

submitted in lieu of Form 3160-5
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD NOV 27 '07
OIL CONS. DIV.

DIST. 3

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of Operator
CONOCOPHILLIPS

3. Address & Phone No. of Operator

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

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

Unit L (NWSW), 1475' FSL & 1175' FWL, Section 33, T28N, R07W, NMPM
Unit I (NESE), 1700' FSL & 200' FEL, Section 32, T28N, R 07W, NMPM

RECEIVED

NOV 21 2007

Bureau of Land Management
Farmington Field Office

5. Lease Number
NMSF-078498
6. If Indian, All. or
Tribe Name
7. Unit Agreement Name
San Juan 28-7 Unit
8. Well Name & Number
San Juan 28-7 Unit 229F
9. API Well No.
30-039-30375
10. Field and Pool
Basin Dakota
Blanco Mesaverde
11. County and State
Rio Arriba Co., 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
☐ Subsequent Report	☐ Recompletion ☐ New Construction
☐ Final Abandonment	☐ Plugging ☐ Non-Routine Fracturing
	☐ Casing Repair ☐ Water Shut off
	☐ Altering Casing ☐ Conversion to Injection

☒ Other - Change of Plans

13. Describe Proposed or Completed Operations

11/21/07 ConocoPhillips wished to change the intermediate depth on this directional well from 4100' TVD to 4242' TVD. Bottom hole location will remain the same. Please find attached the revised drilling program and directional survey.

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

Signed Tamra Sessions Tamra Sessions Title Regulatory Technician Date 11/21/2007

(This space for Federal or State Office use)

APPROVED BY [Signature] Title Reg. Eng. Date 11/26/07

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

NMOC

ConocoPhillips SJB

San Juan Basin

Russell's Site for Directional MV/DK wells

SJ 28-7 #229F

SJ 28-7 #229F

Plan: Plan #1

Standard Planning Report

20 November, 2007

ConocoPhillips or its affiliates
Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #229F
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6243.0ft (Original Well Elev)
Project:	San Juan Basin	MD Reference:	WELL @ 6243 0ft (Original Well Elev)
Site:	Russell's Site for Directional MV/DK wells	North Reference:	True
Well:	SJ 28-7 #229F	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 #229F		
Design:	Plan #1		

Project:	San Juan Basin, Mid-Continent Area		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	Russell's Site for Directional MV/DK wells		
Site Position:		Northing:	629,052.40 m
From:	Lat/Long	Easting:	199,338.08 m
Position Uncertainty:	0 0 ft	Slot Radius:	in
		Latitude:	36° 40' 14.586 N
		Longitude:	107° 18' 29.658 W
		Grid Convergence:	0 31 °

Well	SJ 28-7 #229F		
Well Position	+N/-S	0 0 ft	Northing: 622,744.01 m
	+E/-W	0.0 ft	Easting: 174,778.89 m
Position Uncertainty		0 0 ft	Wellhead Elevation: ft
			Latitude: 36° 36' 53.136 N
			Longitude: 107° 34' 59.388 W
			Ground Level: 6,228.0 ft

Wellbore	SJ 28-7 #229F		
Magnetics	Model Name	Sample Date	Declination
	BGGM2006	9/6/2007	(°)
			10 31
			63.51
			51,083

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0 0	0.0
			279 46

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
0 0	0.00	0 00	0 0	0.0	0.0	0.00	0.00	0 00	0.00	
350.0	0 00	0.00	350 0	0 0	0 0	0.00	0 00	0.00	0.00	
1,696.0	26 92	279 46	1,647.1	51 0	-306.2	2 00	2.00	0 00	279 46	
3,636.6	26 92	279.46	3,377 3	195.4	-1,172.9	0.00	0.00	0.00	0 00	
4,533 9	0.00	0.00	4,242 0	229.4	-1,377.0	3.00	-3 00	0 00	180.00	SJ 28-7 #229F - ICP
7,573.9	0 00	0 00	7,282.0	229.4	-1,377 0	0.00	0.00	0.00	0 00	SJ 28-7 #229F - PCP

ConocoPhillips or its affiliates

Planning Report

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Project:	San Juan Basin	MD Reference:	WELL @ 6243.0ft (Original Well Elev)
Site:	Russell's Site for Directional MV/DK wells	North Reference:	True
Well:	SJ 28-7 #229F	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 #229F		
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
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.00	279.46	400.0	0.1	-0.4	0.4	2.00	2.00	0.00
500.0	3.00	279.46	499.9	0.6	-3.9	3.9	2.00	2.00	0.00
600.0	5.00	279.46	599.7	1.8	-10.8	10.9	2.00	2.00	0.00
692.8	6.86	279.46	692.0	3.4	-20.2	20.5	2.00	2.00	0.00
Nacimiento									
700.0	7.00	279.46	699.1	3.5	-21.1	21.4	2.00	2.00	0.00
800.0	9.00	279.46	798.2	5.8	-34.8	35.3	2.00	2.00	0.00
900.0	11.00	279.46	896.6	8.6	-51.9	52.6	2.00	2.00	0.00
1,000.0	13.00	279.46	994.4	12.1	-72.4	73.4	2.00	2.00	0.00
1,100.0	15.00	279.46	1,091.5	16.0	-96.3	97.6	2.00	2.00	0.00
1,200.0	17.00	279.46	1,187.6	20.6	-123.5	125.2	2.00	2.00	0.00
1,300.0	19.00	279.46	1,282.7	25.6	-154.0	156.1	2.00	2.00	0.00
1,400.0	21.00	279.46	1,376.6	31.3	-187.7	190.3	2.00	2.00	0.00
1,500.0	23.00	279.46	1,469.4	37.4	-224.6	227.7	2.00	2.00	0.00
1,600.0	25.00	279.46	1,560.7	44.1	-264.8	268.4	2.00	2.00	0.00
1,696.0	26.92	279.46	1,647.1	51.0	-306.2	310.4	2.00	2.00	0.00
1,700.0	26.92	279.46	1,650.6	51.3	-308.0	312.2	0.00	0.00	0.00
1,800.0	26.92	279.46	1,739.8	58.7	-352.7	357.5	0.00	0.00	0.00
1,900.0	26.92	279.46	1,828.9	66.2	-397.3	402.8	0.00	0.00	0.00
1,937.1	26.92	279.46	1,862.0	68.9	-413.9	419.6	0.00	0.00	0.00
Ojo Alamo									
2,000.0	26.92	279.46	1,918.1	73.6	-442.0	448.1	0.00	0.00	0.00
2,100.0	26.92	279.46	2,007.2	81.1	-486.6	493.3	0.00	0.00	0.00
2,105.3	26.92	279.46	2,012.0	81.5	-489.0	495.8	0.00	0.00	0.00
Kirtland									
2,200.0	26.92	279.46	2,096.4	88.5	-531.3	538.6	0.00	0.00	0.00
2,300.0	26.92	279.46	2,185.6	95.9	-576.0	583.9	0.00	0.00	0.00
2,400.0	26.92	279.46	2,274.7	103.4	-620.6	629.2	0.00	0.00	0.00
2,500.0	26.92	279.46	2,363.9	110.8	-665.3	674.4	0.00	0.00	0.00
2,600.0	26.92	279.46	2,453.1	118.3	-709.9	719.7	0.00	0.00	0.00
2,615.6	26.92	279.46	2,467.0	119.4	-716.9	726.8	0.00	0.00	0.00
Fruitland									
2,700.0	26.92	279.46	2,542.2	125.7	-754.6	765.0	0.00	0.00	0.00
2,800.0	26.92	279.46	2,631.4	133.1	-799.3	810.3	0.00	0.00	0.00
2,900.0	26.92	279.46	2,720.5	140.6	-843.9	855.6	0.00	0.00	0.00
2,980.1	26.92	279.46	2,792.0	146.5	-879.7	891.8	0.00	0.00	0.00
Pictured Cliffs									
3,000.0	26.92	279.46	2,809.7	148.0	-888.6	900.8	0.00	0.00	0.00
3,100.0	26.92	279.46	2,898.9	155.5	-933.2	946.1	0.00	0.00	0.00
3,200.0	26.92	279.46	2,988.0	162.9	-977.9	991.4	0.00	0.00	0.00
3,204.4	26.92	279.46	2,992.0	163.2	-979.9	993.4	0.00	0.00	0.00
Lewis									
3,300.0	26.92	279.46	3,077.2	170.3	-1,022.6	1,036.7	0.00	0.00	0.00
3,400.0	26.92	279.46	3,166.4	177.8	-1,067.2	1,081.9	0.00	0.00	0.00
3,500.0	26.92	279.46	3,255.5	185.2	-1,111.9	1,127.2	0.00	0.00	0.00
3,600.0	26.92	279.46	3,344.7	192.7	-1,156.5	1,172.5	0.00	0.00	0.00
3,636.6	26.92	279.46	3,377.3	195.4	-1,172.9	1,189.0	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

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Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6243 0ft (Original Well Elev)
Project:	San Juan Basin	MD Reference:	WELL @ 6243 0ft (Original Well Elev)
Site:	Russell's Site for Directional MV/DK wells	North Reference:	True
Well:	SJ 28-7 #229F	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 #229F		
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)
3,700.0	25.02	279.46	3,434.3	200.0	-1,200.3	1,216.8	3.00	-3.00	0.00
3,800.0	22.02	279.46	3,526.0	206.5	-1,239.6	1,256.7	3.00	-3.00	0.00
3,900.0	19.02	279.46	3,619.7	212.3	-1,274.2	1,291.8	3.00	-3.00	0.00
4,000.0	16.02	279.46	3,715.0	217.2	-1,303.9	1,321.9	3.00	-3.00	0.00
4,017.7	15.49	279.46	3,732.0	218.0	-1,308.6	1,326.6	3.00	-3.00	0.00
Chacra									
4,100.0	13.02	279.46	3,811.8	221.3	-1,328.6	1,346.9	3.00	-3.00	0.00
4,200.0	10.02	279.46	3,909.8	224.6	-1,348.3	1,366.9	3.00	-3.00	0.00
4,300.0	7.02	279.46	4,008.7	227.0	-1,362.9	1,381.7	3.00	-3.00	0.00
4,391.8	4.26	279.46	4,100.0	228.5	-1,371.8	1,390.7	3.00	-3.00	0.00
7"									
4,400.0	4.02	279.46	4,108.2	228.6	-1,372.4	1,391.3	3.00	-3.00	0.00
4,500.0	1.02	279.46	4,208.1	229.3	-1,376.7	1,395.7	3.00	-3.00	0.00
4,533.9	0.00	0.00	4,242.0	229.4	-1,377.0	1,396.0	3.00	-3.00	0.00
SJ 28-7 #229F - ICP									
4,600.0	0.00	0.00	4,308.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
4,633.9	0.00	0.00	4,342.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Cliffhouse									
4,700.0	0.00	0.00	4,408.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
4,743.9	0.00	0.00	4,452.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Menefee									
4,800.0	0.00	0.00	4,508.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,608.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,708.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,100.0	0.00	0.00	4,808.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,200.0	0.00	0.00	4,908.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,298.9	0.00	0.00	5,007.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Pt. Lookout									
5,300.0	0.00	0.00	5,008.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,108.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,208.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,308.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,408.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,508.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,608.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,708.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,100.0	0.00	0.00	5,808.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,200.0	0.00	0.00	5,908.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,008.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,108.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,208.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,543.9	0.00	0.00	6,252.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Gallup									
6,600.0	0.00	0.00	6,308.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,408.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,508.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,608.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,708.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,808.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
7,200.0	0.00	0.00	6,908.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
7,223.9	0.00	0.00	6,932.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Greenhorn									

ConocoPhillips or its affiliates

Planning Report

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Wellbore:	SJ 28-7 #229F		
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)
7,300.0	0.00	0.00	7,008.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
7,308.9	0.00	0.00	7,017.0	229.4	-1,377.0	1,396.0	0.00	0.00	0.00
Two Wells									
7,400.0	0.00	0.00	7,108.1	229.4	-1,377.0	1,396.0	0.00	0.00	0.00

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
- hit/miss target									
- Shape									
SJ 28-7 #229F - PCP	0.00	0.00	7,282.0	229.4	-1,377.0	622,812.83	174,359.02	36° 36' 55.404 N	107° 35' 16.278 W
- plan misses by 173.9ft at 7400.0ft MD (7108.1 TVD, 229.4 N, -1377.0 E)									
- Point									
SJ 28-7 #229F - ICP	0.00	0.00	4,242.0	229.4	-1,377.0	622,812.83	174,359.02	36° 36' 55.404 N	107° 35' 16.278 W
- plan hits target									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
4,391.8	4,100.0	7"	7.000	8.750	
200.0	200.0	9 5/8"	9.625	12.250	
7,573.9	7,282.0	4 1/2"	4.500	6.250	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
692.8	692.0	Nacimiento		0.00	
1,937.1	1,862.0	Ojo Alamo		0.00	
2,105.3	2,012.0	Kirtland		0.00	
2,615.6	2,467.0	Fruitland		0.00	
2,980.1	2,792.0	Pictured Cliffs		0.00	
3,204.4	2,992.0	Lewis		0.00	
4,017.7	3,732.0	Chacra		0.00	
4,633.9	4,342.0	Cliffhouse		0.00	
4,743.9	4,452.0	Menefee		0.00	
5,298.9	5,007.0	Pt Lookout		0.00	
6,543.9	6,252.0	Gallup		0.00	
7,223.9	6,932.0	Greenhorn		0.00	
7,308.9	7,017.0	Two Wells		0.00	
7,443.9	7,152.0	Upper Cubero		0.00	
7,573.9	7,282.0	TD		0.00	

T - 28 N
R - 7 W
Sec 33

Objective: MV/DK Directional
Footages: 1475' FSL, 1175' FWL

Rig: AWS #711
GL: 6228'
KB: 6243'

BLM Phone #
505-599-8907
OCD Phone #
505-334-6178

API #
30-039-30375
Network #
10196157

Lease #
NMSF-078498
Like-Kind
125 \$/FT
APD TMD:

APD/BLM:
9/25/2007
AFE #
WAN CNV.7172

(248) Cost
\$978,925
7574'

San Juan Division - Drilling Program

In case of Major Emergency Call 911
Give the following information to Operator:
Well Name: SAN JUAN 28-7 229F
County: Rio Arriba
Latitude: 36 degrees, 36.8661 minutes NAD27
State: NM
Longitude: 107 degrees, 35.062 minutes NAD27
From the PO in Blanco, NM. Go East on HWY 64 for 1.2 miles, turn right (southerly) on CR 44509 for 3.7 miles, stay left at Y-intersection & go (southeasterly) 2.3 miles, stay right at Y-intersection and go (southeast) along the east side of Carrizo Wash for 2.3 miles, turn left (northeasterly) for 2.6 miles, stay right (southeasterly) 1.1 miles, turn right (southeasterly) across Carrizo Wash, and continue (southeasterly) along the south side of Carrizo Wash for 4.3 miles, turn left (easterly) along Carrizo Wash 1.4 miles, cross Martin Canyon Wash and turn right (southerly) 0.1 miles, turn left (easterly) up steep grade and continue along the access road (southeasterly) 1.3 miles, to newly staked location on exsisting well pad.

Environmental, Health & Safety				
*Opportunities are usually disguised as hard work, so most people don't recognize them * Ann Landers "Nothing is particularly hard if you divide it into small jobs" Henry Ford				
Goal	TRIR*	FAT	Restrict'd Duty	OSHA Rec
Actual (9/28/07)	2.8	1	7	22
* TRIR - Total Recordable Incident Rate per 200,000 man-hours.				
Environmental Goals:				
- Zero Spills on Location				
- Remove Trash from Roads and Locations				

TVD	TMD	Geology	Hydraulics	Drig Fluids	Cement	Materials			
0'	0'	San Jose	12 1/4" Retip	Spud Mud	Preset by MOTE on 9/28/07	1 Wood Group wellhead 1 Wellhead fuzz cap 200 feet 9-5/8" 32 3# H-40 STC 1 9-5/8" sawtooth guide shoe 3 Bow Type Centralizers 1 Rubber Plug f/displacement			
200'	200'	SCP	8 3/4" HCM506Z 6-14's 8-15K WOB 420 GPM 65 RPM	Drill out from under surface w/ Clean Faze (Vis 33-35, WT 8 5-9.0 ppg, WL of 6-8 cc/30 min). Sweep hole with gel/fiber as needed. Don't hesitate to mud hole up!	1-Stage Intermediate Cement Procedure Preflush: 10 bbls FW, 10 bbls MF, 10 bbls FW Scavenger: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8% bentonite and 0.4% SMS. 20 sks 11 ppg 17.89 gal/sk 58.0 cu.ft 3.02 cu.ft/sk Lead: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8% Bentonite and 0.4% SMS. 620 sks 12.1 ppg 11.29 gal per sk 1308.3 cu ft 2.13 cu ft/sk 125% Tail: Type III cmt. w/ 1% CaCl, 0.25 pps Cello-Flake and 0.2% FL-52. 110 sks 14.60 ppg 6.64 gal per sk 146 cu ft 1.38 cu.ft/sk 0% Top of Tail @ 3627.2 ft. TMD If losses are incurred an alternate cement procedure or a two stage job (see below) will be used. Call office for instructions.	1 7" Float Shoe (Gemoco) 40 feet Shoe Joint 7" 23.0#, L-80 LT&C 1 7" Float Collar (Gemoco) 4494 feet 7", 23.0#, L-80 LT&C			
692'	693'	Nacimiento	National 6-3/4" 7.8 lobe 5.0 stage 0.28 rev/gpm mud motor	Make wiper trip @ TD	Alternate 2-Stage Intermediate Cement Procedure Stage 1 Preflush: 10 bbls FW, 10 bbls MF, 10 bbls FW Scavenger: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8% bentonite and 0.4% SMS. 20 sks 11.0 ppg 17.89 gal/sk 56.0 cu.ft 3.02 cu.ft/sk Lead: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8 % bentonite and 0.4% SMS. 270 sks 12.1 ppg 11.29 gal/sk 557.9 cu ft. 2.13 cu ft/sk 125% Tail: Type III cmt. w/ 1% CaCl, 0.25 pps Cello-Flake and 0.2% FL-52. 110 sks 14.6 ppg 6.64 gal/sk 145.6 cu.ft 1.38 cu ft/sk Stage 2 Preflush: 10 bbls FW, 10 bbls MF, 10 bbls FW Scavenger: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8% bentonite and 0.4% SMS. 20 sks 11.0 ppg 17.89 gal/sk 56.0 cu ft 3.02 cu.ft/sk Lead: Premium Lite w/ 3% CaCl, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, 8% bentonite and 0.4% SMS. 330 sks 12.1 ppg 11.29 gal/sk 694.4 cu ft 2.13 cu ft/sk 125% Have mudloggers on hole from 7120' TMD to TD. Mudloggers will be Softrock (970-247-8868)	Intermediate String 1 7" Float Shoe (Gemoco) 40 feet Shoe Joint 7" 23.0#, L-80 LT&C 1 7" Float Collar (Gemoco) 4494 feet 7", 23.0#, L-80 LT&C			
1862'	1937'	Ojo Alamo				GPM range for motor 200-450 GPM	Air/Nitrogen 1800 cfm 400 - 500 psi	Production String 1 4-1/2" Float Shoe (Gemoco) 1 4-1/2" Float Collar w/ Insert and latch in plug 350 feet 4-1/2" 11 6#, L-80 LT&C 10 feet 4-1/2" 11 6#, L-80 LT&C marker jt @ the Greenhorn 3680 feet 4-1/2" 11 6#, L-80 LT&C 10 feet 4-1/2" 11 6#, L-80 LT&C marker jt @ 1100' above the Massive Cliffhouse 3524 feet 4-1/2" 11 6#, L-80 LT&C to surface 20 4-1/2" x 6-1/4" bowspring centralizers, 1 on shoe jt, then 1 every 4th jt f/bottom to above Cliffhouse & 1 on jt below 7" shoe	Totals 4684 feet 7", 23.0#, L-80 LT&C w/ 150' extra 37 7" x 8-3/4" Tandem Rise type centralizers
2012'	2105'	Kirtland							
2467'	2316'	Stage Tool (If Needed)							
2792'	2616'	Fruitland	New Diamond Air 6-1/4" Bit Marquis CV462 on Halco Hammer 2-4 K WOB 30-40 RPM Slow ROP before drilling into the top of Greenhorn Reduce WOB to 2,000 & RPM to 25	Run 1-3 #/ft lube beads for friction Oxygen conc MUST be 8% or less while drilling prod hole section	If hole gets wet: Immediately start pulling out of hole and then contact the drilling superintendent	No open hole logs	Production Cement Procedure Preflush: 10 bbls Chem Wash, 2 bbls FW Scavenger: Premium Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52. 10 sks 11.0 ppg 17.89 gal/sk 27.0 cu.ft 3.02 cu ft/sk 40% Tail: Premium Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 220 sks 12.5 ppg 9.80 gal/sk 433.3 cu ft 1.98 cu ft/sk 40% Add 25lb. Bag sugar to first displacement Order 35 sks extra cement for rat and mouse holes.		
2992'	3204'	Lewis							
3732'	4018'	Chacra							
4242'	4534'	ICP							
4342'	4634'	Massive Cliff House							
4452'	4744'	Menefee							
5007'	5299'	Point Lookout							
56252'	6544'	Gallup							
5932'	7224'	Greenhorn							
7017'	7309'	Two Wells							
7152'	7444'	Cubero							
7272'	7562'	Est Bottom Perf							
7278'	NA	Encinal							
7282'	7570'	Est PBDT							
	7574'	Total Depth							

Offset Summary
San Juan 28-7 #136F (MV/DK, 1% ml NW, 2006): Rig drilled surface to 240' Ran 9-5/8" 32 3# H-40 STC to 235' Pumped 30 bbls cmt, circ 5 bbl cmt to surface, 100% excess Drilled f/240'-3,660' w/ 8-3/4" HC607Z bit, max deviation = 2.5%, avg ROP = 180 fph. Ran 7" 20# J-55 STC to 3,650' Pumped 137 bbls, lost returns while pumping tail slurry, continue pumping and bumped plug, no returns to surface, 40% excess. Pressure when plug was bumped was near lift pressure, so cement should be high. Air drilled f/3,660'-7,835' w/ 6-1/4" Marquis CV-462, average ROP = 150 fph Ran 4-1/2" 11 6# N-80 LTC to 7,834' Pumped 122 bbls, TOC at 2,430', 1,220' overlap, 55% excess

San Juan 28-7 #190G (MV/DK, 1 mi. SE, 2005): Rig drilled surface to 240' Ran 9-5/8" 32 3# H-40 STC to 235' Pumped 32 bbls cmt, circ 15 bbl cmt to surface, 120% excess Drilled f/240'-3,570' w/ 8-3/4" HC-607Z, avg ROP = 66 fph, max dev = 4 deg Ran 7" 20# J-55 STC to 3,561' Pumped 234 bbls cmt, circ 20 bbl to surface, 150% excess Air drilled f/3,570'-7,761' w/ 6-1/4" CV-462, ran into tight spots at 3,690' while tripping for bit, dusted to TD Ran 4-1/2" 11 6# N-80 LTC to 7,758 Pumped 120 bbls cmt, TOC @ 2,116', 55% excess.

Operational Notes
Directional Info
- Drill out surface cmt with directional equipment to KOP of 350'
- A 6 1/2" E-Field MWD tool will be used
- Run 6-3/4", 7.8, 0.28 rev/gpm, 5.0 motor for directional work
- Build at 2 degrees/100' in the azimuth of 279.46 degrees to a depth of 1696' TMD (1647' TVD). Hold at 26.92 degrees in azimuth of 279.46 degrees to a depth of 3636' TMD (3373' TVD). Drop angle at 3 degrees/100' to depth of 4534' TMD (4,242' 0' TVD) where inclination will be 0 degrees
- At 7" casing point (4534' TMD, 4242' TVD), TOH with drilling assembly and TIH with insert bit, collar, 8-1/2" 3-pt reamer

Target Info
- Bottom hole location is 1700' FSL and 200' FEL (SECTION 32)
- Target is 229.4' N and 1377' W from surface stake
- BHL is 1396' in azimuth 279.46° from surface location
- Target size is a 50' radius around the desired BHL Hard line 1185' west of surface hole loc
Operational Info
- Run 20 jts of 4 1/2" HeviWate pipe for intermediate hole (supplied by Weatherford).
- Run 6-10 DCs for air BHA; use 20 DCs if mud drilling necessary.
- Caliper everything that goes through the table
- Notify 1st Delivery to stnp location at least five days in advance
- Pump cement job no greater than 4 BPM.
- Install drilling head rotating rubber once BHA is burned
- Reserve pits must be lined
- Well should take an estimated 14 days to drill
- Have Blooie line rigged up prior to drilling the Kirtland
- Call both regulatory agencies 24 hours in advance of BOP testing, spud, running csg, or cementing Leave message if after hours