

Form 3160-3
(August 1999)



NMOCD copies returned
for your disposition

~~CONFIDENTIAL~~

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
SF - 078046

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.
30560

8. Lease Name and Well No.
BW Federal 29-29-8 #101

9. API Well No.
30-045-31180

10. Field and Pool, or Exploratory
Basin - Fruitland Pool

11. Sec., T., R., M., or Blk. and Survey or Area

0 Sec. 29, T29N, R8W, N.M.P.M.

12. County or Parish
San Juan County

13. State
NM

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

CDX Rockies, LLC

215223

3a. Address 679 East 2nd Avenue, Suite #3
Durango, Colorado 81301

3b. Phone No. (include area code)
(970)247-4126

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 825' FNL, 772' FWL

At proposed prod. zone 825' FNL, 660' FWL, 660' FSL, 660' FEL

14. Distance in miles and direction from nearest town or post office*

4.5 miles Southwest of Navajo City, New Mexico

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 772'

16. No. of Acres in lease
2,538

17. Spacing Unit dedicated to this well

W/2 Sec. 29, T29N, R8W, N.M.P.M.

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 3,000'

19. Proposed Depth
3,150' TVD
10,000' +/- TMD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6,466' GL

22. Approximate date work will start*
October 15, 2002

23. Estimated duration
10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Name (Printed/Typed)

Alvin R. (Al) Arlian

Date

9/10/02

Title

Rocky Mountain Land Manager

Approved by (Signature)

/s/ David J. Mankiewicz

Name (Printed/Typed)

SEP 17 2002

Title

Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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)

HOLD C104 FOR status change to Hughes 29 L #1

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.8,
and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOCD

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2002 SEP 17 AM 10:25

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-31180		*Pool Code 71629	*Pool Name 070 FARMING PLANT BASIN FRUITLAND POOL	
*Property Code 30560	*Property Name B.W. FED. 29-29-8		*Well Number 101	
*OGED No. 215223	*Operator Name CDX ROCKIES, LLC.		*Elevation 5455	

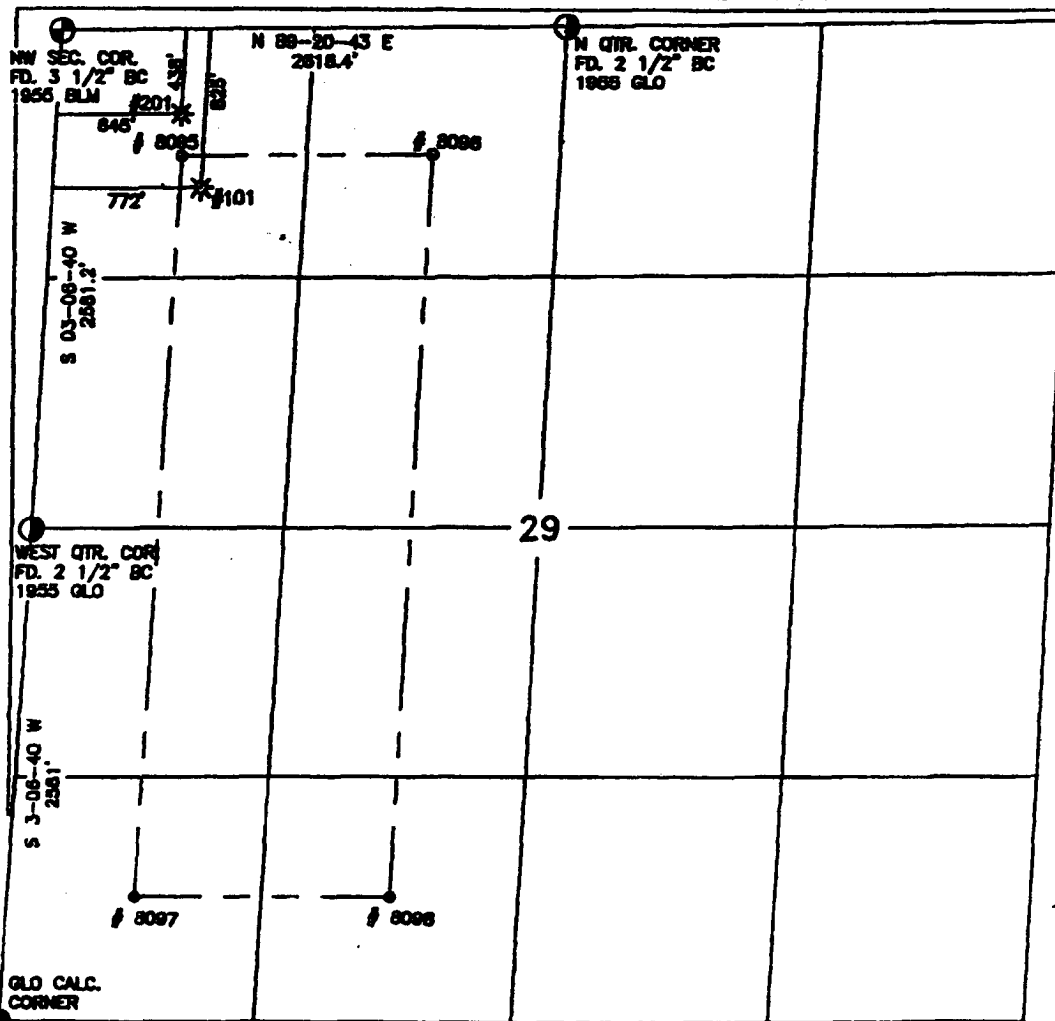
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
D	29	29-N	8-W		825	NORTH	772	WEST	SAN JUAN

¹¹ Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
D	29	29-N	8-W		SEE ATTACHED DEVIATED DRILLING PLANS				
*Dedicated Acres 320			*Joint or Infill N		*Consolidation Code		*Order No. NSL-4777		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

[Signature]
Signature

ALVIN R. ARLIAN
Printed Name
ROCKY MTN LAND MANAGER
Title

9-16-02
Date

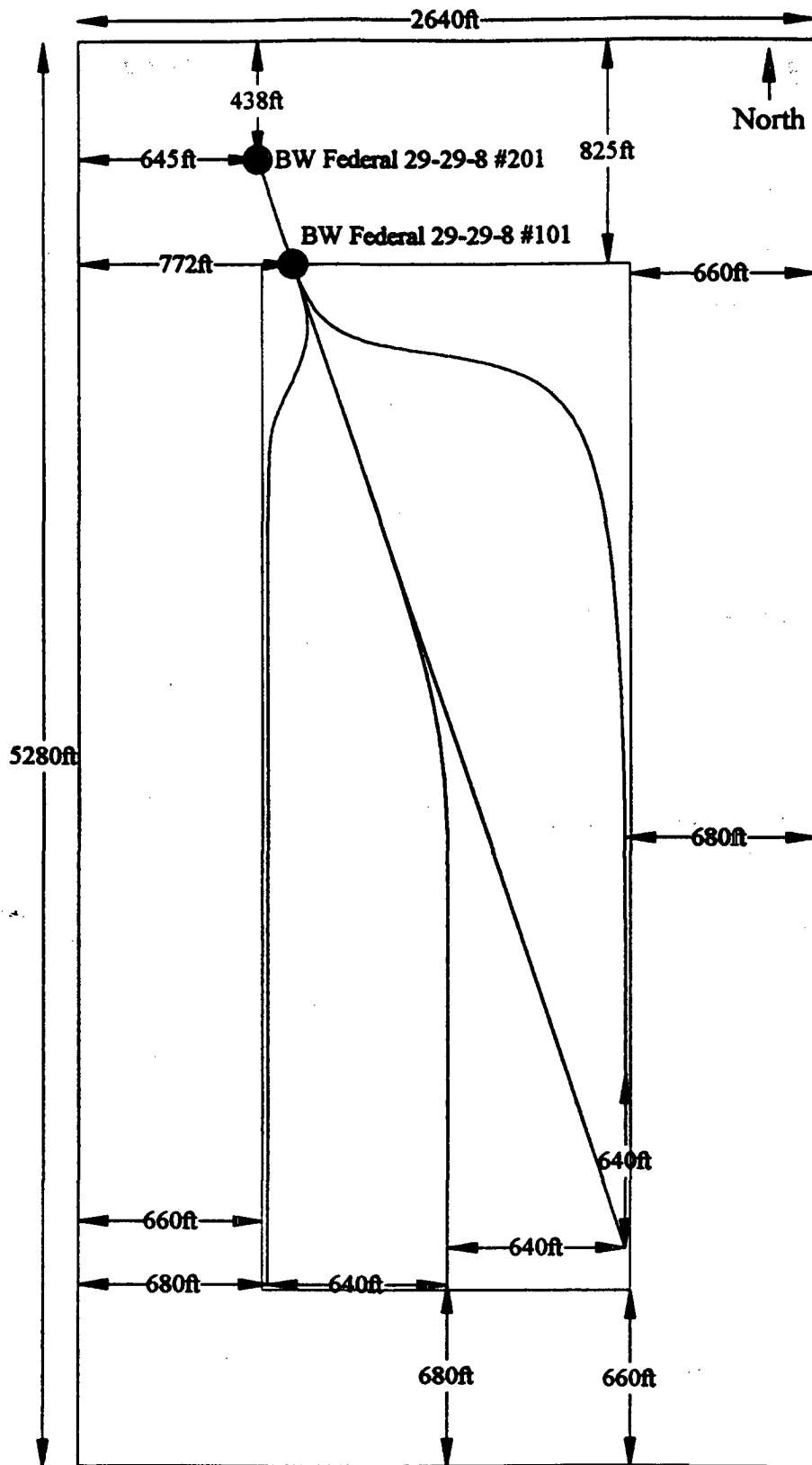
18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DAVID A. JOHNSON
Date of Survey
September 14, 2002
Signed and sealed as Registered Surveyor.
14827
Certificate Number

COX ROCKIES, LLC
S W FED 29-29-8 #10
325 FNL 772 FWL
S W FED 29-29-8 #20
438 FNL 545 FWL
NW/4 SEC 29 T-29-N R-8-W N M P M
SAN JUAN COUNTY, NEW MEXICO

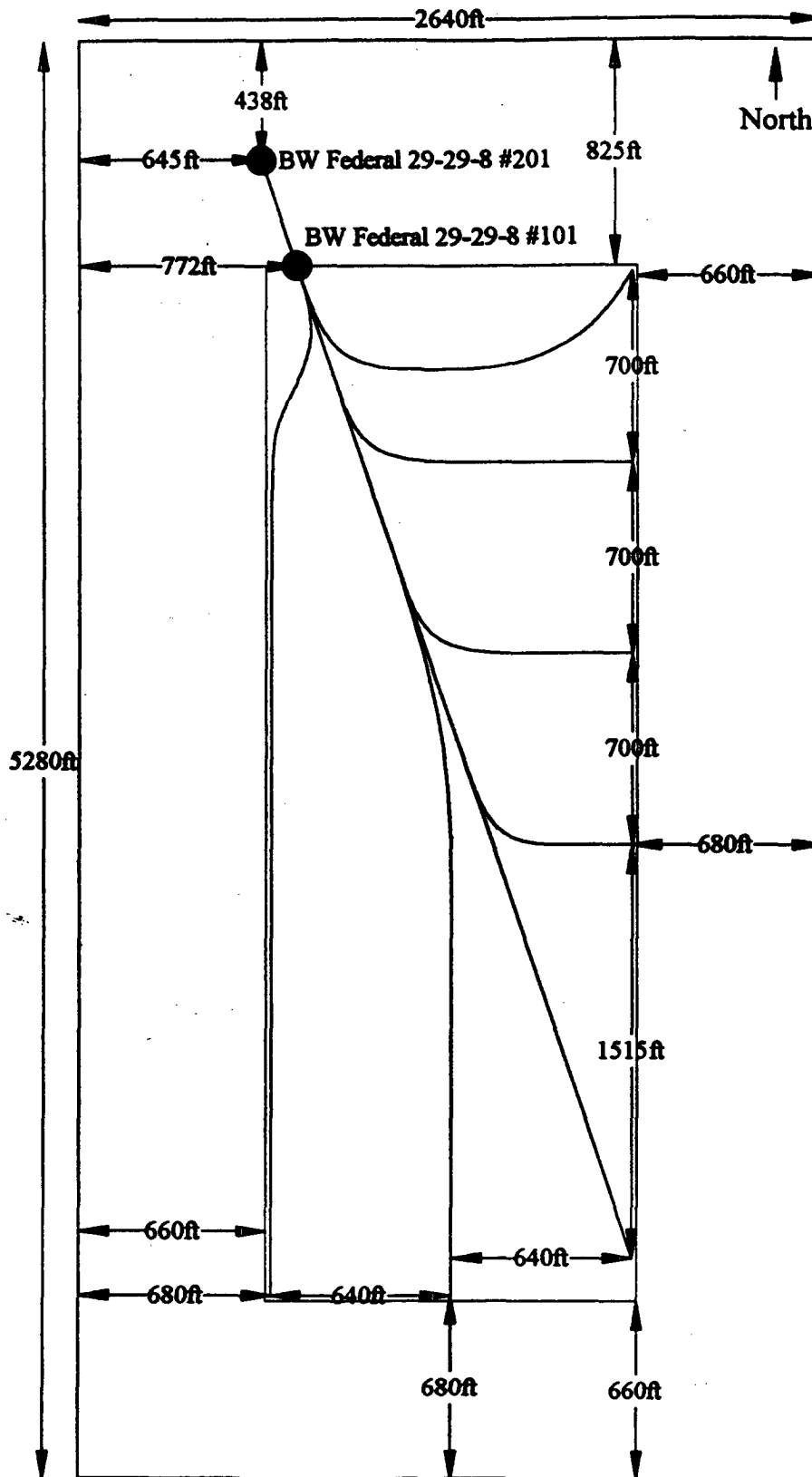




**DEVIATED DRILLING PLAN "A-1" for
BW Federal 29-29-8 #101 & #201 Wells
W/2 Sec. 29 T29N - R8W**

**Scale
1" = 639.47'**

**CDX Rockies, LLC
East Second Ave. #3
Durango, CO 81301**

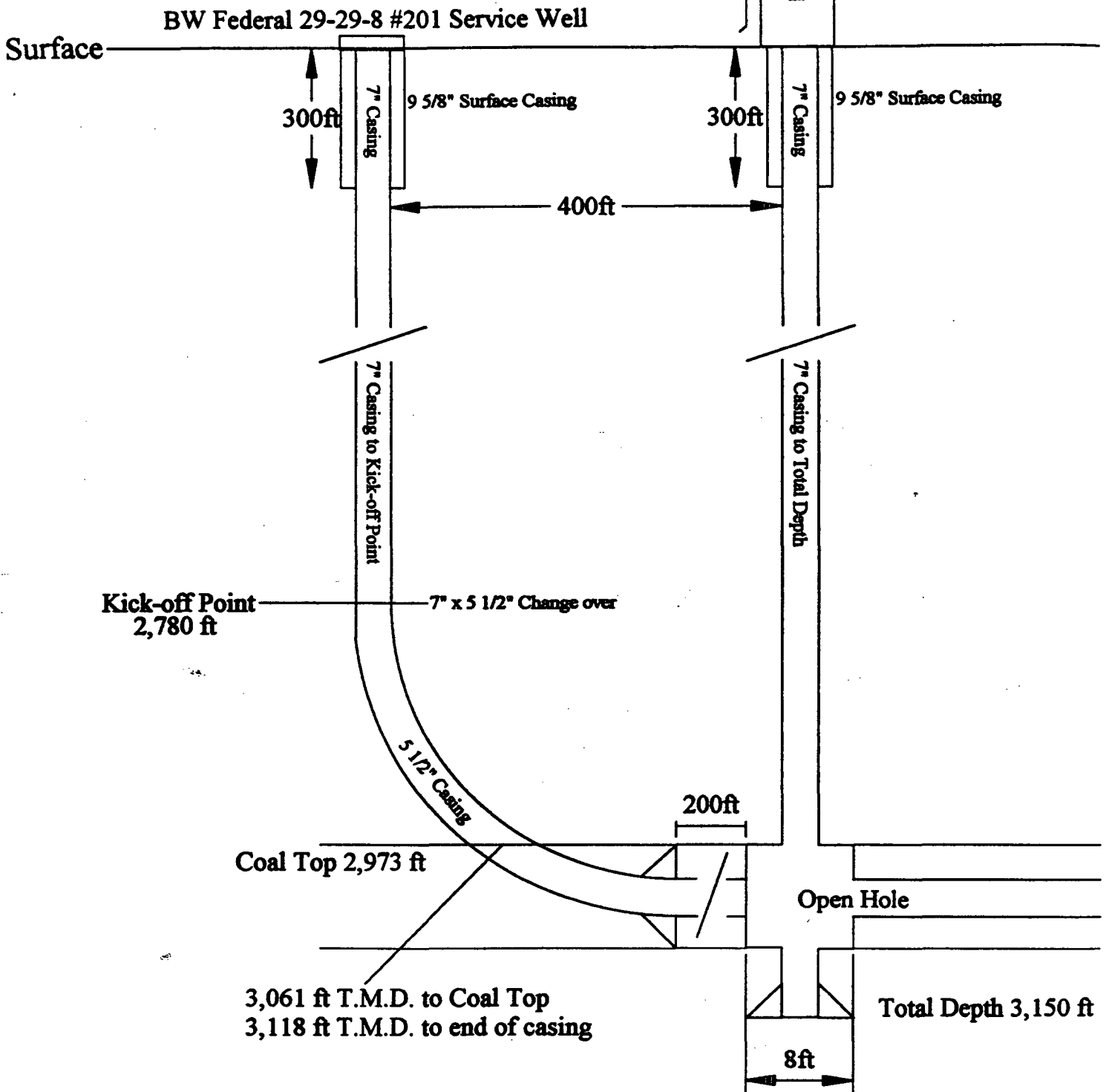


**DEVIATED DRILLING PLAN "A" for
BW Federal 29-29-8 #101 & #201 Wells
W/2 Sec. 29 T29N - R8W**

**Scale
1" = 639.47'**

**CDX Rockies, LLC
East Second Ave. #3
Durango, CO 81301**

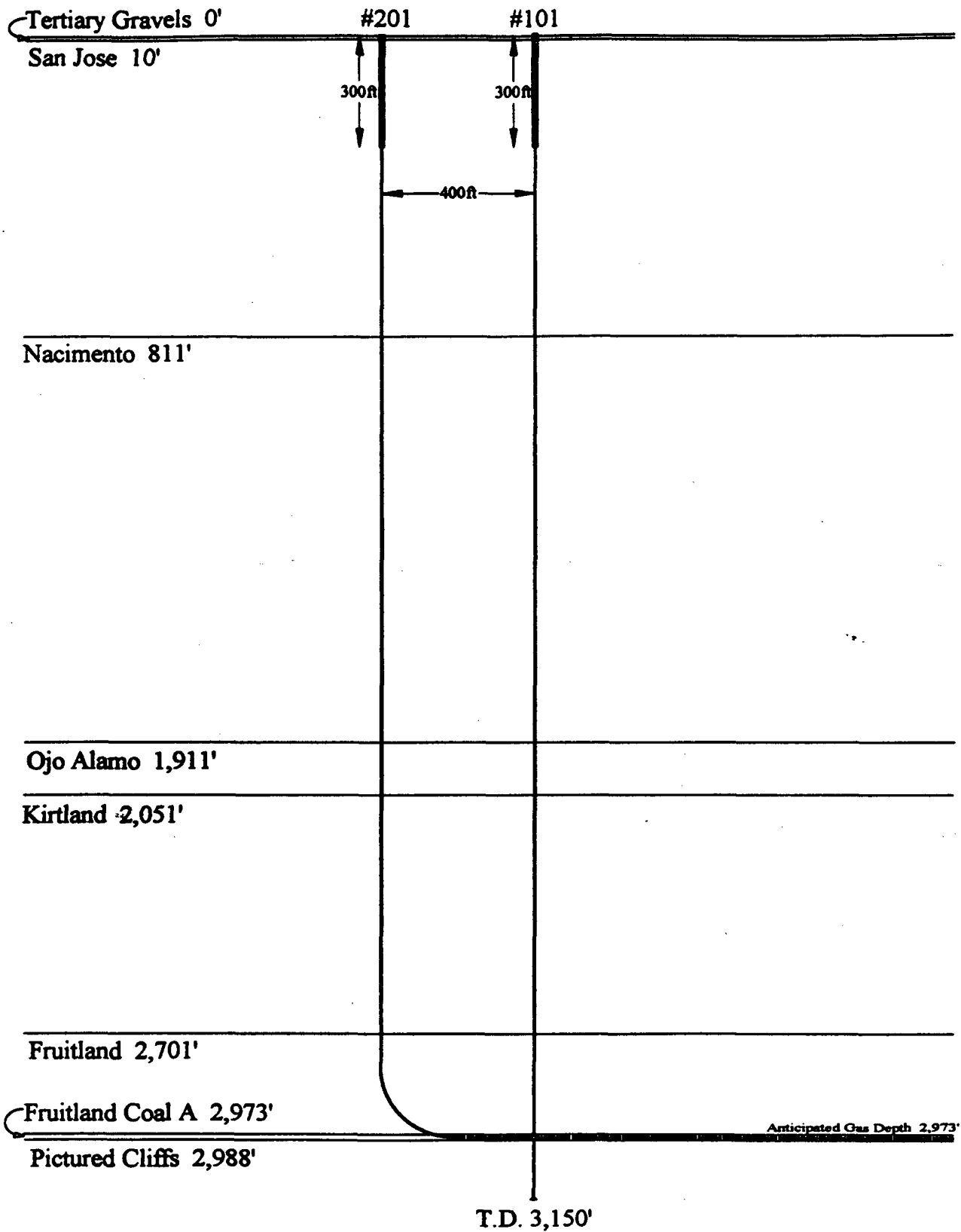
BW Federal 29-29-8 #101 Well



DEVIATED DRILLING PLAN "B" for
 BW Federal 29-29-8 #101 & #201 Wells
 1/2 Sec. 29 T29N - R8W, N.M.P.M.

NOT
TO
SCALE

CDX Rockies, LLC
 679 East Second Avenue #3
 Durango, Colorado 81301



DEVIATED DRILLING PLAN "C" for
BW Federal 29-29-8 #101 & #201 Wells
W/2 Sec. 29 T29N - R8W, N.M.P.M.

SCALE
1" = 392'

CDX Rockies, LLC
679 East Second Avenue #3
Durango, Colorado 81301

BW Federal 29-29-8 #101
825' FNL and 772' FWL
NWNW 29-T9S-R96W
San Juan County, New Mexico

CDX ROCKIES, LLC
Lease No. SF-078046
DRILLING PROGRAM
Page No. 2

will be tested to determine commercial potential. **Both the Surface Pipe and Intermediate Case shall be cemented from surface to total depth protecting any possible water (See Paragraph 4. Proposed Casing and Cementing Program, Subparagraph K).**

3. Pressure Control Equipment: (Schematic Attached)

CDX Rockies, LLC's minimum specifications for pressure control equipment are as follows:

- A. Ram Type: 10" Hydraulic double, 3000 psi w.p.
- B. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.
- C. As a minimum, the above test shall be performed:
 - i. when initially installed;
 - ii. whenever any seal subject to test pressure is broken;
 - iii. following related repairs; and
 - iv. at 30-day intervals
- D. Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.
- E. When testing the kill line valve(s) the check valve shall be held open or the ball removed.
- F. Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

ONSHORE ORDER NO. 1

BW Federal 29-29-8 #101
825' FNL and 772' FWL
NWNW 29-T9S-R96W
San Juan County, New Mexico

CDX ROCKIES, LLC
Lease No. SF-078046
DRILLING PROGRAM
Page No. 3

- G. A BOPE operational meeting shall be conducted weekly for each drilling crew.
- H. All of the above described tests shall be recorded in the drilling log.
- I. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.
- J. The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.
 - i. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 3000 psi working pressure blowout preventer.
 - ii. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
 - iii. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
 - iv. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

4. Proposed Casing and Cementing Program:

- A. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations.

ONSHORE ORDER NO. 1

BW Federal 29-29-8 #101
825' FNL and 772' FWL
NWNW 29-T9S-R96W
San Juan County, New Mexico

CDX ROCKIES, LLC
Lease No. SF-078046
DRILLING PROGRAM
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K. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Surface	0-300' TVD	12.250"	9.625"	36.0#	J-55	ST&C	New
Intermediate	0-3,150' TVD	8.750"	7.000"	23.0#	J-55	LT&C	New
Production	2,973'-2,988' TVD	96.000"	—OPEN HOLE COMPLETION—				
Production	2,988'-3,150' TVD	8.750"	7.000"	23.0#	J-55	LT&C	New
Production	2,980'-10,000' TMD	4.750"	—OPEN HOLE COMPLETION—				

Casing design subject to revision based on geologic conditions encountered.

L. The cement program will be as follows:

<u>Depth</u>	<u>Type and Amount</u>
0 - 300' TVD	*225 sxs Premium (Yield 1.17) with 2% CaCl ₂ , 1/4#/sk celloflake (or sufficient to circulate to surface).

<u>Depth</u>	<u>Type and Amount</u>
0 - 3,150' TVD	*340 sacks Lite (Yield – 3.85) with 12% gel, 10% salt, 1/4#/sk celloflake followed by *290 sacks Premium (Yield – 1.20) with 50/50 Poz, 2% gel, 5% salt, 1/4#/sk celloflake (or sufficient to circulate to surface).

*Actual volumes to be calculated from caliper log.

<u>Depth</u>	<u>Type and Amount</u>
2,973'-2,988' TVD	cavity - (Open Hole)

2,980'-10,000' +/- TMD Laterals - (Open Hole)

M. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

N. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.