

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

BLM
Bureau of Land Management
U.S. Department of the Interior

RECEIVED

SEP 20 2007

Bureau of Land Management
Farmington Field Office

1a. Type of Work DRILL	5. Lease Number USA SF-079520-A Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe NMNM-78411A-MV NMNM-78411B-DK	
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name San Juan 28-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name	
4. Location of Well Surf: Unit F (SENW), 2640' FNL & 2045' FWL Bh: Unit E (SWNW), 1455' FNL & 945' FWL Surf: Latitude 36° 38.1288 N Longitude 107° 18.9518 W BH: Latitude 36° 37.9333 N Longitude 107° 18.7278 W	9. Well Number #78N 10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 25, T28N, R5W API # 30-039-30368	
14. Distance in Miles from Nearest Town 36 mile/Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 945'	17. Acres Assigned to Well DK 320 (W/2)/MV 344.64 (N/2)	
16. Acres in Lease 1209.12	20. Rotary or Cable Tools Rotary	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 53' from San Juan 28-5 78M	22. Approx. Date Work will Start	
19. Proposed Depth 8116' TVD/8463' TMD	BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS	
21. Elevations (DF, FT, GR, Etc.) 6753' GL	9-19-07 Date	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Rhonda Rogers</u> Rhonda Rogers (Regulatory Technician)		

Hold C:104
for Directional Survey
and "As Drilled" plat

PERMIT NO. APPROVAL DATE
APPROVED BY [Signature] TITLE AFN DATE 10/21/08

Archaeological Report attached
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
A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.
NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT
nd NMB-000089
JAN 05 2009
DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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

State of New Mexico SEP 20 2007
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005

DISTRICT II
1901 West Grand Avenue, Artesia, N.M. 86210

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

State Lease - 4 Copies
Fee Lease - 3 Copies

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87506

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30 -039- 30368		*Pool Code 72319 / 71599	*Pool Name Blanco Mesaverde / Basin Dakota
*Property Code 7460	*Property Name SAN JUAN 28-5 UNIT		*Well Number 78N
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6753'

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
F	25	28-N	5-W		2840'	NORTH	2045'	WEST	RIO ARriba

11 Bottom Hole Location If Different From Surface

UL or lot no. E	Section 25	Township 28-N	Range 5-W	Lot Idn	Feet from the 1455'	North/South line NORTH	Feet from the 945'	East/West line WEST	County RIO ARriba
¹³ Dedicated Acres DK 320.0 ac W2 MW 344.64 ac N2			¹⁴ Joint or InRr		¹⁵ Consolidation Code		¹⁶ 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

18

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.

Signature Joni Clark
Joni Clark 10/13/06
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.

6-8
Date of Survey _____
Signature _____
GUYTON, NE
NEW MEXICO
15703
LICENSED PROFESSIONAL SURVEYOR
C. H. Russell
Certificate Number 15703

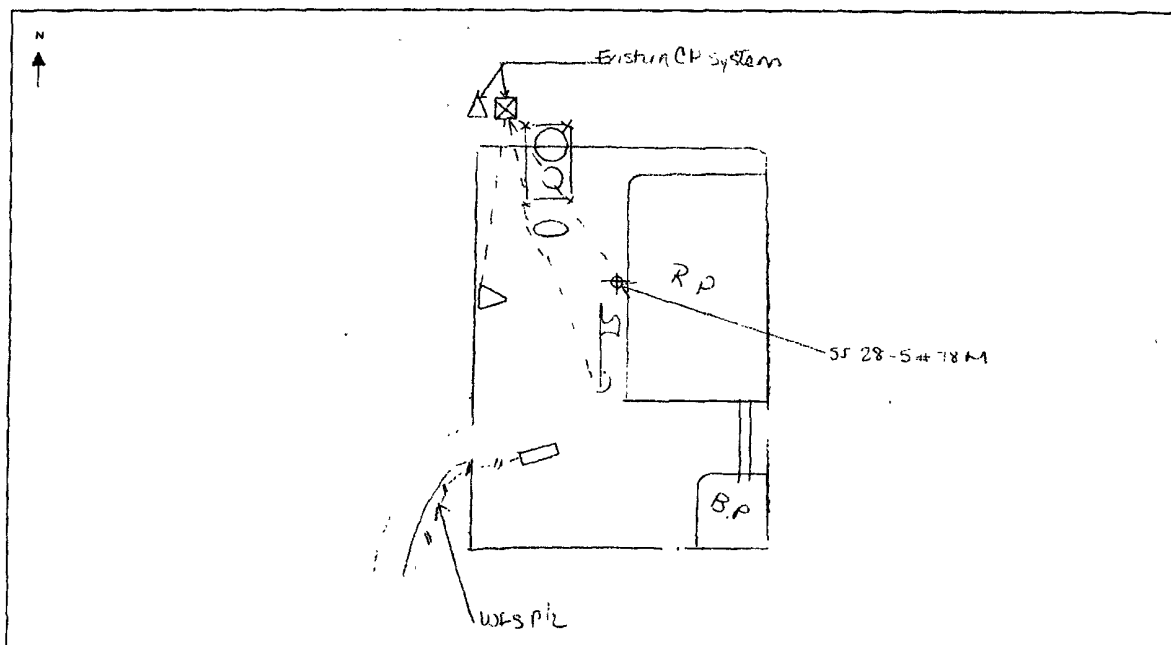


TECHNICAL SERVICES
A CORROSION COMPANY

CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME SJ 28-S #78N LEGALS F-25-28-5 COUNTY Rio Arriba

PURPOSED C.P. SYSYTEM: Drill GB on west edge of location and tie to existing system.
Transfer approx 250' of #8 neg cable from proposed well to existing solar.



EXISTING WELL HEAD	METER HOUSE	G.B.	POWER SOURCE	CABLE	NEW WELL	OVERHEAD A.C.

COMMENTS: ✓ solar for upgrade.

NEAREST POWER SOURCE N/A DISTANCE: _____

PIPELINES IN AREA: WFS P/L

TECHNICIAN: H. H. Technical Services DATE: 4/3/07

6 CR 5412 BLOOMFIELD, N.M. 87413
OFFICE: 505-634-0271 CELL: 505-793-6953

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-5 UNIT 78N

DEVELOPMENT

Lease:		AFE #: WAN.ZA2.4513/4514MV				AFE \$:	
Field Name: hBR_SAN JUAN 28-5 UNIT		Rig: XXX 2009 Directional		State: NM	County: RIO ARRIBA	API #:	
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist: Head, Chip F		Phone: 505-326-9772		Prod. Engineer:		Phone:	
Res. Engineer: Prabowo, Wahyu		Phone: 505-326-9797		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 Deviated							
Latitude: 36.632240	Longitude: -107.312110	X: 652935.60	Y: 2049802.00	Section: 25	Range: 005W		
Footage X: 2045 FWL	Footage Y: 2640 FNL	Elevation: 6753	(FT)	Township: 028N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Deviated							
Latitude: 36.635480	Longitude: -107.315860	X: 651828.00	Y: 2050975.68	Section: 25	Range: 005W		
Footage X: 945 FWL	Footage Y: 1455 FNL	Elevation:	(FT)	Township: 028N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2009		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6765 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	200	6565	☐			12-1/4" hole. 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 170 cu. ft. Circulate cement to surface.	
OJO ALAMO	3100	3665	☐			Surface twinned with SJ 28-5 Unit 78M	
KIRTLAND	3165	3600	☐				
FRUITLAND	3512	3253	☐			Possible Gas	
PICTURED CLIFFS	3672	3093	☐			Possible Gas	
LEWIS	3855	2910	☐				
HUERFANITO BENTONITE	4267	2498	☐				
Intermediate Casing	4500	2265	☐			8 3/4" Hole. 7", 23.0 ppf, L-80, LTC Casing. Cement with 1092 cu. ft. Circulate cement to surface.	
CHACRA	4623	2142	☐			Azimuth ~317degrees with a 1617' reach	
MASSIVE CLIFF HOUSE	5408	1357	☐			Gas	
MENEFEE	5484	1281	☐			Gas	
MASSIVE POINT LOOKOUT	5804	961	☐	800		Gas	
MANCOS	6290	475	☐				
UPPER GALLUP	7029	-264	☐				
GREENHORN	7783	-1018	☐	2300			
GRANEROS	7842	-1077	☐				
TWO WELLS	7900	-1135	☐			Gas	
UPPER CUBERO	7985	-1220	☐			Gas	
LOWER CUBERO	8037	-1272	☐				
PAK CANYON	8098	-1333	☐			Bottom perf ~8093' TVD (193' below T/Two Wells	
NCINAL	8116	-1351	☐			TD is ~216' below T/Paguate	

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-5 UNIT 78N

DEVELOPMENT

TOTAL DEPTH DK	8116	-1351	☐	2300	6-1/4" Hole. 4-1/2", 11.6 ppf, L-80 LTC casing. Cement with 494 cu. ft. Circulate cement a minimum of 100' inside the previous casing string. Cased hole TDT with GR to surface.
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Reference Wells:

Reference Type	Well Name	Comments
Production	SJ 28-5 Unit 94 & 78M	25-28N-05W

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 Grenhorn to TD - mudlogger will call TD.

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - DK 08N05W25NW2 MVNM028N005W25NW2

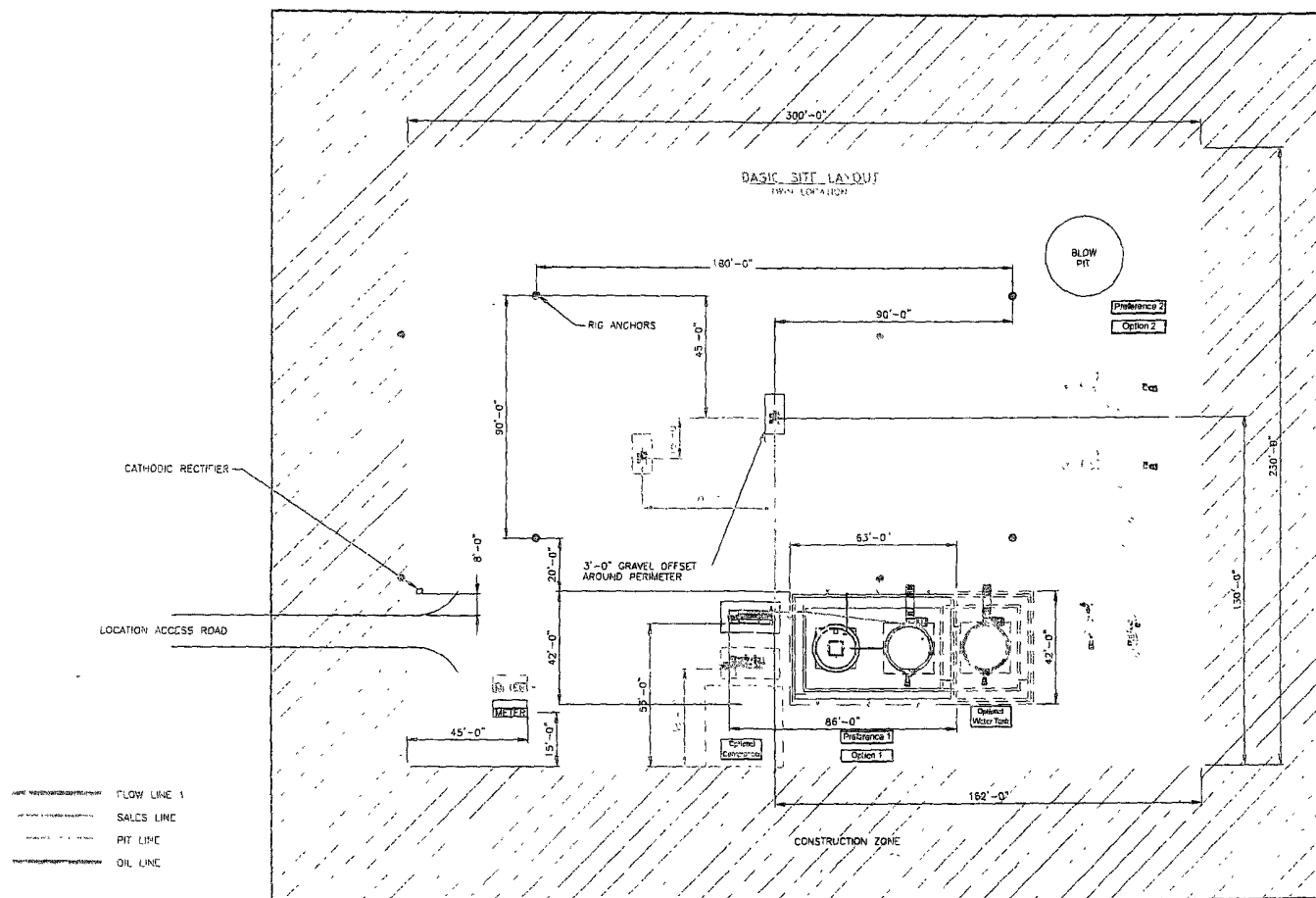
Zones - DK 08N05W25NW2 MVNM028N005W25NW2

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-5 #78N
Company:	ConocoPhillips Lower 48	TVD Reference:	Generic Rig RKB @ 6768.0ft (Generic Rig)
Project:	San Juan Basin	MD Reference:	Generic Rig RKB @ 6768.0ft (Generic Rig)
Site:	Russell's Site for Directional MV/DK wells	North Reference:	True
Well:	SJ 28-5 #78N	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-5 #78N		
Design:	APD Directional Plan		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (d)	Dip Direction (d)	
3,351.9	3,100.0	Ojo		0.00		
3,424.5	3,165.0	Kirtland		0.00		
3,811.8	3,512.0	Fruitland		0.00		
3,990.4	3,672.0	Pictured Cliffs		0.00		
4,188.8	3,855.0	Lewis		0.00		
4,613.2	4,267.0	Huerfano Bentonite		0.00		
4,969.8	4,623.0	Chacra		0.00		
5,754.8	5,408.0	Mass. Cliffhouse		0.00		
5,837.3	5,490.5	Menefee		0.00		
6,150.8	5,804.0	Point Lookout		0.00		
6,636.8	6,290.0	Mancos		0.00		
7,375.8	7,029.0	Upper Gallup		0.00		
8,129.8	7,783.0	Greenhorn		0.00		
8,188.8	7,842.0	Graneros		0.00		
8,246.8	7,900.0	Two Wells		0.00		
8,331.8	7,985.0	Cubero		0.00		
8,383.8	8,037.0	Lower Cubero		0.00		
8,462.8	8,116.0	TD		0.00		
8,462.8	8,116.0	Encinal		0.00		



SEE SHEET 3 & 4 FOR PIPING DETAILS
ALL UNDERGROUND PIPING IS TO BE BURIED A MIN. OF 2'-0" DEEP

SHEET 1 OF 5

ENGINEERING REVIEW										REFERENCE DRAWINGS		ConocoPhillips	CONOCOPHILLIPS HIGH PRESSURE 3 PHASE FACILITY DIAGRAM- SITE LAYOUT		
DESCRIPTION	DATE	BY	CHK'D	ENG	DEC	APP	REVISION	DATE	TO	DESCRIPTION			CLIENT FILE	CLIENT APPR	APPRO DATE
													SCALE: 1"=10'		CONSTRUCTION DATE: 6/20/07
													FILE NO	HP3PHASE-REV1	SHEET NO
														1 OF 5	

\\conocphillips\shared\business\San Juan\Business Unit Layout\dep. 06/20/2007 - 08:03pm

Directions from the Post Office
In Blanco, NM
to

Burlington Resources Oil & Gas Company LP
SAN JUAN 28-5 UNIT #78N
2640' FNL & 2045' FWL,
Section 25, T28N, R5W, N.M.P.M., Rio Arriba County,
New Mexico

From the Post Office In Blanco, NM
Take Highway 64 East for 27.6 miles

turn right (southerly) for 1.1 miles,
turn left (southeasterly) for 1.9 miles,
turn right (south) for 5.1 miles on Arnold Ranch Road,
stay left (northerly) 0.2 miles,
stay left (northerly) @ fork for 0.2 miles,
to new location on existing well pad
San Juan 28-5 Unit #78M.