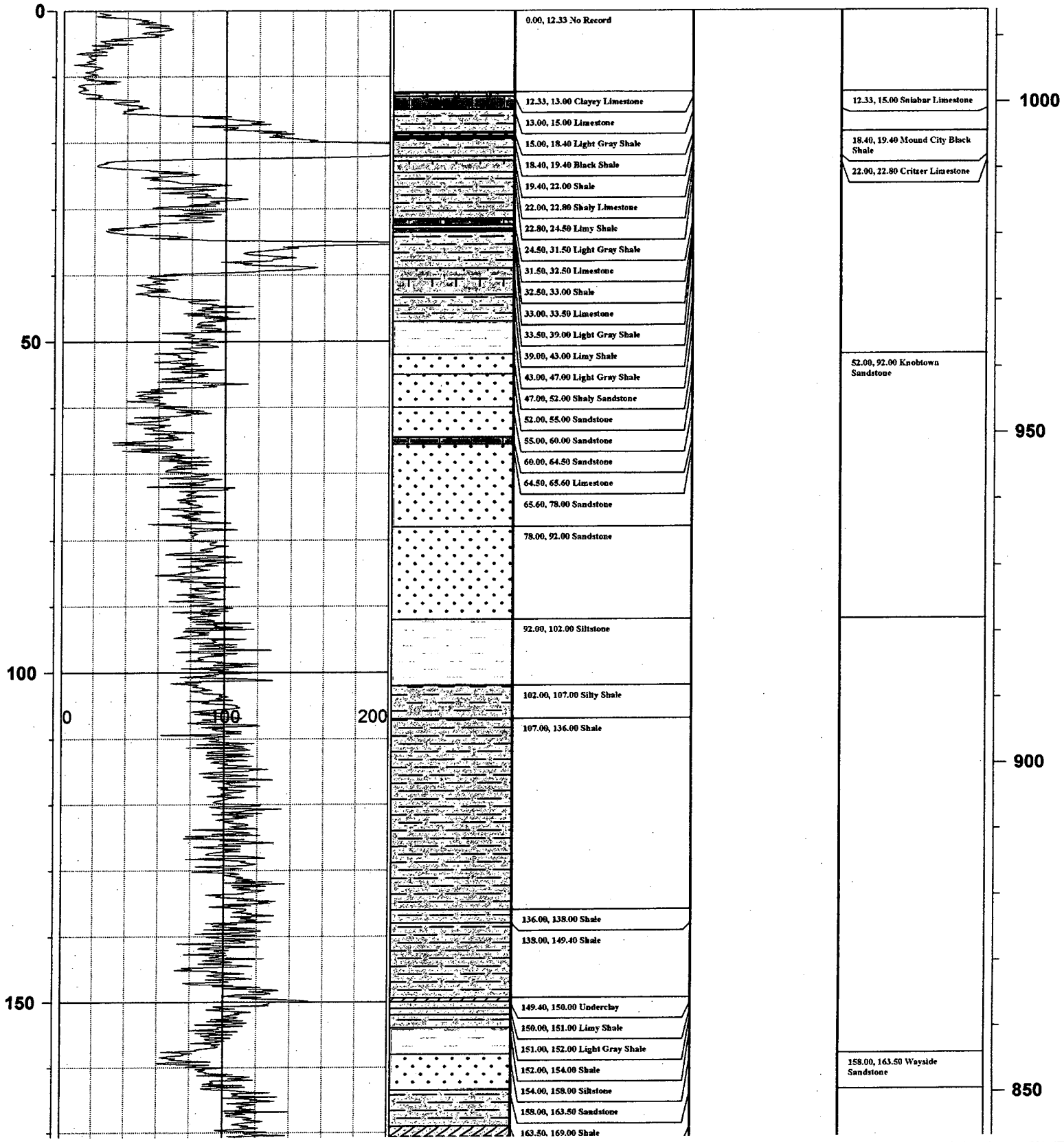

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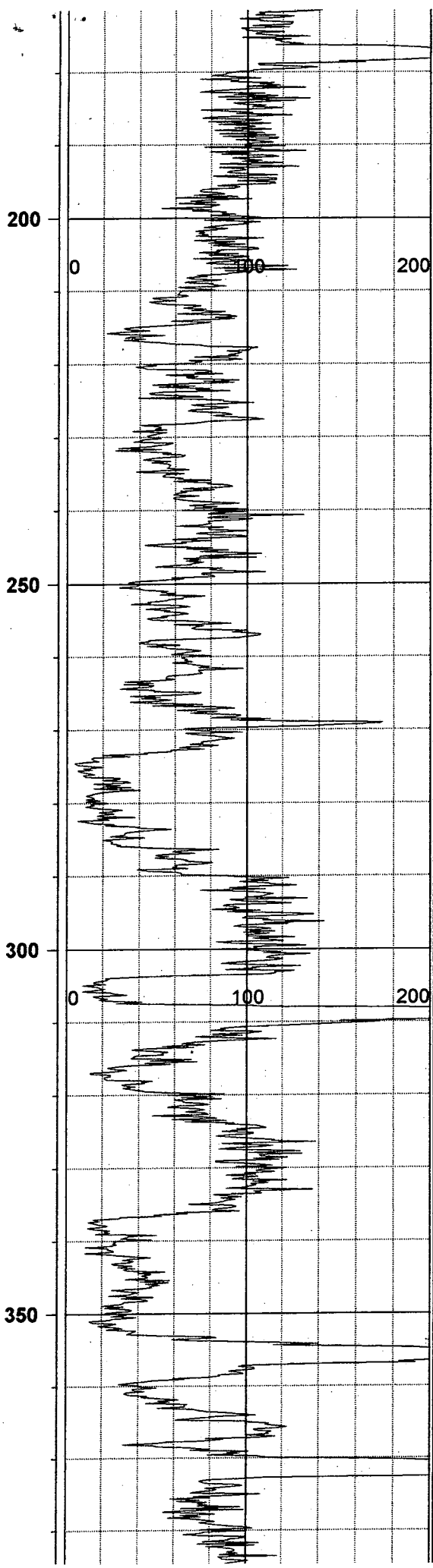


169.00, 173.00 Underclay
173.00, 177.50 Bluish Gray Shale
177.50, 178.17 Black Shale
178.17, 179.40 Shale
179.40, 179.60 Siltstone
179.60, 180.00 Shale
180.00, 180.20 Coal
180.20, 185.50 Underclay
185.50, 186.00 Silty Shale
186.00, 206.00 Sandstone
206.00, 216.00 Sandstone
216.00, 220.80 Sandstone
220.80, 234.60 Sandstone
234.60, 234.80 Shale
234.80, 238.00 Sandstone
238.00, 238.20 Shale
238.20, 246.00 Sandstone
246.00, 246.20 Shale
246.20, 256.00 Sandstone
256.00, 261.00 Sandstone
261.00, 262.30 Sandstone
262.30, 264.00 Sandstone
264.00, 266.00 Limestone
266.00, 268.29 Limy Shale
268.29, 269.08 Coal
269.08, 270.50 Shale
270.50, 289.20 Limestone
289.20, 302.40 Shale
302.40, 307.00 Limestone
307.00, 308.38 Shale
308.38, 310.00 Carbonaceous Shale
310.00, 310.83 Coal
310.83, 311.20 Underclay
311.20, 319.00 Sandstone
319.00, 323.17 Shale
323.17, 323.33 Coal
323.33, 328.00 Shale
328.00, 332.00 Silty Shale
332.00, 337.00 Shale
337.00, 353.00 Limestone
353.00, 354.00 Shale
354.00, 357.00 Carbonaceous Shale
357.00, 360.00 Underclay
360.00, 369.79 Limestone
369.79, 371.17 Carbonaceous Shale
371.17, 372.13 Coal
372.13, 372.21 Sandstone
372.21, 372.33 Coal
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177.50, 178.17 Black Shale, No Gas Show
219.00, 220.00 Oil Show
220.80, 221.00 Oil Show
221.40, 221.80 Oil Show
222.00, 223.00 Oil Show
228.80, 235.60 Oil Show
235.80, 238.00 Oil Show
243.00, 244.00 Oil Show
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257.00, 259.00 Oil Show
268.29, 269.08 10.5" Coal, Canistered, 25+ scf/st
308.38, 310.00 1' 7.5" Black Shale, Canistered, 5+ scf/st
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340.60, 341.70 Oil Show in Fractures and Porosity
366.00, 368.00 Dead Oil in Fractures
369.79, 371.17 1' 4.5" Black Shale, Canistered, <3 scf/st
371.17, 372.33 11.5" Coal, Canistered, 25+ scf/st

177.50, 178.00 South Mound Black Shale
186.00, 264.00 Hepler Sandstone
264.00, 266.00 Amoret Limestone
268.29, 269.08 Mulberry Coal Bed
270.50, 289.20 Coal City Limestone
289.20, 302.40 Mine Creek Shale
302.40, 307.00 Myrick Station Limestone
308.38, 310.00 Anna Black Shale
310.00, 310.83 Lexington Coal Bed
311.20, 319.00 Englevale Sandstone
323.20, 323.40 Alvis Coal Bed
337.00, 353.00 Higginsville Limestone
354.00, 357.00 Binkley Black Shale
360.00, 369.79 Blackjack Creek Limestone
369.79, 371.17 Excello Black Shale
371.17, 372.33 Mulky Coal Bed

800
750
700
650

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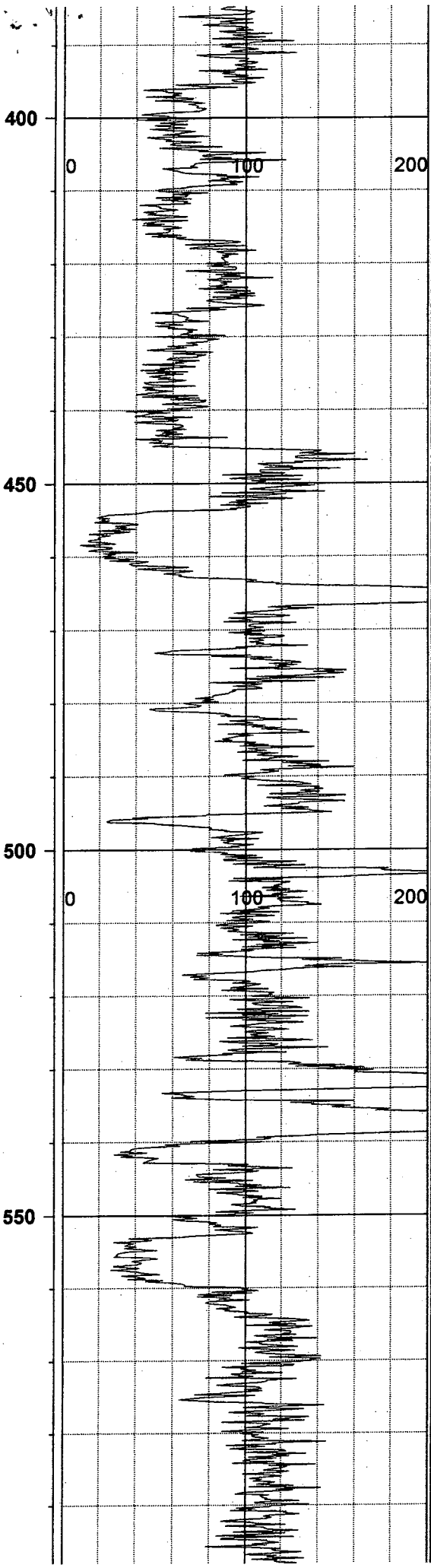


376.00, 396.00 Siltstone

396.00, 404.00 Sandstone

404.00, 408.00 Siltstone

408.00, 415.00 Sandstone

415.00, 425.00 Siltstone

425.00, 445.00 Sandstone

445.00, 450.80 Shale

450.80, 451.00 Limestone

451.00, 452.25 Shale

452.25, 452.75 Coal

452.75, 454.00 Limy Shale

454.00, 462.00 Limestone

462.00, 464.00 Limy Shale

464.00, 465.25 Carbonaceous Shale

465.25, 472.50 Shale

472.50, 473.17 Coal

473.17, 479.00 Shale

479.00, 481.75 Limestone

481.75, 483.00 Shale

483.00, 484.75 Limestone

484.75, 489.00 Light Gray Shale

489.00, 495.25 Dark Gray Shale

495.25, 496.75 Coal

496.75, 503.33 Siltstone

503.33, 504.46 Coal

504.46, 511.80 Shale

511.80, 512.40 Black Shale

512.40, 513.60 Limy Shale

513.60, 515.00 Black Shale

515.00, 515.03 Coal

515.03, 515.50 Black Shale

515.50, 516.00 Shale

516.00, 517.50 Siltstone

517.50, 524.58 Shale

524.58, 526.06 Black Shale

526.06, 527.00 Limestone

527.00, 530.67 Black Shale

530.67, 532.42 Coal

532.42, 535.08 Shale

535.08, 536.00 Black Shale

536.00, 536.08 Coal

536.08, 539.00 Shale

539.00, 541.33 Sandstone

541.33, 542.75 Black Shale

542.75, 542.83 Coal

542.83, 546.40 Siltstone

546.40, 546.80 Dark Gray Shale

546.80, 550.00 Siltstone

550.00, 551.50 Shale

551.50, 560.00 Sandstone

560.00, 561.00 Siltstone

561.00, 562.60 Sandstone

562.60, 571.20 Shale

402.60, 403.50 Oil Show

408.40, 415.00 Bleeding Oil and Gas

472.50, 473.17 8" Coal, Canistered, 60+ scf/st

490.29, 491.29 1' Dark Gray Shale, Canistered, <3 scf/st

495.25, 496.75 1' 6" Coal, Canistered, 40+ scf/st

503.33, 504.46 1' 1.5" Coal, Canistered, 40+ scf/st

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529.42, 530.67 1' 3" Black Shale, Canistered, 10+ scf/st

530.67, 532.42 1' 9" Coal, Canistered, 70+ scf/st

535.08, 536.00 11" Black Shale, Canistered, <5 scf/st

541.33, 542.75 1' 5" Black Shale, Canistered, <5 scf/st

396.00, 404.00 Upper Squirrel Sandstone

408.00, 415.00 Middle Squirrel Sandstone

425.00, 445.00 Lower Squirrel Sandstone

452.25, 452.75 Wheeler Coal Bed

454.00, 462.00 Ardmore Limestone

464.00, 465.25 Oakley Black Shale

472.50, 473.17 Croweburg Coal Bed

481.75, 481.75 Fleming Coal Horizon

495.25, 496.75 Mineral Coal Bed

503.33, 504.46 Scammon Coal Bed

512.40, 512.40 Lower Scammon Coal Horizon

512.40, 513.60 Tiawah Limestone Horizon

515.00, 515.03 Tebo Coal Bed

530.67, 532.42 Weir-Pittsburg Coal Bed

536.30, 536.50 Cainsville Coal Bed

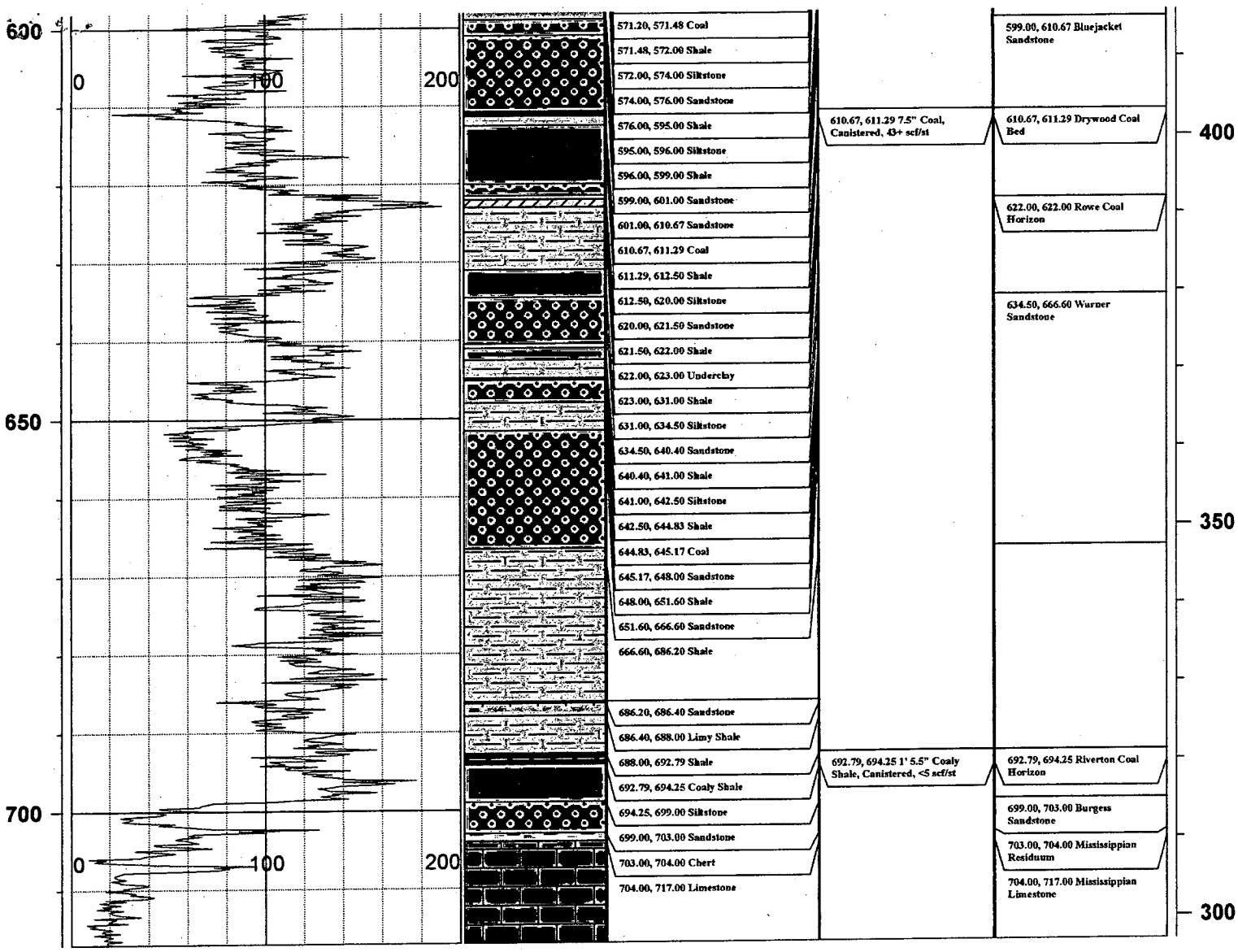
539.00, 541.50 Middle Bartlesville Sandstone

542.75, 542.83 Princeton Coal Bed

551.50, 562.60 Lower Bartlesville Sandstone

571.20, 571.48 Lower Weir Coal Bed

600
550
500
450

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**P R OPERATING COMPANY NO. 1 JACOBS**

**Lithologic Log and Correlations by David C. Smith, Geologist, February 4, 2008**

**From Gamma Ray Log and Graphic Core Log by K. David Newell, Geologist**

Schlumberger BlueView :