

RCVD JUN 27 '12

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS. DIV.
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

MAY 21 2012

Farmington Field Office
Bureau of Land Management

1a. Type of Work DRILL	5. Lease Number SF-078415-A Unit Reporting Number CANMNM T3157(LW) NMNM T5820(DK)
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Lively 9. Well Number 4M
4. Location of Well Surface: Unit O(SWSE), 1215' FSL & 2039' FEL BHL : Unit N(SSEW), 710' FSL & 1930' FWL Surface: Latitude: 36.72141° N (NAD83) Longitude: 107.64350° W BHL : Latitude: 36.72006° N (NAD83) Longitude: 107.64771° W	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 14, T29N, R8W API# 30-045- 35380
14. Distance in Miles from Nearest Town 13 miles from Blanco	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 710'	
16. Acres in Lease 1040.000	17. Acres Assigned to Well 320.00 Acres - W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 700' from Vanderwart 35A - MV/PC	
19. Proposed Depth 8156'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6937' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	5/21/12 Date

PERMIT NO.

APPROVAL DATE

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

Hold C104

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

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

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

JUL 10 2012

NMOCDA

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

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

Hold C104
for Directional Survey
and "As Drilled" plat

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised July 16, 2010

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

Submit one copy to appropriate
District Office

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

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35380	² Pool Code 72319/71599	³ Pool Name BLANCO MESAVERDE / BASIN DAKOTA
⁴ Property Code 18182	⁵ Property Name LIVELY	⁶ Well Number 4M
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6937'

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
0	14	29N	8W		1215'	SOUTH	2039'	EAST	SAN JUAN

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
N	14	29N	8W		710'	SOUTH	1930'	WEST	SAN JUAN

¹² Dedicated Acres 320.00 ACRES - W/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

¹⁶ FND 3/4" BC BLM 1955 LEASE # USA SF-078502-A LEASE # USA SF-078415-A BOTTOM HOLE LAT. 36.72006° N (NAD83) LONG. 107.64771° W (NAD83) LAT. 36°43.20312' N (NAD27) LONG. 107°38.82582' W (NAD27) DIRECTIONAL DRILL S 68°11'13" W 1328.66' WELL FLAG LAT. 36.72141° N (NAD83) LONG. 107.64350° W (NAD83) LAT. 36°43.28435' N (NAD27) LONG. 107°38.57334' W (NAD27) 14 5193.80' (M) 5195.52' (R) 5184.30' (R) 5182.87' (M) N 01°24'11" E N 01°25' E N 0°45' E N 00°42'50" E 1930' 710' 5207.40' (R) N 89°26' W N 89°27'29" W 5204.49' (M) BASIS OF BEARINGS FND 3/4" BC BLM 1955	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 undivided 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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Brandie Blakley 11-22-10 Signature Date Brandie Blakley Printed Name blaklbn@conocophillips.com E-mail Address 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. NOVEMBER 2, 2010 Date of Survey Signature and Seal of Professional Surveyor: David R. Russell DAVID R. RUSSELL NEW MEXICO REGISTERED 10201 SURVEYOR Certificate Number 10201
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PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

LIVELY 4M

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9107				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: SAN JUAN		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: 36.721404		Longitude: -107.642889		X:	Y:	Section: 14	Range: 008W
Footage X: 2039 FEL		Footage Y: 1215 FSL		Elevation: 6937 (FT)		Township: 029N	
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.720054		Longitude: -107.647099		X:	Y:	Section: 14	Range: 008W
Footage X: 1930 FWL		Footage Y: 710 FSL		Elevation: (FT)		Township: 029N	
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6952 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6752		☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	1314	5638		☐			
OJO ALAMO	2587	4365		☐			
KIRTLAND	2774	4178		☐			
FRUITLAND	3201	3751		☐			Possible Gas
PICTURED CLIFFS	3600	3352		☐			
LEWIS	3748	3204		☐			
Intermediate Casing	4250	2702		☐	114		8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1137 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	4411	2541		☐			
CHACRA	4586	2366		☐			Est. Top Perf - 4588 (2364)
UPPER CLIFF HOUSE	5166	1786		☐			Gas; Cliffhouse is dry
MASSIVE CLIFF HOUSE	5254	1698		☐	464		Gas
MENEFEE	5414	1538		☐			
POINT LOOKOUT	5808	1144		☐			
MANCOS	6266	686		☐			
UPPER GALLUP	7054	-102		☐			
GREENHORN	7796	-844		☐			
GRANEROS	7852	-900		☐			
TWO WELLS	7890	-938		☐	2530		Gas
PAGUATE	7996	-1044		☐			
UPPER CUBERO	8018	-1066		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

LIVELY 4M

DEVELOPMENT

LOWER CUBERO	8040	-1088	☐	
ENCINAL	8096	-1144	☐	60' below TD - T/ENCN; Est. Btm Perf - 8106 (- 1154) based on offset wells
Total Depth	8156	-1204	☐	197 6-1/4" hole, 4-1/2" 11.6 ppf, J-55/L-80, LTC casing. Cement w/ 477 cuft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:		
Reference Type	Well Name	Comments
Production	Roelofs A 5	29N 8W 14 SW SW
Production	Wilch 5E	29N 8W 23 SW NE NW
Production	Vanderwart B 1E	29N 8W 14 NE SW NE
Production	Vanderwart B 1	29N 8W 14 SW NE SE

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

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico West Wells
Site: Other Named Wells
Well: Lively #4M
Wellbore: Wellbore #1
Design: Plan #1

Local Co-ordinate Reference: Well Lively #4M
TVD Reference: WELL @ 6592.0ft (Original Well Elev)
MD Reference: WELL @ 6592.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico West 3003

System Datum: Ground Level
Using geodetic scale factor

Site: Other Named Wells

Site Position: Northing: 2,063,826.04 ft Latitude: 36° 40' 18.848 N
From: Lat/Long Easting: 504,691.02 ft Longitude: 107° 49' 2.415 W
Position Uncertainty: 15.0 ft Slot Radius: 6-1/8" Grid Convergence: 0.01°

Well: Lively #4M
Well Position: +N/-S 0.0 ft Northing: 2,081,902.48 ft Latitude: 36° 43' 17.061 N
+E/-W 0.0 ft Easting: 555,814.91 ft Longitude: 107° 38' 34.400 W
Position Uncertainty: 0.0 ft Wellhead Elevation: ft Ground Level: 6,577.0 ft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2011	5/17/2012	9.73	63.44	50,610

Design: Plan #1

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.0

Vertical Section	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	248.22

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	
1,604.0	25.08	248.22	1,564.4	-100.2	-250.8	2.00	2.00	0.00	248.22	
3,675.4	25.08	248.22	3,440.4	-426.0	-1,066.2	0.00	0.00	0.00	0.00	
4,511.4	0.00	0.00	4,250.0	-492.9	-1,233.4	3.00	-3.00	0.00	180.00	LIVLEY #4M ICP
8,417.4	0.00	0.00	8,156.0	-492.9	-1,233.4	0.00	0.00	0.00	0.00	LIVELY #4M PCP

ConocoPhillips or its affiliates

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 MD Reference: WELL @ 6592.0ft (Original Well Elev)
 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)
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
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.00	248.22	400.0	-0.2	-0.4	0.4	2.00	2.00	0.00
500.0	3.00	248.22	499.9	-1.5	-3.6	3.9	2.00	2.00	0.00
600.0	5.00	248.22	599.7	-4.0	-10.1	10.9	2.00	2.00	0.00
700.0	7.00	248.22	699.1	-7.9	-19.8	21.4	2.00	2.00	0.00
800.0	9.00	248.22	798.2	-13.1	-32.8	35.3	2.00	2.00	0.00
900.0	11.00	248.22	896.6	-19.5	-48.9	52.6	2.00	2.00	0.00
1,000.0	13.00	248.22	994.4	-27.2	-68.2	73.4	2.00	2.00	0.00
1,100.0	15.00	248.22	1,091.5	-36.2	-90.6	97.6	2.00	2.00	0.00
1,200.0	17.00	248.22	1,187.6	-46.5	-116.2	125.2	2.00	2.00	0.00
1,300.0	19.00	248.22	1,282.7	-57.9	-144.9	156.1	2.00	2.00	0.00
1,333.2	19.66	248.22	1,314.0	-62.0	-155.1	167.1	2.00	2.00	0.00
NACIMIENTO									
1,400.0	21.00	248.22	1,376.6	-70.6	-176.7	190.3	2.00	2.00	0.00
1,500.0	23.00	248.22	1,469.4	-84.5	-211.5	227.7	2.00	2.00	0.00
1,600.0	25.00	248.22	1,560.7	-99.6	-249.2	268.4	2.00	2.00	0.00
1,604.0	25.08	248.22	1,564.4	-100.2	-250.8	270.1	2.00	2.00	0.00
1,700.0	25.08	248.22	1,651.3	-115.3	-288.6	310.8	0.00	0.00	0.00
1,800.0	25.08	248.22	1,741.9	-131.1	-328.0	353.2	0.00	0.00	0.00
1,900.0	25.08	248.22	1,832.4	-146.8	-367.3	395.6	0.00	0.00	0.00
2,000.0	25.08	248.22	1,923.0	-162.5	-406.7	438.0	0.00	0.00	0.00
2,100.0	25.08	248.22	2,013.6	-178.2	-446.1	480.4	0.00	0.00	0.00
2,200.0	25.08	248.22	2,104.1	-194.0	-485.4	522.7	0.00	0.00	0.00
2,300.0	25.08	248.22	2,194.7	-209.7	-524.8	565.1	0.00	0.00	0.00
2,400.0	25.08	248.22	2,285.3	-225.4	-564.1	607.5	0.00	0.00	0.00
2,500.0	25.08	248.22	2,375.9	-241.2	-603.5	649.9	0.00	0.00	0.00
2,600.0	25.08	248.22	2,466.4	-256.9	-642.9	692.3	0.00	0.00	0.00
2,700.0	25.08	248.22	2,557.0	-272.6	-682.2	734.7	0.00	0.00	0.00
2,733.1	25.08	248.22	2,587.0	-277.8	-695.3	748.7	0.00	0.00	0.00
OJO ALAMO									
2,800.0	25.08	248.22	2,647.6	-288.4	-721.6	777.1	0.00	0.00	0.00
2,900.0	25.08	248.22	2,738.1	-304.1	-761.0	819.5	0.00	0.00	0.00
2,939.6	25.08	248.22	2,774.0	-310.3	-776.5	836.2	0.00	0.00	0.00
KIRTLAND									
3,000.0	25.08	248.22	2,828.7	-319.8	-800.3	861.9	0.00	0.00	0.00
3,100.0	25.08	248.22	2,919.3	-335.5	-839.7	904.2	0.00	0.00	0.00
3,200.0	25.08	248.22	3,009.9	-351.3	-879.0	946.6	0.00	0.00	0.00
3,300.0	25.08	248.22	3,100.4	-367.0	-918.4	989.0	0.00	0.00	0.00
3,400.0	25.08	248.22	3,191.0	-382.7	-957.8	1,031.4	0.00	0.00	0.00
3,411.0	25.08	248.22	3,201.0	-384.5	-962.1	1,036.1	0.00	0.00	0.00
FRUITLAND									
3,500.0	25.08	248.22	3,281.6	-398.5	-997.1	1,073.8	0.00	0.00	0.00
3,600.0	25.08	248.22	3,372.1	-414.2	-1,036.5	1,116.2	0.00	0.00	0.00
3,675.4	25.08	248.22	3,440.4	-426.0	-1,066.2	1,148.1	0.00	0.00	0.00
3,700.0	24.34	248.22	3,462.8	-429.9	-1,075.7	1,158.4	3.00	-3.00	0.00
3,800.0	21.34	248.22	3,554.9	-444.3	-1,111.8	1,197.2	3.00	-3.00	0.00
3,848.2	19.90	248.22	3,600.0	-450.6	-1,127.5	1,214.2	3.00	-3.00	0.00
PICTURED CLIFFS									
3,900.0	18.34	248.22	3,649.0	-456.9	-1,143.3	1,231.2	3.00	-3.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Lively #4M
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6592.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6592 0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Lively #4M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)
4,000.0	15.34	248.22	3,744.7	-467.6	-1,170.2	1,260.2	3.00	-3.00	0.00
4,003.4	15.24	248.22	3,748.0	-467.9	-1,171.0	1,261.1	3.00	-3.00	0.00
LEWIS									
4,100.0	12.34	248.22	3,841.8	-476.5	-1,192.4	1,284.1	3.00	-3.00	0.00
4,200.0	9.34	248.22	3,940.0	-483.5	-1,209.9	1,302.9	3.00	-3.00	0.00
4,300.0	6.34	248.22	4,039.0	-488.5	-1,222.5	1,316.5	3.00	-3.00	0.00
4,400.0	3.34	248.22	4,138.6	-491.7	-1,230.4	1,325.0	3.00	-3.00	0.00
4,500.0	0.34	248.22	4,238.6	-492.9	-1,233.4	1,328.2	3.00	-3.00	0.00
4,511.4	0.00	0.00	4,250.0	-492.9	-1,233.4	1,328.2	3.00	-3.00	979.39
LIVLEY #4M ICF									
4,600.0	0.00	0.00	4,338.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
4,672.4	0.00	0.00	4,411.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
HUERFANITO BENTONITE									
4,700.0	0.00	0.00	4,438.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
4,800.0	0.00	0.00	4,538.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
4,847.4	0.00	0.00	4,586.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
CHACRA									
4,900.0	0.00	0.00	4,638.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,738.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,100.0	0.00	0.00	4,838.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,200.0	0.00	0.00	4,938.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,038.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,138.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,427.4	0.00	0.00	5,166.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
UPPER CLIFF HOUSE									
5,500.0	0.00	0.00	5,238.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,515.4	0.00	0.00	5,254.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
MASSIVE CLIFF HOUSE									
5,600.0	0.00	0.00	5,338.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,675.4	0.00	0.00	5,414.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
MENEFEE									
5,700.0	0.00	0.00	5,438.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,538.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,638.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,738.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,069.4	0.00	0.00	5,808.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
POINT LOOKOUT									
6,100.0	0.00	0.00	5,838.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,200.0	0.00	0.00	5,938.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,300.0	0.00	0.00	6,038.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,138.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,500.0	0.00	0.00	6,238.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,527.4	0.00	0.00	6,266.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
MANCOS									
6,600.0	0.00	0.00	6,338.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,438.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,538.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,638.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,738.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,100.0	0.00	0.00	6,838.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,200.0	0.00	0.00	6,938.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,300.0	0.00	0.00	7,038.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Lively #4M
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6592.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6592.0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Lively #4M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)
7,315.4	0.00	0.00	7,054.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
UPPER GALLUP									
7,400.0	0.00	0.00	7,138.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,500.0	0.00	0.00	7,238.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,338.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,438.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,538.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,638.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,738.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,057.4	0.00	0.00	7,796.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
GREENHORN									
8,100.0	0.00	0.00	7,838.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,113.4	0.00	0.00	7,852.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
GRANEROS									
8,151.4	0.00	0.00	7,890.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
TWO WELLS									
8,200.0	0.00	0.00	7,938.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,257.4	0.00	0.00	7,996.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
PAGUATE									
8,279.4	0.00	0.00	8,018.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
UPPER CUBERO									
8,300.0	0.00	0.00	8,038.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,301.4	0.00	0.00	8,040.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
LOWER CUBERO									
8,357.4	0.00	0.00	8,096.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
ENCINAL									
8,400.0	0.00	0.00	8,138.6	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
8,417.4	0.00	0.00	8,156.0	-492.9	-1,233.4	1,328.2	0.00	0.00	0.00
LIVELY #4M 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
LIVELY #4M PCP	- plan hits target center	0.00	0.00	8,156.0	-492.9	-1,233.4	2,081,407.18	554,582.59	36° 43' 12.187 N 107° 38' 49.549 W
	- Point								
LIVELY #4M ICP	- plan hits target center	0.00	0.00	4,250.0	-492.9	-1,233.4	2,081,407.20	554,582.59	36° 43' 12.187 N 107° 38' 49.549 W
	- Point								

ConocoPhillips or its affiliates

Planning Report

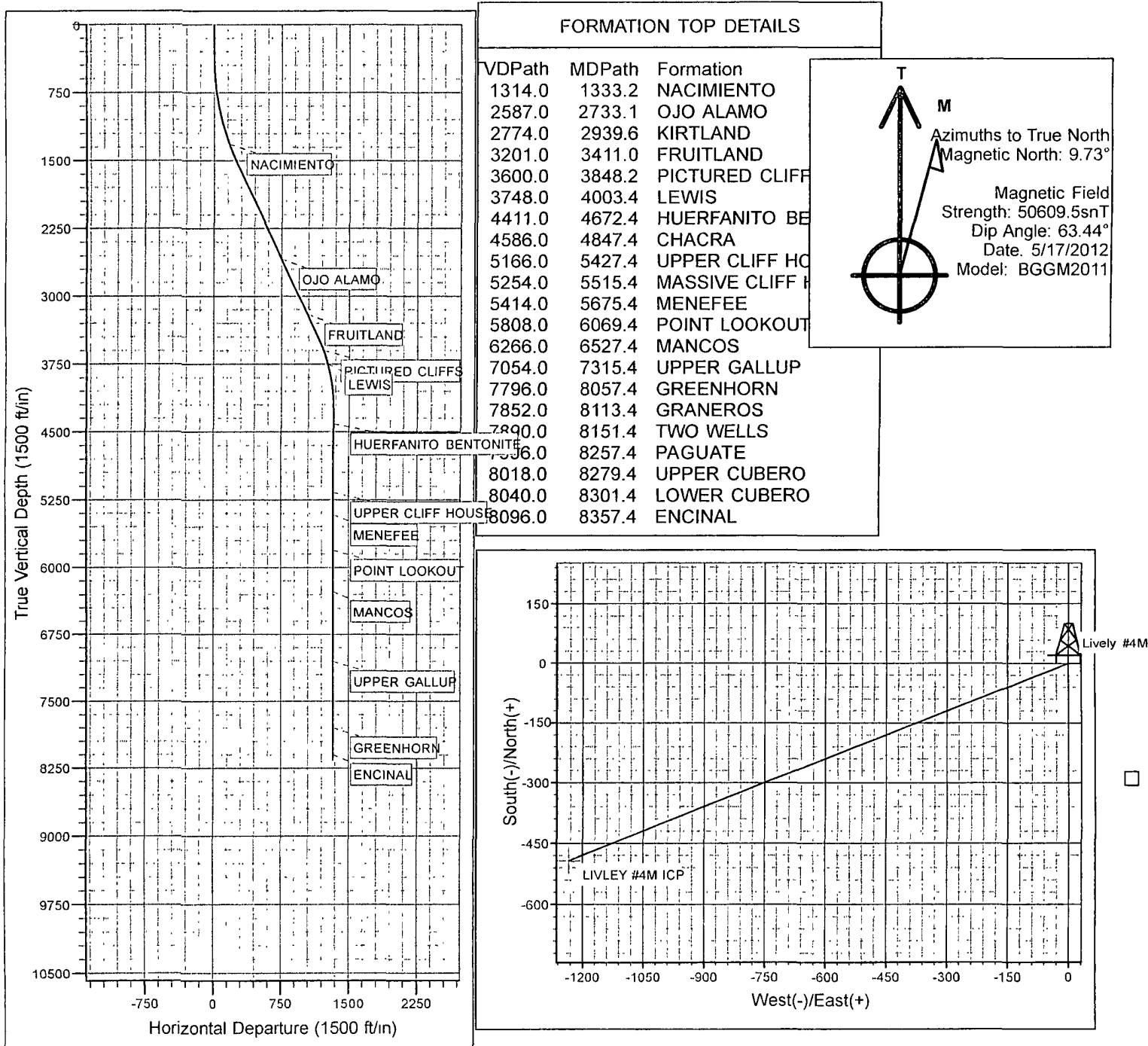
Databas: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico West Wells
Sito: Other Named Wells
Well: Lively #4M
Wellbore: Wellbore #1
Design: Plan #1

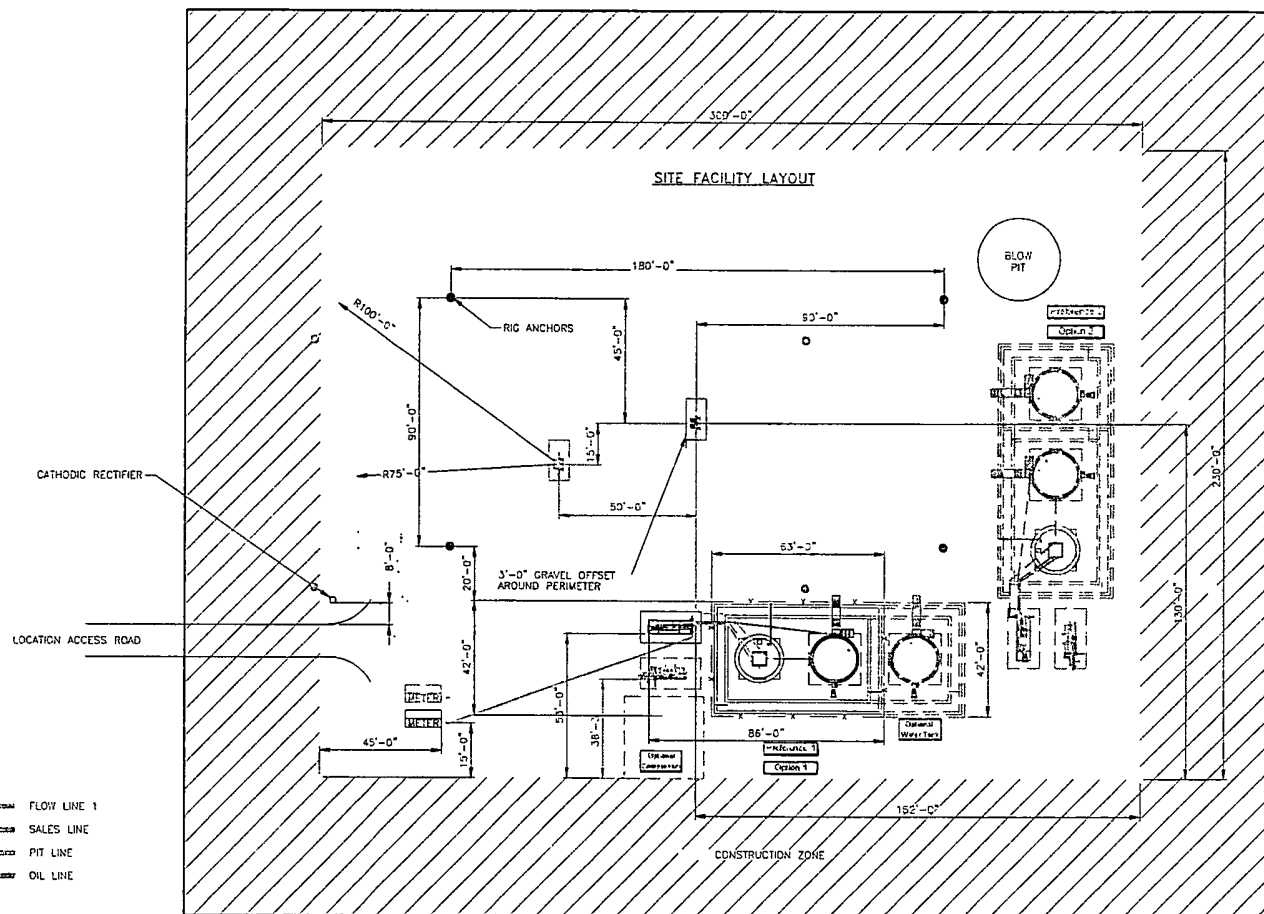
Local Co-ordinate Reference: Well Lively #4M
TVD Reference: WELL @ 6592.0ft (Original Well Elev)
MD Reference: WELL @ 6592.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,279.4	8,018.0	UPPER CUBERO		0.00	
5,427.4	5,166.0	UPPER CLIFF HOUSE		0.00	
8,057.4	7,796.0	GREENHORN		0.00	
3,411.0	3,201.0	FRUITLAND		0.00	
2,939.6	2,774.0	KIRTLAND		0.00	
2,733.1	2,587.0	OJO ALAMO		0.00	
5,675.4	5,414.0	MENEFEE		0.00	
8,151.4	7,890.0	TWO WELLS		0.00	
4,003.4	3,748.0	LEWIS		0.00	
8,357.4	8,096.0	ENCINAL		0.00	
4,672.4	4,411.0	HUERFANITO BENTONITE		0.00	
4,847.4	4,586.0	CHACRA		0.00	
6,527.4	6,266.0	MANCOS		0.00	
5,515.4	5,254.0	MASSIVE CLIFF HOUSE		0.00	
8,301.4	8,040.0	LOWER CUBERO		0.00	
8,257.4	7,996.0	PAGUATE		0.00	
1,333.2	1,314.0	NACIMIENTO		0.00	
8,113.4	7,852.0	GRANEROS		0.00	
3,848.2	3,600.0	PICTURED CLIFFS		0.00	
7,315.4	7,054.0	UPPER GALLUP		0.00	
6,069.4	5,808.0	POINT LOOKOUT		0.00	

REFERENCE INFORMATION		Project: San Juan Basin - New Mexico West V								
WELL @ 6592 0ft (Original Well Elev)		Site: Other Named Wells								
Ground Elevation 6577.0		Well: Lively #4M								
Reference Lat: 36° 43' 17.061 N		Wellbore: Wellbore #1								
Reference Long: 107° 38' 34 400 W		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	350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.0	
3	1604.0	25.08	248.22	1564.4	-100.2	-250.8	2.00	248.22	270.1	
4	3675.4	25.08	248.22	3440.4	-426.0	-1066.2	0.00	0.00	1148.1	
5	4511.4	0.00	0.00	4250.0	-492.9	-1233.4	3.00	180.00	1328.2	LIVLEY #4M ICP
6	8417.4	0.00	0.00	8156.0	-492.9	-1233.4	0.00	0.00	1328.2	LIVELY #4M PCP





BURLINGTON RESOURCES OIL & GAS COMPANY LP

LIVELY #4M

1215' FSL & 2039' FEL

LOCATED IN THE SW/4 SE/4 OF SECTION 14,
T29N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM POST OFFICE IN BLANCO, TRAVEL EAST ON HWY 64 FOR 9.0 MILES TO THE RIDGE ROAD TURN-OFF ON THE RIGHT.
- 2) TURN RIGHT ONTO RIDGE ROAD AND TRAVEL 1.7 MILES.
- 3) TURN LEFT AND TRAVEL 1.2 MILES TO THE FLAGGED ACCESS ON THE LEFT.

WELL FLAG LOCATED AT LAT. 36.72141° N, LONG. 107.64350° W (NAD 83).

