

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 04 2009

Sundry Notices and Reports on Wells

Bureau of Land Management
Farmington Field Office

1. Type of Well
GAS

5. Lease Number
SF-078996

6. If Indian, All. or
Tribe Name

2. Name of Operator

7. Unit Agreement Name
San Juan 32-7 Unit

ConocoPhillips

3. Address & Phone No. of Operator

8. Well Name & Number
San Juan 32-7 Unit 19M

PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. API Well No.

30-045-34599

4. Location of Well, Footage, Sec., T, R, M

Surface: Unit K (NESW), 2525' FSL & 2000' FWL, Section 4, T31N, R7W, NMPM
Bottomhole: Unit E (SWNW), 725' FNL & 1150' FWL, Section 4, T31N, R7W, NMPM

10. Field and Pool
Blanco MV / Basin DK

11. County and State
San Juan, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent

☐ Abandonment

☒ Change of Plans

☐ Other -

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

RCVD SEP 17 '09
OIL CONS. DIV.
DIST. 3

13. Describe Proposed or Completed Operations

ConocoPhillips wishes to change the depth of the Intermediate casing from 5702' TVD to 3781' TVD and 3951' MD. Verbal approval was received from the BLM (Troy Salyers) and OCD (Steve Hayden) on 9/3/2009. The new Directional Drill Plan and Project Proposal are attached. ✓

14. I hereby certify that the foregoing is true and correct.

Signed Crystal Tafoya Crystal Tafoya

Title: Regulatory Technician Date 9/4/09

(This space for Federal or State Office use)

APPROVED BY Troy L Salyers

Title Petroleum Engineer

Date 9/14/2009

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

NMOCD

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 UNIT 19M

DEVELOPMENT

Lease:		AFE #: WAN.CNV.7101		AFE \$: 1,750,141.04	
Field Name: 32-7		Rig: Aztec Rig 730		State: NM	County: SAN JUAN
Geologist:		Phone:		Geophysicist:	
Geoscientist:		Phone:		Prod. Engineer:	
Res. Engineer:		Phone:		Proj. Field Lead:	
Primary Objective (Zones):					
Zone	Zone Name				
R20076	DAKOTA(R20076)				
R20002	MESAVERDE(R20002)				
Location: Surface Datum Code: NAD 27					
Latitude: 36.928206	Longitude: -107.577838	X:	Y:	Section: 04	Range: 007W
Footage X: 2000 FWL	Footage Y: 2525 FSL	Elevation: 6615	(FT)	Township: 031N	
Tolerance:					
Location: Bottom Hole Datum Code: NAD 27					
Latitude: 36.929395	Longitude: -107.580737	X:	Y:	Section: 04	Range: 007W
Footage X: 1150 FWL	Footage Y: 725 FNL	Elevation:	(FT)	Township: 031N	
Tolerance:					
Location Type: Restricted		Start Date (Est.): 1/1/2009		Completion Date:	
Formation Data: Assume KB = 6630		Units = FT			
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
Surface Casing	200	6430	☐		
NACIMIENTO	905	5725	☐		
OJO ALAMO	2398	4232	☐		
KIRTLAND	2507	4123	☐		
FRUITLAND	2982	3648	☐		Possible Gas
PICTURED CLIFFS	3486	3144	☐		
LEWIS	3631	2999	☐		
Intermediate Casing	3781	2849	☐		
HUERFANITO BENTONITE	4309	2321	☐		
CHACRA	4707	1923	☐		
UPPER CLIFF HOUSE	5157	1473	☐		
MASSIVE CLIFF HOUSE	5496	1134	☐	1077	Gas
MENEFEE	5552	1078	☐		
POINT LOOKOUT	5810	820	☐		
MANCOS	6252	378	☐		
UPPER GALLUP	7182	-552	☐		
GREENHORN	7881	-1251	☐		
GRANEROS	7938	-1308	☐		
TWO WELLS	8030	-1400	☐	3560	Gas
PAGUATE	8053	-1423	☐		
UPPER CUBERO	8064	-1434	☐		
LOWER CUBERO	8102	-1472	☐		

12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 159 cuft. Circulate cement to surface.

Possible Gas

8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1320 cuft. Circulate cement to surface.

Gas

Gas

2 of 3 offsets had water problems in completion (19A & 18M)

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 UNIT 19M

DEVELOPMENT

ENCINAL	8164	-1534	☐	TD 41' into Encinal per 19A log
Total Depth	8205	-1575	☐	6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 350 cuft. Circulate cement a minimum of 100' above Top of Chacra.

Reference Wells:

Reference Type	Well Name	Comments
Intermediate	SJ 32-7 74	4-31N-7W-SE, KB = 6756
Intermediate	SJ 32-7 18	5-31N-7W-SE, KB = 6673
Intermediate	SJ 32-7 10	32-32N-7W-SW, KB = 6565
Production	San Juan 32-7 31	32N-7W32 NW SE SE
Production	San Juan 32-7 216A	31N-7W4 NW
Production	San Juan 32-7 74	31N-7W4 SE NE SE
Production	San Juan 32-7 18-5	31N-7W5 NE NE SE

Logging Program:

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

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

GR/CBL

Mudlog from 100' above top of GRHN to TD - mudlogger will call TD.

Mudlog from 100' above Greenhorn to TD - mudlogger will call TD

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Scientific Drilling
Directional Drilling Operations

ConocoPhillips

**SAN JUAN BASIN
SEC 04-T31N-R7W
SJ 32-7 #19M**

Original Hole

Plan: Plan #1 ✓

Standard Planning Report

01 September, 2009

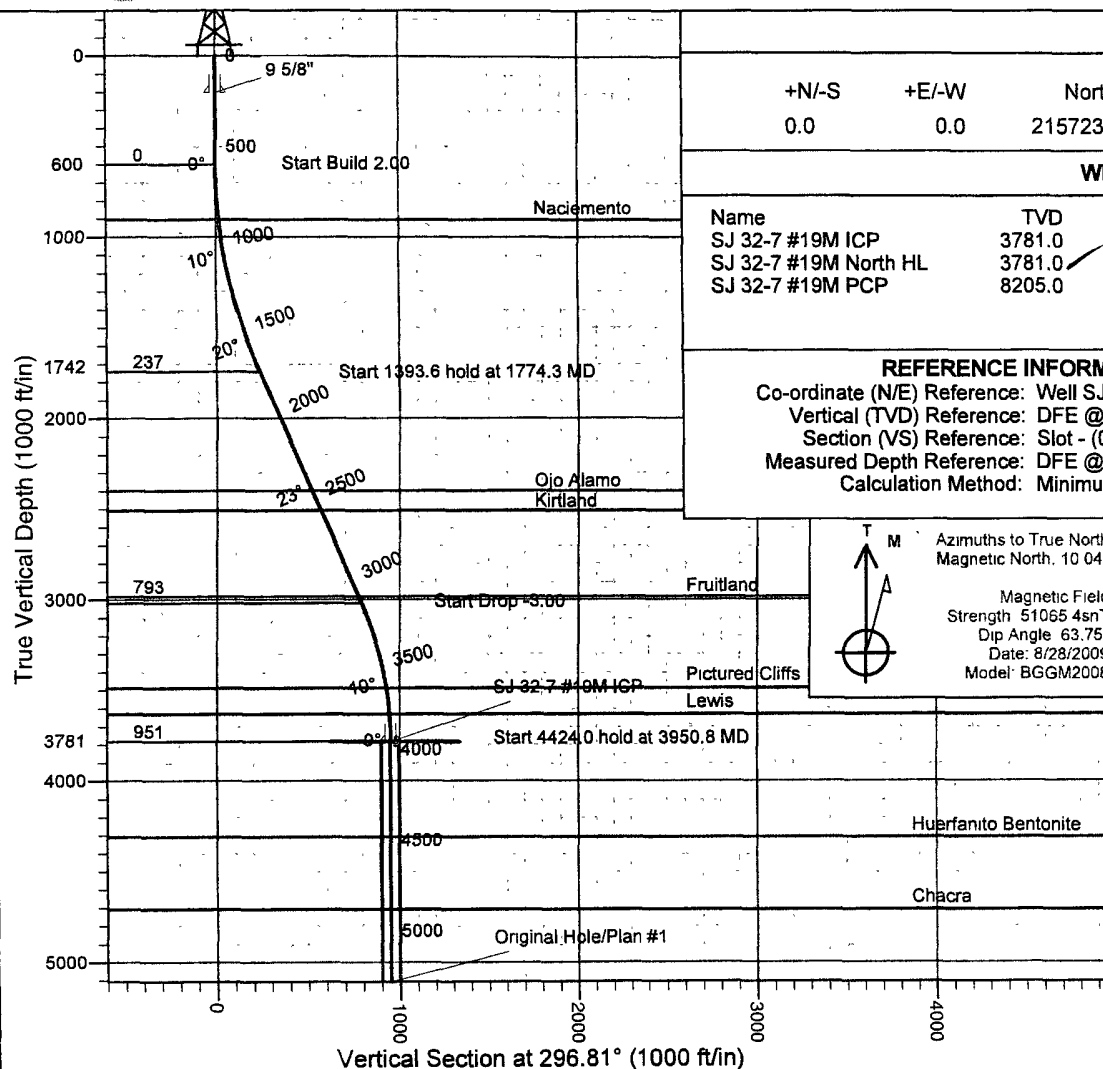


ConocoPhillips



Scientific Drilling
Directional Drilling Operations

Project: SAN JUAN BASIN
Site: SEC 04-T31N-R7W
Well: SJ 32-7 #19M
Wellbore: Original Hole
Design: Plan #1



WELL DETAILS: SJ 32-7 #19M

		Ground Level: 6615.0			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	2157236.81	574680.04	36° 55' 41.584 N	107° 34' 40.200 W
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SJ 32-7 #19M ICP	3781.0	428.9	-848.7	36° 55' 45.825 N	107° 34' 50.652 W
SJ 32-7 #19M North HL	3781.0	493.9	-848.7	36° 55' 46.467 N	107° 34' 50.653 W
SJ 32-7 #19M PCP	8205.0	428.9	-848.7	36° 55' 45.825 N	107° 34' 50.652 W
				Shape	
				Circle (Radius: 50.0)	
				Polygon	
				Point	

REFERENCE INFORMATION

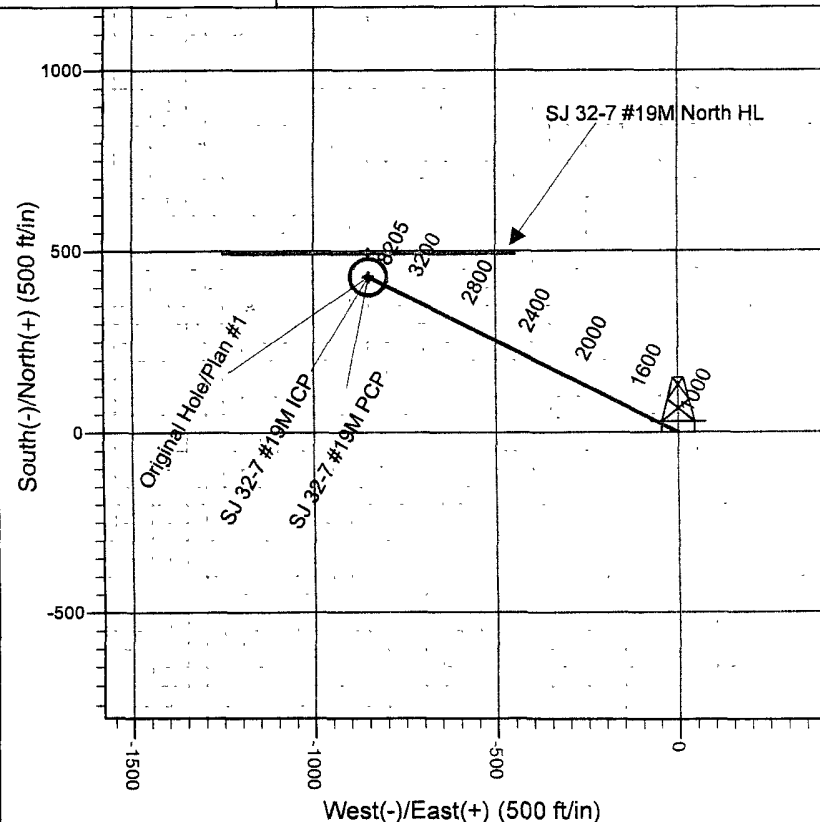
Co-ordinate (N/E) Reference: Well SJ 32-7 #19M, True North
Vertical (TVD) Reference: DFE @ 6630.0ft (AWS 730)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: DFE @ 6630.0ft (AWS 730)
Calculation Method: Minimum Curvature

PROJECT DETAILS: SAN JUAN BASIN

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level



Azimuths to True North
Magnetic North: 10.04°
Magnetic Field
Strength: 51065.4nT
Dip Angle: 63.75°
Date: 8/28/2009
Model: BGGM2008



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1774.3	23.49	296.81	1741.7	107.0	-211.8	2.00	296.81	237.3	
4	3167.9	23.49	296.81	3019.9	357.6	-707.5	0.00	0.00	792.7	
5	3950.8	0.00	0.00	3781.0	428.9	-848.7	3.00	180.00	950.9	SJ 32-7 #19M ICP
6	8374.8	0.00	0.00	8205.0	428.9	-848.7	0.00	0.00	950.9	SJ 32-7 #19M PCP

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well SJ 32-7 #19M
Company:	ConocoPhillips	TVD Reference:	DFE @ 6630.0ft (AWS 730)
Project:	SAN JUAN BASIN	MD Reference:	DFE @ 6630.0ft (AWS 730)
Site:	SEC 04-T31N-R7W	North Reference:	True
Well:	SJ 32-7 #19M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Project:	SAN JUAN BASIN, NEW MEXICO		
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 West 3003		Using geodetic scale factor

Site:	SEC 04-T31N-R7W		
Site Position:		Northing:	2,157,236.81 ft
From:	Lat/Long	Easting:	574,680.04 ft
Position Uncertainty:	0.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 55' 41.584 N
		Longitude:	107° 34' 40.200 W
		Grid Convergence:	0.15 °

Well:	SJ 32-7 #19M, S-Type MV/DK		
Well Position	+N/-S	0.0 ft	Northing: 2,157,236.81 ft
	+E/-W	0.0 ft	Easting: 574,680.04 ft
Position Uncertainty	0.0 ft		Latitude: 36° 55' 41.584 N
		Wellhead Elevation:	ft
		Ground Level:	6,615.0 ft

Wellbore:	Original Hole				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2008	8/28/2009	(°)	(°)	(nT)
			10.04	63.75	51,065

Design:	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	296.81

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,774.3	23.49	296.81	1,741.7	107.0	-211.8	2.00	2.00	0.00	296.81	
3,167.9	23.49	296.81	3,019.9	357.6	-707.5	0.00	0.00	0.00	0.00	
3,950.8	0.00	0.00	3,781.0	428.9	-848.7	3.00	-3.00	0.00	180.00	SJ 32-7 #19M ICP
8,374.8	0.00	0.00	8,205.0	428.9	-848.7	0.00	0.00	0.00	0.00	SJ 32-7 #19M PCP

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well SJ 32-7 #19M
Company:	ConocoPhillips	TVD Reference:	DFE @ 6630.0ft (AWS 730)
Project:	SAN JUAN BASIN	MD Reference:	DFE @ 6630.0ft (AWS 730)
Site:	SEC 04-T31N-R7W	North Reference:	True
Well:	SJ 32-7 #19M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
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
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
9.5/8"									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	296.81	700.0	0.8	-1.6	1.7	2.00	2.00	0.00
800.0	4.00	296.81	799.8	3.1	-6.2	7.0	2.00	2.00	0.00
900.0	6.00	296.81	899.5	7.1	-14.0	15.7	2.00	2.00	0.00
905.6	6.11	296.81	905.0	7.3	-14.5	16.3	2.00	2.00	0.00
Nacimiento									
1,000.0	8.00	296.81	998.7	12.6	-24.9	27.9	2.00	2.00	0.00
1,100.0	10.00	296.81	1,097.5	19.6	-38.8	43.5	2.00	2.00	0.00
1,200.0	12.00	296.81	1,195.6	28.2	-55.9	62.6	2.00	2.00	0.00
1,300.0	14.00	296.81	1,293.1	38.4	-75.9	85.1	2.00	2.00	0.00
1,400.0	16.00	296.81	1,389.6	50.1	-99.0	111.0	2.00	2.00	0.00
1,500.0	18.00	296.81	1,485.3	63.2	-125.1	140.2	2.00	2.00	0.00
1,600.0	20.00	296.81	1,579.8	77.9	-154.2	172.8	2.00	2.00	0.00
1,700.0	22.00	296.81	1,673.2	94.1	-186.2	208.6	2.00	2.00	0.00
1,774.3	23.49	296.81	1,741.7	107.0	-211.8	237.3	2.00	2.00	0.00
1,800.0	23.49	296.81	1,765.3	111.7	-221.0	247.6	0.00	0.00	0.00
1,900.0	23.49	296.81	1,857.0	129.6	-256.5	287.4	0.00	0.00	0.00
2,000.0	23.49	296.81	1,948.7	147.6	-292.1	327.3	0.00	0.00	0.00
2,100.0	23.49	296.81	2,040.4	165.6	-327.7	367.1	0.00	0.00	0.00
2,200.0	23.49	296.81	2,132.1	183.6	-363.2	407.0	0.00	0.00	0.00
2,300.0	23.49	296.81	2,223.8	201.5	-398.8	446.8	0.00	0.00	0.00
2,400.0	23.49	296.81	2,315.6	219.5	-434.4	486.7	0.00	0.00	0.00
2,489.9	23.49	296.81	2,398.0	235.7	-466.3	522.5	0.00	0.00	0.00
Ojo Alamo									
2,500.0	23.49	296.81	2,407.3	237.5	-469.9	526.5	0.00	0.00	0.00
2,600.0	23.49	296.81	2,499.0	255.5	-505.5	566.4	0.00	0.00	0.00
2,608.7	23.49	296.81	2,507.0	257.0	-508.6	569.9	0.00	0.00	0.00
Kirtland									
2,700.0	23.49	296.81	2,590.7	273.4	-541.1	606.2	0.00	0.00	0.00
2,800.0	23.49	296.81	2,682.4	291.4	-576.6	646.1	0.00	0.00	0.00
2,900.0	23.49	296.81	2,774.1	309.4	-612.2	685.9	0.00	0.00	0.00
3,000.0	23.49	296.81	2,865.9	327.4	-647.8	725.8	0.00	0.00	0.00
3,100.0	23.49	296.81	2,957.6	345.3	-683.3	765.6	0.00	0.00	0.00
3,126.6	23.49	296.81	2,982.0	350.1	-692.8	776.3	0.00	0.00	0.00
Fruitland									
3,167.9	23.49	296.81	3,019.9	357.6	-707.5	792.7	0.00	0.00	0.00
3,200.0	22.52	296.81	3,049.4	363.2	-718.7	805.3	3.00	-3.00	0.00
3,300.0	19.52	296.81	3,142.7	379.4	-750.7	841.1	3.00	-3.00	0.00
3,400.0	16.52	296.81	3,237.8	393.3	-778.3	872.1	3.00	-3.00	0.00
3,500.0	13.52	296.81	3,334.4	405.0	-801.4	898.0	3.00	-3.00	0.00
3,600.0	10.52	296.81	3,432.2	414.4	-820.0	918.8	3.00	-3.00	0.00
3,654.6	8.89	296.81	3,486.0	418.6	-828.3	928.0	3.00	-3.00	0.00
Pictured Cliffs									
3,700.0	7.52	296.81	3,530.9	421.5	-834.0	934.5	3.00	-3.00	0.00
3,800.0	4.52	296.81	3,630.4	426.2	-843.4	945.0	3.00	-3.00	0.00
3,800.6	4.50	296.81	3,631.0	426.3	-843.4	945.0	3.00	-3.00	0.00



Scientific Drilling International Planning Report



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well SJ 32:7 #19M
Company:	ConocoPhillips	TVD Reference:	DFE @ 6630.0ft (AWS 730)
Project:	SAN JUAN BASIN	MD Reference:	DFE @ 6630.0ft (AWS 730)
Site:	SEC 04-T31N-R7W	North Reference:	True
Well:	SJ 32:7 #19M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
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)
Lewis									
3,900.0	1.52	296.81	3,730.2	428.6	-848.1	950.3	3.00	-3.00	0.00
3,950.8	0.00	0.00	3,781.0	428.9	-848.7	950.9	3.00	-3.00	0.00
7" SJ 32:7 #19M ICP - SJ 32:7 #19M North HL									
4,000.0	0.00	0.00	3,830.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,100.0	0.00	0.00	3,930.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,030.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,130.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,230.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,478.8	0.00	0.00	4,309.0	428.9	-848.7	950.9	0.00	0.00	0.00
Huerfano Bentonite									
4,500.0	0.00	0.00	4,330.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,430.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,700.0	0.00	0.00	4,530.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,630.2	428.9	-848.7	950.9	0.00	0.00	0.00
4,876.8	0.00	0.00	4,707.0	428.9	-848.7	950.9	0.00	0.00	0.00
Chacra									
4,900.0	0.00	0.00	4,730.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,830.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,100.0	0.00	0.00	4,930.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,030.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,130.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,326.8	0.00	0.00	5,157.0	428.9	-848.7	950.9	0.00	0.00	0.00
Upper Cliff House									
5,400.0	0.00	0.00	5,230.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,330.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,430.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,665.8	0.00	0.00	5,496.0	428.9	-848.7	950.9	0.00	0.00	0.00
Massive Cliff House									
5,700.0	0.00	0.00	5,530.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,721.8	0.00	0.00	5,552.0	428.9	-848.7	950.9	0.00	0.00	0.00
Menefee									
5,800.0	0.00	0.00	5,630.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,730.2	428.9	-848.7	950.9	0.00	0.00	0.00
5,979.8	0.00	0.00	5,810.0	428.9	-848.7	950.9	0.00	0.00	0.00
Point Lookout									
6,000.0	0.00	0.00	5,830.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,100.0	0.00	0.00	5,930.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,030.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,130.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,230.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,421.8	0.00	0.00	6,252.0	428.9	-848.7	950.9	0.00	0.00	0.00
Mancos									
6,500.0	0.00	0.00	6,330.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,430.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,530.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,630.2	428.9	-848.7	950.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,730.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,830.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,100.0	0.00	0.00	6,930.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,030.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,130.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,351.8	0.00	0.00	7,182.0	428.9	-848.7	950.9	0.00	0.00	0.00

Database: EDM 2003.21 Single User Db
 Company: ConocoPhillips
 Project: SAN JUAN BASIN
 Site: SEC 04-T31N-R7W
 Well: SJ 32-7 #19M
 Wellbore: Original Hole
 Design: Plan #1

Local Co-ordinate Reference: Well SJ 32-7 #19M
 TVD Reference: DFE @ 6630.0ft (AWS 730)
 MD Reference: DFE @ 6630.0ft (AWS 730)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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)
Gallup									
7,400.0	0.00	0.00	7,230.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,330.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,430.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,530.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,630.2	428.9	-848.7	950.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,730.2	428.9	-848.7	950.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,830.2	428.9	-848.7	950.9	0.00	0.00	0.00
8,050.8	0.00	0.00	7,881.0	428.9	-848.7	950.9	0.00	0.00	0.00
Greenhorn									
8,100.0	0.00	0.00	7,930.2	428.9	-848.7	950.9	0.00	0.00	0.00
8,107.8	0.00	0.00	7,938.0	428.9	-848.7	950.9	0.00	0.00	0.00
Graneros									
8,199.8	0.00	0.00	8,030.0	428.9	-848.7	950.9	0.00	0.00	0.00
Two Wells									
8,200.0	0.00	0.00	8,030.2	428.9	-848.7	950.9	0.00	0.00	0.00
8,222.8	0.00	0.00	8,053.0	428.9	-848.7	950.9	0.00	0.00	0.00
Paguete									
8,233.8	0.00	0.00	8,064.0	428.9	-848.7	950.9	0.00	0.00	0.00
Upper Cubero									
8,271.8	0.00	0.00	8,102.0	428.9	-848.7	950.9	0.00	0.00	0.00
Lower Cubero									
8,300.0	0.00	0.00	8,130.2	428.9	-848.7	950.9	0.00	0.00	0.00
8,333.8	0.00	0.00	8,164.0	428.9	-848.7	950.9	0.00	0.00	0.00
Encinal									
8,374.8	0.00	0.00	8,205.0	428.9	-848.7	950.9	0.00	0.00	0.00
SJ 32-7 #19M PCP									

Design Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 32-7 #19M ICP	- plan hits target center	0.00	0.00	3,781.0	428.9	-848.7	2,157,663.42	573,830.25	36° 55' 45.825 N	107° 34' 50.652 W
	- Circle (radius 50.0)									
SJ 32-7 #19M North I	- plan misses target center by 65.0ft at 3950.8ft MD (3781.0 TVD, 428.9 N, -848.7 E)	0.00	0.00	3,781.0	493.9	-848.7	2,157,728.40	573,830.07	36° 55' 46.467 N	107° 34' 50.653 W
	- Polygon									
	Point 1			3,781.0	0.0	-400.0	2,157,727.33	573,430.10		
	Point 2			3,781.0	0.0	400.0	2,157,729.47	574,230.04		
SJ 32-7 #19M PCP	- plan hits target center	0.00	0.00	8,205.0	428.9	-848.7	2,157,663.42	573,830.25	36° 55' 45.825 N	107° 34' 50.652 W
	- Point									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well SJ 32-7 #19M
Company:	ConocoPhillips	TVD Reference:	DFE @ 6630.0ft (AWS 730)
Project:	SAN JUAN BASIN	MD Reference:	DFE @ 6630.0ft (AWS 730)
Site:	SEC.04-T31N-R7W	North Reference:	True
Well:	SJ 32-7 #19M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1:		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
200.0	200.0	9 5/8"	9-5/8	12-1/4	
3,950.8	3,781.0	7"	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
905.6	905.0	Nacimiento				
2,489.9	2,398.0	Ojo Alamo				
2,608.7	2,507.0	Kirtland				
3,126.6	2,982.0	Fruitland				
3,654.6	3,486.0	Pictured Cliffs				
3,800.6	3,631.0	Lewis				
4,478.8	4,309.0	Huerfano Bentonite				
4,876.8	4,707.0	Chacara				
5,326.8	5,157.0	Upper Cliff House				
5,665.8	5,496.0	Massive Cliff House				
5,721.8	5,552.0	Menefee				
5,979.8	5,810.0	Point Lookout				
6,421.8	6,252.0	Mancos				
7,351.8	7,182.0	Gallup				
8,050.8	7,881.0	Greenhorn				
8,107.8	7,938.0	Graneros				
8,199.8	8,030.0	Two Wells				
8,222.8	8,053.0	Paguate				
8,233.8	8,064.0	Upper Cubero				
8,271.8	8,102.0	Lower Cubero				
8,333.8	8,164.0	Encinal				