

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 27 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK ^{Farmington Field Office}
Bureau of Land Management

1a. Type of Work DRILL	5. Lease Number SF-078640 Unit Reporting Number NMNM-78413A-MV CA-NMNM-75815-DK	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator ConocoPhillips Company	7. Unit Agreement Name San Juan 28-7 Unit Com	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 298	
4. Location of Well Surface: Unit C(NENW), 1124' FNL & 1821' FWL BHL : Unit F(SENW), 1925' FNL & 1750' FWL Surface: Latitude: 36.5487154° N (NAD83) Longitude: 107.5653912° W BHL : Latitude: 36.5465033° N (NAD83) Longitude: 107.5656475° W	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 27, T27N, R7W API# 30-039-31093	
14. Distance in Miles from Nearest Town 24 miles to Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1750	17. Acres Assigned to Well NOV 15 '11 320.000 (W/2)	
16. Acres in Lease 2560.000		
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 229' from SJ 28-7 115 (PC)		
19. Proposed Depth 7574	20. Rotary or Cable Tools Rotary	21. Elevations (DF, FT, GR, Etc.) 6690' GL
22. Proposed Casing and Cementing Program See Operations Plan attached	22. Approx. Date Work will Start 9/27/11	
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	Date	

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

Hold C104
for Directional Survey and "As Drilled" plat
NOTIFY AZTEC OCD 24 HRS PRIOR TO CASING & CEMENT

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 11/9/11

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 ES-0048 and ES-0085

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOC NOV 21 2011

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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, N.M. 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised July 16, 2010
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31093	² Pool Code 71599/72319	³ Pool Name BLANCO BASIN DAKOTA / MESA VERDE
⁴ Property Code 31739 38932	⁵ Property Name SAN JUAN 28-7 UNIT COM	⁶ Well Number 298
⁷ OGRID No. 217817	⁸ Operator Name CONOCOPHILLIPS COMPANY	⁹ Elevation 6690

¹⁰ Surface Location

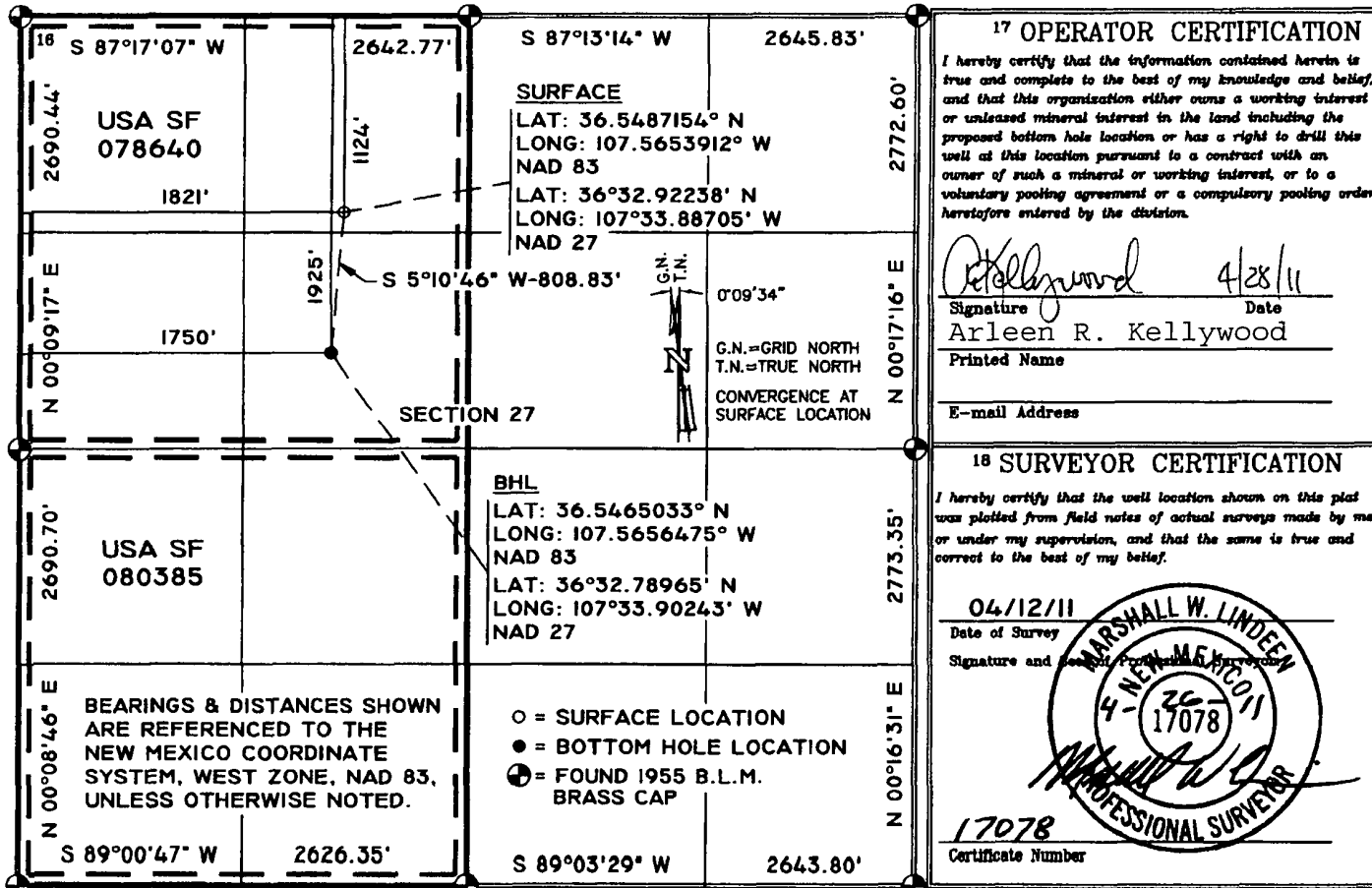
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	27	27 N	7 W		1124	NORTH	1821	WEST	RIO ARriba

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
F	27	27 N	7 W		1925	NORTH	1750	WEST	RIO ARriba

¹² Dedicated Acres 320.00 (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	Order No.
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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



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT COM 298

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1047				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 673		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						
RON	BLANCO MESAVERDE (PRORATED GAS)						
FRR	BASIN DAKOTA (PRORATED GAS)						
Location: Surface Datum Code: NAD 27 Directional							
Latitude: 36.548706	Longitude: -107.564784	X:	Y:	Section: 27		Range: 007W	
Footage X: 1821 FWL	Footage Y: 1124 FNL	Elevation: 6690	(FT)	Township: 027N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.546494	Longitude: -107.565040	X:	Y:	Section: 27		Range: 007W	
Footage X: 1750 FWL	Footage Y: 1925 FNL	Elevation:	(FT)	Township: 027N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6705		Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	15	6690		☐			Lost 550 bbls at 150'.
Surface Casing	200	6505	200	☐		46	12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 144 cuft. Circulate cement to surface.
NACIMIENTO	735	5970		☐			
OJO ALAMO	2277	4428		☐			
KIRTLAND	2436	4269		☐			
FRUITLAND	2679	4026		☐		95	Possible Gas
PICTURED CLIFFS	3071	3634		☐	50		
LEWIS	3197	3508		☐			
HUERFANITO BENTONITE	3535	3170		☐			
CHACRA	3967	2738		☐		121	
MASSIVE CLIFF HOUSE	4765	1940		☐	221		Gas
UPPER CLIFF HOUSE	4767	1938		☐			Gas
MENEFEE	4816	1889		☐			
Intermediate Casing	4966	1739	5086	☐		138	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1135 cuft. Circulate cement to surface.
POINT LOOKOUT	5330	1375		☐			
MANCOS	5687	1018		☐			
UPPER GALLUP	6475	230		☐			
GREENHORN	7261	-556		☐		187	
GRANEROS	7308	-603		☐			
TWO WELLS	7369	-664		☐	2492		Gas
PAGUATE	7399	-694		☐			Gas

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT COM 298

DEVELOPMENT

UPPER CUBERO	7484	-779	☐	191	Gas - Wet CBRO in SJ 28-7 151E (27n 7w 21) in 2008. Mud up & drilled into BRCN, Completed ENCN, prod ok w/some wtr.
LOWER CUBERO	7513	-808	☐		Gas - Bottom perf ~-849 (~20' above TD) base on offset well.
Total Depth	7574	-869	7694	☐	194 6-1/4" hole, 4-1/2" 10.5/11.6 ppf, J-55, STC/LTC casing. Cement w/ 360 cuft. Circulate cement a minimum of 100' inside the previous casing string.
ENCINAL	7586	-881	☐		Gas
BURRO CANYON	7620	-915	☐		
MORRISON	7663	-958	☐		

Reference Wells:

Reference Type	Well Name	Comments
Production	RINCON UNIT (DK) 202	

Logging Program:

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

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

GR CBL.
Mud log ~100' above Gallup down to TD.
Mudlogger will call TD.
Bottom perf ~20' above TD.

Additional Information:

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

San Juan Basin - New Mexico West Wells

San Juan 28 Wells

SJ 28-7 Unit Com #298

SJ 28-7 Unit Com #298

Plan: Plan #1

Standard Planning Report

14 September, 2011

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 Unit Com #298
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6705.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6705.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 Unit Com #298	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 Unit Com #298		
Design:	Plan #1		

Project:	San Juan Basin - New Mexico West 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	San Juan 28 Wells				
Site Position:		Northing:	2,042,566.26ft	Latitude:	36° 36' 47.901 N
From:	Lat/Long	Easting:	563,690.29ft	Longitude:	107° 36' 58.757 W
Position Uncertainty:	15.0 ft	Slot Radius:	"	Grid Convergence:	0.13 °

Well	SJ 28-7 Unit Com #298, S-Shaped MV/DK Short Reach, Deep Set Int					
Well Position	+N/-S	0.0 ft	Northing:	2,019,087.98 ft	Latitude:	36° 32' 55.343 N
	+E/-W	0.0 ft	Easting:	578,881.53 ft	Longitude:	107° 33' 53.223 W
Position Uncertainty	3.0 ft	Wellhead Elevation:	ft	Ground Level:	6,690.0 ft	

Wellbore:	SJ 28-7 Unit Com #298				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2011	9/14/2011	9.76	63.33	50,603

Design:	Plan #1:				
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Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	185.34

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	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,740.3	18.81	185.34	2,723.5	-152.3	-14.2	2.00	2.00	0.00	185.34	
4,458.9	18.81	185.34	4,350.3	-703.9	-65.8	0.00	0.00	0.00	0.00	
5,085.7	0.00	0.00	4,966.0	-805.4	-75.3	3.00	-3.00	0.00	180.00	SJ 28-7 Unit Com #
7,693.7	0.00	0.00	7,574.0	-805.4	-75.3	0.00	0.00	0.00	0.00	SJ 28-7 Unit Com #

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 Unit Com #298
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6705.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6705.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 Unit Com #298	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 Unit Com #298		
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
Surf Csg									
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	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
735.0	0.00	0.00	735.0	0.0	0.0	0.0	0.00	0.00	0.00
Nacimiento									
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	2.00	185.34	1,900.0	-1.7	-0.2	1.7	2.00	2.00	0.00
2,000.0	4.00	185.34	1,999.8	-6.9	-0.6	7.0	2.00	2.00	0.00
2,100.0	6.00	185.34	2,099.5	-15.6	-1.5	15.7	2.00	2.00	0.00
2,200.0	8.00	185.34	2,198.7	-27.8	-2.6	27.9	2.00	2.00	0.00
2,279.2	9.58	185.34	2,277.0	-39.8	-3.7	40.0	2.00	2.00	0.00
Ojo Alamo									
2,300.0	10.00	185.34	2,297.5	-43.3	-4.1	43.5	2.00	2.00	0.00
2,400.0	12.00	185.34	2,395.6	-62.3	-5.8	62.6	2.00	2.00	0.00
2,441.3	12.83	185.34	2,436.0	-71.2	-6.7	71.5	2.00	2.00	0.00
Kirtland									
2,500.0	14.00	185.34	2,493.1	-84.7	-7.9	85.1	2.00	2.00	0.00
2,600.0	16.00	185.34	2,589.6	-110.5	-10.3	111.0	2.00	2.00	0.00
2,693.4	17.87	185.34	2,679.0	-137.6	-12.9	138.2	2.00	2.00	0.00
Fruitland									
2,700.0	18.00	185.34	2,685.3	-139.6	-13.1	140.2	2.00	2.00	0.00
2,740.3	18.81	185.34	2,723.5	-152.3	-14.2	152.9	2.00	2.00	0.00
2,800.0	18.81	185.34	2,780.0	-171.4	-16.0	172.2	0.00	0.00	0.00
2,900.0	18.81	185.34	2,874.7	-203.5	-19.0	204.4	0.00	0.00	0.00
3,000.0	18.81	185.34	2,969.3	-235.6	-22.0	236.7	0.00	0.00	0.00
3,100.0	18.81	185.34	3,064.0	-267.7	-25.0	268.9	0.00	0.00	0.00
3,107.4	18.81	185.34	3,071.0	-270.1	-25.3	271.3	0.00	0.00	0.00
Pictured Cliffs									
3,200.0	18.81	185.34	3,158.7	-299.8	-28.0	301.1	0.00	0.00	0.00
3,240.5	18.81	185.34	3,197.0	-312.8	-29.2	314.2	0.00	0.00	0.00
Lewis									
3,300.0	18.81	185.34	3,253.3	-331.9	-31.0	333.4	0.00	0.00	0.00
3,400.0	18.81	185.34	3,348.0	-364.0	-34.0	365.6	0.00	0.00	0.00
3,500.0	18.81	185.34	3,442.7	-396.1	-37.0	397.8	0.00	0.00	0.00
3,597.6	18.81	185.34	3,535.0	-427.4	-40.0	429.3	0.00	0.00	0.00
Huerfano Bentonite									
3,600.0	18.81	185.34	3,537.3	-428.2	-40.0	430.1	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 Unit Com #298
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6705.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6705.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 Unit Com #298	Survey Calculation Method:	Minimum Curvature
Wellbore Design:	SJ 28-7 Unit Com #298 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	18.81	185.34	3,632.0	-460.3	-43.0	462.3	0.00	0.00	0.00
3,800.0	18.81	185.34	3,726.6	-492.4	-46.0	494.5	0.00	0.00	0.00
3,900.0	18.81	185.34	3,821.3	-524.5	-49.0	526.8	0.00	0.00	0.00
4,000.0	18.81	185.34	3,916.0	-556.6	-52.0	559.0	0.00	0.00	0.00
4,053.9	18.81	185.34	3,967.0	-573.9	-53.7	576.4	0.00	0.00	0.00
Chacra									
4,100.0	18.81	185.34	4,010.6	-588.7	-55.0	591.2	0.00	0.00	0.00
4,200.0	18.81	185.34	4,105.3	-620.8	-58.0	623.5	0.00	0.00	0.00
4,300.0	18.81	185.34	4,199.9	-652.9	-61.0	655.7	0.00	0.00	0.00
4,400.0	18.81	185.34	4,294.6	-685.0	-64.0	687.9	0.00	0.00	0.00
4,458.9	18.81	185.34	4,350.3	-703.9	-65.8	706.9	0.00	0.00	0.00
4,500.0	17.57	185.34	4,389.4	-716.6	-67.0	719.8	3.00	-3.00	0.00
4,600.0	14.57	185.34	4,485.5	-744.2	-69.6	747.4	3.00	-3.00	0.00
4,700.0	11.57	185.34	4,582.9	-766.7	-71.7	770.1	3.00	-3.00	0.00
4,800.0	8.57	185.34	4,681.3	-784.1	-73.3	787.5	3.00	-3.00	0.00
4,884.4	6.04	185.34	4,765.0	-794.8	-74.3	798.3	3.00	-3.00	0.00
Massive Cliff House									
4,900.0	5.57	185.34	4,780.6	-796.4	-74.5	799.9	3.00	-3.00	0.00
4,935.6	4.50	185.34	4,816.0	-799.5	-74.8	803.0	3.00	-3.00	0.00
Menefee									
5,000.0	2.57	185.34	4,880.3	-803.5	-75.1	807.0	3.00	-3.00	0.00
5,085.7	0.00	0.00	4,966.0	-805.4	-75.3	808.9	3.00	-3.00	0.00
Int.Csg - SJ 28-7 Unit Com #298 - ICP									
5,100.0	0.00	0.00	4,980.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,080.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,180.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,280.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,449.7	0.00	0.00	5,330.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Point Lookout									
5,500.0	0.00	0.00	5,380.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,480.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,580.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,680.3	-805.4	-75.3	808.9	0.00	0.00	0.00
5,806.7	0.00	0.00	5,687.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Mancos									
5,900.0	0.00	0.00	5,780.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,880.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,100.0	0.00	0.00	5,980.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,080.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,180.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,280.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,380.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,594.7	0.00	0.00	6,475.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Gallup									
6,600.0	0.00	0.00	6,480.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,580.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,680.3	-805.4	-75.3	808.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,780.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,880.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,100.0	0.00	0.00	6,980.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,080.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,180.3	-805.4	-75.3	808.9	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 Unit Com #298
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6705.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6705 0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 Unit Com #298	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 Unit Com #298		
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)
7,380.7	0.00	0.00	7,261.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Greenhorn									
7,400.0	0.00	0.00	7,280.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,427.7	0.00	0.00	7,308.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Graneros									
7,488.7	0.00	0.00	7,369.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Two Wells									
7,500.0	0.00	0.00	7,380.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,518.7	0.00	0.00	7,399.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Paguate									
7,600.0	0.00	0.00	7,480.3	-805.4	-75.3	808.9	0.00	0.00	0.00
7,603.7	0.00	0.00	7,484.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Cubero									
7,632.7	0.00	0.00	7,513.0	-805.4	-75.3	808.9	0.00	0.00	0.00
Lower Cubero									
7,693.7	0.00	0.00	7,574.0	-805.4	-75.3	808.9	0.00	0.00	0.00
TD - Prod Csg - SJ 28-7 Unit Com #298 - 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
SJ 28-7 Unit Com #29	- plan hits target center - Point	0.00	0.00	7,574.0	-805.4	-75.3	2,018,282.47	578,808.49	36° 32' 47.379 N	107° 33' 54.146 W
SJ 28-7 Unit Com #29	- plan hits target center - Point	0.00	0.00	4,966.0	-805.4	-75.3	2,018,282.47	578,808.49	36° 32' 47.379 N	107° 33' 54.146 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
200.0	200.0	Surf Csg	9-5/8	12-1/4
5,085.7	4,966.0	Int Csg	7	8-3/4
7,693.7	7,574.0	Prod Csg	4-1/2	6-1/4

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 Unit Com #298
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6705.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6705.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 Unit Com #298	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 28-7 Unit Com #298		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,632.7	7,513.0	Lower Cubero		0.00		
2,441.3	2,436.0	Kirtland		0.00		
4,884.4	4,765.0	Massive Cliff House		0.00		
5,806.7	5,687.0	Mancos		0.00		
4,935.6	4,816.0	Menefee		0.00		
4,053.9	3,967.0	Chacra		0.00		
7,693.7	7,574.0	TD		0.00		
3,107.4	3,071.0	Pictured Cliffs		0.00		
7,488.7	7,369.0	Two Wells		0.00		
6,594.7	6,475.0	Gallup		0.00		
7,427.7	7,308.0	Graneros		0.00		
7,603.7	7,484.0	Cubero		0.00		
3,597.6	3,535.0	Huerfanito Bentonite		0.00		
2,693.4	2,679.0	Fruitland		0.00		
735.0	735.0	Nacimiento		0.00		
5,449.7	5,330.0	Point Lookout		0.00		
7,518.7	7,399.0	Paguate		0.00		
2,279.2	2,277.0	Ojo Alamo		0.00		
7,380.7	7,261.0	Greenhorn		0.00		
3,240.5	3,197.0	Lewis		0.00		

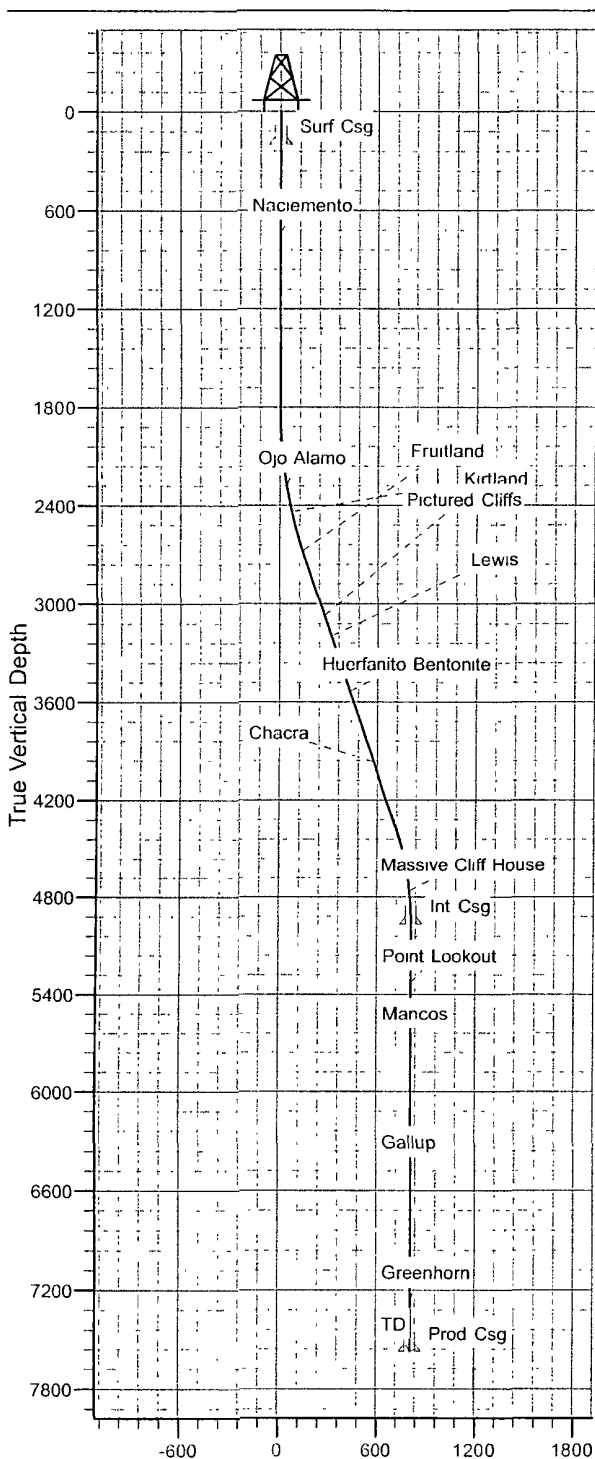
WELL @ 6705.0ft (Original Well Elev)
Ground Elevation 6690.0
Reference Lat: 36° 32' 55.343 N
Reference Long: 107° 33' 53.223 W

Project: San Juan Basin - New Mexico West
Site: San Juan 28 Wells
Well: SJ 28-7 Unit Com #298
Wellbore: SJ 28-7 Unit Com #298
Design: Plan #1



SECTION DETAILS

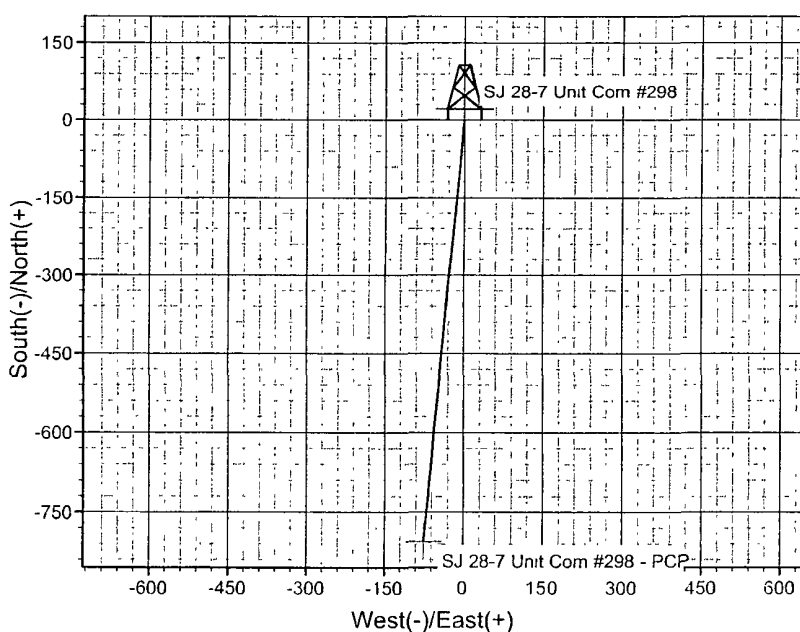
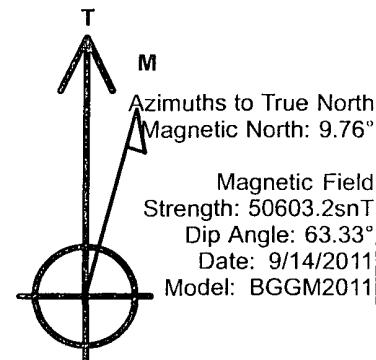
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	
3	2740.3	18.81	185.34	2723.5	-152.3	-14.2	2.00	185.34	152.9	
4	4458.9	18.81	185.34	4350.3	-703.9	-65.8	0.00	0.00	706.9	
5	5085.7	0.00	0.00	4966.0	-805.4	-75.3	3.00	180.00	808.9	SJ 28-7 Unit Com #298 - ICP
6	7693.7	0.00	0.00	7574.0	-805.4	-75.3	0.00	0.00	808.9	SJ 28-7 Unit Com #298 - PCP



Vertical Section at 185.34°

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
735.0	735.0	Nacimiento
2277.0	2279.2	Ojo Alamo
2436.0	2441.3	Kirtland
2679.0	2693.4	Fruitland
3071.0	3107.4	Pictured Cliffs
3197.0	3240.5	Lewis
3535.0	3597.6	Huerfanito Bentonite
3967.0	4053.9	Chacra
4765.0	4884.4	Massive Cliff House
4816.0	4935.6	Menefee
5330.0	5449.7	Point Lookout
5687.0	5806.7	Mancos
6475.0	6594.7	Gallup
7261.0	7380.7	Greenhorn
7308.0	7427.7	Graneros
7369.0	7488.7	Two Wells
7399.0	7518.7	Paguate
7484.0	7603.7	Cubero
7513.0	7632.7	Lower Cubero
7574.0	7693.7	TD



CONOCOPHILLIPS COMPANY
SAN JUAN 28-7 UNIT COM 298 - 1124' FNL & 1821' FWL (SURFACE)
1925' FNL & 1750' FWL (BOTTOM HOLE)
SECTION 27, T-27-N, R-7-W, N.M.P.M., RIO ARriba COUNTY, N.M.
ELEVATION: 6690 - DATE: APRIL 12, 2011

SAN JUAN 28-7 UNIT COM 298

LATITUDE: 36.5487154° N
 LONGITUDE: 107.5653912° W
 NAD 83
 LATITUDE: 36°32.92238' N
 LONGITUDE: 107°33.88705' W
 NAD 27

SAN JUAN 28-7 UNIT 115

LATITUDE: 36.5490796° N
 LONGITUDE: 107.5660257° W
 NAD 83
 LATITUDE: 36°32.94423' N
 LONGITUDE: 107°33.92512' W
 NAD 27

CENTER OF PIT

LATITUDE: 36.5488538° N
 LONGITUDE: 107.5652270° W
 NAD 83
 LATITUDE: 36°32.93068' N
 LONGITUDE: 107°33.87720' W
 NAD 27
 ELEVATION: 6678

PROPOSED CATHODIC PROTECTION STATION

LATITUDE: 36.5488121° N
 LONGITUDE: 107.5657099° W
 NAD 83
 LATITUDE: 36°32.92818' N
 LONGITUDE: 107°33.90617' W
 NAD 27

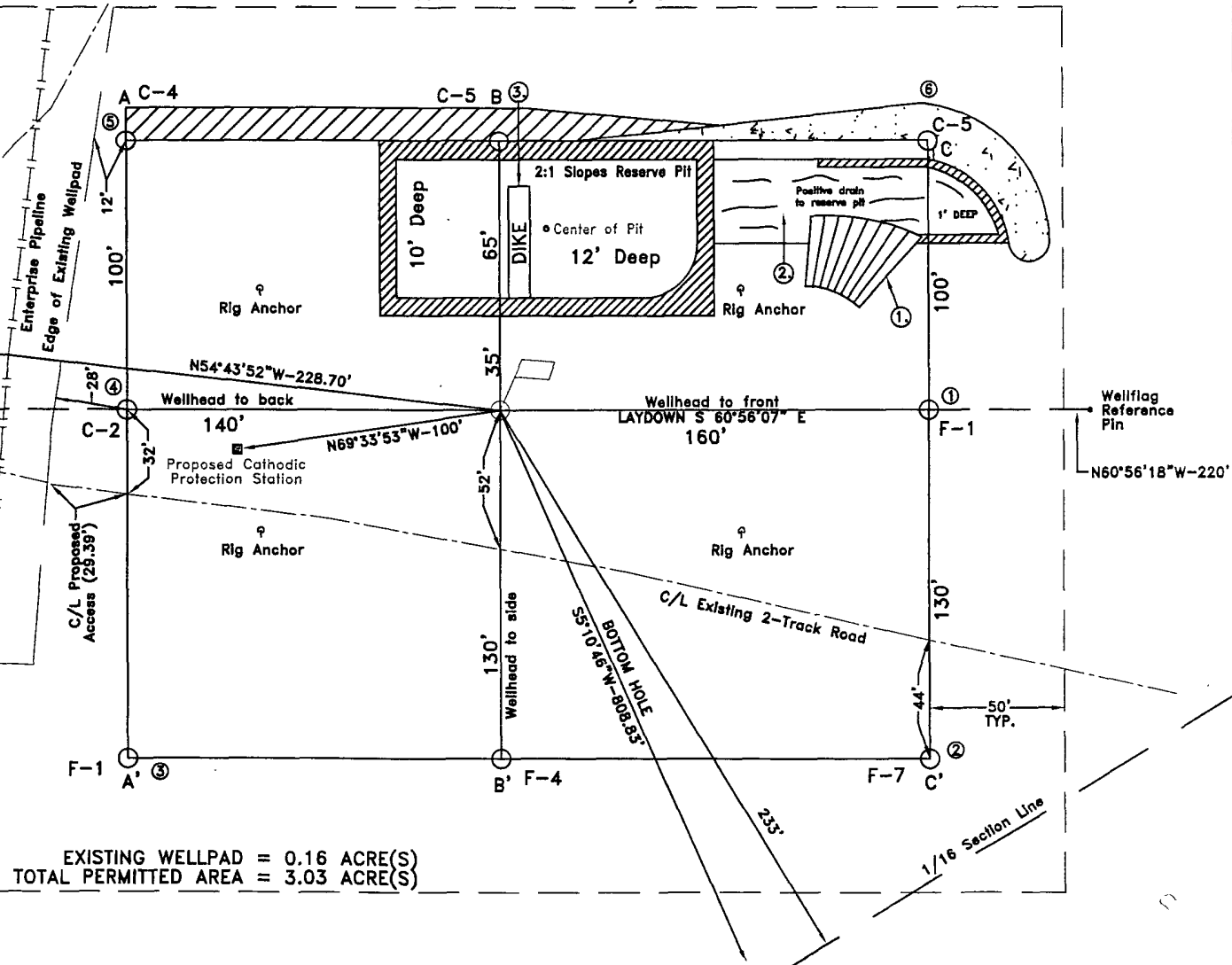
G.M.N.
 0°09'34"

G.N.=GRID NORTH
 T.N.=TRUE NORTH
 CONVERGENCE AT
 SURFACE LOCATION

0 30 60
 SCALE: 1"=60'

PAD CONSTRUCTION SPECS:

1. RAMP INTO PIT CONSTRUCTED FROM PAD GRADE INTO FLARE AREA AT 5% SLOPE.
2. APPROXIMATE 13'x75' PIT AREA LINED WITH 12 MIL POLYLINER.
3. RESERVE PIT DIKE TO BE 6' ABOVE DEEP SIDE (OVERFLOW- 3' WIDE AND 1' ABOVE SHALLOW SIDE).



EXISTING WELLPAD = 0.16 ACRE(S)
 TOTAL PERMITTED AREA = 3.03 ACRE(S)

NOTES:

- 1.) BEARINGS & DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NAD 83.
- 2.) CONTRACTOR SHOULD CONTACT "ONE-CALL" FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
- 3.) UNITED FIELD SERVICES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.



P.O. BOX 3651
 FARMINGTON, NM 87499
 OFFICE: (505) 334-0408

DWG. NO. : 9954L01

REVISION: 1

DRAWN BY: C.B.

DATE DRAWN: 04/15/11

REV. DATE:

SURVEYED: 04/12/11

APP. BY: M.W.L.

SHEET: 1

CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 UNIT COM 298

1124' FNL & 1821' FWL (SURFACE)

1925' FNL & 1750' FWL (BOTTOM HOLE)

LATITUDE: 36.5487154° N

LONGITUDE: 107.5653912° W

NAD 83

SECTION 27, T-27-N, R-7-W, N.M.P.M.

RIO ARRIBA COUNTY, NEW MEXICO

FROM U.S. POST OFFICE, ZIP CODE 87412, IN BLANCO, NEW MEXICO.

TRAVEL EASTERLY ON U.S. HIGHWAY 64 FOR 1.3 MILES TO MILE POST 75.

TURN RIGHT ONTO C.R. 4450 (LARGO CANYON)

AND TRAVEL SOUTHEASTERLY 3.6 MILES.

TURN LEFT AT FORK IN ROAD AND CONTINUE SOUTHEASTERLY 2.4 MILES

TOWARD CUTTER DAM TURNOFF.

PASSING TURNOFF, CONTINUE SOUTHEASTERLY 3.3 MILES ON MAIN ROAD,

PASSING JASIS CANYON, TOWARDS CARRIZO CANYON

TO A MAJOR INTERSECTION SOUTHWEST OF JASIS MESA.

TURN RIGHT AND CROSS CARRIZO WASH AT "ROCK CROSSING" BY OLD BRIDGE

AND TRAVEL SOUTHERLY 0.2 MILE TO 3-WAY INTERSECTION.

TURN LEFT AND TRAVEL SOUTHEASTERLY 4.1 MILES

THROUGH CARRIZO CANYON ON MAIN ROAD.

TURN RIGHT TOWARD STOVE CANYON AND TRAVEL 3.8 MILES UP GOULD PASS.

TURN RIGHT, CROSS CATTLEGUARD

AND TRAVEL 1.4 MILES SOUTHERLY DOWN "NAKED LADY HILL."

TURN LEFT AT Y-INTERSECTION EAST OF SMITH CANYON

AND TRAVEL EASTERLY 2.8 MILES ON C.R. 500.

TURN RIGHT & TRAVEL SOUTHWESTERLY 0.6 MILE EAST OF CUERVO CANYON.

TURN LEFT AND TRAVEL SOUTHEASTERLY 0.3 MILE TO EXISTING

SAN JUAN 28-7 UNIT 115 WELL LOCATION & PROPOSED

SAN JUAN 28-7 UNIT COM 298 WELL LOCATION & ACCESS ROUTE.