

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 5/2/14

Well information;

Operator Burlington R., Well Name and Number Allison Unit 145 H

API# 30-045-29363, Section 7, Township 32 N S, Range 6 E W

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☐ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

Charles Per-
NMOCD Approved by Signature

7-3-14
Date

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 02 2014

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Farmington Field Office
Bureau of Land Management

1a. Type of Work Reentry a FEE well, crossing Federal Minerals adding 2 laterals to existing wellbore	5. Lease Number NMNM4207 FEE & NM-042071 Unit Reporting Number NMNM78372C
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name Allison Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 145H
4. Location of Well Surface: Unit M (SWSW), 880' FSL & 925' FWL BHL : Unit F (SENW), 1685' FNL & 2290' FWL Surface: Latitude: 36.989992° N (NAD83) Longitude: 107.505966° W BHL : Latitude: 36.995506° N (NAD83) Longitude: 107.483031° W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Surface: Sec. 7, 32N, R6W Bottomhole: Sec. 8, T32N, R6W API # 30-045-29363
14. Distance in Miles from Nearest Town 16.4 miles from Ignacio, CO	12. County San Juan
	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 100'	
16. Acres in Lease FEE and Federal	17. Acres Assigned to Well 827.05 acres (see plat)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 72' Allison Unit 24 (MV)	
19. Proposed Depth +/- 9976' MD	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6591' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Patsy Clugston</u> Patsy Clugston (Staff Regulatory Tech)	<u>5/2/14</u> Date

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

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

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.

Bond Numbers NMB-000015 and NMB-000089

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

NMB-000015

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

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011

Submit one copy to appropriate
District Office

MAY 02 2014

Farmington Field Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 29363	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 6784	⁵ Property Name ALLISON UNIT	⁶ Well Number 145 H
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6519'

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
M	7	32-N	6-W	7	880	SOUTH	925	WEST	SAN JUAN

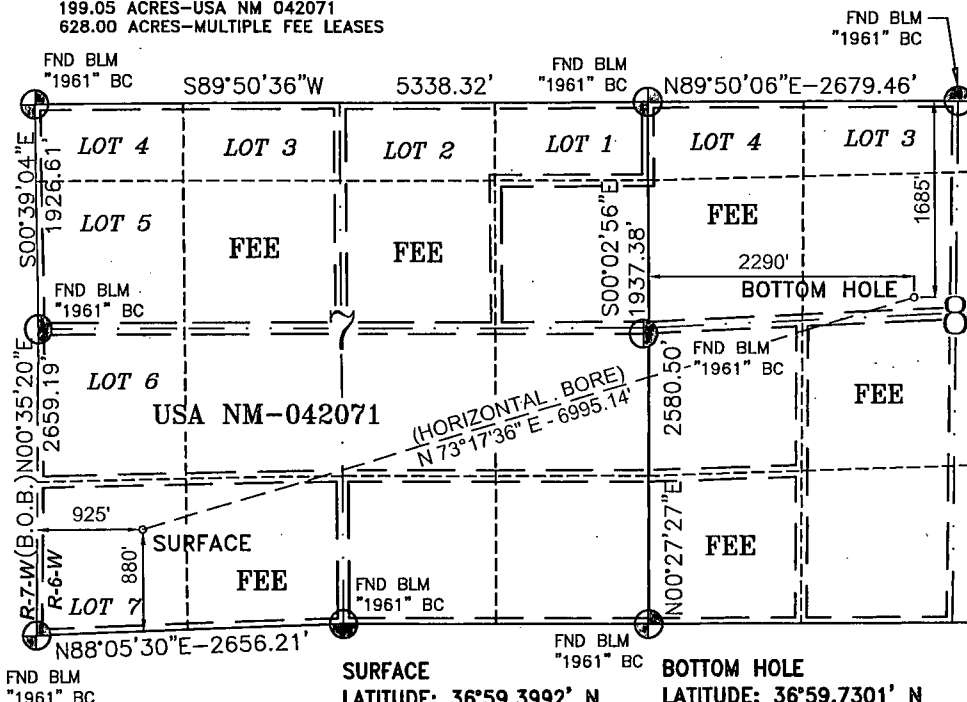
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	8	32-N	6-W		1685	NORTH	2290	WEST	SAN JUAN

¹² Dedicated Acres PROJECT AREA 827.05 ACRES SEE DETAIL BELOW	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 DETAIL
199.05 ACRES-USA NM 042071
628.00 ACRES-MULTIPLE FEE LEASES



FND BLM
"1961" BC

SURFACE

LATITUDE: 36°59.3992' N
LONGITUDE: 107°30.3216' W
NAD27

LATITUDE: 36.989992° N
LONGITUDE: 107.505966° W
NAD83

BOTTOM HOLE

LATITUDE: 36°59.7301' N
LONGITUDE: 107°28.9455' W
NAD27

LATITUDE: 36.995506° N
LONGITUDE: 107.483031° W
NAD83

BASIS OF BEARING:

BETWEEN FOUND MONUMENTS AT THE SOUTHWEST CORNER AND THE WEST
QUARTER CORNER OF SECTION 7, TOWNSHIP 32 NORTH, RANGE 6 WEST,
N.M.P.M. SAN JUAN COUNTY, NEW MEXICO.

LINE BEARS: N 00°35'20\" E A DISTANCE OF 2659.19 FEET AS MEASURED
BY G.P.S. LOCAL GRID NAD83.

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.

Arleen White 4-11-14
Signature Date

Arleen White

Printed Name

arleen.r.white@conocophillips.com

E-mail Address

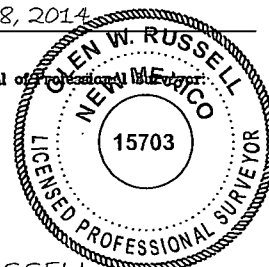
¹⁸ SURVEYOR CERTIFICATION

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.

JANUARY 28, 2014

Date of Survey

Signature and Seal of Professional Surveyor



GLEN W. RUSSELL

Certificate Number

15703

Plane to Re-enter existing well "Allison Unit #145" and drill Two Horizontal Laterals in the Coal

Burlington Resources Oil & Gas Company LP, a subsidiary of ConocoPhillips proposes to re-enter Allison Unit #145 well, gyro existing well, set and utilize whip stocks to mill windows out of the existing Allison Unit 145 7" csg at approximately 2818' TVD Lateral A and 2723' TVD Lateral B. The completed horizontal laterals will target two coal seams within the Fruitland formation.

Technical Plan

1. Location

Allison Unit #145H

SHL: 880' FSL, 925 FWL -- T 32N, R 06W, Sec 7

BHL: 1,685' FNL, 2,290' FWL -- T 32N, R 06W, Sec 8

GL: 6,519'

2. Geological Markers

Anticipated formation tops with comments of any possible water, gas, or oil shows are indicated below:

Formation	Depth (TVD)	Remarks
Nacimiento	719'	
Ojo Alamo	2249'	
Kirtland	2361'	
Fruitland	2894'	Gas

See attached directional plan for anticipated formation tops in measure depth.

3. Pressure Control Equipment

See Attached BOPE & Choke Manifold Schematic for a diagram of pressure control equipment.

- BOPE will be nipped up on top of wellhead after surface casing is set and cemented.
- Pressure control configuration will be designed to meet the minimum 2M standards.
- All equipment will have 3M pressure ratings.
- A rotating head will be rigged up on top of annular as seen in attached diagram.

4. Casing & Cement Program

A) The existing and proposed casing program is outlined below:

Proposed Casing				
Casing	Hole Size	Casing Size	Weight/Grade	Set Depth TVD/MD
Surface	12-1/4"	9-5/8"	36#, K-55, STC, existing	155' TVD/MD
Intermediate	8-3/4"	7"	20#, K-55, STC, existing	2,955' TVD /MD
Lateral A, Lower	6-1/4"	4-1/2"	11.6#, N/-80/L-80, BTC, New	3,091' TVD / 9,976' MD

Production Liner (pre-perforated)				
Lateral B, Upper Production Liner (pre-perforated)	6-1/4"	4-1/2"	11.6#, N/-80/L-80, BTC, New	2,983' TVD / 9,882' MD

The production liner will be landed back into the existing 7" casing string with a hook wall hanger at the window and a pack-off element set below the hook wall hanger in the open hole. The production liner will be pre-perforated and left in open hole.

If the 6-1/4" hole is not drilled to total MD, the production liner setting depth and length will be adjusted accordingly.

B) The proposed cement program:

4-1/2" Liner will be landed in open hole and not cemented.

C) The proposed centralizer program is shown below:

Centralizer Program	
Interval	Centralizers
Production	N/A

5. Drilling Fluids

A) The proposed drilling fluid program is outlined below:

Mud Program			
Interval	Mud Type	Weight (ppg)	Fluid Loss (cc)
Production	Water Based LSND Brine (if needed)*	8.5 – 10	4 – 14

*In the Production hole, Brine will be utilized only if a weighting agent is needed to raise MW (for either well control or wellbore stability purposes).

LCM may be added to the mud system if hole conditions indicate.

B) If brine is utilized, any cuttings drilled with brine will be hauled off to an approved disposal site.

6. Abnormal Pressures & Hazards

- No over-pressured intervals expected.
- Estimated Reservoir Pressure = 1,500 psi.
- Maximum Anticipated Surface Pressure = 1,300 psi
- No hydrogen sulfide gas is expected based off nearby well production.

7. Testing, Logging, Coring

- Mud Logs: Mud loggers will be rigged up from KOP to production hole TD.
- MWD: Directional tools from KOP to production hole TD.
- LWD: Gamma Ray utilized in production hole for well placement.
- Logs: No planned open hole logs (other than the previously identified LWD logs) will be ran.

8. Directional Plan

The planned wellbore directional plan and plot are attached.

The planned directional plan is built off geological targets from offset wells. The production hole will be landed and drilled within target formation horizontally utilizing LWD equipment to help steer the wellbore. On site adjustments will be made to the directional plan as formation and hole indicates.

Allison 145H Lateral

Directional Plan Lateral A, accompanies this document
Directional Plan Lateral B, accompanies this document

GL 6519'
KB 6534' Est.

Surface location:

Lateral B (upper lateral), beginning of prod. interval

Lateral B (upper lateral), end of prod. interval

Lateral A (lower lateral), beginning of prod. interval

Lateral A (lower lateral), end of prod interval

State of New Mexico, San Juan County

T32N, R06W, Section 7, 880' FSL, 925' FWL

T32N, R06W, Section 7, 963' FSL, 1199' FWL

T32N, R06W, Section 8, 1685' FNL, 2290' FWL

T32N, R06W, Section 7, 967' FSL, 1198' FWL

T32N, R06W, Section 8, 1685' FNL, 2290' FWL

MD
ft

TVD
ft

NA

NA

3175'

3010'

landed at 90° in the upper coal

9882'

2983'

lateral total depth & 4-1/2" casing depth

3269'

3106'

landed at 90° in the lower coal

9976'

3091'

lateral total depth & 4-1/2" casing depth

solid lines indicate present wellbore
dashed lines indicate laterals to be added

12-1/4" Hole and 9-5/8" Casing set at 155' MD
Casing description: 9-5/8" 36 #/ft, K-55, STC
Cemented to surface, 1.5 bbls cement to surface

casing exits at:
2723' & 2818'

8-3/4" Hole & 7" Casing set at 2955' MD
casing description: 7", 20#/ft, K-55, STC
TOC: Cemented to Surface, 8 bbls cement to surface.

6-1/4" Hole, 4-1/2" Liner at 3127' MD
casing description: 4-1/2" 10.5#/ft K-55
no cement

Lateral B

Lateral A

Two Laterals, Upper and Lower
each consisting of 6-1/4" Hole & 4-1/2" Liner
casing description: 4-1/2" 11.6#/ft, L-80, BTC
uncemented, pre-perforated

BOP program and drilling mud program will be per basin-wide standards for top-set coal wells.

Allison 145H Lateral

Directional Plan Lateral A, accompanies this document
Directional Plan Lateral B, accompanies this document

GL 6519'
KB 6534' Est.

Surface location:

Lateral B (upper lateral), beginning of prod. interval

Lateral B (upper lateral), end of prod. interval

Lateral A (lower lateral), beginning of prod. interval

Lateral A (lower lateral), end of prod interval

State of New Mexico, San Juan County

T32N, R06W, Section 7, 880' FSL, 925' FWL

T32N, R06W, Section 7, 963' FSL, 1199' FWL

T32N, R06W, Section 8, 1685' FNL, 2290' FWL

T32N, R06W, Section 7, 967' FSL, 1198' FWL

T32N, R06W, Section 8, 1685' FNL, 2290' FWL

MD
ft

TVD
ft

NA

NA

3175'

3010'

landed at 90° in the upper coal

9882'

2983'

lateral total depth & 4-1/2" casing depth

3269'

3106'

landed at 90° in the lower coal

9976'

3091'

lateral total depth & 4-1/2" casing depth

— solid lines indicate present wellbore
- - - - - dashed lines indicate laterals to be added

12-1/4" Hole and 9-5/8" Casing set at 155' MD
Casing description: 9-5/8" 36 #/ft, K-55, STC
Cemented to surface, 1.5 bbls cement to surface

casing exits at:
2723' & 2818'

Lateral B

Lateral A

8-3/4" Hole & 7" Casing set at 2955' MD
casing description: 7", 20#/ft, K-55, STC
TOC: Cemented to Surface, 8 bbls cement to surface.

Two Laterals, Upper and Lower
each consisting of 6-1/4" Hole & 4-1/2" Liner
casing description: 4-1/2" 11.6#/ft, L-80, BTC
uncemented, pre-perforated

6-1/4" Hole, 4-1/2" Liner at 3127' MD
casing description: 4-1/2" 10.5#/ft K-55
no cement

BOP program and drilling mud program will be per basin-wide standards for top-set coal wells.

ConocoPhillips SJB

San Juan Basin - New Mexico West Wells

Allison Unit Wells

Allison Unit #145H

Lower Lateral

Plan: Lateral A

Standard Planning Report

06 March, 2014

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Allison Unit #145H
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6534.0usft
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6534.0usft
Site:	Allison Unit Wells	North Reference:	Grid
Well:	Allison Unit #145H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lower Lateral		
Design:	Lateral A		

Project	San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	Allison Unit Wells		
Site Position:	From:	Lat/Long	
	Northing:	2,182,281.84 usft	Latitude: 36° 59' 49.194 N
	Easting:	576,403.52 usft	Longitude: 107° 34' 18.126 W
Position Uncertainty:	15.0 usft	Slot Radius: 13-3/16"	Grid Convergence: 0.16 °

Well	Allison Unit #145H		
Well Position	+N/-S	0.0 usft	Northing: 2,179,789.17 usft
	+E/-W	0.0 usft	Easting: 595,785.92 usft
Position Uncertainty	2.5 usft	Wellhead Elevation:	usft
			Ground Level: 6,519.0 usft

Wellbore	Lower Lateral		
Magnetics:	Model Name	Sample Date	Declination
			(°)
	BGGM2013	2/10/2014	9.54
			Dip Angle (°)
			63.67
			Field Strength (nT)
			50,577

Design	Lateral A		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 2,818.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			73.11

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
2,818.0	0.00	0.00	2,818.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,819.5	0.00	0.00	2,819.5	0.0	0.0	0.00	0.00	0.00	0.00	
3,269.5	90.00	72.24	3,106.0	87.4	272.8	20.00	20.00	0.00	72.24	
3,269.6	90.00	72.24	3,106.0	87.4	272.9	0.00	0.00	0.00	0.00	Allison Unit #145H En
9,976.4	90.26	74.05	3,091.0	2,031.8	6,691.4	0.03	0.00	0.03	81.94	Allison Unit #145H Bl

ConocoPhillips Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico West Wells
Site: Allison Unit Wells
Well: Allison Unit #145H
Wellbore: Lower Lateral
Design: Lateral A

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Allison Unit #145H
WELL @ 6534.0usft
WELL @ 6534.0usft
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,818.0	0.00	0.00	2,818.0	0.0	0.0	0.0	0.00	0.00	0.00
2,819.5	0.00	0.00	2,819.5	0.0	0.0	0.0	0.00	0.00	0.00
2,825.0	1.10	72.24	2,825.0	0.0	0.0	0.1	20.00	20.00	0.00
2,850.0	6.10	72.24	2,849.9	0.5	1.5	1.6	20.00	20.00	0.00
2,875.0	11.10	72.24	2,874.7	1.6	5.1	5.4	20.00	20.00	0.00
2,894.9	15.07	72.24	2,894.0	3.0	9.4	9.8	20.00	20.00	0.00
FRUITLAND									
2,900.0	16.10	72.24	2,898.9	3.4	10.7	11.2	20.00	20.00	0.00
2,925.0	21.10	72.24	2,922.6	5.9	18.3	19.2	20.00	20.00	0.00
2,950.0	26.10	72.24	2,945.5	8.9	27.8	29.2	20.00	20.00	0.00
2,975.0	31.10	72.24	2,967.5	12.6	39.2	41.2	20.00	20.00	0.00
3,000.0	36.10	72.24	2,988.3	16.8	52.4	55.0	20.00	20.00	0.00
3,025.0	41.10	72.24	3,007.8	21.5	67.2	70.6	20.00	20.00	0.00
3,050.0	46.10	72.24	3,025.9	26.8	83.6	87.8	20.00	20.00	0.00
3,075.0	51.10	72.24	3,042.5	32.5	101.5	106.6	20.00	20.00	0.00
3,100.0	56.10	72.24	3,057.3	38.6	120.6	126.7	20.00	20.00	0.00
3,125.0	61.10	72.24	3,070.3	45.1	141.0	148.0	20.00	20.00	0.00
3,150.0	66.10	72.24	3,081.4	52.0	162.3	170.4	20.00	20.00	0.00
3,175.0	71.10	72.24	3,090.5	59.1	184.4	193.6	20.00	20.00	0.00
3,200.0	76.10	72.24	3,097.6	66.4	207.3	217.6	20.00	20.00	0.00
3,225.0	81.10	72.24	3,102.5	73.9	230.6	242.1	20.00	20.00	0.00
3,250.0	86.10	72.24	3,105.3	81.4	254.3	266.9	20.00	20.00	0.00
3,269.5	90.00	72.24	3,106.0	87.4	272.8	286.4	20.00	20.00	0.00
3,269.6	90.00	72.24	3,106.0	87.4	272.9	286.5	0.00	0.00	0.00
3,300.0	90.00	72.25	3,106.0	96.7	301.9	316.9	0.03	0.00	0.03
3,400.0	90.00	72.28	3,106.0	127.1	397.1	416.9	0.03	0.00	0.03
3,500.0	90.01	72.30	3,106.0	157.6	492.4	516.9	0.03	0.00	0.03
3,600.0	90.01	72.33	3,106.0	187.9	587.6	616.9	0.03	0.00	0.03
3,700.0	90.02	72.36	3,105.9	218.3	682.9	716.9	0.03	0.00	0.03
3,800.0	90.02	72.38	3,105.9	248.5	778.2	816.9	0.03	0.00	0.03
3,900.0	90.02	72.41	3,105.9	278.8	873.6	916.9	0.03	0.00	0.03
4,000.0	90.03	72.44	3,105.8	309.0	968.9	1,016.9	0.03	0.00	0.03
4,100.0	90.03	72.47	3,105.8	339.1	1,064.2	1,116.9	0.03	0.00	0.03
4,200.0	90.04	72.49	3,105.7	369.2	1,159.6	1,216.8	0.03	0.00	0.03
4,300.0	90.04	72.52	3,105.6	399.3	1,255.0	1,316.8	0.03	0.00	0.03
4,400.0	90.04	72.55	3,105.6	429.3	1,350.4	1,416.8	0.03	0.00	0.03
4,500.0	90.05	72.57	3,105.5	459.3	1,445.8	1,516.8	0.03	0.00	0.03
4,600.0	90.05	72.60	3,105.4	489.2	1,541.2	1,616.8	0.03	0.00	0.03
4,700.0	90.05	72.63	3,105.3	519.1	1,636.6	1,716.8	0.03	0.00	0.03
4,800.0	90.06	72.65	3,105.2	548.9	1,732.1	1,816.8	0.03	0.00	0.03
4,900.0	90.06	72.68	3,105.1	578.7	1,827.5	1,916.8	0.03	0.00	0.03
5,000.0	90.07	72.71	3,105.0	608.5	1,923.0	2,016.8	0.03	0.00	0.03
5,100.0	90.07	72.74	3,104.9	638.2	2,018.5	2,116.8	0.03	0.00	0.03
5,200.0	90.07	72.76	3,104.8	667.8	2,114.0	2,216.8	0.03	0.00	0.03
5,300.0	90.08	72.79	3,104.6	697.4	2,209.5	2,316.8	0.03	0.00	0.03
5,400.0	90.08	72.82	3,104.5	727.0	2,305.0	2,416.8	0.03	0.00	0.03
5,500.0	90.09	72.84	3,104.3	756.5	2,400.6	2,516.8	0.03	0.00	0.03
5,600.0	90.09	72.87	3,104.2	786.0	2,496.1	2,616.8	0.03	0.00	0.03
5,700.0	90.09	72.90	3,104.0	815.4	2,591.7	2,716.8	0.03	0.00	0.03
5,800.0	90.10	72.92	3,103.9	844.8	2,687.3	2,816.8	0.03	0.00	0.03
5,900.0	90.10	72.95	3,103.7	874.2	2,782.9	2,916.8	0.03	0.00	0.03
6,000.0	90.10	72.98	3,103.5	903.4	2,878.5	3,016.8	0.03	0.00	0.03
6,100.0	90.11	73.01	3,103.3	932.7	2,974.1	3,116.8	0.03	0.00	0.03

ConocoPhillips Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Allison Unit #145H
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6534.0usft
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6534.0usft
Site:	Allison Unit Wells	North Reference:	Grid
Well:	Allison Unit #145H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lower Lateral		
Design:	Lateral A		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,200.0	90.11	73.03	3,103.1	961.9	3,069.7	3,216.8	0.03	0.00	0.03
6,300.0	90.12	73.06	3,102.9	991.1	3,165.4	3,316.8	0.03	0.00	0.03
6,400.0	90.12	73.09	3,102.7	1,020.2	3,261.1	3,416.8	0.03	0.00	0.03
6,500.0	90.12	73.11	3,102.5	1,049.3	3,356.8	3,516.8	0.03	0.00	0.03
6,600.0	90.13	73.14	3,102.3	1,078.3	3,452.4	3,616.8	0.03	0.00	0.03
6,700.0	90.13	73.17	3,102.1	1,107.3	3,548.2	3,716.8	0.03	0.00	0.03
6,800.0	90.13	73.19	3,101.8	1,136.2	3,643.9	3,816.8	0.03	0.00	0.03
6,900.0	90.14	73.22	3,101.6	1,165.1	3,739.6	3,916.8	0.03	0.00	0.03
7,000.0	90.14	73.25	3,101.4	1,193.9	3,835.4	4,016.8	0.03	0.00	0.03
7,100.0	90.15	73.27	3,101.1	1,222.7	3,931.1	4,116.8	0.03	0.00	0.03
7,200.0	90.15	73.30	3,100.8	1,251.5	4,026.9	4,216.8	0.03	0.00	0.03
7,300.0	90.15	73.33	3,100.6	1,280.2	4,122.7	4,316.8	0.03	0.00	0.03
7,400.0	90.16	73.36	3,100.3	1,308.9	4,218.5	4,416.8	0.03	0.00	0.03
7,500.0	90.16	73.38	3,100.0	1,337.5	4,314.3	4,516.8	0.03	0.00	0.03
7,600.0	90.17	73.41	3,099.7	1,366.1	4,410.1	4,616.8	0.03	0.00	0.03
7,700.0	90.17	73.44	3,099.5	1,394.6	4,506.0	4,716.8	0.03	0.00	0.03
7,800.0	90.17	73.46	3,099.2	1,423.1	4,601.8	4,816.8	0.03	0.00	0.03
7,900.0	90.18	73.49	3,098.8	1,451.5	4,697.7	4,916.8	0.03	0.00	0.03
8,000.0	90.18	73.52	3,098.5	1,479.9	4,793.6	5,016.8	0.03	0.00	0.03
8,100.0	90.18	73.54	3,098.2	1,508.3	4,889.5	5,116.8	0.03	0.00	0.03
8,200.0	90.19	73.57	3,097.9	1,536.6	4,985.4	5,216.8	0.03	0.00	0.03
8,300.0	90.19	73.60	3,097.6	1,564.8	5,081.3	5,316.8	0.03	0.00	0.03
8,400.0	90.20	73.63	3,097.2	1,593.0	5,177.3	5,416.8	0.03	0.00	0.03
8,500.0	90.20	73.65	3,096.9	1,621.2	5,273.2	5,516.8	0.03	0.00	0.03
8,600.0	90.20	73.68	3,096.5	1,649.3	5,369.2	5,616.8	0.03	0.00	0.03
8,700.0	90.21	73.71	3,096.2	1,677.4	5,465.1	5,716.8	0.03	0.00	0.03
8,800.0	90.21	73.73	3,095.8	1,705.4	5,561.1	5,816.7	0.03	0.00	0.03
8,900.0	90.22	73.76	3,095.4	1,733.4	5,657.1	5,916.7	0.03	0.00	0.03
9,000.0	90.22	73.79	3,095.0	1,761.4	5,753.2	6,016.7	0.03	0.00	0.03
9,100.0	90.22	73.81	3,094.7	1,789.3	5,849.2	6,116.7	0.03	0.00	0.03
9,200.0	90.23	73.84	3,094.3	1,817.1	5,945.2	6,216.7	0.03	0.00	0.03
9,300.0	90.23	73.87	3,093.9	1,844.9	6,041.3	6,316.7	0.03	0.00	0.03
9,400.0	90.23	73.90	3,093.5	1,872.7	6,137.4	6,416.7	0.03	0.00	0.03
9,500.0	90.24	73.92	3,093.1	1,900.4	6,233.4	6,516.7	0.03	0.00	0.03
9,600.0	90.24	73.95	3,092.6	1,928.1	6,329.5	6,616.7	0.03	0.00	0.03
9,700.0	90.25	73.98	3,092.2	1,955.7	6,425.6	6,716.7	0.03	0.00	0.03
9,800.0	90.25	74.00	3,091.8	1,983.3	6,521.8	6,816.6	0.03	0.00	0.03
9,900.0	90.25	74.03	3,091.3	2,010.8	6,617.9	6,916.6	0.03	0.00	0.03
9,976.4	90.26	74.05	3,091.0	2,031.8	6,691.4	6,993.0	0.03	0.00	0.03

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Allison Unit #145H Entry	0.00	0.00	3,106.0	87.4	272.9	2,179,876.56	596,058.80	36° 59' 24.807 N	107° 30' 15.929 W
- plan hits target center									
- Point									
Allison Unit #145H BHL	0.00	0.00	3,091.0	2,031.8	6,691.4	2,181,820.84	602,476.80	36° 59' 43.806 N	107° 28' 56.730 W
- plan hits target center									
- Point									

ConocoPhillips Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico West Wells
Site: Allison Unit Wells
Well: Allison Unit #145H
Wellbore: Lower Lateral
Design: Lateral A

Local Co-ordinate Reference: Well Allison Unit #145H
TVD Reference: WELL @ 6534.0usft
MD Reference: WELL @ 6534.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,894.9	2,894.0	FRUITLAND		0.00	

REFERENCE INFORMATION

WELL @ 6534.0usft
Ground Elevation 6519.0
Reference Lat: 36° 59' 23.952 N
Reference Long: 107° 30' 19.296 W

Project:San Juan Basin - New Mexico

Well: Allison Unit #145H

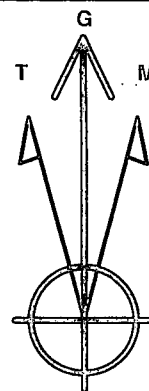
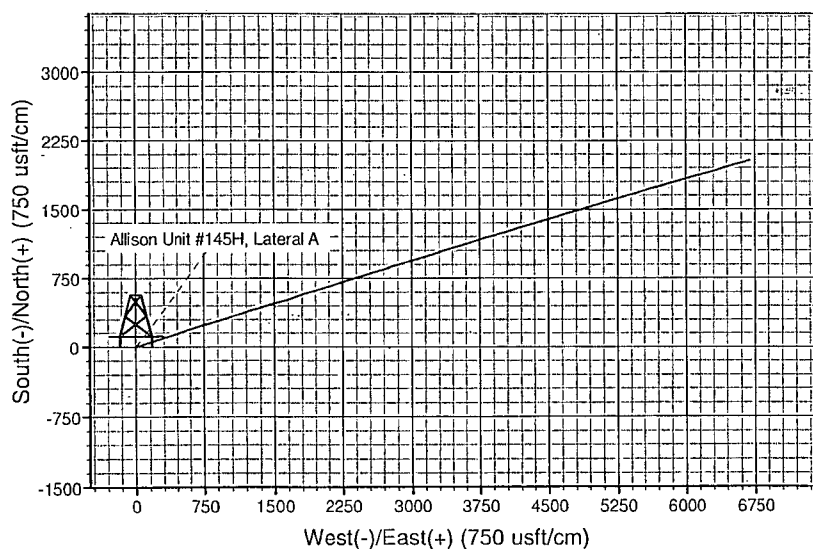
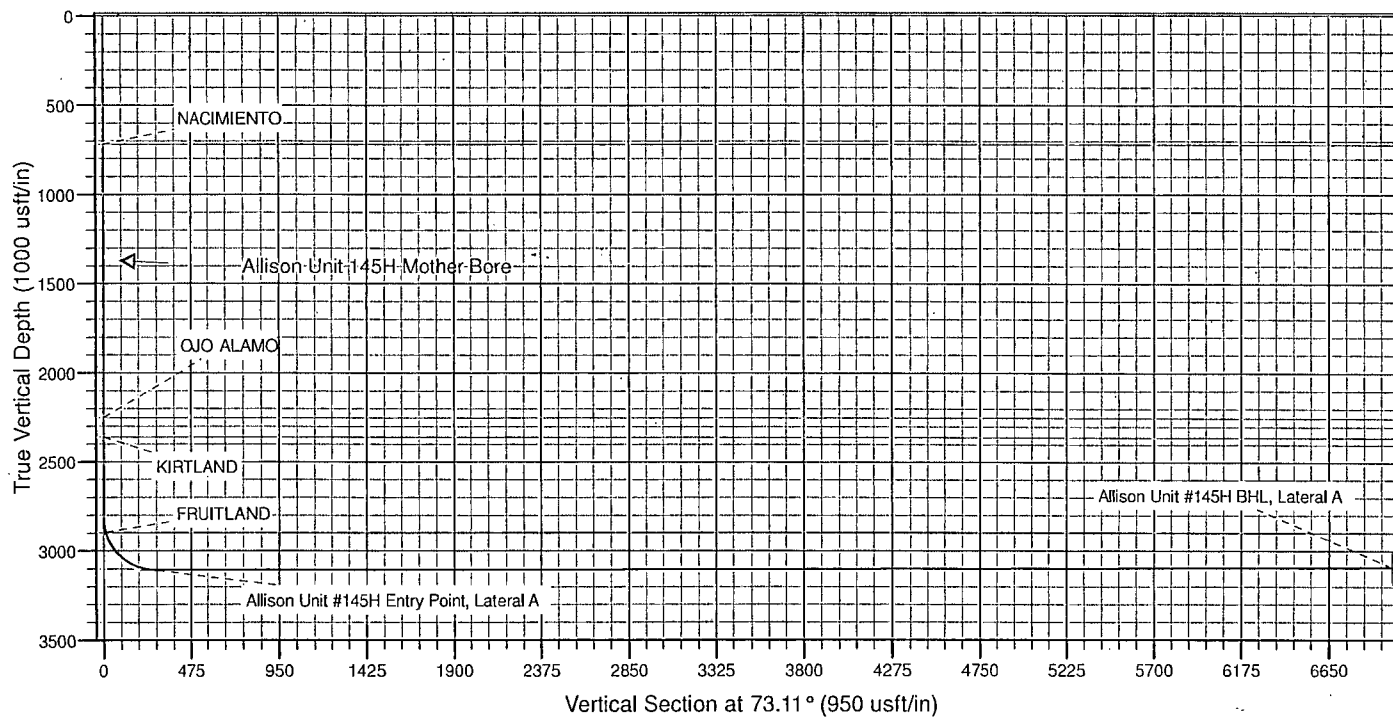
Wellbore: Re-Entry Lower Lateral

Design: Lateral A



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	2818.0	0.00	0.00	2818.0	0.0	0.0	0.00	0.00	0.0	
2	2819.5	0.00	0.00	2819.5	0.0	0.0	0.00	0.00	0.0	
3	3269.5	90.00	72.24	3106.0	87.4	272.8	20.00	72.24	286.4	
4	3269.6	90.00	72.24	3106.0	87.4	272.9	0.00	0.00	286.5	Entry Point, Lateral A
5	9976.4	90.26	74.05	3091.0	2031.8	6691.4	0.03	81.94	6993.0	BHL, Lateral A



Azimuths to Grid North
True North: -0.20°
Magnetic North: 9.34°

Magnetic Field
Strength: 50576.6snT
Dip Angle: 63.67°
Date: 2/10/2014
Model: BGGM2013

ConocoPhillips SJBU

San Juan Basin - New Mexico West Wells

Allison Unit Wells

Allison Unit #145H

Upper Lateral

Plan: Lateral B

Standard Planning Report

06 March, 2014

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Allison Unit #145H
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6534.0usft
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6534.0usft
Site:	Allison Unit Wells	North Reference:	Grid
Well:	Allison Unit #145H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Upper Lateral		
Design:	Lateral B		

Project	San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	Allison Unit Wells		
Site Position:		Northing:	2,182,281.84 usft
From:	Lat/Long	Easting:	576,403.52 usft
Position Uncertainty:	15.0 usft	Slot Radius:	13-3/16"
		Latitude:	36° 59' 49.194 N
		Longitude:	107° 34' 18.126 W
		Grid Convergence:	0.16 °

Well	Allison Unit #145H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	2.5 usft	Wellhead Elevation:	usft
		Latitude:	36° 59' 23.952 N
		Longitude:	107° 30' 19.296 W
		Ground Level:	6,519.0 usft

Wellbore	Upper Lateral		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2013	3/4/2014	9.53
			Dip Angle
			(°)
			Field Strength
			(nT)
			63.67
			50,569

Design	Lateral B		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			2,723.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			73.11

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
2,723.0	0.00	0.00	2,723.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,724.6	0.00	0.00	2,724.6	0.0	0.0	0.00	0.00	0.00	0.00	
3,174.5	90.00	73.11	3,010.0	82.9	273.1	20.00	20.00	0.00	73.11	
3,175.5	90.00	73.11	3,010.0	83.2	274.1	0.00	0.00	0.00	0.00	Allison Unit 145H Entr
4,400.0	90.75	73.11	3,002.0	438.9	1,445.8	0.06	0.06	0.00	-0.30	AU 145H, Lat. B, targ
6,400.0	89.42	73.11	2,999.0	1,019.9	3,359.5	0.07	-0.07	0.00	179.94	Au 145H, Lat. B, targ
9,882.1	91.10	73.10	2,983.0	2,031.8	6,691.1	0.05	0.05	0.00	-0.54	Allison Unit #145H Bl

ConocoPhillips Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Allison Unit #145H
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6534.0usft
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6534.0usft
Site:	Allison Unit Wells	North Reference:	Grid
Well:	Allison Unit #145H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Upper Lateral		
Design:	Lateral B		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/S (usft)	+E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,723.0	0.00	0.00	2,723.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,724.6	0.00	0.00	2,724.6	0.0	0.0	0.0	0.00	0.00	0.00	
2,750.0	5.09	73.11	2,750.0	0.3	1.1	1.1	20.00	20.00	0.00	
2,775.0	10.09	73.11	2,774.7	1.3	4.2	4.4	20.00	20.00	0.00	
2,800.0	15.09	73.11	2,799.1	2.9	9.5	9.9	20.00	20.00	0.00	
2,825.0	20.09	73.11	2,823.0	5.1	16.7	17.4	20.00	20.00	0.00	
2,850.0	25.09	73.11	2,846.0	7.9	25.9	27.0	20.00	20.00	0.00	
2,875.0	30.09	73.11	2,868.2	11.2	36.9	38.6	20.00	20.00	0.00	
2,900.0	35.09	73.11	2,889.2	15.1	49.8	52.1	20.00	20.00	0.00	
2,905.9	36.27	73.11	2,894.0	16.1	53.1	55.5	20.00	20.00	0.00	
FRUITLAND										
2,925.0	40.09	73.11	2,909.0	19.6	64.4	67.3	20.00	20.00	0.00	
2,950.0	45.09	73.11	2,927.4	24.5	80.6	84.2	20.00	20.00	0.00	
2,975.0	50.10	73.11	2,944.3	29.8	98.3	102.7	20.00	20.00	0.00	
3,000.0	55.10	73.11	2,959.5	35.6	117.3	122.5	20.00	20.00	0.00	
3,025.0	60.10	73.11	2,972.9	41.7	137.4	143.6	20.00	20.00	0.00	
3,050.0	65.10	73.11	2,984.4	48.2	158.7	165.8	20.00	20.00	0.00	
3,075.0	70.10	73.11	2,993.9	54.9	180.8	188.9	20.00	20.00	0.00	
3,100.0	75.10	73.11	3,001.4	61.8	203.6	212.8	20.00	20.00	0.00	
3,125.0	80.10	73.11	3,006.7	68.9	227.0	237.2	20.00	20.00	0.00	
3,150.0	85.10	73.11	3,010.0	76.1	250.7	262.0	20.00	20.00	0.00	
3,174.5	90.00	73.11	3,010.0	82.9	273.1	285.4	20.00	20.00	0.00	
3,175.5	90.00	73.11	3,010.0	83.2	274.1	286.4	0.00	0.00	0.00	
3,200.0	90.01	73.11	3,010.0	90.3	297.5	310.9	0.06	0.06	0.00	
3,300.0	90.08	73.11	3,009.9	119.4	393.2	410.9	0.06	0.06	0.00	
3,400.0	90.14	73.11	3,009.7	148.4	488.9	510.9	0.06	0.06	0.00	
3,500.0	90.20	73.11	3,009.4	177.5	584.6	610.9	0.06	0.06	0.00	
3,600.0	90.26	73.11	3,009.0	206.5	680.3	710.9	0.06	0.06	0.00	
3,700.0	90.32	73.11	3,008.5	235.5	776.0	810.9	0.06	0.06	0.00	
3,800.0	90.38	73.11	3,007.9	264.6	871.7	910.9	0.06	0.06	0.00	
3,900.0	90.44	73.11	3,007.2	293.6	967.4	1,010.9	0.06	0.06	0.00	
4,000.0	90.50	73.11	3,006.4	322.7	1,063.0	1,110.9	0.06	0.06	0.00	
4,100.0	90.57	73.11	3,005.4	351.7	1,158.7	1,210.9	0.06	0.06	0.00	
4,200.0	90.63	73.11	3,004.4	380.8	1,254.4	1,310.9	0.06	0.06	0.00	
4,300.0	90.69	73.11	3,003.3	409.8	1,350.1	1,410.9	0.06	0.06	0.00	
4,400.0	90.75	73.11	3,002.0	438.9	1,445.8	1,511.0	0.06	0.06	0.00	
4,500.0	90.68	73.11	3,000.8	467.9	1,541.4	1,610.9	0.07	-0.07	0.00	
4,600.0	90.62	73.11	2,999.6	497.0	1,637.1	1,710.9	0.07	-0.07	0.00	
4,700.0	90.55	73.11	2,998.6	526.0	1,732.8	1,810.9	0.07	-0.07	0.00	
4,800.0	90.48	73.11	2,997.7	555.1	1,828.5	1,910.9	0.07	-0.07	0.00	
4,900.0	90.42	73.11	2,996.9	584.1	1,924.2	2,010.9	0.07	-0.07	0.00	
5,000.0	90.35	73.11	2,996.2	613.2	2,019.9	2,110.9	0.07	-0.07	0.00	
5,100.0	90.28	73.11	2,995.7	642.2	2,115.5	2,210.9	0.07	-0.07	0.00	
5,200.0	90.22	73.11	2,995.2	671.3	2,211.2	2,310.9	0.07	-0.07	0.00	
5,300.0	90.15	73.11	2,994.9	700.3	2,306.9	2,410.9	0.07	-0.07	0.00	
5,400.0	90.09	73.11	2,994.7	729.4	2,402.6	2,510.9	0.07	-0.07	0.00	
5,500.0	90.02	73.11	2,994.6	758.4	2,498.3	2,610.9	0.07	-0.07	0.00	
5,600.0	89.95	73.11	2,994.6	787.5	2,594.0	2,710.9	0.07	-0.07	0.00	
5,700.0	89.89	73.11	2,994.8	816.5	2,689.7	2,810.9	0.07	-0.07	0.00	
5,800.0	89.82	73.11	2,995.0	845.6	2,785.4	2,910.9	0.07	-0.07	0.00	
5,900.0	89.75	73.11	2,995.4	874.6	2,881.0	3,010.9	0.07	-0.07	0.00	
6,000.0	89.69	73.11	2,995.9	903.7	2,976.7	3,110.9	0.07	-0.07	0.00	
6,100.0	89.62	73.11	2,996.5	932.7	3,072.4	3,210.9	0.07	-0.07	0.00	

ConocoPhillips Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico West Wells
Site: Allison Unit Wells
Well: Allison Unit #145H
Wellbore: Upper Lateral
Design: Lateral B

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Allison Unit #145H
WELL @ 6534.0usft
WELL @ 6534.0usft
Grid
Minimum Curvature

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,200.0	89.56	73.11	2,997.2	981.8	3,168.1	3,310.9	0.07	-0.07	0.00	
6,300.0	89.49	73.11	2,998.1	990.8	3,263.8	3,410.9	0.07	-0.07	0.00	
6,400.0	89.42	73.11	2,999.0	1,019.9	3,359.5	3,510.9	0.07	-0.07	0.00	
6,500.0	89.47	73.11	3,000.0	1,048.9	3,455.1	3,610.9	0.05	0.05	0.00	
6,600.0	89.52	73.11	3,000.8	1,078.0	3,550.8	3,710.9	0.05	0.05	0.00	
6,700.0	89.57	73.11	3,001.6	1,107.0	3,646.5	3,810.9	0.05	0.05	0.00	
6,800.0	89.62	73.11	3,002.4	1,136.1	3,742.2	3,910.8	0.05	0.05	0.00	
6,900.0	89.66	73.11	3,003.0	1,165.1	3,837.9	4,010.8	0.05	0.05	0.00	
7,000.0	89.71	73.11	3,003.5	1,194.2	3,933.6	4,110.8	0.05	0.05	0.00	
7,100.0	89.76	73.11	3,004.0	1,223.2	4,029.3	4,210.8	0.05	0.05	0.00	
7,200.0	89.81	73.11	3,004.4	1,252.3	4,124.9	4,310.8	0.05	0.05	0.00	
7,300.0	89.86	73.11	3,004.6	1,281.4	4,220.6	4,410.8	0.05	0.05	0.00	
7,400.0	89.91	73.11	3,004.9	1,310.4	4,316.3	4,510.8	0.05	0.05	0.00	
7,500.0	89.95	73.11	3,005.0	1,339.5	4,412.0	4,610.8	0.05	0.05	0.00	
7,600.0	90.00	73.11	3,005.0	1,368.5	4,507.7	4,710.8	0.05	0.05	0.00	
7,700.0	90.05	73.11	3,005.0	1,397.6	4,603.4	4,810.8	0.05	0.05	0.00	
7,800.0	90.10	73.11	3,004.8	1,426.7	4,699.0	4,910.8	0.05	0.05	0.00	
7,900.0	90.15	73.11	3,004.6	1,455.7	4,794.7	5,010.8	0.05	0.05	0.00	
8,000.0	90.20	73.11	3,004.3	1,484.8	4,890.4	5,110.8	0.05	0.05	0.00	
8,100.0	90.24	73.10	3,003.9	1,513.8	4,986.1	5,210.8	0.05	0.05	0.00	
8,200.0	90.29	73.10	3,003.5	1,542.9	5,081.8	5,310.8	0.05	0.05	0.00	
8,300.0	90.34	73.10	3,002.9	1,572.0	5,177.5	5,410.8	0.05	0.05	0.00	
8,400.0	90.39	73.10	3,002.3	1,601.0	5,273.1	5,510.8	0.05	0.05	0.00	
8,500.0	90.44	73.10	3,001.6	1,630.1	5,368.8	5,610.8	0.05	0.05	0.00	
8,600.0	90.48	73.10	3,000.8	1,659.2	5,464.5	5,710.8	0.05	0.05	0.00	
8,700.0	90.53	73.10	2,999.9	1,688.2	5,560.2	5,810.8	0.05	0.05	0.00	
8,800.0	90.58	73.10	2,998.9	1,717.3	5,655.9	5,910.8	0.05	0.05	0.00	
8,900.0	90.63	73.10	2,997.8	1,746.3	5,751.5	6,010.8	0.05	0.05	0.00	
9,000.0	90.68	73.10	2,996.7	1,775.4	5,847.2	6,110.8	0.05	0.05	0.00	
9,100.0	90.73	73.10	2,995.5	1,804.5	5,942.9	6,210.8	0.05	0.05	0.00	
9,200.0	90.77	73.10	2,994.2	1,833.6	6,038.6	6,310.8	0.05	0.05	0.00	
9,300.0	90.82	73.10	2,992.8	1,862.6	6,134.2	6,410.8	0.05	0.05	0.00	
9,400.0	90.87	73.10	2,991.3	1,891.7	6,229.9	6,510.8	0.05	0.05	0.00	
9,500.0	90.92	73.10	2,989.7	1,920.8	6,325.6	6,610.8	0.05	0.05	0.00	
9,600.0	90.97	73.10	2,988.1	1,949.8	6,421.2	6,710.7	0.05	0.05	0.00	
9,700.0	91.02	73.10	2,986.4	1,978.9	6,516.9	6,810.7	0.05	0.05	0.00	
9,800.0	91.06	73.10	2,984.6	2,008.0	6,612.6	6,910.7	0.05	0.05	0.00	
9,882.1	91.10	73.10	2,983.0	2,031.8	6,691.1	6,992.8	0.05	0.05	0.00	

ConocoPhillips

Planning Report

Database: EDM Central Planning
 Company: ConocoPhillips SJB
 Project: San Juan Basin - New Mexico West Wells
 Site: Allison Unit Wells
 Well: Allison Unit #145H
 Wellbore: Upper Lateral
 Design: Lateral B

Local Co-ordinate Reference: Well Allison Unit #145H
 TVD Reference: WELL @ 6534.0usft
 MD Reference: WELL @ 6534.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
AU 145H, Lat. B, target i - plan hits target center - Point	0.00	0.00	3,002.0	438.9	1,445.8	2,180,228.03	597,231.61	36° 59' 28.242 N	107° 30' 1.457 W
Au 145H, Lat. B, target # - plan hits target center - Point	0.00	0.00	2,999.0	1,019.9	3,359.5	2,180,808.99	599,145.17	36° 59' 33.920 N	107° 29' 37.844 W
Allison Unit #145H BHL, - plan hits target center - Point	0.00	0.00	2,983.0	2,031.8	6,691.1	2,181,820.84	602,476.50	36° 59' 43.806 N	107° 28' 56.734 W
Allison Unit 145H Entry I - plan hits target center - Point	0.00	0.00	3,010.0	83.2	274.1	2,179,872.36	596,060.00	36° 59' 24.765 N	107° 30' 15.914 W

REFERENCE INFORMATION

WELL @ 6534.0usft
Ground Elevation 6519.0
Reference Lat: 36° 59' 23.952 N
Reference Long: 107° 30' 19.296 W

Project: San Juan Basin - New Mexico

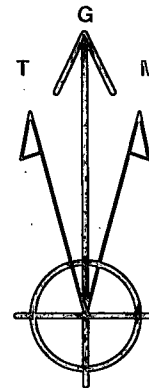
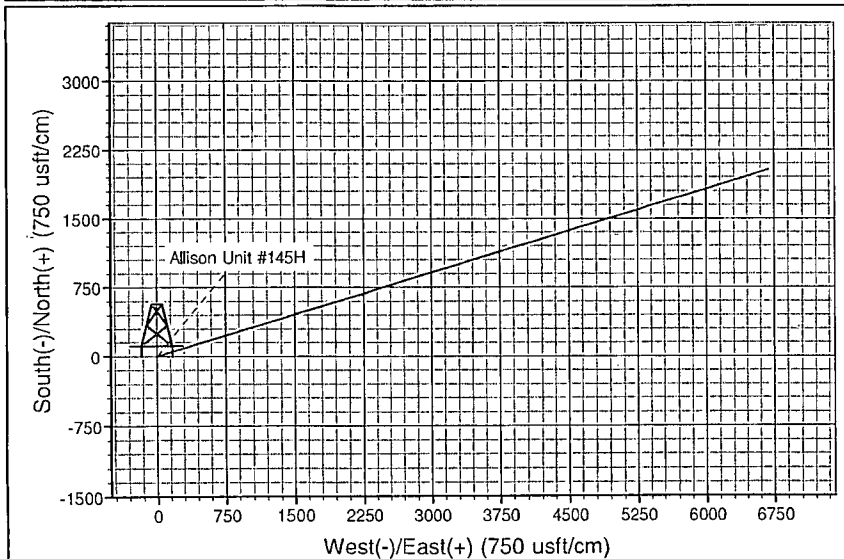
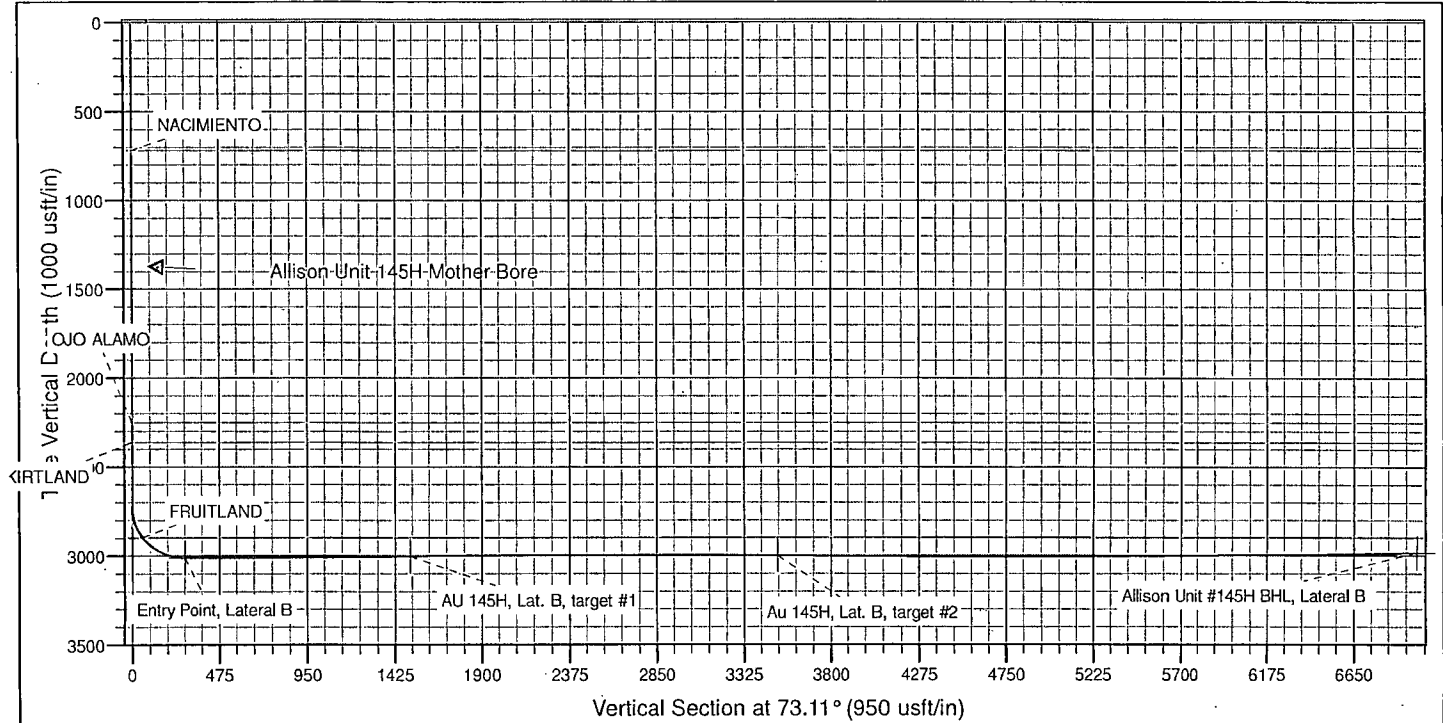
Well: Allison Unit #145H

Wellbore: Re-Entry Upper Lateral
Design: Lateral B

ConocoPhillips

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	2723.0	0.00	0.00	2723.0	0.0	0.0	0.00	0.00	0.0	
2	2724.6	0.00	0.00	2724.6	0.0	0.0	0.00	0.00	0.0	
3	3174.5	90.00	73.11	3010.0	82.9	273.1	20.00	73.11	285.4	
4	3175.5	90.00	73.11	3010.0	83.2	274.1	0.00	0.00	286.4	Entry Point, Lateral B
5	4400.0	90.75	73.11	3002.0	438.9	1445.8	0.06	-0.30	1511.0	AU 145H, Lat. B, target #1
6	6400.0	89.42	73.11	2999.0	1019.9	3359.5	0.07	179.94	3510.9	AU 145H, Lat. B, target #2
7	9882.1	91.10	73.10	2983.0	2031.8	6691.1	0.05	-0.54	6992.8	BHL, Lateral B



Azimuths to Grid North
True North: -0.20°
Magnetic North: 9.33°

Magnetic Field
Strength: 50569.4snT
Dip Angle: 63.67°
Date: 3/4/2014
Model: BGGM2013

Burlington Resources is proposing to use during drilling and completion operations are shown on Sheet H.

B. Burlington Resources will report the water source(s) used during drilling operations on the subsequent drilling reports and report the water sources used during completion on the subsequent completion reports.

V. Construction Materials & Methods

A. No new construction is planned since this well is a re-entry

B. As determined during the onsite on 2/20/14, the following best management practices will be implemented:

1. Re-establish diversions & ditches
2. Juniper Green paint

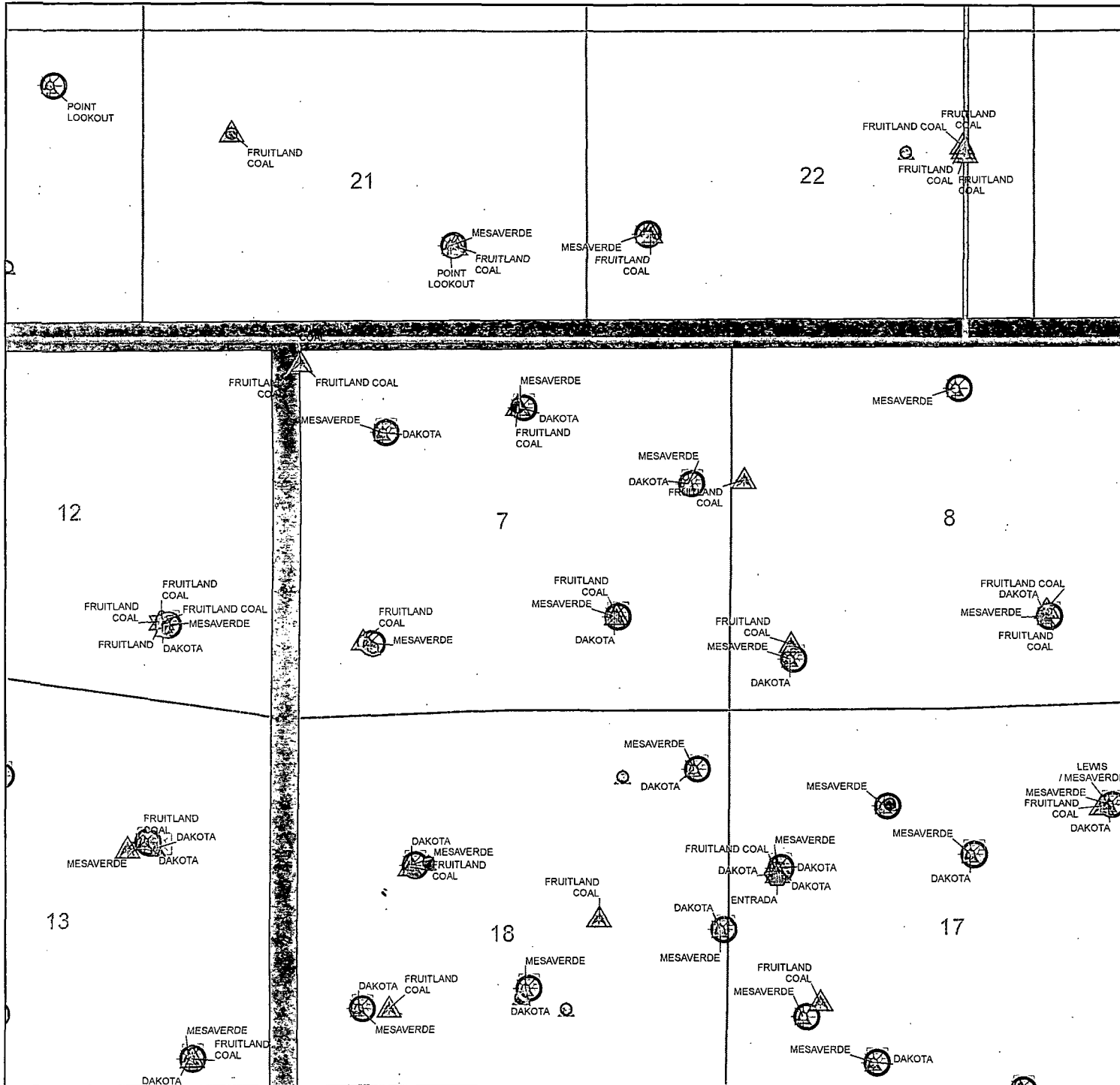
C. Construction contractors will call New Mexico One-Call (or equivalent) to identify the location of any marked or unmarked pipeline or cables located in proximity to the proposed resource road and well pad at least two working days prior to ground disturbance.

D. All operations will be conducted in such a manner that full compliance is made with the applicable laws and regulations, the Application for Permit to Drill, and applicable Notice(s) to Lessees.

VI. Methods for Handling Waste

A. Cuttings, Drilling Fluids, and Flowback Water - The drill cuttings, drill water and completion fluids will be placed in a closed loop system. placed in a lined reserve pit. The free fluids will be removed after completion or may be trucked and reused in drilling operations or trucked to an approved disposal facility as indicated in Burlington Resources Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file at the NMOCD office in Aztec, NM.

B. Garbage and other waste material - garbage, trash and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an authorized sanitary landfill. No trash will be buried or burned on location.



ConocoPhillips	
ALLISON UNIT 145H	
Map 1A	
Sec. 07 - T32N - R06W	
Author:	Date: 4/11/2014
Compiled by:	Scale:



Directions from the Intersection of Hwy. 172 & Hwy 151
in Ignacio, CO

To:

Burlington Resources Oil & Gas Company LP
ALLISON UNIT #145 H
880' FSL & 925' FWL,
Section 7, T32N, R6W, N.M.P.M., San Juan County,
New Mexico

Latitude: 36° 59' 23.971" N

Longitude: 107° 30' 21.477"W

Nad 83

Go East on Hwy 151 for 11.9 miles to CR 330,
turn right (southerly) for 1.9 miles,
turn right (westerly) for 0.7 miles,
continue (southerly) for 1.2 miles to Self Ranch gate,
turn left (easterly) thru Self Ranch gate for 0.5 miles,
turn left (northerly) for 0.2 miles,
to the newly staked location twinned on existing well pad,
ALLISON UNIT #145 & ALLISON UNIT #24.

BOPE & Choke Manifold Schematic

