

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**OCD-ARTESIA****SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

5. Lease Serial No.

NM-89878

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Pending

8. Well Name and No.

Pavo Mesa 30 Federal Com No. 1

9. API Well No.

30-015-35918

10. Field and Pool, or Exploratory Area

Pavo Mesa; Abo

11. County or Parish, State

Eddy County, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

MAR 31 2008

2. Name of Operator

Cimarex Energy Co. of Colorado

OCD-ARTESIA

3a. Address

PO Box 140907; Irving, TX 75014-0907

3b. Phone No (include area code)

972-401-3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

30-16S-29E

SHL 1780' FNL & 330' FWL, BHL 1980' FNL & 330' FEL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Acidize☐ Deepen☐ Production (Start/Resume)☐ Water Shut-Off☐ Subsequent Report☒ Alter Casing☐ Fracture Treat☐ Reclamation☐ Well Integrity☐ Casing Repair☐ New Construction☐ Recomplete☒ Other Alter intermediate☒ Change Plans☐ Plug and Abandon☐ Temporarily Abandonand production casing &☐ Final Abandonment Notice☐ Convert to Injection☐ Plug Back☐ Water DisposalBOP

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof.

If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Cimarex has changed its intermediate and production casing plans as well as its BOP plans for all operations below the base of the surface casing (existing) as shown on the attached exhibits.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Natalie Krueger

Title

Regulatory Analyst

Signature

Date

March 14, 2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

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.

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.

(Instructions on reverse)

APPROVED

MAR 14 2008

WESLEY W. INGRAM
PETROLEUM ENGINEER

Revised Drilling Plan - Surface & Intermediate Casing & BOP
Cimarex Energy Co. of Colorado
Pavo Mesa 30 Federal Com No. 1
Unit E Section 30
T16S R29E Eddy County, NM

- 1 Location: SHL 1780' FNL & 330' FWL
 BHL 1980' FNL & 330' FEL
- 2 Elevation above sea level: 3701' GR
- 3 Geologic name of surface formation: Quaternary Alluvium Deposits
- 4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5 Proposed drilling depth: 11,064'
- 6 Estimated tops of geological markers:
San Andres 2,400'
Abo Shale 5,825'
Lower Abo Dolomite 7,000'
Wolfcamp 7,126'
- 7 Possible mineral bearing formation:
Abo Oil Primary

8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 340' (existing)	8.4 - 8.6	28-29	May lose circ	Fresh water gel spud mud
340' to 2,500'	10.0	28-29	May lose circ	Brine Water
2,500' to 7300' Pilot Hole	8.4 - 9.5	29-32	NC	Fresh water and brine, use hi-vis sweeps to keep hole clean
6810' KOP to 11064' MD 7040' TVD	9.0	29-32	NC	Brine Water

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

8a. Proposed drilling Plan

Drill pilot hole to 7300' and set 7" 26# P-110 LTC casing and cement. Set kick-off plug at 7010.' Kick off horizontal leg at 6810' and drill 7-7/8" hole to 11064' MD, 7040' TVD. Run 4½" 11.6# P-110 LTC Peak Completion Assembly, which will not require cementing.

Revised Drilling Plan - Surface & Intermediate Casing & BOP

Cimarex Energy Co. of Colorado

Pavo Mesa 30 Federal Com No. 1

Unit E

Section 30

T16S R29E

Eddy County, NM

9 Casing & Cementing Program:

Hole Size	Depth	Casing OD	Weight	Thread	Collar	Grade
17½"	0 to 340'	New 13½"	48#	8-R	STC	H-40
12¼"	0 to 2,500'	New 9⅝"	24# 90	8-R	LTC	J-55
8¾"	0 to 7,300'	New 7"	17# 26	8-R	LTC	P-110
6⅝"	0 to MD 11064' TVD 7040'	New 4½"	11.6#	8-R	LTC (800' BTC)	P-110

10 Cementing & Setting Depth:

*per operator -
3/14/08*

13⅝"	Surface	Set 340' of 13⅝" 48# H-40 STC <u>Lead:</u> 300 sx Thixotropic/Premium Plus + 10# Gilsonite + 10# Cal-Seal + 1% CaCl + 0.125# Poly-e-flake (wt 14.2, yld 1.64) <u>Tail:</u> 220 sx Premium Plus + 2% CaCl (wt 14.8, yld 1.35) TOC Surface
9⅝"	Intermediate	Set 2,500' of 9⅝" 24# J-55 LTC <u>Lead:</u> 415 sx Interfill C + 0.125# flocele (wt 11.9, yld 2.45) <u>Tail:</u> 215 sx Prem Plus + 1% CaCl (wt 14.8, yld 1.33) TOC Surface
7"	Pilot Hole	Set 7,300' of 7" 17# P-110 LTC <u>Lead:</u> 270 sx Interfill H + 0.1% HR-7 + 0.125# Poly-e-flake (wt 13.8, yld 2.76) <u>Tail:</u> 170 sx Super H + 0.5% Halad-344 + 0.4% CFR-3 + 1# Salt + 5# Gilsonite + 0.125# Poly-e-flake + 0.35% HR-7 (wt 13.2, yld 1.61) TOC 1300'
4½"	Liner	Set MD 11064' TVD 7040' of 4½" 11.6# P-110 LTC (800' BTC) Peak Completion Assembly liner will not require cementing.

Fresh water will be protected by setting 13⅝" casing at 340' and cementing to Surface
Hydrocarbon zones will be protected by setting 9⅝" casing at 2,500' and cementing to Surface
and by setting 7" casing at 7,300' and cementing to 1300'

Cimarex uses the following minimum safety factors:

Burst	Collapse	Tension
1.125	1.125	1.60

Revised Drilling Plan - Surface & Intermediate Casing & BOP

Cimarex Energy Co. of Colorado

Pavo Mesa 30 Federal Com No. 1

Unit E Section 30

T16S R29E Eddy County, NM

11 Pressure control Equipment:

see COA [Exhibit "E-1" - *Intermediate Casing* . A 9 $\frac{5}{8}$ " 3000 PSI ~~rotating head~~ B.O.P. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

9 5/8 Exhibit "E-2" - *Production Casing* . A ~~13 3/8~~ 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000# hydril. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

We are requesting a variance for testing the 13-3/8" surface casing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting to test the 13-3/8" casing to 1000 psi using rig pumps. The BOR will be tested to 5000 PSI by an independent service company.

SR & A

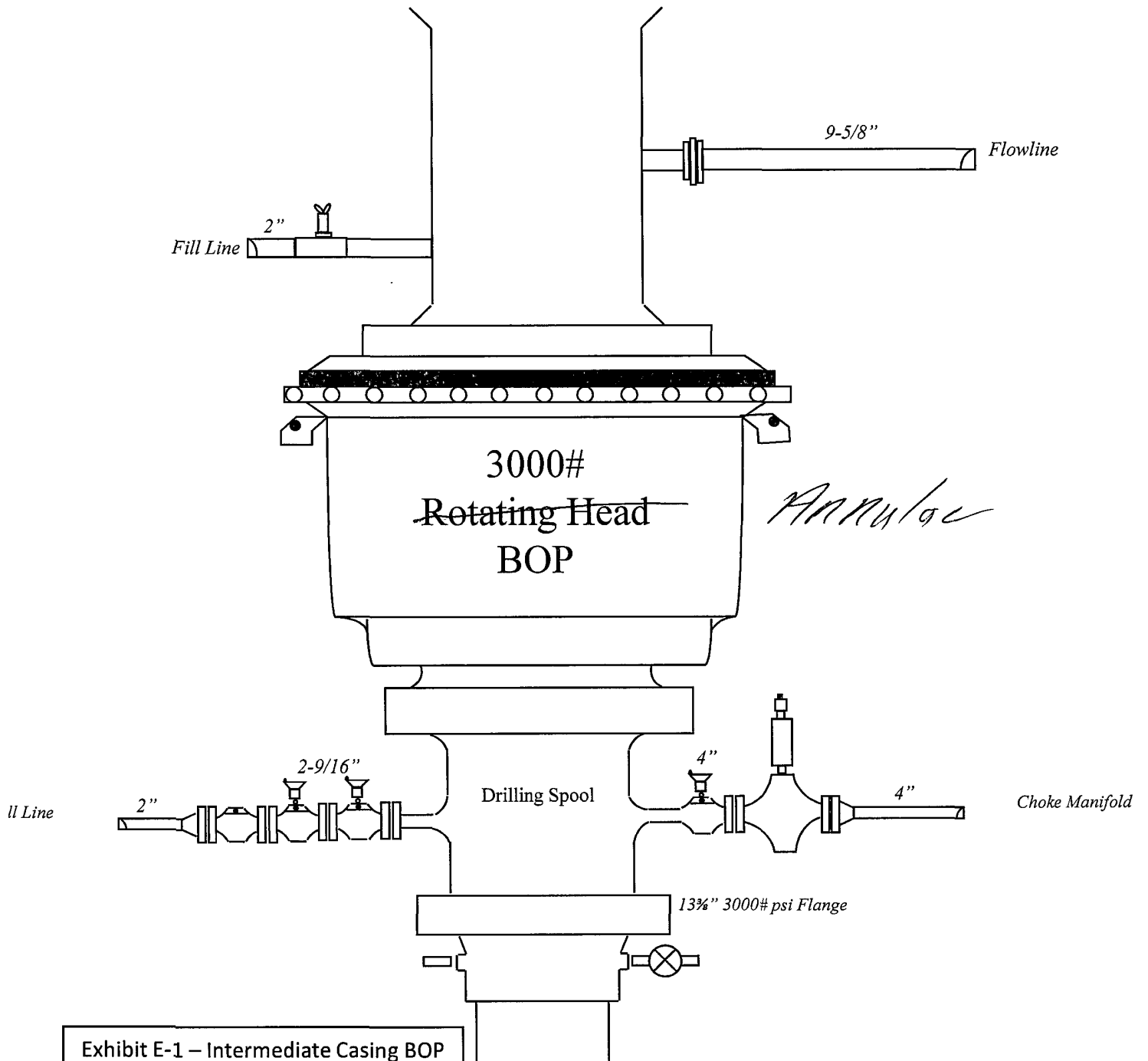


Exhibit E-1 – Intermediate Casing BOP
Pavo Mesa 30 Federal Com No. 1
Cimarex Energy Co. of Colorado
30-16S-29E
SHL 1780' FNL & 330' FWL
BHL 1980' FNL & 330' FEL
Eddy County, NM

SR & A

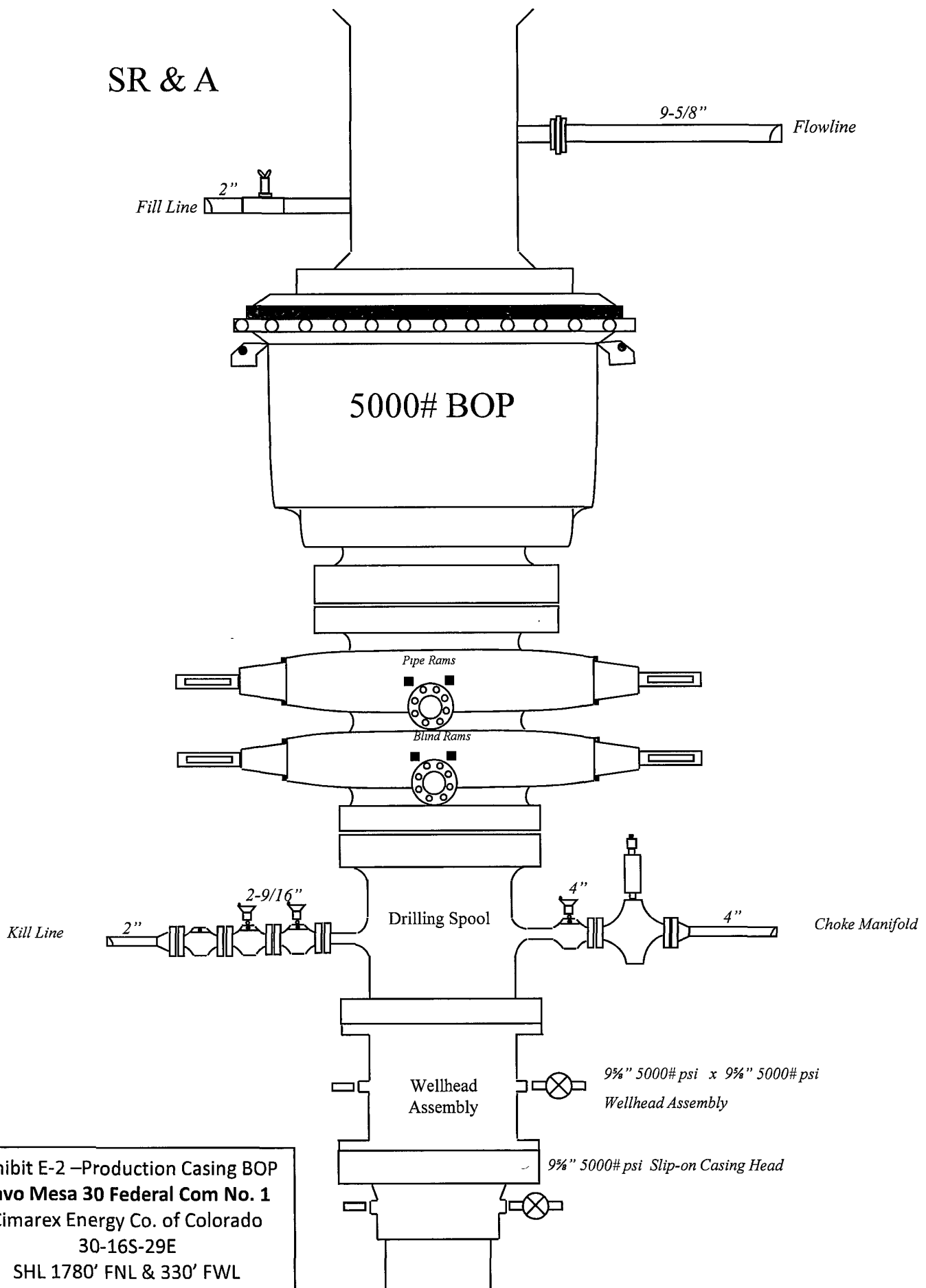


Exhibit E-2 –Production Casing BOP
Pavo Mesa 30 Federal Com No. 1
 Cimarex Energy Co. of Colorado
 30-16S-29E
 SHL 1780' FNL & 330' FWL
 BHL 1980' FNL & 330' FEL
 Eddy County, NM



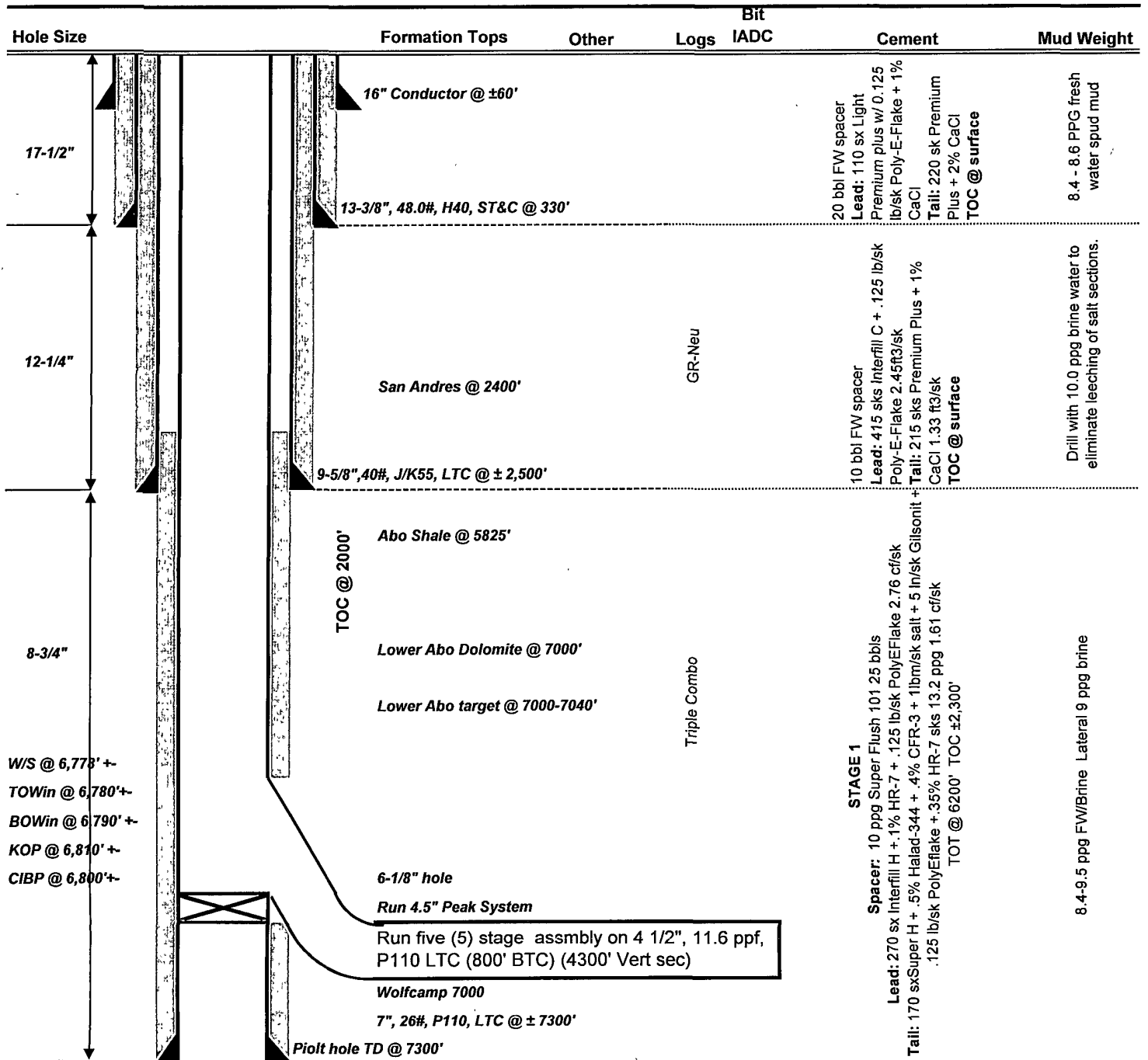
DRILLING PROGNOSIS
Cimarex Energy Company

2/27/2008

Well: Pavo Mesa 30 Fed #1H
Location: 30-16S-29E
County, State: Eddy County, NM
Surface Location: 1780 FNL, 330 FWL
Bottomhole Loc: 1980 FNL, 330 FEL
E-Mail:
Wellhead:

Lse Serial #:
Field:
Objective:
TVD/MD: 7300 / 11350
Cementing: Halliburton
Mud: Baroid
Motors:
OH Logs: Halliburton
Rig: Key 880
Offset Wells:

Xmas Tree
Tubing: 2 7/8" L80 EUE
Superintendent: Dee Smith
Engineer: Mark Audas



NOTES:

Install 13 3/4" 3000 psi flange and rotating BOP. Test to 1000 psi with rig pumps. Then after setting 9-5/8" casing, install 9-5/8" wellhead and NU BOP (5M) w/ rotating head and test BOP to 5M w/ test unit. Test casing.
Cement volumes for surface csg include a 100% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.
Cement volumes for intermediate csg include a 70% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.
Cement volumes for production csg include a 25% excess in the open hole section. Adjust volumes after caliper + 25% excess.

ALL INVOICES ARE TO SHOW CIMAREX ENERGY AS OPERATOR AND USE CIMAREX ACCOUNTING CODES.