

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

31-31-12W
Form ACO-1
September 1999
Form Must Be Typed

COPY

Operator: License # 9482
Name: National Petroleum Reserves, Inc.
Address: 250 N. Rock Rd.
City/State/Zip: Wichita, KS 67206
Purchaser: Undetermined
Operator Contact Person: T.C. Bredehoff
Phone: (316) 681-3515
Contractor: Name: Sterling Drilling
License: 5142
Wellsite Geologist: Ken LeBlanc

Designate Type of Completion:

☒ New Well ☐ Re-Entry ☐ Workover
☐ Oil ☐ SWD ☐ SIOW ☐ Temp. Abd.
☒ Gas ☐ ENHR ☐ SIGW
☐ Dry ☐ Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:

Operator: _____
Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
☐ Deepening ☐ Re-perf. ☐ Conv. to Enhr./SWD
☐ Plug Back ☐ Plug Back Total Depth
☐ Commingled ☐ Docket No. _____
☐ Dual Completion ☐ Docket No. _____
☐ Other (SWD or Enhr.?) ☐ Docket No. _____

| | | |
|-----------------------------------|-----------------|---|
| 3-25-02 | 4-01-02 | 4-19-02 |
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |

API No. 15 - 15-007-22701-00-00
County: Barber
ap. NE NE NE Sec. 31 Twp. 31 S. R. 12 ☐ East ☒ West
360 feet from S / N (circle one) Line of Section
370 feet from E / W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

(circle one) NE SE NW SW
Lease Name: Raleigh Well #: 1
Field Name: Maryhall
Producing Formation: Tarkio Sandstone
Elevation: Ground: 1557 Kelly Bushing: 1568
Total Depth: 4693 Plug Back Total Depth: 4285
Amount of Surface Pipe Set and Cemented at 306' Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☒ No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan See 1 EN 7-23-02
(Data must be collected from the Reserve Pit)
Chloride content 5,000 ppm Fluid volume 460 bbls
Dewatering method used Hauled to Mac SWD
Location of fluid disposal if hauled offsite: _____
Operator Name: Bemco Inc.
Lease Name: Mac License No.: 32613
Quarter NW Sec. 7 Twp. 32 S. R. 11 East ☒ West
County: Barber Docket No.: CD78217

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: TC Bredehoff, II
Title: Vice-President Date: 5-2-02
Subscribed and sworn to before me this 2nd day of May
2002
Notary Public: Susan E. Bredehoff
Date Commission Expires: _____

SUSAN E. BREDEHOFT
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 5-13-05

KCC Office Use ONLY

☒ Letter of Confidentiality Attached
If Denied, Yes ☐ Date: _____
☒ Wireline Log Received
☒ Geologist Report Received
☐ UIC Distribution

Operator Name: National Petroleum Reserves, Inc. Lease Name: RaleighSec. 31 Twp. 31 S. R. 12 East ☒ West County: Barber

COPY

Well #: 1RECEIVED
JULY 28 2002
KOCMCHITA

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

 Drill Stem Tests Taken ☒ Yes No
 (Attach Additional Sheets)

 Samples Sent to Geological Survey ☒ Yes No

 Cores Taken Yes ☒ No

 Electric Log Run ☒ Yes No
 (Submit Copy)

List All E. Logs Run:

DI, Cal, CDN, PE

☒ Log Formation (Top), Depth and Datum Sample

Name Top Datum

Indian Cave 2629 -1061

Tarkio Sand 2808 -1240

Heebner 3519 -1951

Lansing 3711 -2143

Mississippian 4213 -2645

Viola 4461 -2893

Simpson Sh. 4541 -2973

CASING RECORD New Used

Report all strings set-conductor, surface, intermediate, production, etc.

| 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" | 20# | 306' | 60/40 pox | 220 | 2% gel 3% cc |
| Production | 7 7/8" | 4 1/2" | 10.5# | 4,327' | AA-2 | 225 | 10% salt |
| | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | #Sacks Used | Type and Percent Additives |
|--|------------------|----------------|-------------|----------------------------|
| <input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone | | | | |
| | | | | |
| | | | | |

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) | Depth |
|----------------|---|---|-------|
| 8 | 2809-2812 | 250 gal 7.5 % MCA acid with 40% methano | 2812 |
| | | | |
| | | | |
| | | | |
| | | | |

| TUBING RECORD | Size | Set At | Packer At | Liner Run |
|---|-----------|---|-------------|--|
| | 2 3/8" | 2789' | NA | Yes <input checked="" type="checkbox"/> No |
| Date of First, Resumed Production, SWD or Enhr. Waiting on pipeline con. | | Producing Method | | |
| | | <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) | | |
| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio Gravity |
| | NA | AOF 420 mcfgl | trace | |

Disposition of Gas METHOD OF COMPLETION Production Interval

☐ Vented ☒ Sold ☐ Used on Lease
 (If vented, Submit ACO-18.)

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled
☐ Other (Specify)

ORIGINAL

National Petroleum Reserves, Inc.

Drill Stem Tests

#1 Raleigh

NE NE NE Sec. 31, 31s-12w

Barber County, KS

DST #1 3925-3940 K.C. Drum 30-30-30-30

1st open weak to 11 inches, 2nd open weak to 6 inches

Rec: 375' Muddy Water

F.P.'s: 41-159 & 166-209

S.I.P.'s: 1507 - 1506

DST #2 Straddle Test 4536-4561 Simpson Sand 30-30-60-60

1st open weak to 7 inches, 2nd open weak to 10 inches

Rec: 360' Muddy Water

F.P.'s: 41-142 & 147-199

S.I.P.'s: 1672.- 1684

DST #3 Hook-Wall Test 2801-2837 Tarkio Sand 30-30-90-90

1st open weak to 10 inches, 2nd open good off btm. in 1 minute, GTS in 55 min.

Rec: 400' gas cut heavy drilling mud.

Max gauge 15 MCFGPD after 90 min.

F.P.'s: 220-194 & 194 - 173

S.I.P.'s 856 - 1194