

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

Form C-103
May 27, 2004

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

WELL API NO.	30-025-37489
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	R E Cole
8. Well Number	4
9. OGRID Number	147179
10. Pool name or Wildcat	Penrose Skelly; Grayburg

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

2. Name of Operator
Chesapeake Operating Inc.

3. Address of Operator
P.O. Box 11050
Midland, TX 79702-8050

4. Well Location
Unit Letter N : 460 feet from the South line and 2310 feet from the West line
Section 16 Township 22S Range 37E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3375 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: Add Perfs and Re-Frac ☒

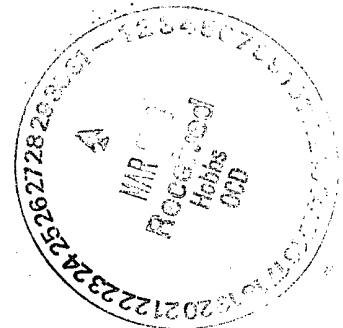
SUBSEQUENT REPORT OF:

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.

Chesapeake, respectfully, request to add perfs and frac this well per the attached procedure.



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 NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE Shay Stricklin TITLE Production/Regulatory Asst. DATE 03/28/2006

Type or print name Shay Stricklin
For State Use Only

E-mail address: sstricklin@chkenergy.com Telephone No. (432)687-2992

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE _____
Conditions of Approval (if any): _____

APR 03 2006

R. E. Cole #4
Lea County, New Mexico
Grayburg Add Perfs and Re-frac Procedure

Date: March 27, 2006

Location: 16-T22S-R37E

Production Casing: 5 1/2" 15.5# J-55 LT&C 0-4504', ID-4.950", Drift-4.825", Burst-4,810#

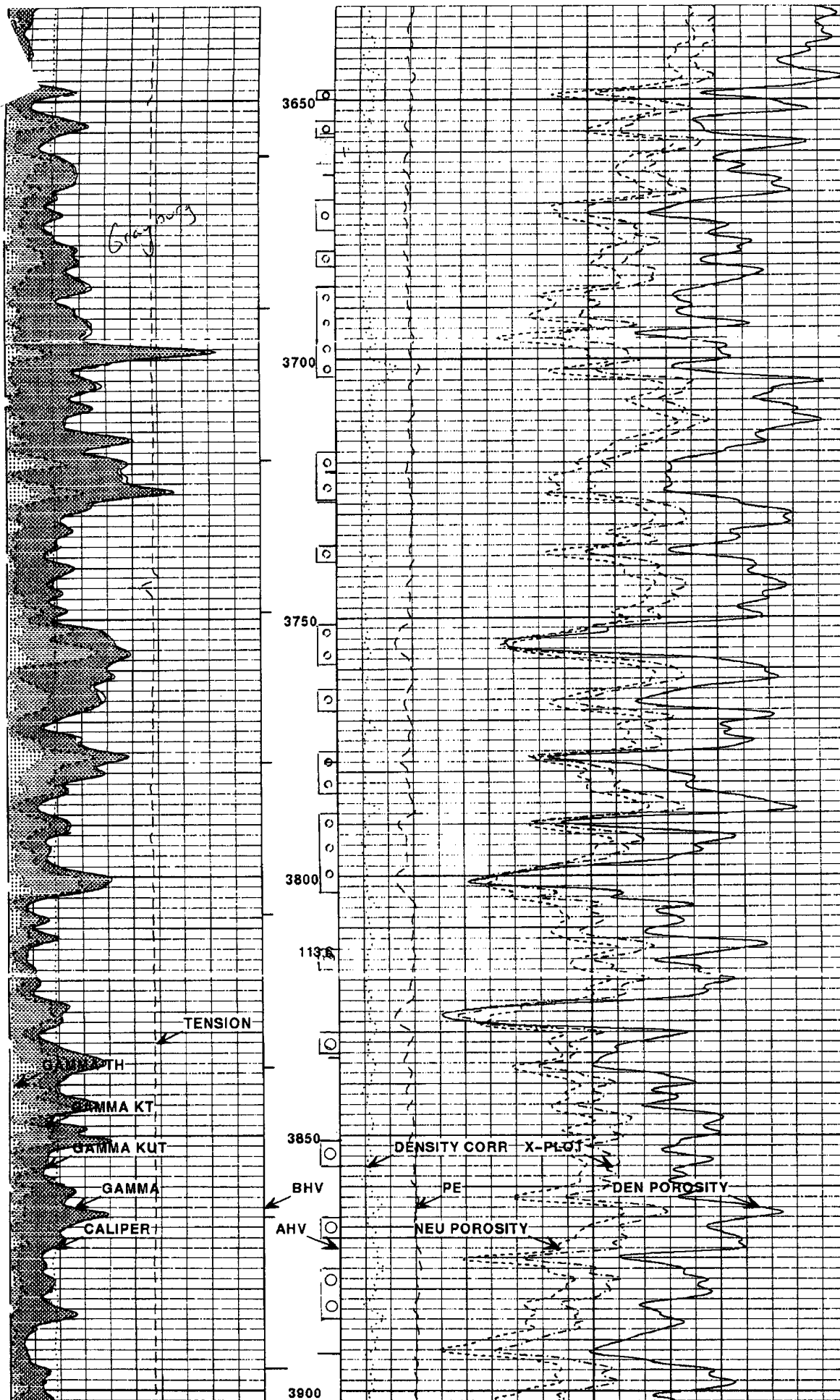
PBTD/TD: 3,910' / 4,504'

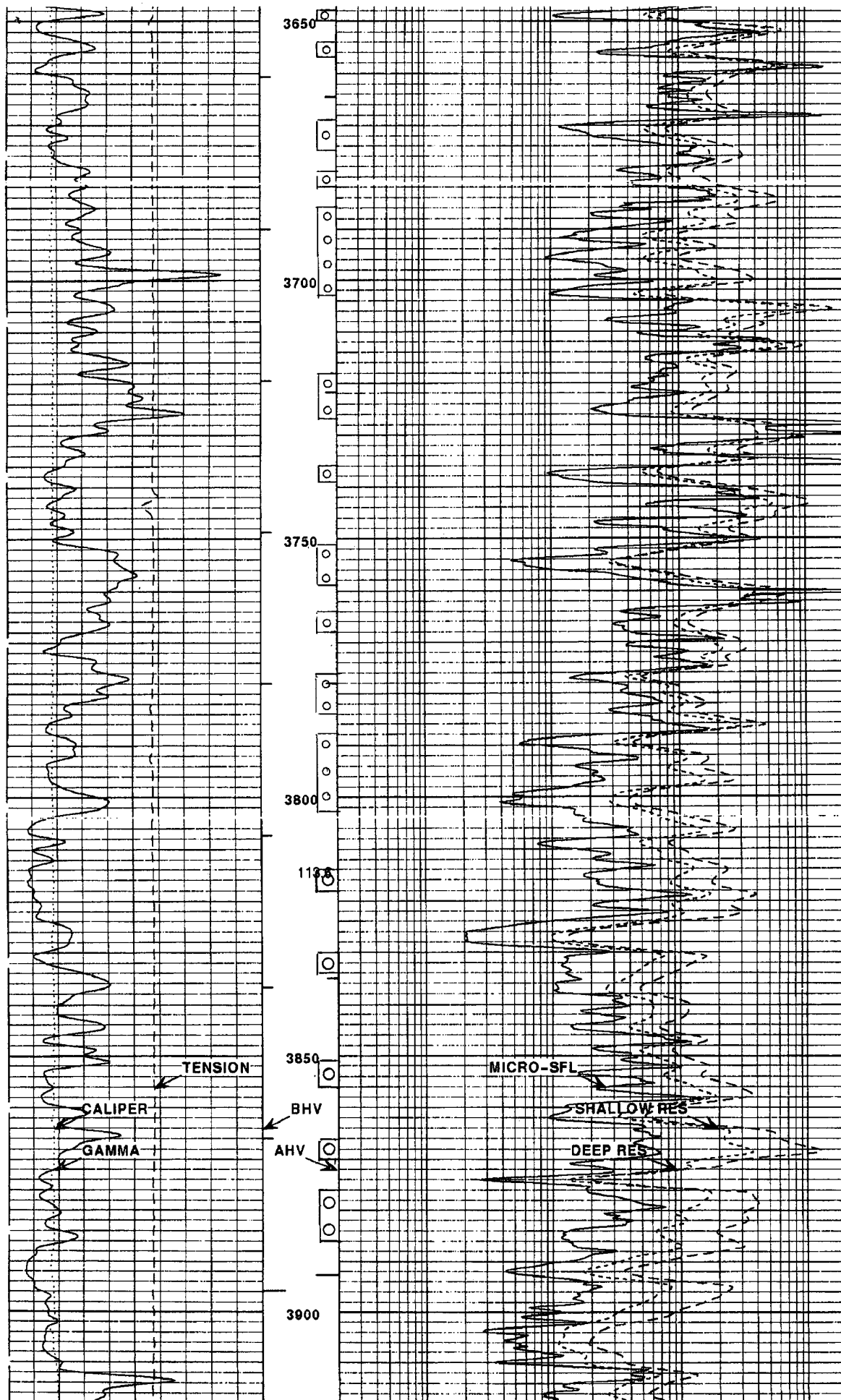
Current Perfs: Grayburg 3648-3803'
San Andres 3956-3962', 4000-4100' (below CIBP)

Proposed Perfs: Grayburg 3814-3886' OA

Recommended Procedure:

1. MIRU PU. NDWH/NUBOP. POH w/ rods and tbg.
2. RU Wireline Co. Perforate Grayburg:
3814-18' (4')
3830-34' (4')
3851-56' (5')
3866-70' (4')
3876-86' (10') (Total 27') w/ 2 JSPF, 120° phased. RDMO Wireline Co.
3. RIH w/ 5 1/2" packer on 2 7/8" tbg to 3900'. Spot acid across perfs. Pull packer up hole to 3810', reverse spot acid back into tubing, set packer. Acidize Grayburg perfs w/ 3,000 gal 15% NEFE acid @ 5-6 bpm, dropping 85 7/8" ball sealers evenly throughout job. Displace acid to bottom perf. (if acid communicates during job, pull packer to 3600' and continue acid job dropping an additional 200 perf balls.) SI 30 mins and swab test.
4. Release packer and run down through perfs to knock off perf balls. POH w/ packer.
5. Frac Grayburg down 5 1/2" casing per frac design (anticipate 60 bpm gel water system w/ 200,000# sand). Flow well back. Check for fill-up. Clean out casing as needed.
6. RIH w/ production equipment and put on pump from Grayburg. RDMO completion rig.





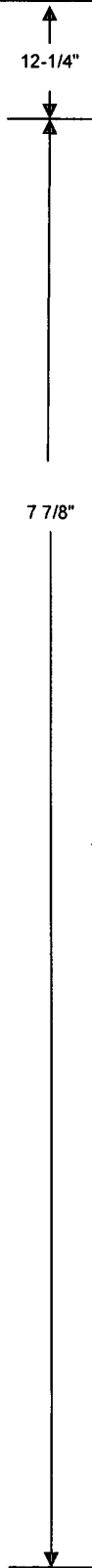
CURRENT WELLBORE SCHEMATIC
CHESAPEAKE OPERATING INC.



WELL : R E COLE #4
FIELD : PENROSE SKELLY (GRAYBURG)
COUNTY : LEA STATE : NEW MEXICO
LOCATION : 460' FSL & 2,310' FWL of Sec 16-T22S -R37E
ELEVATION : 3,375' GR 3,386' KB

API #: 30-025-37489
SPUD DATE: 12/02/05
RIG RELEASED: 12/10/05
FIRST SALES: 1/24/06
CHK Property #: 819674

HOLE SIZE



8-5/8 24# J-55 STC Surf. csg @ 360'
Cmt w/227 sx Cl C + 1% CaCl₂ + 0.25
pps Celloflake, 14.8 ppg & 1.34 yld.
Full Returns.

Well Completion History:

01/04/06 RIH w/104 jt 2-3/8" tbg, tag @ 4,412'.
01/05/06 Gd cmt bond evident thru out interval logged, TOC @ surf.
Perf San Andres 4,000-4,100' w/2 spf (200 holes). Perf Grayburg
3,656-662' w/2 spf (12 holes). Perf San Andres 3,956-962' w/2 spf
(12 holes). Fluid level dropped approx 150' during perf. RIH w/pkr &
SN, subs & tbg. Set pkr @ 3,972'. Acdz San Andres, note
communication w/perfs @ 3,956-62'. Flush surf lines w/KCl. Rel pkr,
POOH. Flush annulus w/10 bbl KCl. Reset pkr @ 3,867'. continue
acdz San Andres w/5,000 gal 15% NEFe HCl using 300 - 7/8" 1.3 BS
thruout. Flush to perfs w/KCl. Fm BD w/1790#, max PSI 1943#, avg
PSI 1350#, max rate 5.2 BPM, avg rate 5.2 BPM, 162 BLWTR, ISIP
850#, 5' 575#, 10' 395#, 15' 283#, wk ball action during job w/avg incr
25# when balls on.
01/06/06 Tbg on vac. Swb, 25 BW, shw 1-5% oil.
01/07/06 Continue swb. Ck for H₂S, found gas had 50 ppm H₂S, ck rig
monitors.
01/08/06 Swab, 2 BO, 104 BW, lt gas blw btwn runs.
01/10/06 Swab, 144 BF, 2% oil cut, fair gas
01/11/06 POOH w/tbg & pkr. Set CIBP @ 3,930', dump 20' cmt. RIH
w/pkr & 2-7/8" tbg, set pkr. Tst CIBP to 2000#, OK. Rel pkr, POOH w/
tbg & pkr. Perf Grayburg 3,648-50', 3,654-57', 3,669-75', 3,679-82',
3,686-703', 3,718-727', 3,736-739', 3,751-759', 3,764-768', 3,776-84',
3,788-803' w/2 spf (156 holes). RIH w/32A pkr, SN & 110 jt 2-7/8" tbg
to 3,582'.
01/12/06 Spot 210 gal 15% NEFe acid @ 3,803'. PU to 3,567', rev acid
into tbg w/5 bbl 2% KCl. Set pkr @ 3,567'. Pmp 2 bbl 2% KCl @ 1.7
BPM, fm broke 1750-1230#. Acdz Grayburg w/5,000 gal 15% NEFe
acid, drop 240 BS, no ball action. Flush w/26 bbl 2% KCl. Avg rate 5
BPM, max rate 5 BPM, min rate 5 BPM, avg PSI 1487#, max PSI 1531#,
min PSI 1440#, ISIP 1156#, 5' 996#, 10' 913#, 15' 817#, 178 BLWTR.
FB 2 BW. IFL surf, swb 4.5 hr 88 BF, 4% oil last run, FFL 2,000'.
01/13/06 IFL 1,500', top 500' of run 100% oil, swab 3 hr 40 BW, 4%
OC, fair gas, ck H₂S @ 15,000 ppm. Continue swbg.
01/17/06 Kill w/15 bbl 2% KCl down tbg, rel pkr. RIH to 3,828' to wipe
balls. POOH w/tbg, SN & pkr.
01/18/06 Frac Grayburg w/27,000 gal Dyna-Frac 20 pad, csg loaded
w/ 32 bbl, 40 BPM @ 1562#, pump 14,994 gal sd laden w/44,300#
Brown 16/30, stage 2 ppg & 3 ppg, press incr w/3 ppg into fm fr 40
BPM @ 1600-2250#, 93 bbl into 3# stage, pump 5 bbl flush. Screen out
w/5000#. 34,642# sd in fm, left 9658# sd in csg, avg sd laden 40 BPM
@ 2572#. Bleed 200# press off csg, total load 1,075 bbl. RIH w/4-3/4"
bit & 106 jt 2-7/8" tbg to tag sd @ 3,471'. POOH to 2,656', MIRU rev
unit & swivel, circ sd until clean @ 2,656'.
01/19/06 CO to 3,461', circ hole ctn, POOH to 2,623'.
01/20/06 CO to PBTD @ 3,910'. Circ hole ctn, POOH to 2,623'.
01/21/06 14 hr SITP 0#, RIH, tag @ 3,902'. POOH w/tbg & bit. RIH w/
pkr, SN & tbg, set pkr @ 3,567'. Press pkr to 500#, OK. Swb, last 3
runs 10% oil & fair gas.
01/22/06 Swb, 10 BO, 158 BW
01/23/06 Swb, pmp 7 bbl 2% KCl down tbg, rel pkr. POOH w/tbg, SN &
pkr, RIH w/20' MA, 2-7/8" x 4' sub, 2-7/8" SN, 3 jt 2-7/8" J-55, 2-7/8" x 5
1/2" TAC & 108 jt 2-7/8" J-55 tbg, SN @ 3,627'.
01/25/06 RIH w/pump & rods. Space out w/1-1/2" x 26' spray metal
polish rod. Load w/6 bbl 2% KCl. Press up, pump up OK. Transfer 20
BO from half-tank to stock tanks, turn over to prod.
First gas sales to Targa on 1/24/06.
First oil sales to CEMI on 1/24/06.
01/26/06 24 hrs, 0 BO, 6 BW, 0 MCFG.
01/27/06 24 hrs, 0 BO, 102 BW, 0 MCFG, TP 200#, CP 400#.
01/28/06 24 hrs, 0 BO, 110 BW, 21 MCFG, TP 300#, CP 250#.

Rob & Pump Detail:
143 - 3/4" Norris KD rods
2-1/2" x 1-1/2" x 20' RHBC pump &
1-1/2" x 8' GA

Tubing Detail:
108 jt 2-7/8" J-55 tbg
2-7/8" x 5-1/2" TAC @ 3,527'
3 jt 2-7/8" J-55 tbg
2-7/8" SN @ 3,627'
2-7/8" x 4' PS
2-7/8" x 20' MA (Btm MA @ 3,652')

Added Grayburg perfs 3,648-803 OA w/2 spf (156 holes)
Grayburg perfs @ 3,656-662' w/2 spf (12 holes)

CIBP @ 3,930' w/20' cmt

Grayburg perfs @ 3,956-962' w/2 spf (12 holes)

San Andres perfs @ 4,000-4,100' w/2 spf (200 holes).

5-1/2" 15.5# J-55 LTC Prod csg @ 4,504'

Cmt
Lead w/480 sx Cl C + 5% salt + 0.2% FL25 + 0.25 pps
Celloflake, 12.5 ppg & 2.04 yld.
Tail w/335 sx Cl C + 2% salt + 0.8% BA10 + 0.3% CD32,
14.8 ppg & 1.35 yld.

TD @ 4,504'
PBTD @ 3,910'

PREPARED BY: Linda S. Fries

DATE: 12/12/05

UPDATED BY:

DATE:

JF