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
Jun 19, 2008

WELL API NO. **30-039-24610**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **E-289-50 & E-289-55**

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)

7. Lease Name or Unit Agreement Name **San Juan 29-6 Unit**

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number **231H**

2. Name of Operator **ConocoPhillips Company**

9. OGRID Number **217817**

3. Address of Operator P.O. Box 4289, Farmington, NM 87499-4289

10. Pool name or Wildcat **Basin Fruitland Coal**

4. Well Location
Unit Letter **B** : **816** feet from the **North** line and **974** feet from the **East** line
Section **36** Township **29N** Range **6W** NMPM **Rio Arriba** County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6405' GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☒	
DOWNHOLE COMMINGLE ☐			
OTHER: ☒ **ADD LATERAL**		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.

ConocoPhillips wishes to add a lateral to the original wellbore in the basal coal formation. Please see attached C102 package, project proposal, directional drill plan and plot.

Hold C104 for Directional Survey and "As Drilled" plat

Spud Date: Rig Released Date:

Hold C104 for Directional Survey and "As Drilled" plat

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

SIGNATURE Dollie L Busse TITLE Staff Regulatory Technician DATE 7-22-11

Type or print name Dollie L. Busse E-mail address: dollie.l.busse@conocophillips.com PHONE: 505-324-6104

For State Use Only

APPROVED BY: TITLE **SUPERVISOR DISTRICT # 3** DATE JUL 29 2011

Conditions of Approval (if any):

RECEIVED
JUL 2011
OIL CONS. DIV. DIST. 3

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised July 10, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-24610	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
31326	SAN JUAN 29-6 UNIT	231H

[7] OGRID No.	[8] Operator Name	[9] Elevation
217817	CONOCOPHILLIPS COMPANY	6405'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	36	29N	6W		816'	NORTH	974'	EAST	RIO ARRIBA

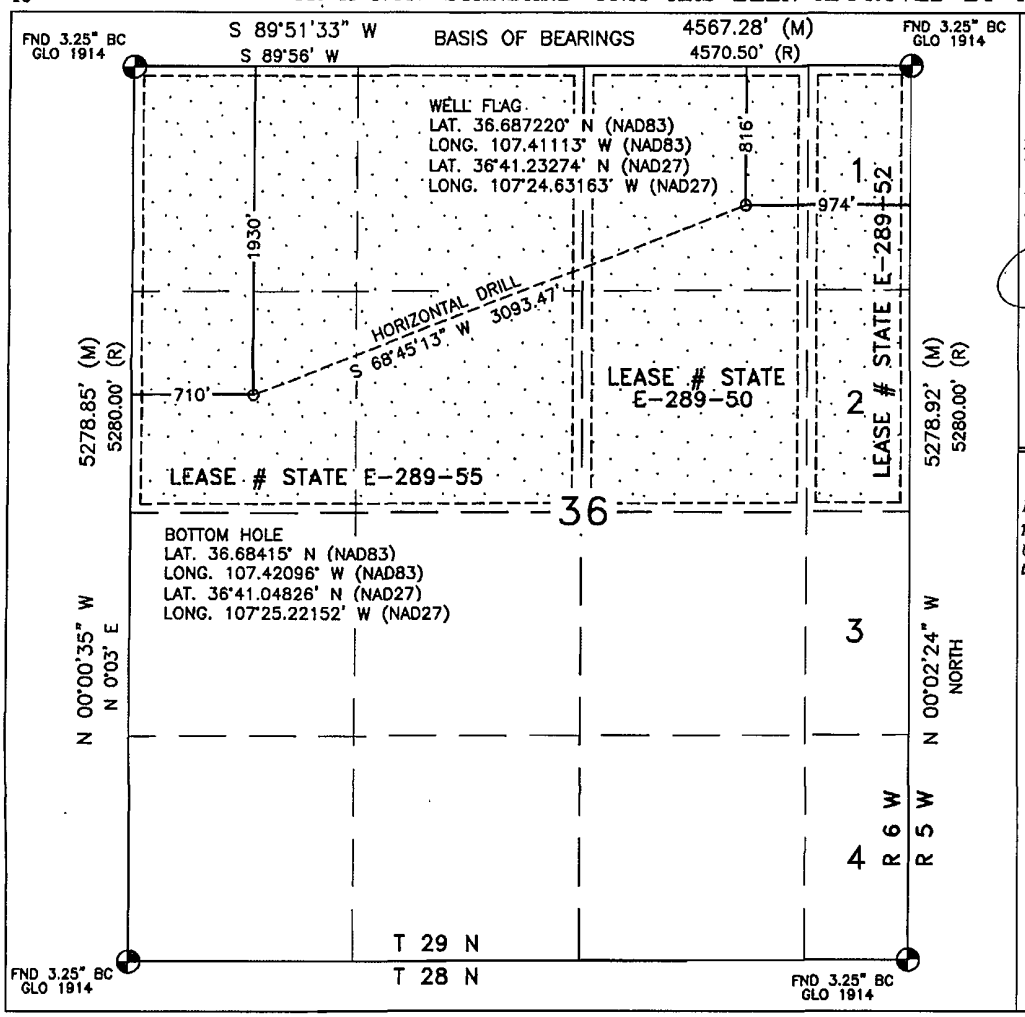
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	36	29N	6W		2440'	NORTH	710'	WEST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
276.04 ACRES - N/2			

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

16



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 7-22-11

Dollie L. Busse
Printed Name

E-mail Address

[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.

JANUARY 7, 2011
Date of Survey

Signature and Seal of Professional Surveyor:

DAVID RUSSELL NEW MEXICO 10201 REGISTERED PROFESSIONAL LAND SURVEYOR

DAVID RUSSELL

Certificate Number 10201

ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-6 UNIT 231H **DEVELOPMENT**

Lease:		AFE #: WAN.CDR.0144			AFE $: 0.00
Field Name: SAN JUAN	Rig: Aztec Rig 730		State: NM	County: RIO ARRIBA	API #: 3003924610
Geologist:	Phone:	Geophysicist:		Phone:	
Geoscientist:	Phone:	Prod. Engineer:		Phone:	
Res. Engineer:	Phone:	Proj. Field Lead:		Phone:	

Primary Objective (Zones):

Zone	Zone Name
R20001	FRUITLAND COAL(R20001)

Location: Surface	Datum Code: NAD 27				**Horizontal**
Latitude: 36.687212	Longitude: -107.410527	X:	Y:	Section: 36	Range: 006W
Footage X: 974 FEL	Footage Y: 816 FNL	Elevation: 6405 (FT)	Township: 029N		
Tolerance:					
Location: Bottom Hole	Datum Code: NAD 27				**Horizontal**
Latitude: 36.682732	Longitude: -107.420357	X:	Y:	Section: 36	Range: 006W
Footage X: 710 FWL	Footage Y: 2440 FNL	Elevation: (FT)	Township: 029N		
Tolerance:					

Location Type: Year Round Start Date (Est.): 1/1/2011 Completion Date: Date In Operation:

Formation Data: Assume KB = 6420 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Total Depth	0	6420		☐			
NACIMIENTO	1259	5161		☐			
OJO ALAMO	2512	3908		☐			
KIRTLAND	2667	3753		☐			
FRUITLAND	2880	3540		☐	900		
EXIT MAIN BORE LATERAL	2967	3453		☐			2967' MD: Casing Exit out of existing 7"
PATH 2500' F/SHL LATERAL	3282	3138		☐			5648' MD: Target in Lateral 2500' horizontal displacement from surface location
PATH 2000' F/SHL LATERAL	3282	3138		☐			5148' MD: Target in Lateral 2000' horizontal displacement from surface hole location
PATH 1500' F/SHL LATERAL	3282	3138		☐			4648' MD: Target in Lateral 1500' horizontal displacement from surface location
PATH 500' F/SHL LATERAL	3285	3135		☐			3648' MD: Target in Lateral 500' horizontal displacement from surface location
PATH 100' F/SHL LATERAL	3285	3135		☐			3226' MD: Target in Lateral 100' horizontal displacement from surface location
PATH 1000' F/SHL LATERAL	3285	3135		☐			4148' MD: Target in Lateral 1000' horizontal displacement from surface location
PATH AT BH LATERAL	3287	3133		☐			TD 6460' MD: 4 1/2" 11.6 ppf L-80 BTC Liner left un-cemented. Swell Packers & sliding sleeves will be run to isolate frac stages. Liner will be hung inside 7" 50'-100' above casing exit and will be hydraulically and mechanically isolated.

Reference Wells:

Reference Type	Well Name	Comments
Production	SJ 29-6 231	29N 6W 36 SW NE NE
Production	SJ 29-6 Unit 50A	29N 6W 36 SW NE SE

Printed on: 6/8/2011 3:00:30 PM

ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-6 UNIT 231H **DEVELOPMENT**

Production	SJ 29-6 Unit 50	29N 6W 36 SW NE NE
Production	SJ 29-6 Unit 107M	29N 6W 36 NW NE NW

Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☑ Other

MWD - Gamma Ray from start of open hole section to TD
Mudlog from kick off point to TD

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

Scientific Drilling
Directional Drilling Operations

ConocoPhillips

SJB (NM Central)
SEC 36-T29N-R6W
SJ 29-6 #231H
API# 30-039-24610
Lateral A

Plan: Plan #1

Standard Planning Report

05 May, 2011

ConocoPhillips

Scientific Drilling
Directional Drilling Operations

Project: SJB (NM Central)
Site: SEC 36-T29N-R6W
Well: SJ 29-6 #231H
Wellbore: Lateral A
Design: Plan #1

ConocoPhillips

REFERENCE INFORMATION

Co-ordinate (N/E) Reference	Well SJ 29-6 #231H, True North
Vertical (TVD) Reference	AD 730 @ 6420 0ft (15' DF + 6405' GL)
Section (VS) Reference	Slot - (0 0N, 0 0E)
Measured Depth Reference	AD 730 @ 6420 0ft (15' DF + 6405' GL)
Calculation Method	Minimum Curvature

PROJECT DETAILS

Geodetic System	US State Plane 1927 (Exact solution
Datum	NAD 1927 (NADCON CONUS)
Ellipsoid	Clarke 1866
Zone	New Mexico Central 3002
System Datum.	Mean Sea Level

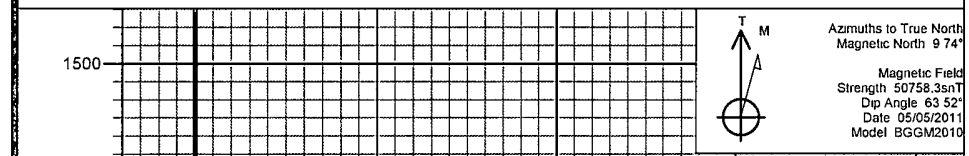
WELL DETAILS: SJ 29-6 #231H

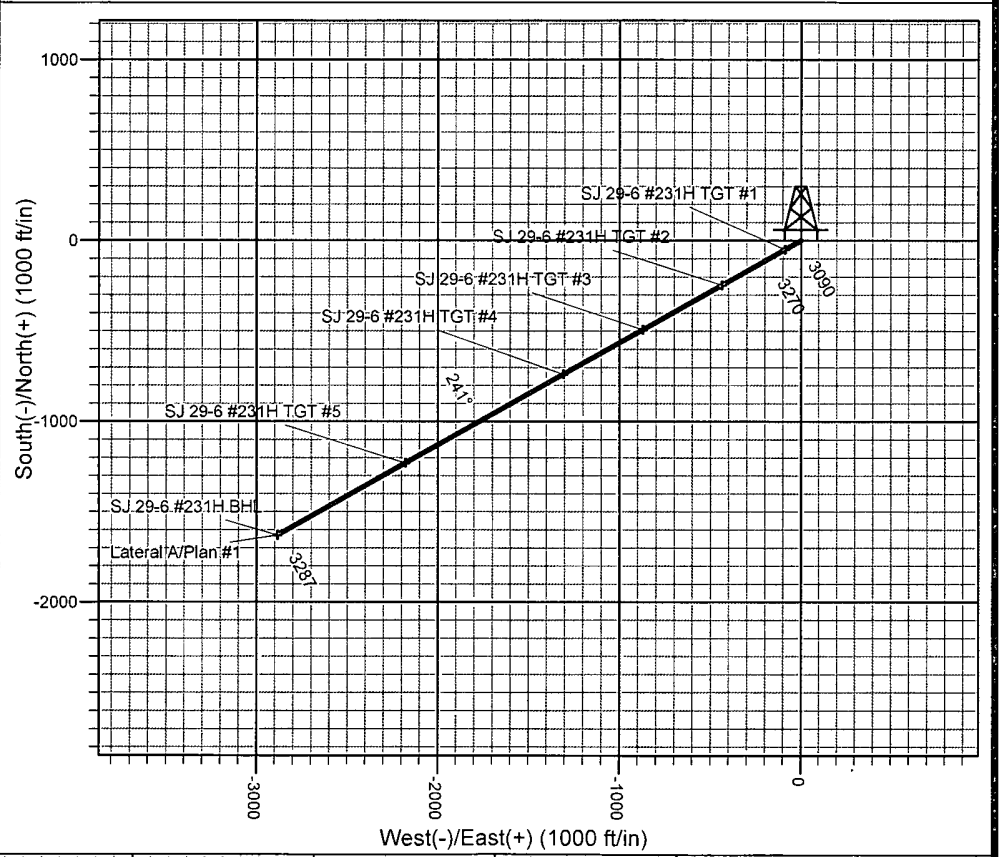
Ground Level
AD 730 @ 6420.0ft (15' DF + 6405' GL) 6405.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0 0	0.0	2071423.70	159724.31	36° 41' 13.964 N	107° 24' 37.898 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	2966 7	0 00	0 00	2966 7	0 0	0 0	0 00	0 00	0 0	
2	3466.7	90 00	240 53	3285 0	-156.6	-277 1	18.00	240 53	318 3	
3	3648 4	90 00	240.53	3285 0	-246 0	-435 3	0.00	0 00	500 0	SJ 29-6 #231H TGT #2
4	4148 4	90 00	240 53	3285 0	-492 0	-870 6	0 00	0 00	1000 0	SJ 29-6 #231H TGT #3
5	4165 9	90 35	240 53	3285 0	-500 6	-885 9	2 00	0 00	1017 6	
6	4648 4	90 35	240 53	3282 0	-738 0	-1305 9	0 00	0 00	1500.0	SJ 29-6 #231H TGT #4
7	4666.1	90.00	240 53	3281 9	-746.7	-1321 3	2 00	-180 00	1517 7	
8	5648.4	90 00	240 53	3282 0	-1229 9	-2176 5	0 00	0 00	2500 0	SJ 29-6 #231H TGT #5
9	5666.1	89 64	240 55	3282 1	-1238 6	-2191 9	2 00	177 43	2517 7	
10	6460.3	89 64	240.55	3287 0	-1629.1	-2883.5	0.00	0.00	3311.9	SJ 29-6 #231H BHL





Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well SJ 29-6 #231H
Company:	ConocoPhillips	**TVD Reference:**	AD 730 @ 6420.0ft (15' DF + 6405' GL)
Project:	SJB (NM Central)	**MD Reference:**	AD 730 @ 6420 0ft (15' DF + 6405' GL)
Site:	SEC 36-T29N-R6W	**North Reference:**	True
Well:	SJ 29-6 #231H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #1		

Project SJB (NM Central), New Mexico, S-Type MV/DK Wells

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		Using Well Reference Point
Map Zone:	New Mexico Central 3002		Using geodetic scale factor

Site SEC 36-T29N-R6W

Site Position:		**Northing:**	2,071,423.70 ft	**Latitude:**	36° 41' 13.964 N
From:	Lat/Long	**Easting:**	159,724.31 ft	**Longitude:**	107° 24' 37.898 W
Position Uncertainty:	15.0 ft	**Slot Radius:**	6-1/8"	**Grid Convergence:**	-0.69 °

Well SJ 29-6 #231H, Re-entry HZ FC Well

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,071,423.70 ft	**Latitude:**	36° 41' 13 964 N
	+E/-W	0.0 ft	**Easting:**	159,724.31 ft	**Longitude:**	107° 24' 37.898 W
Position Uncertainty		3.5 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,405.0 ft

Wellbore Lateral A

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	05/05/11	9 74	63.52	50,758

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	2,966.7

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 0	0 0	0 0	240 53

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
2,966 7	0 00	0.00	2,966 7	0 0	0 0	0 00	0 00	0 00	0.00	
3,466 7	90 00	240.53	3,285 0	-156.6	-277.1	18.00	18 00	0 00	240.53	
3,648 4	90.00	240.53	3,285.0	-246.0	-435 3	0 00	0 00	0.00	0.00	SJ 29-6 #231H TG
4,148.4	90 00	240.53	3,285 0	-492 0	-870 6	0 00	0.00	0 00	0 00	SJ 29-6 #231H TG
4,165 9	90.35	240.53	3,285.0	-500 6	-885.9	2 00	2 00	0 00	0 00	
4,648.4	90 35	240 53	3,282 0	-738 0	-1,305 9	0 00	0.00	0 00	0 00	SJ 29-6 #231H TG
4,666.1	90.00	240 53	3,281 9	-746 7	-1,321 3	2 00	-2 00	0 00	-180 00	
5,648.4	90.00	240.53	3,282 0	-1,229.9	-2,176 5	0 00	0 00	0 00	0.00	SJ 29-6 #231H TG
5,666 1	89 64	240 55	3,282.1	-1,238.6	-2,191.9	2.00	-2 00	0 09	177.43	
6,460.3	89.64	240 55	3,287 0	-1,629.1	-2,883 5	0 00	0 00	0.00	0.00	SJ 29-6 #231H BHL

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well SJ 29-6 #231H
Company:	ConocoPhillips	**TVD Reference:**	AD 730 @ 6420.0ft (15' DF + 6405' GL)
Project:	SJB (NM Central)	**MD Reference:**	AD 730 @ 6420.0ft (15' DF + 6405' GL)
Site:	SEC 36-T29N-R6W	**North Reference:**	True
Well:	SJ 29-6 #231H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 0	0 00	0 00	0 0	0 0	0.0	0 0	0 00	0 00	0.00
2,966.7	0.00	0.00	2,966 7	0.0	0 0	0.0	0.00	0.00	0.00
2,975.0	1.49	240 53	2,975 0	-0 1	-0.1	0 1	18 00	18 00	0 00
3,000.0	5.99	240.53	2,999.9	-0.9	-1.5	1.7	18.00	18.00	0 00
3,025.0	10.49	240 53	3,024.7	-2 6	-4.6	5 3	18 00	18 00	0 00
3,050.0	14.99	240.53	3,049.1	-5 3	-9.4	10.8	18.00	18.00	0.00
3,075 0	19.49	240 53	3,072.9	-9 0	-15.9	18.2	18 00	18.00	0.00
3,100 0	23.99	240 53	3,096 1	-13.5	-23.9	27 5	18 00	18 00	0 00
3,125 0	28.49	240 53	3,118 6	-19.0	-33 6	38.6	18 00	18 00	0.00
3,150 0	32.99	240 53	3,140.0	-25.3	-44.7	51.3	18.00	18.00	0.00
3,175.0	37.49	240 53	3,160 4	-32.4	-57 2	65.8	18 00	18 00	0 00
3,200.0	41.99	240.53	3,179 7	-40 2	-71 2	81.7	18.00	18.00	0.00
3,225.0	46.49	240.53	3,197.6	-48.8	-86.3	99.2	18.00	18.00	0.00
3,250.0	50.99	240 53	3,214 1	-58.0	-102.7	118 0	18 00	18 00	0.00
3,275.0	55.49	240 53	3,229 0	-67.9	-120.1	138.0	18 00	18 00	0.00
SJ 29-6 #231H TGT #1									
3,300 0	59.99	240 53	3,242 3	-78 3	-138 5	159 1	18 00	18 00	0 00
3,325.0	64.49	240.53	3,254 0	-89.2	-157 8	181 2	18 00	18 00	0 00
3,350.0	68.99	240.53	3,263 9	-100.5	-177 8	204 2	18 00	18 00	0 00
3,375.0	73.49	240.53	3,271.9	-112.1	-198 4	227.9	18.00	18.00	0.00
3,400 0	77.99	240.53	3,278.0	-124.0	-219 5	252.1	18.00	18.00	0 00
3,425 0	82.49	240.53	3,282 3	-136.1	-240 9	276 7	18 00	18 00	0 00
3,450 0	86.99	240 53	3,284.6	-148.4	-262.6	301.6	18.00	18.00	0.00
3,466.7	90.00	240.53	3,285 0	-156.6	-277.1	318 3	18 00	18 00	0 00
3,500 0	90 00	240.53	3,285.0	-173.0	-306.1	351.6	0.00	0.00	0.00
3,600 0	90 00	240.53	3,285.0	-222.2	-393.2	451 6	0.00	0.00	0 00
3,648 4	90.00	240.53	3,285.0	-246.0	-435 3	500 0	0 00	0 00	0 00
SJ 29-6 #231H TGT #2									
3,700 0	90.00	240.53	3,285.0	-271 4	-480 2	551 6	0.00	0.00	0.00
3,800 0	90 00	240.53	3,285.0	-320.6	-567.3	651 6	0 00	0.00	0.00
3,900.0	90 00	240.53	3,285.0	-369 8	-654 4	751 6	0 00	0.00	0.00
4,000.0	90.00	240.53	3,285.0	-419 0	-741 4	851 6	0.00	0.00	0 00
4,100.0	90.00	240.53	3,285.0	-468 2	-828 5	951 6	0.00	0 00	0.00
4,148.4	90 00	240 53	3,285.0	-492.0	-870 6	1,000.0	0 00	0.00	0 00
SJ 29-6 #231H TGT #3									
4,165 9	90.35	240.53	3,285.0	-500.6	-885.9	1,017.6	2 00	2.00	0.00
4,200 0	90.35	240.53	3,284.7	-517.4	-915.5	1,051.6	0.00	0 00	0.00
4,300 0	90 35	240 53	3,284.1	-566 6	-1,002 6	1,151 6	0 00	0 00	0.00
4,400 0	90.35	240.53	3,283 5	-615.7	-1,089 7	1,251.6	0.00	0 00	0 00
4,500.0	90 35	240 53	3,282 9	-664 9	-1,176 7	1,351 6	0 00	0 00	0 00
4,600 0	90.35	240 53	3,282.3	-714.1	-1,263.8	1,451 6	0.00	0 00	0 00
4,648 4	90.35	240 53	3,282 0	-738.0	-1,305.9	1,500.0	0.00	0.00	0.00
SJ 29-6 #231H TGT #4									
4,666.1	90.00	240.53	3,281 9	-746.7	-1,321.3	1,517 7	2.00	-2 00	0 00
4,700 0	90.00	240.53	3,281.9	-763.3	-1,350.8	1,551.6	0.00	0.00	0.00
4,800.0	90.00	240.53	3,282.0	-812.5	-1,437.9	1,651 6	0 00	0 00	0 00
4,900.0	90 00	240.53	3,282.0	-861 7	-1,525 0	1,751 6	0.00	0 00	0.00
5,000.0	90.00	240.53	3,282 0	-910 9	-1,612 0	1,851 6	0.00	0 00	0.00
5,100 0	90 00	240 53	3,282.0	-960.1	-1,699.1	1,951.6	0.00	0.00	0.00
5,200.0	90.00	240 53	3,282 0	-1,009.3	-1,786 2	2,051.6	0 00	0.00	0 00
5,300.0	90.00	240.53	3,282.0	-1,058.5	-1,873 2	2,151 6	0 00	0 00	0 00
5,400 0	90.00	240.53	3,282.0	-1,107.7	-1,960.3	2,251 6	0.00	0 00	0.00
5,500 0	90.00	240.53	3,282 0	-1,156.9	-2,047.3	2,351 6	0.00	0 00	0 00
5,600 0	90.00	240.53	3,282.0	-1,206.1	-2,134.4	2,451.6	0.00	0 00	0 00

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well SJ 29-6 #231H
Company:	ConocoPhillips	**TVD Reference:**	AD 730 @ 6420.0ft (15' DF + 6405' GL)
Project:	SJB (NM Central)	**MD Reference:**	AD 730 @ 6420.0ft (15' DF + 6405' GL)
Site:	SEC 36-T29N-R6W	**North Reference:**	True
Well:	SJ 29-6 #231H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,648 4	90 00	240 53	3,282.0	-1,229 9	-2,176 5	2,500 0	0 00	0.00	0 00
SJ 29-6 #231H TGT #5									
5,666.1	89.64	240.55	3,282.1	-1,238.6	-2,191.9	2,517 7	2.00	-2 00	0 09
5,700 0	89 64	240 55	3,282.3	-1,255.3	-2,221 5	2,551 6	0.00	0 00	0.00
5,800 0	89.64	240.55	3,282.9	-1,304.5	-2,308 5	2,651 6	0 00	0 00	0 00
5,900 0	89.64	240.55	3,283.5	-1,353.6	-2,395 6	2,751.6	0 00	0 00	0 00
6,000 0	89 64	240 55	3,284.1	-1,402.8	-2,482 7	2,851 6	0 00	0.00	0.00
6,100.0	89 64	240 55	3,284.8	-1,452.0	-2,569 8	2,951.6	0 00	0.00	0.00
6,200 0	89 64	240 55	3,285.4	-1,501.2	-2,656 8	3,051 6	0 00	0 00	0.00
6,300.0	89.64	240.55	3,286.0	-1,550.3	-2,743.9	3,151.6	0.00	0.00	0.00
6,400.0	89.64	240 55	3,286 6	-1,599.5	-2,831 0	3,251 6	0.00	0.00	0.00
6,460 3	89 64	240 55	3,287.0	-1,629.1	-2,883 5	3,311 9	0 00	0.00	0.00
SJ 29-6 #231H BHL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 29-6 #231H TGT # - plan hits target center - Point	0 00	0.00	3,282.0	-1,229.9	-2,176.5	2,070,220.18	157,532 99	36° 41' 1 802 N	107° 25' 4.618 W
SJ 29-6 #231H TGT # - plan hits target center - Point	0 00	0 00	3,282 0	-738.0	-1,305.9	2,070,701 59	158,409 52	36° 41' 6.667 N	107° 24' 53.930 W
SJ 29-6 #231H TGT # - plan misses target center by 67 7ft at 3275 0ft MD (3229.0 TVD, -67 9 N, -120 1 E) - Point	0.00	0.00	3,285.0	-49.2	-87.1	2,071,375.56	159,636.66	36° 41' 13.478 N	107° 24' 38 967 W
SJ 29-6 #231H TGT # - plan hits target center - Point	0 00	0 00	3,285 0	-246 0	-435 3	2,071,183 00	159,286.05	36° 41' 11.532 N	107° 24' 43.242 W
SJ 29-6 #231H TGT # - plan hits target center - Point	0.00	0.00	3,285 0	-492 0	-870 6	2,070,942 29	158,847.78	36° 41' 9 100 N	107° 24' 48 586 W
SJ 29-6 #231H BHL - plan hits target center - Point	0 00	0.00	3,287.0	-1,629.1	-2,883.5	2,069,829.53	156,821.25	36° 40' 57.854 N	107° 25' 13 296 W

Seven Point Technical Plan

1. **Geologic Tops** -

Formation	Top - MD	Top- TVD	Substance
Nacimiento	1259′	1259′	Possible water flows
Ojo Alamo	2512′	2512′	Water
Kirtland	2667′	2667′	
Fruitland	2880′	2880′	Gas/Water
Casing Exit Lateral A	2967′	2967′	NA
TD (Lateral A)	6460′	3287′	Gas/Water

2. **Pressure control equipment**

- BOP stack will include
  - 3M Double Ram with outlets between rams for choke and kill lines
  - 3M Annular
  - Rotating Head

- Estimated min vertical depth = 2967 ft TVD.
- Bottom Hole Pressure = 900 psi (estimated).
- Minimum BOP Working Pressure = 900 psi - .22 psi/ft * 2967 ft = 247 psi
- BOPE of 2,000 psi (2M) working pressure is required, but well will be drilled with 3M stack.
- See BOP diagram in masterplan

3. **Complete information on the drilling equipment, casing and cementing program –**

Proposed Casing And Cementing Program				
Size of Hole	**Size of Casing**	**Weight/Foot**	**Proposed Setting Depth (MD)**	**Quantity of Cement**
Lat A 6-1/4″	4-1/2″ liner	11.6#, L-80, BTC, New	2917-6410′	Liner left un-cemented. Swell Packers & sliding sleeves will be run to isolate frac stages. Liner will be hung inside 7″ 50′-100′ above casing exit and will be hydraulically and mechanically isolated.

4. **Information on Mud System -**

Mud Program				
Interval (MD)	**Mud Type**	**Weight (ppg)**	**Water/Fluid Loss**	**Additives**
All Drilling out of casing exits	LSND	8.4-8.7	Some control	Polymer, and LCM as required

5. **Testing, Logging, Coring** -

- Logs: Cased hole GR-CCL-CBL will be run in existing 7" casing
- MWD LWD(GR) outside casing exit to both laterals TD
- Mudlog from Casing Exits to TD, taking samples every 10'
- Coring: No coring is planned
- DST: No planned drill stem test

6. **Expected BHP, abnormal temperatures and pressures, and hazards –**

- No overpressured intervals expected
- No H2S anticipated
- Possible lost circulation in Fruitland to be handled if it occurs with standard LCM products

7. **Other information** –

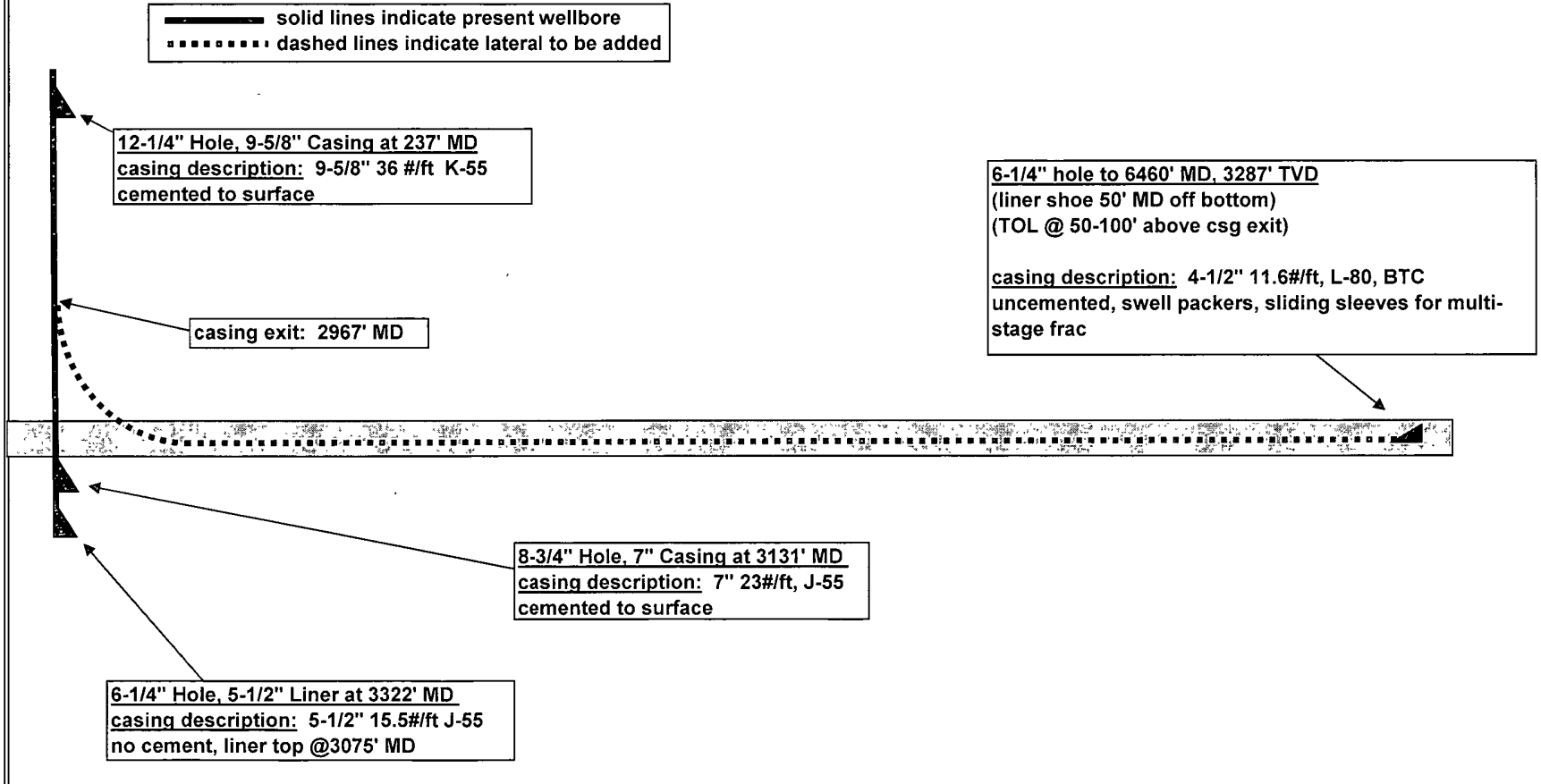
This is a single lateral Horizontal re-entry out of existing 7" casing. Lateral A will be drilled out of pre-existing casing through a casing exit. A liner with swell packers and sliding sleeves will be used to isolate the multi-stage frac. Top of liner will be 50'-100' above casing exit.

SJ 29-6 231H Lateral Re-Entry - Well Summary

Note: Lateral Directional Plan Lateral A (Plan #1) accompanies this document

GL 6405'
KB 6420' (Aztec 730)

	State of New Mexico, Rio Arriba County	MD	TVD	
surface location:	T29N, R06W, Section 36, 816' FNL, 974' FEL	NA	NA	
beginning of producing interval, lateral	T29N, R06W, Section 36, 973' FNL, 1251' FEL	3467'	3285'	entry point in the coal target
bottom of productive interval, lateral	T29N, R06W, Section 36, 2440' FNL, 710' FWL	6460'	3287'	lateral total depth



-Note: Same mud will be used per APD Master Plan, except in certain situations salt may be used for weight, salt will be contained in steel pits on surface and properly disposed of

-Note: Same BOP stack will be used per APD Master Plan