

Submit 3 Copies To Appropriate District Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103

May 27, 2004

WELL API NO.

30-015-35513

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

South Culebra Bluff 23

8. Well Number 020

9. OGRID Number

227588

10. Pool name or Wildcat  
Loving; Brushy Canyon East

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other Water Injection

2. Name of Operator

Range Operating New Mexico, Inc.

3. Address of Operator

100 Throckmorton St., Ste. 1200, Fort Worth, TX 76102

AUG 29 2007

4. Well Location

OCD-ARTESIA

Unit Letter K : 2460 feet from the South line and 2460 feet from the East line  
Section 23 Township 23S Range 28E NMPM Eddy County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
3001' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☒ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

7-18-07 - Spud well @ 1200 PM 7-18-07 and drill to 347'. Hole 12.25", Ran 8 jts, 345', 24#, J-55, New LTC, 8.625" csg. Cmt'd same to w/300 sx Class 'C' + 2% CaCl<sub>2</sub>. Tagged TOC at 25'.

7-19-07 - Test csg 1000 psi for 30 mins, OK. WOC 23.5 hrs. Drlg. 7 7/8" hole.

7-27-07 - Reached TD 7-27-07 @ 1630 pm

7-28-07 - Ran 149 jts, 6,347', 15.5#, J-55, new LTC, 5.5" csg. Set csg @ 6347'. Cmt'd w/350 sx. 35-65-6C+5%Salt+3/10%FL-52S+4# LCM (LEAD) & 100 sx. 15-61-11-C + 6/10%FL-25 + 6/10% FL-52A + 5/10%BA-1 (TAIL).

7-29-07 - Tested casing to 3000 psig for 30 mins, OK. Waited on cement 24 hrs.

8-13-07 - MIRU. Test BOP Blind Rams to 1000 psig for 5 mins, OK. TIH. Test BOP Pipe Rams to 1000 psig. Tagged PBTD at 6255'. Circulate hole clean. Test casing to 1000 psi for 30 mins, OK. POOH. Perforate 6228'-6240', 6198'-6210', 6188'-6192', and 6128'-6177' (Lower Brushy Canyon) w/4 JSPF, 90 DEG phasing, 0.35" EHD, 308 holes.

8-14-07 - Acidized perfs with 3,850 Gallons 15% NEFE acid. POOH.

8-15-07 - RIH w/5-1/2" x 2-3/8" Nickel Coated Arrowset 1-X pkr, 1.43" ID 'F' profile nipple w/on-off tool, Fiber Line Adaptor and 198 jts 2-3/8", 4.7#, J-55, 8R, EUE Fiber Lined tubing to 6095.35' Set packer. Test casing to 500 psig, OK. Open by-pass & circulate packer fluid. Re-set packer. ND BOP, NU WH. Tested casing to 500 psig for 30 mins, OK. RDMO

8-24-07 - Topped off annulus with 27 sx cement to surface.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Bill May for LCS TITLE Sr. Engineering Tech DATE 8/29/07

Type or print name Linda C. Stiles

E-mail address: lstyles@rangeresources.com

Telephone No. (817) 869-4208

For State Use Only

APPROVED BY: FOR RECORDS ONLY TITLE \_\_\_\_\_

DATE AUG 31 2007

Conditions of Approval (if any):

Well Name: SCB 23-20

Field: Loving

County: Eddy

State: New Mexico

08/13/07

**SCB 23-20**

**AFE # 06-04-13-0438**

**Eddy NM**

**Day 1**

**PURPOSE OF WK: COMPLETION.** MIRU I & J WS UNIT #4 / NU BOP / TALLIED TUB / RU GRACO REV RIG / TST BOP BLIND RAMS 1000# / 5 MIN / OK / PU 4 3/4 RR BIT BS 6 3 1/4 DC'S / XO SUB / TIH W/ 1 JT 2 7/8'S TBG / TST BOP PIPE RAMS 1000# 5 MIN / OK / FINISHED TIH PICKING UP TBG / TAGGED PBTD @ 6255 RU & CIRC HOLE CLEAN W/ PROD H2O / CLOSED PIPE RAMS & TST CSG TO 1000# / 30 MIN OK / TOH STANDING UP WS / LD DC'S & BIT / MIRU ENERTECH WL TRK / PU GR-CCL TOOL / RIN & TAGGED PBTD @ 6247 / CORL W/ BAKER ATLAS OPEN HOLE LOG DATED 7/14/07 & LOGGED BACK TO 4000FT. POH LD GR-CCL TOOL / PU 3 3/8 DISP CSG GUN LOADED W/ 4 JSPF 32gr CHARGES 90dg PHASED RIH & CORL W/ GR-CCL LOG & PERF 6198-6210 & 6228-6240 TOTAL 96 SHOTS / TOH / LD GUN #1 / ALL SHOTS FIRED / PU GUN #2 / 3 3/8 DISP CSG GUN LOADED 4 JSPF 32gr CHARGES 90dg PHASED / RIH CORL W/ GR-CCL LOG & PERF 6188-6192 TOTAL 16 SHOTS / POH / LD GUN #2 / ALL SHOTS FIRED. PU GUN #3 A 3 3/8'S DISP CSG GUN LOADED 4 JSPF 32gr CHARGES 90dg PHASED / RIN CORL W/ GR-CCL LOG & PERF 6128-6177 TOTAL 196 SHOTS / POH / LD GUN / ALL SHOTS FIRED / RD MO WL TRK. PU 2 7/8 X 5 1/2 15.5# ARROW SET HD PKR & 5 1/2 15.5# T-S RBP / RIH ON 10 STDS & SINGLE 2 7/8'S WS / CWI / SWIFN.

**Daily Cost \$30,328**

**Cum Cmpl Cost \$0**

**Cum Well Cost \$30,328**

08/14/07

**SCB 23-20**

**AFE # 06-04-13-0438**

**Eddy NM**

**Day 2**

**PURPOSE OF WK: COMPLETION.** OPEN WELL -0- PSI / FINISHED TIH W/ TOOLS / SET RBP @ 6077 PK @ 6062 / MI RU PETROPLEX ACID PMP & PSI TST LINES TO 4000# / OK / ON TBG PSI TO 4000# & TST RBP TBG & PK / OK UNSET PK & PLUG / MOVED RBP TO 6245 / POOH & SET PK @ 6220 / OPENED BY PASS / BROKE CIRC W/ PROD H2O / PMP 600 GAL 15% NEFE HCL PLUS 21 BBL PROD H2O / CLOSED BY PASS PSI TBG TO 2900# / FORMATION TAKING FLUID @ 1.2 BPM / ACID ON FORMATION PSI FELL TO 1800# / INCREASED RATE TO 4 BPM @ 2100# / W/ 30 BBL FLUSH PMP PSI 1700# 5 BPM / FORMATION COMMUNICATED / SD ISIP VAC / UNSET PK & POOH TO 6179 / PSI TBG / FORMATION COMMUNICATED / SD / ISIP VAC / MOVED PK TO 6070 / ON ACID PMP 3250 GAL 15% NEFE HCL @ 5 BPM 1800# / WHEN ACID ON FORMATION INCREASED RATE TO 7 BPM @ 2200# / STARTED FLUSH @ 7 BPM 2200# & PMP 48 BBL PROD H2O / OVER FLUSHED 4 BBL / FINAL PMP PSI 2200# @ 7 BPM / ISIP 160# / 5 MIN VAC / TLAWTR 181 BBL / RD MO ACID PMP / UNSET PK / RIH & RET RBP / TOH LD WS / STOOD BACK 10 STDS / LD TOOLS / RIH W/ 10 STD KILL STRING / CWI SWIFN.

**Daily Cost \$17,005**

**Cum Cmpl Cost \$0**

**Cum Well Cost \$47,333**

AUG 29 2007  
OCD-ARTESA

**Well Name: SCB 23-20**

Field: Loving

County: Eddy

State: New Mexico

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08/15/07

**SCB 23-20**

**AFE # 06-04-13-0438**

**Eddy NM**

**Day 3**

**PURPOSE OF WK: COMPLETION.** OPEN WELL -0- PSI / TOH & LD DWN 20 JTS 2 7/8'S WS / UN LOAD & TALLEY 2 3/8'S TBG / CHANGE PIPE RAMS IN BOP / PU 2 3/8'S X 5 1/2 ARROW SET 1-X NICHOL PLATED PLASTIC LINED PK W 1.43 "F" PROFILE NIPPLE W O&O TOOL ON TOP / WL ENT GUIDE ON BTM / TIH ON 198 JTS OF 2 3/8'S FIBER LINED 4.7# J-55 8RD EUE TBG / SET TOOL @ 6091.45 / LOAD & PSI TST CSG TBG & PK TO 500# / OK / OPEN BY-PASS & CIRC HOLE W PK FLUID / CLOSE BY-PASS / ND BOP / NU WELL HEAD / PSI TST PK TBG & CSG TO 500# FOR 30 MIN / OK / RD MO WO UNIT.

**TBG DETAIL:**

|                                                  |         |
|--------------------------------------------------|---------|
| KB                                               | 17.00   |
| 198 JTS OF 2 3/8'S 4.7# J-55 FIBER LINED 8RD TBG | 6068.55 |
| FIBER LINE ADPTER                                | .70     |
| O&O TOOL W 1.43 "F" NIPPLE                       | 1.45    |
| ARROW SET 1-X PACKER 2 3/8'S X 5 1/2             | 7.25    |
| WL ENTRY GUIDE                                   | .40     |
| END OF TBG STRING                                | 6095.35 |
| PACKER ELEMENT                                   | 6091.85 |

**Daily Cost \$20,003**

**Cum Cmpl Cost \$0**

**Cum Well Cost \$67,336**

**FINAL REPORT**

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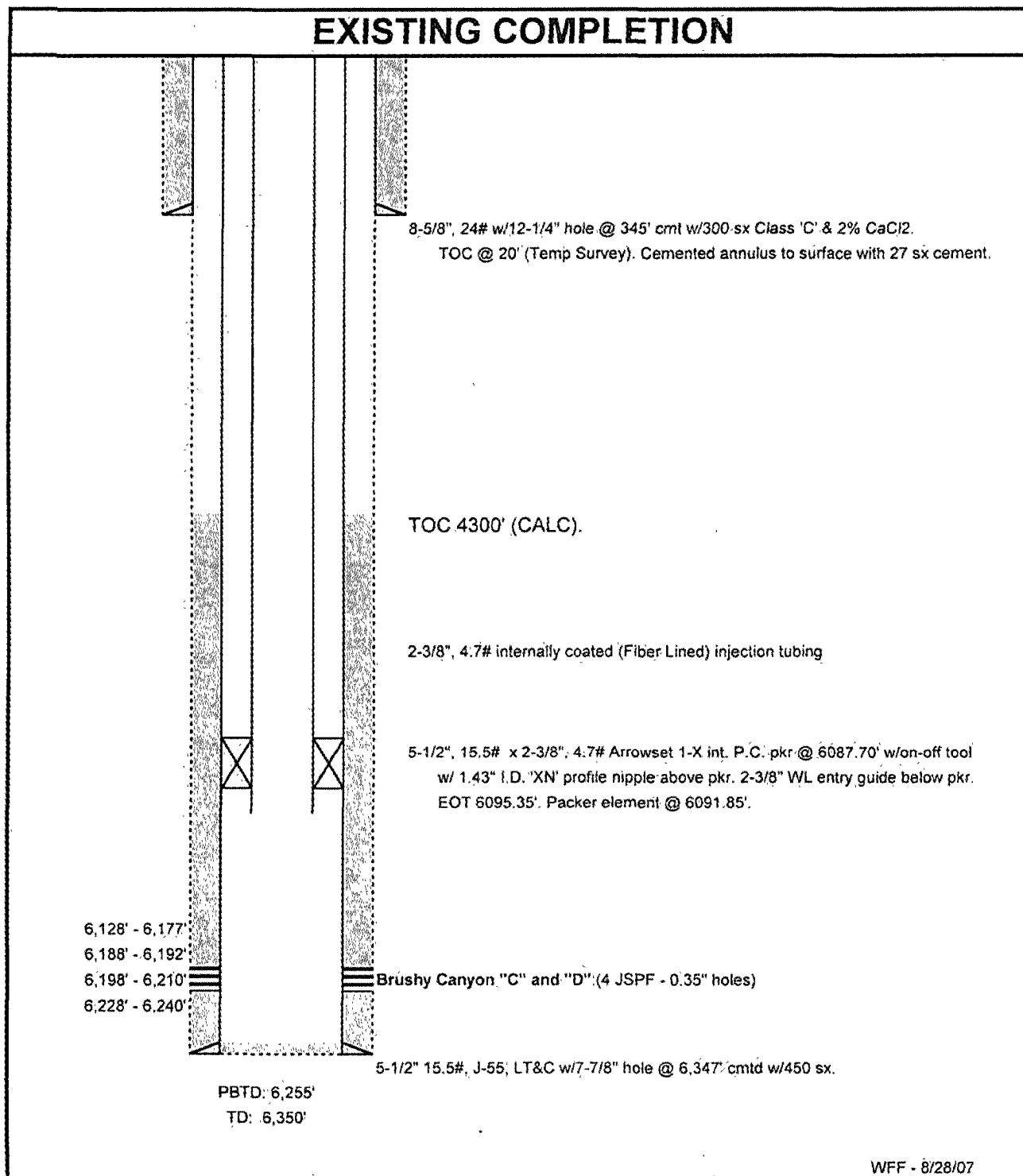
RANGE RESOURCES

LEASE: SCB  
FIELD: Loving East  
LOCATION: Sec 23, T23S, R28E

WELL #: 23-20  
COUNTY: Eddy  
LEGAL: 2460' FSL & 2460' FEL

API#: 30-015-35513  
STATE: New Mexico  
KB: 3018' (KB 17')

## EXISTING COMPLETION



# Tubing Detail

## SCB 23-20 Tbg Detail :

|                                                                              | Length<br>(ft) | Depth<br>(ft) |
|------------------------------------------------------------------------------|----------------|---------------|
| KB                                                                           | 17.00          |               |
| 198 Jts. Fiber Lined Tbg, 2-3/8", 4.7#, J-55, 8R, EUE tbg, 1.73 I.D.         | 6068.55        | 17.00         |
| Fiber Line Adapter                                                           | 0.70           | 6085.55       |
| On-Off Tool w/1.43" ID 'F' Profile Nipple                                    | 1.45           | 6086.25       |
| 2-3/8" x 5-1/2" Arrow set 1-X Pkr, Nickle plated w/ Internal Plastic Coating | 7.25           | 6087.70       |
| 2 3/8 WL Entry Guide                                                         | 0.40           | 6094.95       |
| <b>END OF TUBING</b>                                                         |                | 6095.35       |
| Packer Element                                                               |                | 6091.85       |