

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 04 2010

Farmington Field Office
Bureau of Land Management

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number Jicarilla Contract 150 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe Jicarilla Apache
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name Jicarilla 150
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name RCVD MAR 2 '11 OIL CONS. DIV. DIST. 3
4. Location of Well Surface: Unit G(SWNE), 1625' FNL & 1560' FEL BH: Unit H(ENE), 2220' FNL & 710' FEL Surface: Latitude: 36.518636° N (NAD83) Longitude: 107.324013° W Bottomhole: Latitude: 36.516956° N (NAD83) Longitude: 107.321128° W	10. Field, Pool, Wildcat Basin DK/Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 2, T26N, R5W API # 30-039-30998
14. Distance in Miles from Nearest Town 43.5 Miles from Blanco, NM	12. County Rio Arriba
15. Distance from Proposed Location to Nearest Property or Lease Line 1560'	13. State NM
16. Acres in Lease This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	17. Acres Assigned to Well DK-319.83 E/2 MV-319.83 E/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 73' from Jicarilla 150 8 (MV/DK)	
19. Proposed Depth 7838'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6677' GL	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Brandie Blakley</u> Brandie Blakley (Staff Regulatory Tech)	9-29-10 Date

PERMIT NO.

APPROVAL DATE

Hold C104
for Directional Survey
and "As Drilled" plat

APPROVED BY

TITLE

DATE

Archaeological Report attached

A gas recovery unit may or may not be used on this location.

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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 presentations as to any matter within its jurisdiction.

Example Master Plan Type 3

Bond Numbers NMB-000015 and NMB-000089

BLM'S APPROVAL OR ACCEPTANCE OF THIS
ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
NECESSARY PERMITS OR OPERATIONS
ON FEDERAL AND INDIAN LANDS

MAR 04 2011

NMOCD

Hold C104
for Directional Survey
and "As Drilled" plat

PC

DISTRICT I
1025 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 West 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 October 12, 2005

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

OCT 04 2010

Farmington Field Office
Bureau of Land Management

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30998	² Pool Code 71599/72319	³ Pool Name BASIN DAKOTA/BLANCO MESAVERDE
⁴ Property Code 16344	⁵ Property Name JICARILLA 150	⁶ Well Number 8M
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6677'

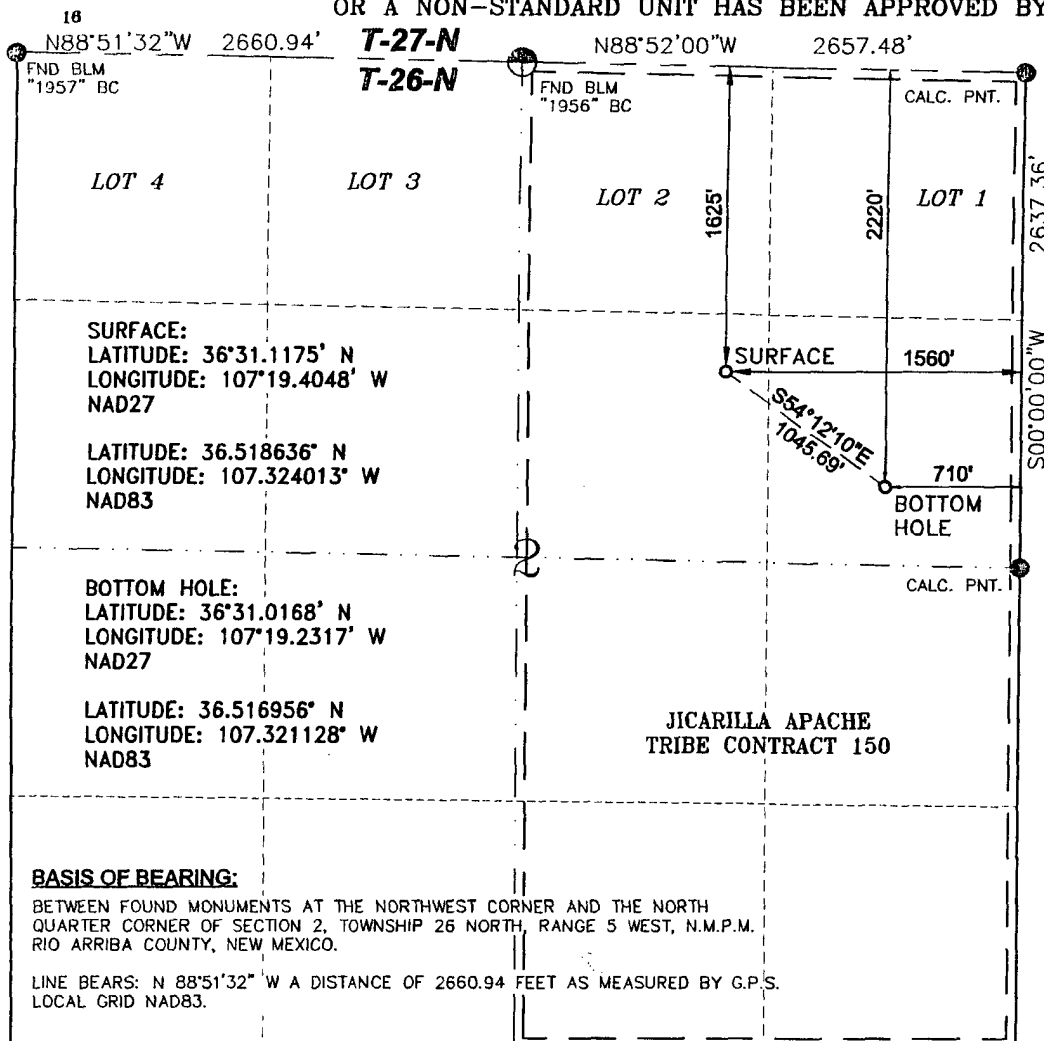
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	2	26-N	5-W		1625	NORTH	1560	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
H	2	26-N	5-W		2220	NORTH	710	EAST	RIO ARriba
¹² Dedicated Acres DK 319.83 ACRES E/2 MV 319.83 ACRES E/2			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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, 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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brandie Blakley 6-2-10
Signature

Brandie Blakley 06-02-2010
Printed Name

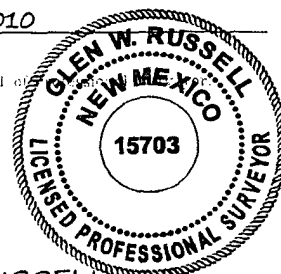
18 SURVEYOR CERTIFICATION

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.

MAY 20, 2010

Date of Survey

Signature and Seal of



GLEN W. RUSSELL

Certificate Number

15703

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

JICARILLA 150 8M

DEVELOPMENT

Lease:		AFE #: WAN.CDR.0015				AFE \$: 902,808.03	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA		API #:
Geologist:	Phone:	Geophysicist:		Phone:			
Geoscientist:	Phone:	Prod. Engineer:		Phone:			
Res. Engineer:	Phone:	Proj. Field Lead:		Phone:			
Primary Objective (Zones):							
Zone	Zone Name						
FRR	BASIN DAKOTA (PRORATED GAS)						
RON	BLANCO MESAVERDE (PRORATED GAS)						
Location: Surface		Datum Code: NAD 27				Directional	
Latitude: 36.518626	Longitude: -107.323413	X:	Y:	Section: 02	Range: 005W		
Footage X: 1560 FEL	Footage Y: 1625 FNL	Elevation: 6677	(FT)	Township: 026N			
Tolerance:							
Location: Bottom Hole		Datum Code: NAD 27				Directional	
Latitude: 36.516946	Longitude: -107.320528	X:	Y:	Section: 02	Range: 005W		
Footage X: 710 FEL	Footage Y: 2220 FNL	Elevation:	(FT)	Township: 026N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2011		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6692 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200 370	6372		☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	1400	5292		☐			
OJO ALAMO	2860	3832		☐			
KIRTLAND	2961	3731		☐			
FRUITLAND	3003	3689		☐			Possible Gas
PICTURED CLIFFS	3410	3282		☐			
LEWIS	3476	3216		☐			
Intermediate Casing	3576	3116		☐	114	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 850 cuft. Circulate cement to surface.	
HUERFANITO BENTONITE	3879	2813		☐			
CHACRA	4353	2339		☐			
UPPER CLIFF HOUSE	4956	1736		☐			Gas; Est. Top Perf - 4958 (1734)
MASSIVE CLIFF HOUSE	5050	1642		☐	704		Gas; Cliffhouse is dry
MENEFEE	5178	1514		☐			
POINT LOOKOUT	5551	1141		☐			
MANCOS	6032	660		☐			
UPPER GALLUP	6701	-9		☐			
GREENHORN	7501	-809		☐			
GRANEROS	7559	-867		☐			
TWO WELLS	7592	-900		☐	2317		Gas
PAGUATE	7673	-981		☐			
UPPER CUBERO	7702	-1010		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

JICARILLA 150 3M

DEVELOPMENT

LOWER CUBERO	7739	-1047	☐	Est. Btm Perf - 7808 (- 1116) based on offset wells
ENCINAL	7818	-1126	☐	TD - 20' below T/ENCN
Total Depth	7838	-1146	☐	198 6-1/4" hole, 4-1/2" 11.6 ppf, J-55/L-80, LTC casing. Cement w/ 580 cuft. Circulate cement a minimum of 100' inside the previous casing string.
BURRO CANYON	7840	-1148	☐	
MORRISON	7866	-1174	☐	

Reference Wells:

Reference Type	Well Name	Comments
Production	Jicarilla G 1	26N 5W 1 NW SW
Production	Jicarilla G 8E	26N 5W 2 SW NE SE
Production	Jicarilla G 8	26N 5W 2 NE SW NE
Production	Jicarilla G 6M	26N 5W 2 SE NW NW

Logging Program:

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

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

Cased Hole GR / CBL

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

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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ConocoPhillips or its affiliates
Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Jicarilla 150 #8M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6692.0ft (AWS RIG)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6692.0ft (AWS RIG)
Site:	Other Named Wells	North Reference:	True
Well:	Jicarilla 150 #8M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Project:	San Juan Basin - New Mexico Wells, New Mexico, Directional "S"		
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:	Other Named Wells		
Site Position:		Northing:	2,108,178.26 ft
From:	Lat/Long	Easting:	643,887.63 ft
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 47' 33.793 N
		Longitude:	107° 20' 30.932 W
		Grid Convergence:	0.29 °

Well:	Jicarilla 150 #8M, Directional S Curve Short Stepout					
Well Position	+N/-S	0.0 ft	Northing:	2,008,424.13 ft	Latitude:	36° 31' 7.050 N
	+E/-W	0.0 ft	Easting:	649,838.35 ft	Longitude:	107° 19' 24.288 W
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft	Ground Level:	6,677.0 ft	

Wellbore:	Original Hole				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	BGGM2010	9/8/2010	9.77	63.40	50,743

Design:	Plan #1				
Audit Notes:					
Version:	1	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	125.78	

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	
320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,609.4	25.79	125.78	1,566.3	-166.8	231.5	2.00	2.00	0.00	125.78	
2,918.6	25.79	125.78	2,745.1	-499.8	693.5	0.00	0.00	0.00	0.00	
3,778.2	0.00	0.00	3,576.0	-611.0	847.8	3.00	-3.00	0.00	180.00	Jicarilla 150 #8M ICP
8,040.2	0.00	0.00	7,838.0	-611.0	847.8	0.00	0.00	0.00	0.00	Jicarilla 150 #8M PCF

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Jicarilla 150 #8M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6692.0ft (AWS RIG)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6692.0ft (AWS RIG)
Site:	Other Named Wells	North Reference:	True
Well:	Jicarilla 150 #8M	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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.60	125.78	400.0	-0.7	0.9	1.1	2.00	2.00	0.00
500.0	3.60	125.78	499.9	-3.3	4.6	5.7	2.00	2.00	0.00
600.0	5.60	125.78	599.6	-8.0	11.1	13.7	2.00	2.00	0.00
700.0	7.60	125.78	698.9	-14.7	20.4	25.2	2.00	2.00	0.00
800.0	9.60	125.78	797.8	-23.5	32.5	40.1	2.00	2.00	0.00
900.0	11.60	125.78	896.0	-34.2	47.5	58.5	2.00	2.00	0.00
1,000.0	13.60	125.78	993.6	-47.0	65.2	80.3	2.00	2.00	0.00
1,100.0	15.60	125.78	1,090.4	-61.7	85.6	105.5	2.00	2.00	0.00
1,200.0	17.60	125.78	1,186.2	-78.4	108.8	134.1	2.00	2.00	0.00
1,300.0	19.60	125.78	1,281.0	-97.0	134.7	166.0	2.00	2.00	0.00
1,400.0	21.60	125.78	1,374.6	-117.6	163.2	201.2	2.00	2.00	0.00
1,427.4	22.15	125.78	1,400.0	-123.6	171.5	211.4	2.00	2.00	0.00
Nacimiento									
1,500.0	23.60	125.78	1,466.9	-140.1	194.4	239.6	2.00	2.00	0.00
1,600.0	25.60	125.78	1,557.8	-164.4	228.2	281.2	2.00	2.00	0.00
1,609.4	25.79	125.78	1,566.3	-166.8	231.5	285.3	2.00	2.00	0.00
1,700.0	25.79	125.78	1,647.9	-189.8	263.4	324.7	0.00	0.00	0.00
1,800.0	25.79	125.78	1,737.9	-215.3	298.7	368.2	0.00	0.00	0.00
1,900.0	25.79	125.78	1,828.0	-240.7	334.0	411.7	0.00	0.00	0.00
2,000.0	25.79	125.78	1,918.0	-266.2	369.3	455.2	0.00	0.00	0.00
2,100.0	25.79	125.78	2,008.0	-291.6	404.6	498.7	0.00	0.00	0.00
2,200.0	25.79	125.78	2,098.1	-317.0	439.9	542.2	0.00	0.00	0.00
2,257.7	25.79	125.78	2,150.0	-331.7	460.3	567.3	0.00	0.00	0.00
Surface Shoe									
2,300.0	25.79	125.78	2,188.1	-342.5	475.2	585.7	0.00	0.00	0.00
2,400.0	25.79	125.78	2,278.2	-367.9	510.5	629.2	0.00	0.00	0.00
2,500.0	25.79	125.78	2,368.2	-393.3	545.8	672.7	0.00	0.00	0.00
2,600.0	25.79	125.78	2,458.3	-418.8	581.1	716.3	0.00	0.00	0.00
2,700.0	25.79	125.78	2,548.3	-444.2	616.4	759.8	0.00	0.00	0.00
2,800.0	25.79	125.78	2,638.3	-469.6	651.7	803.3	0.00	0.00	0.00
2,900.0	25.79	125.78	2,728.4	-495.1	687.0	846.8	0.00	0.00	0.00
2,918.6	25.79	125.78	2,745.1	-499.8	693.5	854.9	0.00	0.00	0.00
3,000.0	23.35	125.78	2,819.2	-519.6	721.0	888.7	3.00	-3.00	0.00
3,044.3	22.02	125.78	2,860.0	-529.6	734.8	905.8	3.00	-3.00	0.00
Ojo Alamo									
3,100.0	20.35	125.78	2,912.0	-541.3	751.2	925.9	3.00	-3.00	0.00
3,152.0	18.78	125.78	2,961.0	-551.5	765.3	943.3	3.00	-3.00	0.00
Kirtland									
3,196.2	17.46	125.78	3,003.0	-559.6	776.5	957.1	3.00	-3.00	0.00
Fruitland Coal									
3,200.0	17.35	125.78	3,006.6	-560.2	777.4	958.2	3.00	-3.00	0.00
3,300.0	14.35	125.78	3,102.8	-576.2	799.5	985.5	3.00	-3.00	0.00
3,400.0	11.35	125.78	3,200.3	-589.2	817.6	1,007.7	3.00	-3.00	0.00
3,500.0	8.35	125.78	3,298.8	-599.2	831.4	1,024.8	3.00	-3.00	0.00
3,600.0	5.35	125.78	3,398.1	-606.1	841.1	1,036.8	3.00	-3.00	0.00
3,612.0	4.99	125.78	3,410.0	-606.8	842.0	1,037.8	3.00	-3.00	0.00
Pictured Cliffs									
3,678.2	3.00	125.78	3,476.0	-609.5	845.7	1,042.4	3.00	-3.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Jicarilla 150 #8M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6692.0ft (AWS RIG)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6692.0ft (AWS RIG)
Site:	Other Named Wells	North Reference:	True
Well:	Jicarilla 150 #8M	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										
3,700.0	2.35	125.78	3,497.8	-610.1	846.5	1,043.5	3.00	-3.00	0.00	
3,778.2	0.00	0.00	3,576.0	-611.0	847.8	1,045.1	3.00	-3.00	-160.83	
Intermediate Shoe - Jicarilla 150 #8M ICP										
3,800.0	0.00	0.00	3,597.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,697.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,000.0	0.00	0.00	3,797.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,081.2	0.00	0.00	3,879.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Huerfano Bentonite										
4,100.0	0.00	0.00	3,897.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,200.0	0.00	0.00	3,997.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,300.0	0.00	0.00	4,097.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,197.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,297.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,555.2	0.00	0.00	4,353.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Chacra										
4,600.0	0.00	0.00	4,397.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,497.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,597.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,697.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,000.0	0.00	0.00	4,797.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,100.0	0.00	0.00	4,897.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,158.2	0.00	0.00	4,956.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Upper Cliff House										
5,200.0	0.00	0.00	4,997.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,252.2	0.00	0.00	5,050.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Massive Cliff House										
5,300.0	0.00	0.00	5,097.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,380.2	0.00	0.00	5,178.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Menefee										
5,400.0	0.00	0.00	5,197.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,297.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,397.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,497.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,753.2	0.00	0.00	5,551.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Point Lookout										
5,800.0	0.00	0.00	5,597.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,697.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,797.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,100.0	0.00	0.00	5,897.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,200.0	0.00	0.00	5,997.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,234.2	0.00	0.00	6,032.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Mancos										
6,300.0	0.00	0.00	6,097.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,197.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,297.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,397.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,497.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,597.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,697.8	-611.0	847.8	1,045.1	0.00	0.00	0.00	
6,903.2	0.00	0.00	6,701.0	-611.0	847.8	1,045.1	0.00	0.00	0.00	
Upper Gallup										

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Jicarilla 150 #8M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6692.0ft (AWS RIG)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6692.0ft (AWS RIG)
Site:	Other Named Wells	North Reference:	True
Well:	Jicarilla 150 #8M	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)
7,000.0	0.00	0.00	6,797.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,100.0	0.00	0.00	6,897.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,200.0	0.00	0.00	6,997.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,097.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,197.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,297.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,397.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,497.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,703.2	0.00	0.00	7,501.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Greenhorn									
7,761.2	0.00	0.00	7,559.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Grñneros									
7,794.2	0.00	0.00	7,592.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Two Wells									
7,800.0	0.00	0.00	7,597.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,875.2	0.00	0.00	7,673.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Paguete									
7,900.0	0.00	0.00	7,697.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
7,904.2	0.00	0.00	7,702.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Upper Cubero									
7,941.2	0.00	0.00	7,739.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Lower Cubero									
8,000.0	0.00	0.00	7,797.8	-611.0	847.8	1,045.1	0.00	0.00	0.00
8,020.2	0.00	0.00	7,818.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Encinal									
8,040.2	0.00	0.00	7,838.0	-611.0	847.8	1,045.1	0.00	0.00	0.00
Jicarilla 150 #8M PCP									

Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
Jicarilla 150 #8M PCP	- plan hits target center - Circle (radius 50.0)	0.00	0.00	7,838.0	-611.0	847.8	2,007,817.67	650,689.33	36° 31' 1.008 N 107° 19' 13.902 W
Jicarilla 150 #8M ICP	- plan hits target center - Circle (radius 50.0)	0.00	0.00	3,576.0	-611.0	847.8	2,007,817.67	650,689.36	36° 31' 1.008 N 107° 19' 13.902 W

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,040.2	7,838.0	Production Shoe	4-1/2	6-1/4
3,778.2	3,576.0	Intermediate Shoe	7	8-3/4
2,257.7	2,150.0	Surface Shoe	9-5/8	12-1/4

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Jicarilla 150 #8M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6692.0ft (AWS RIG)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6692.0ft (AWS RIG)
Site:	Other Named Wells	North Reference:	True
Well:	Jicarilla 150 #8M	Survey Calculation Method:	Minimum Curvature
Wellbore Design:	Original Hole Plan #1		

Formations:						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Direction (°)	
7,703.2	7,501.0	Greenhorn		0.00		
5,753.2	5,551.0	Ploint Lookout		0.00		
	7,840.0	Burro Canyon		0.00		
6,903.2	6,701.0	Upper Gallup		0.00		
3,678.2	3,476.0	Lewis		0.00		
5,158.2	4,956.0	Upper Cliff House		0.00		
7,875.2	7,673.0	Paguate		0.00		
3,152.0	2,961.0	Kirtland		0.00		
3,044.3	2,860.0	Ojo Alamo		0.00		
7,794.2	7,592.0	Two Wells		0.00		
7,904.2	7,702.0	Upper Cubero		0.00		
3,612.0	3,410.0	Pictured Cliffs		0.00		
	7,866.0	Morrison		0.00		
4,555.2	4,353.0	Chacra		0.00		
4,081.2	3,879.0	Huerfano Bentonite		0.00		
8,020.2	7,818.0	Encinal		0.00		
3,196.2	3,003.0	Fruitland Coal		0.00		
7,761.2	7,559.0	Graneros		0.00		
7,941.2	7,739.0	Lower Cubero		0.00		
5,252.2	5,050.0	Massive Cliff House		0.00		
5,380.2	5,178.0	Menefee		0.00		
6,234.2	6,032.0	Mancos		0.00		
1,427.4	1,400.0	Nacimiento		0.00		

REFERENCE INFORMATION

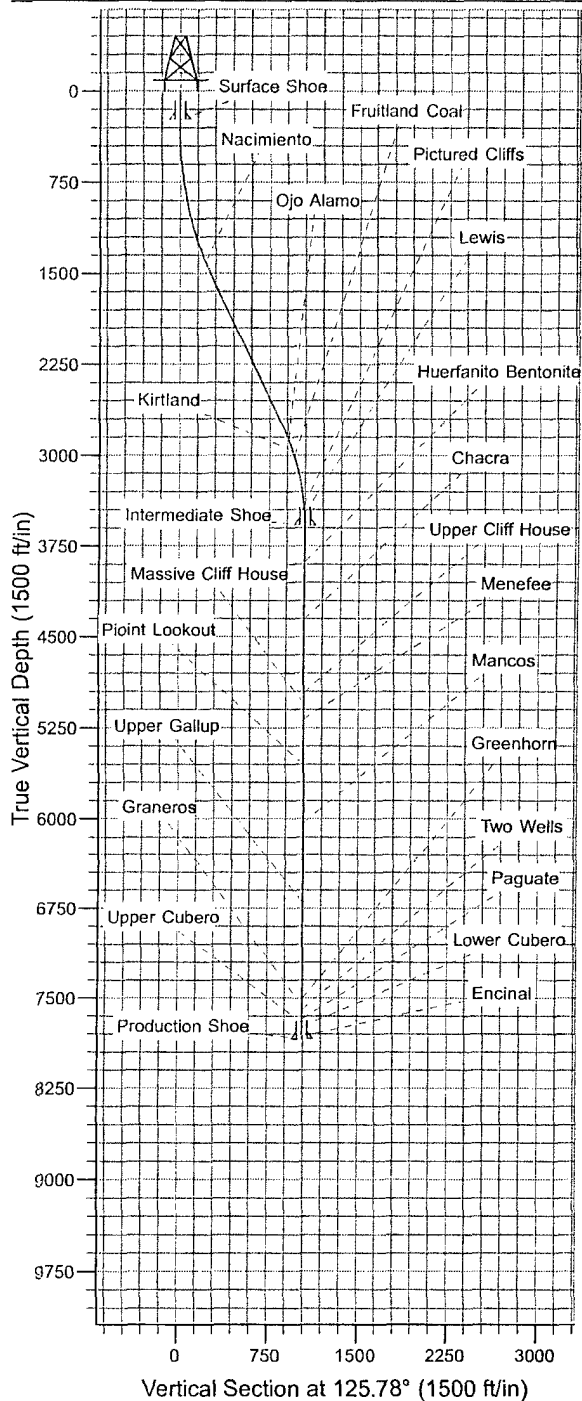
RKB @ 6692.0ft (AWS RIG)
Ground Elevation 6677.0
Reference Lat: 36° 31' 7.050 N
Reference Long: 107° 19' 24.288 W

Project: San Juan Basin - New Mexico Wells
Site: Other Named Wells
Well: Jicarilla 150 #8M
Wellbore: Original Hole
Design: Plan #1



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	320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.0	
3	1609.4	25.79	125.78	1566.3	-166.8	231.5	2.00	125.78	285.3	
4	2918.6	25.79	125.78	2745.1	-499.8	693.5	0.00	0.00	854.9	
5	3778.2	0.00	0.00	3576.0	-611.0	847.8	3.00	180.00	1045.1	Jicarilla 150 #8M ICP
6	8040.2	0.00	0.00	7838.0	-611.0	847.8	0.00	0.00	1045.1	Jicarilla 150 #8M PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
		Burro Canyon
		Morrison
1400.0	1427.4	Nacimiento
2860.0	3044.3	Ojo Alamo
2961.0	3152.0	Kirtland
3003.0	3196.2	Fruitland Coal
3410.0	3612.0	Pictured Cliffs
3476.0	3678.2	Lewis
3879.0	4081.2	Huerfanito Bentonite
4353.0	4555.2	Chacra
4956.0	5158.2	Upper Cliff House
5050.0	5252.2	Massive Cliff House
5178.0	5380.2	Menefee
5551.0	5753.2	Point Lookout
6032.0	6234.2	Mancos
6701.0	6903.2	Upper Gallup
7501.0	7703.2	Greenhorn
7559.0	7761.2	Graneros
7592.0	7794.2	Two Wells
7673.0	7875.2	Paguate
7702.0	7904.2	Upper Cubero
7739.0	7941.2	Lower Cubero
7818.0	8020.2	Encinal

