| Form 3160-5 (August 1999) E SUNDR Do not use th abandoned w | V-Dist. 2 Venue FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000 82-10 NM-NM53218 6. If Indian, Allottee or Tribe Name N/A | | | |
|--|--|---|--|--|
| 1. Type of Well Oil Well 2. Name of Operator Devon-SFS Operating, Inc 3a. Address 20 N. Broadway, Suite 150 4. Location of Well (Footage, See SHL: 1716' FNL & 1128' F BHL: 660' FNL & 660' FW | 0, OKC, OK 73102 <i>T., R., M., or Survey Descriptio</i> FWL, Unit E, Section 34 L, Unit D, Section 34-T2 | well 3b. Phone No. (includ (405)552-4595 V on) I-T21S-R24E, Eddy 21S-24E, Eddy Cnty | e area code) lally Frank Cnty, NM , NM | 7. If Unit or CA/Agreement, Name and/or No. N/A 8. Well Name and No. Right Hand Canyon "34" Federal #3 9. API Well No. 30-015- 321477 10. Field and Pool, or Exploratory Area Indian Basin (Upper Penn Assoc.) 11. County or Parish, State Eddy County New Mexico |
| 12. CHECK AP | PROPRIATE BOX(ES) TO | O INDICATE NATU | RE OF NOTICE, F | REPORT, OR OTHER DATA |
| If the proposal is to deepen dire Attach the Bond under which the following completion of the invi- testing has been completed. Fin determined that the site is ready Devon-SFS is requesting a setting 9 5/8" surface casis sheets for each. | approval to amend the A | Deepen Fracture Treat New Construction Plug and Abandon Plug Back inent details, including esti Ily, give subsurface locatic vide the Bond No. on file w results in a multiple comp filed only after all requirer pplication for Permit sing and 7" product | ns measured and true v ith BLM/BIA. Require etion or recompletion in nents, including reclam to Drill for the Ri on casing. Attac | Well Integrity Other Amend APD other Amend APD andon my proposed work and approximate duration thereof. ertical depths of all pertinent markers and zones. d subsequent reports shall be filed within 30 days in a new interval, a Form 3160-4 shall be filed once ation, have been completed, and the operator has ght Hand Canyon "34" Federal #3 by hed please find the casing design |
| 14. I hereby certify that the foregoin Name (<i>Printed/Typed</i>) | ng is true and correct 05) 552-4520 R-Jraham | Title | ering Tech. 2002 | RECEILD STOCD ARTISIA |

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

→ETROLEUM ENGINEER Date JAN 1 0 2002

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

| Well | name: |
|------|-------|
|------|-------|

Right Hand Canyon 34 "D" #3

Operator: String type:

e: Production

Location: 660' FNL & 660' FWL, Sec. 34, T21S, R24E

Devon SFS Operating, Inc.

| Design parameters: Collapse | Minimum design Collapse: | factors: | Environment: H2S considered? | Yes | | |
|---|-----------------------------|---------------|---------------------------------|--|---------------|--|
| Mud weight: Design is based on evacu | 8.400 ppg lated pipe. | Design factor | 1.125 | Surface temperature: Bottom hole temperature Temperature gradient: Minimum section length | 0.80 °F/100ft | |
| | | Burst: | | | , | |
| | | Design factor | 1.00 | | | |
| Burst | | U | | | | |
| Max anticipated surface | | | | | | |
| pressure: | 3,753 psi | | | | | |
| Internal gradient: 0.000 psi/ft | | Tension: | | Directional Info - Build & Hold | | |
| Calculated BHP | 3,753 psi | 8 Round STC: | 1.80 (J) | Kick-off point | 5000 ft | |
| | • | 8 Round LTC: | 1.80 (J) | Departure at shoe: | 1171 ft | |
| Annular backup: | 8.50 ppg | Buttress: | 1.60 (J) | Maximum dogleg: | 1.5 °/100ft | |
| · | | Premium: | 1.50 (J) | Inclination at shoe: | 22.38 ° | |
| | | Body yield: | 1.60 (B) | | | |
| | Tension is based on | air weight. | | | | |

Neutral point: 7,638 ft

Estimated cost: 6

63,690 (\$)

| Run Seq | Segment Length | Size | Nominal Weight | Grade | End Finish | True Vert Depth | Measured Depth | Drift Diameter | Est. Cost |
|------------|-------------------|----------------------|--------------------|---------------|-------------------|--------------------|-------------------|---------------------|-------------------|
| | (ft) | (in) | (lbs/ft) | | | (ft) | (ft) | (in) | (\$) |
| 3 | 1100 | 7 | 23.00 | HCL-80 | LT&C | 1100 | 1100 | 6.25 | 10679 |
| 2 | 4900 | 7 | 23.00 | J-55 | LT&C | 5989 | 6000 | 6.25 | 25710 |
| 1 | 2812 | 7 | 23.00 | HCL-80 | LT&C | 8600 | 8812 | 6.25 | 27301 |
| Run Seq | Collapse Load | Collapse Strength | Collapse Design | Burst Load | Burst Strength | Burst Design | Tension Load | Tension Strength | Tension Design |
| | (psi) | (psi) | Factor | (psi) | (psi) | Factor | (kips) | (kips) | Factor |
| 3 | 480 | 4891 | 10.19 | 3753 | 6340 | 1.69 | 197.8 | 485 | 2.45 J |
| 2 | 2613 | 3030 | 1.16 | 3267 | 4360 | 1.33 | 172.5 | 313 | 1.81 J |
| 1 | 3753 | 5650 | 1.51 | 1108 | 6340 | 5.72 | 60.1 | 485 | 8.08 J |

Prepared W.M. Frank by: Devon Energy Phone: (405) 552-4595 FAX: (405) 552-4621 Date: January 3,2002 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 8600 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Right Hand Canyon 34 "D" #3

Operator:

String type: Surface

Location: 660' FNL & 660' FWL, Sec. 34, T21S, R24E

Devon SFS Operating, Inc.

| Design parameters: <u>Collapse</u> Mud weight: 8.500 ppg Design is based on evacuated pipe. | | | | Collapse: | Minimum design factors: Collapse: Design factor 1.125 | | | Environment:H2S considered?NoSurface temperature:90 °FBottom hole temperature:104 °FTemperature gradient:0.80 °F/100ftMinimum section length:1,000 ftMinimum Drift:2.250 in | | |
|--|---|---------------------------------------|--|---|---|--|---|---|---|--|
| <u>Burst</u> | Surface pressure: 250 psi <u>irst</u> Max anticipated surface | | | | Burst: Design factor 1.00 | | | | | |
| Inter Calc | ressure: nal gradient ulated BHP ular backup: | | 971 psi 0.000 psi/ft 971 psi 8.50 ppg | Tension: 8 Round S 8 Round L Buttress: Premium: | | 1.80 (J) 1.80 (J) 1.60 (J) 1.50 (J) | Non-directional string. | | | |
| | | | | Body yield | s based on air | 1.60 (B) | Re subsequent strings: Next setting depth: Next mud weight: Next setting BHP: Fracture mud wt: Fracture depth: Injection pressure | | 8,600 ft 8.800 ppg 3,931 psi 11.000 ppg 1,700 ft 971 psi | |
| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (Ibs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost (\$) | |
| 1 | 1700 | 9.625 | 32.30 | H-40 | ST&C | 1700 | 1700 | 8.876 | 14057 | |
| Run Seq î | Collapse Load (psi) 1001 | Collapse Strength (psi) 1370 | Collapse Design Factor 1.37 | Burst Load (psi) 971 | Burst Strength (psi) 2270 | Burst Design Factor 2.34 | Tension Load (kips) 54.9 | Tension Strength (kips) 254 | Tension Design Factor 4.63 J | |

Prepared W.M. Frank by: Devon Energy Phone: (405) 552-4595 FAX: (405) 552-4621

Date: January 3,2002 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 1700 ft, a mud weight of 8.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.