

NM OIL CONSERVATION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ARTESIA DISTRICT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010DEC 01 2014
Artesia**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM17224
2. Name of Operator CHEVRON USA INCORPORATED Contact: DENISE PINKERTON E-Mail: leakejd@chevron.com		6. If Indian, Allottee or Tribe Name
3a. Address 15 SMITH ROAD MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 432-687-7375	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 19 T24S R29E SESW 0330FSL 1490FWL 32.196672 N Lat, 103.196672 W Lon		8. Well Name and No. RUSTLER BLUFF 19 24 29 3H
		9. API Well No. 30-015-42593-00-X1
		10. Field and Pool, or Exploratory PIERCE CROSSING
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

CHEVRON RESPECTFULLY REQUEST PERMISSION TO PLUG BACK THE ORIGINAL WELLBORE AND RE-DRILL TO THE NEW BOTTOM HOLE LOCATION.

PLEASE FIND ATTACHED, CHANGES TO APD, NEW DIRECTIONAL PLAN, AND NEW C-102 PLAT SHOWING NEW BOTTOMHOLE LOCATION.

ANY QUESTIONS SHOULD BE DIRECTED TO MATT KUBACHKA, CHEVRON DRILLING ENGINEER AT 713-372-5721

*Approved As Written
Original LOA still Applies*



14. I hereby certify that the foregoing is true and correct. Electronic Submission #279420 verified by the BLM Well Information System For CHEVRON USA INCORPORATED, sent to the Carlsbad Committed to AFMSS for processing by ED FERNANDEZ on 11/14/2014 (15EF00108)	
Name (Printed/Typed) DENISE PINKERTON	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 11/14/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>EDWARD FERNANDEZ</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>11/14/2014</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <u>Carlsbad</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 745-1283 Fax: (575) 745-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6175 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3469 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

~~AMENDED REPORT~~

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-01542593	Pool Code 50371	Pool Name Pierce Crossings Bone Spring
Property Code	Property Name RUSTLER BLUFF 19 24 29 FEDERAL	Well Number 3H
OGRIID No. 4323	Operator Name CHEVRON U.S.A. INC.	Elevation 2918'

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	19	24 SOUTH	29 EAST, N.M.P.M.		330'	SOUTH	1490'	WEST	EDDY

" 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
C	19	24 SOUTH	29 EAST, N.M.P.M.		285'	NORTH	1980'	WEST	EDDY

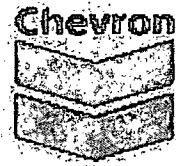
" Dedicated Acres 16.0	" Joint or Infill	" Consolidation Code	" Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	PROPOSED BOTTOM HOLE LOCATION X= 595,262 NAD 27 Y= 440,081 LAT. 32.209488 LONG. 104.025330 X= 636,446 NAD83 Y= 440,119 LAT. 32.209591 LONG. 104.025820	" 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 this division. Signature: <i>Devin Pinkerton</i> Date: <i>11/14/2014</i> Printed Name: <i>Devin Pinkerton</i> E-mail Address: <i>leakey@chevron.com</i>
	CORNER COORDINATES TABLE (NAD 27) A - Y=440343.96, X=594603.29 B - Y=440347.08, X=595926.61 C - Y=435029.25, X=594643.06 D - Y=435033.33, X=595949.89	" 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. Date of Survey: <i>11/14/2014</i> Signature: <i>W. J. DANIEL</i> Professional Surveyor Certificate Number: <i>19078</i>

Delaware Basin

Changes to APD for Federal Well



Well Name: Rustler Bluff 19 Federal 3H

API Well No.: 30-015-42593

Rig: Ensign 767

CVX CONTACT:

MATT KUBACHKA

DRILLING ENGINEER

1400 SMITH ST.

HOUSTON, TX 77002

DESK: HOU140/43-130

CELL: 432-438-2482

EMAIL: MATT.KUBACHKA@CHEVRON.COM

Summary of Changes to APD Submission

1. Plug back wellbore from 8,391' to 7,600'
2. Relocate bottom hole location to inside producing area

(1) Plug back wellbore from 8,391' to 7,600'

Summary: Wellbore deviated ~160' west of proposed directional plan. Wellbore will be plugged back with cement and whipstock, then re-drilled to new bottom hole location. (New directional plan attached)

As Planned on Well:

Plug Slurry:

Density: 17.5 ppg
Yield: .947 ft³/sx
Sacks: 320 sx
Barrels: 50 bbl
Excess: 35%
Coverage: 550 ft MD to 7,600'

(2) Relocate bottom hole location to inside producing area

Summary: Well was originally permitted outside the 330' line but it is better for future development to place the wellbore inside the standard producing area. (New plat attached)

As Defined in APD:

BHL- 330' FNL and 1490' FWL

As Planned on Well:

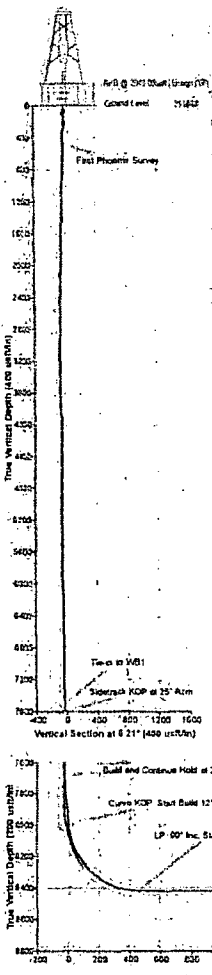
BHL- 285' FNL and 1980' FWL



Project: Eddy County, NM (NAD27 NME)
Site: Rustler Bluff 19 24 28 Federal
Well: JH
Wellbore: Wellbore #2 Job #1412116
Design: Plan 2 11-10-14
Rig: Ensign 757



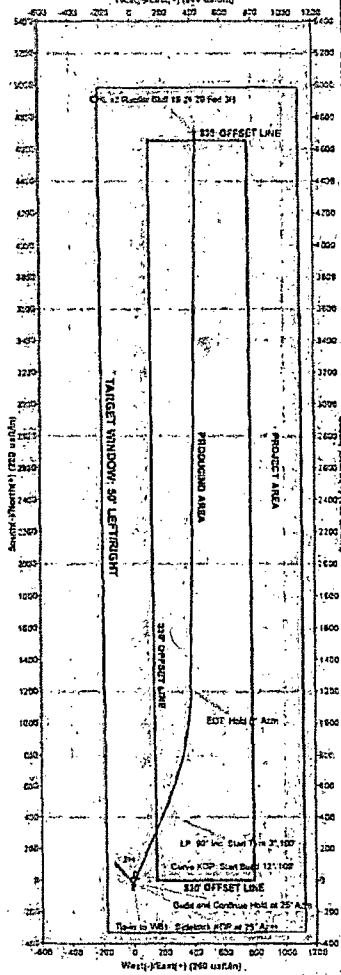
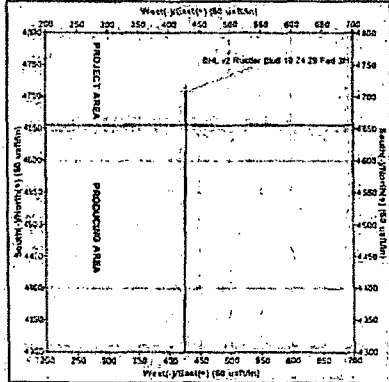
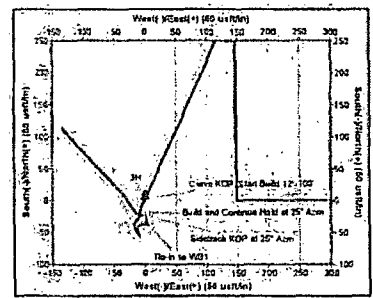
Adm. North to Grid North
True North: 4.15°
Magnetic North: 7.35°
Magnetic Field
30 mgs. 48144 Gauss
Dip Angle: 61.5°
Date: 11/19/2014
Model: 80052514



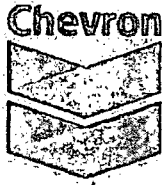
WELL DETAILS									
Well	MD	Inc	Ac	FD	40.5	45.0	50.0	55.0	60.0
4	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
5	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
6	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
7	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
8	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
9	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
10	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
11	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84
12	702.00	6.76	34.88	702.07	21.55	19.15	8.52	8.91	2.84

Mag System: US State Plane 1983 (Elev. 1000)
Datum: NAD 1983 BROADBENT CORRECTION
Elevation: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well #1, Grid North
Latitude: 37° 11' 47.50254 N
Longitude: 104° 1' 38.46470 W
Grid East: 584822.00
Grid North: 433333.00
Scale Factor: 1.000
Geographic Model: 80052514
Datum Date: 10/20/14
Magnetic Declination: 7.50°
Dip Angle from Horizontal: 59.89°
Magnetic Field Strength: 48145
To convert a Magnetic Direction to a Grid Direction: Add 7.50°
To convert a True Direction to a Grid Direction: Add 7.50° East
To convert a True Direction to a Grid Direction: Subtract 0.10°
FORMATION TOP DETAILS
To transfer data to well

LEGEND
JH Wellbore #2 Job #1412116 Surveys (Design 757) VC
Plan 2 11-10-14



Checked By: John Andrus Date: 10/25 November 15, 2014



Chevron

Eddy County, NM (NAD27 NME)

Rustler Bluff 19 24 29 Federal

3H

Wellbore #2 Job #1412116

Plan: Plan 2 11-10-14

Standard Planning Report

10 November, 2014



PHOENIX
TECHNOLOGY SERVICES



Phoenix Technology Services
Planning Report



Database:	Compass 5000 GCR apdm	Local Co-ordinate Reference:	Well 3H
Company:	Chevron	TVD Reference:	RKB @ 2949.00usft (Ensign 767)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	RKB @ 2949.00usft (Ensign 767)
Site:	Rustler Bluff 19 24 29 Federal	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 Job #1412116		
Design:	Plan 2 11-10-14		

Project:	Eddy County, NM (NAD27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Rustler Bluff 19 24 29 Federal				
Site Position:		Northing:	435,360.00 usft	Latitude:	32° 11' 47.58064 N
From:	Map	Easting:	594,822.00 usft	Longitude:	104° 1' 36.46420 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.16°

Well	3H					
Well Position	+N-S	0.00 usft	Northing:	435,360.00 usft	Latitude:	32° 11' 47.58064 N
	+E-W	0.00 usft	Easting:	594,822.00 usft	Longitude:	104° 1' 36.46420 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	2,918.00 usft

Wellbore		Wellbore #2 Job #1412116			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	11/10/14	7.55	59.99	48,165

Design:	Plan 2 11-10-14			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	7,502.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	5.21

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
7,502.00	0.70	314.88	7,500.57	-21.98	-10.48	0.00	0.00	0.00	0.00	
7,600.00	0.74	25.00	7,598.57	-20.99	-10.63	0.84	0.04	71.55	122.79	
7,675.33	3.00	25.00	7,673.86	-18.76	-9.60	3.00	3.00	0.00	0.00	
7,994.83	6.00	25.00	7,992.33	3.96	1.00	0.94	0.94	0.00	0.00	
8,694.83	90.00	25.00	8,419.89	434.32	201.68	12.00	12.00	0.00	0.00	
9,501.31	90.00	0.81	8,419.90	1,214.60	380.43	3.00	0.00	-3.00	-90.00	
12,994.79	90.00	0.81	8,420.00	4,707.73	429.55	0.00	0.00	0.00	0.00	BHL v2 Rustler Bluff 1



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR epdm	Local Co-ordinate Reference:	Well 3H
Company:	Chevron	TVD Reference:	RKB @ 2849.00usft (Ensign 767)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	RKB @ 2949.00usft (Ensign 767)
Site:	Ruster Bluff 19 24 29 Federal	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 Job #1412116		
Design:	Plan 2 11-10-14		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
467.00	1.58	213.82	466.94	-5.35	-3.58	-5.65	0.34	0.34	0.00
560.00	1.52	208.26	559.91	-7.50	-4.88	-7.91	0.17	-0.06	-5.98
764.00	1.59	193.39	763.83	-12.64	-6.82	-13.20	0.20	0.03	-7.29
947.00	1.48	185.88	946.77	-17.46	-7.65	-18.08	0.13	-0.06	-4.10
1,137.00	1.26	190.28	1,136.71	-21.95	-8.27	-22.61	0.13	-0.12	2.32
1,327.00	1.38	203.97	1,326.66	-26.10	-9.57	-26.86	0.18	0.06	7.21
1,517.00	1.40	218.17	1,516.61	-30.06	-11.87	-31.02	0.16	0.01	6.42
1,707.00	1.17	218.57	1,706.56	-33.45	-14.45	-34.63	0.12	-0.12	1.26
1,897.00	1.23	222.50	1,896.52	-36.47	-17.04	-37.87	0.05	0.03	2.07
2,087.00	1.05	173.61	2,086.48	-39.71	-18.22	-41.20	0.50	-0.09	-25.73
2,277.00	1.33	163.46	2,276.44	-43.55	-17.40	-44.95	0.18	0.15	-5.34
2,467.00	2.48	144.90	2,466.34	-49.03	-14.41	-50.14	0.68	0.61	-9.77
2,561.00	1.65	142.56	2,560.27	-51.77	-12.42	-52.68	0.89	-0.88	-2.49
2,753.00	1.29	122.70	2,752.21	-55.13	-8.92	-55.71	0.32	-0.19	-10.34
2,943.00	0.31	235.92	2,942.20	-56.57	-7.55	-57.03	0.76	-0.52	59.59
3,134.00	0.40	273.34	3,133.19	-56.82	-8.64	-57.37	0.13	0.05	19.59
3,324.00	0.45	256.63	3,323.19	-56.96	-10.03	-57.63	0.07	0.03	-8.79
3,515.00	1.59	350.23	3,514.16	-54.52	-11.21	-55.31	0.88	0.60	49.01
3,704.00	1.51	347.77	3,703.09	-49.50	-12.18	-50.40	0.06	-0.04	-1.30
3,895.00	1.86	347.80	3,894.01	-44.01	-13.37	-45.05	0.18	0.18	0.02
4,085.00	0.59	66.35	4,083.97	-40.61	-13.12	-41.63	0.97	-0.67	41.34
4,275.00	0.85	71.97	4,273.96	-39.78	-10.89	-40.60	0.14	0.14	2.96
4,464.00	0.77	71.33	4,462.94	-38.94	-8.35	-39.54	0.04	-0.04	-0.34
4,656.00	0.73	66.92	4,654.92	-38.05	-6.00	-38.43	0.04	-0.02	-2.30
4,844.00	0.71	68.14	4,842.91	-37.14	-3.82	-37.34	0.01	-0.01	0.65
5,034.00	1.01	102.56	5,032.89	-37.07	-1.09	-37.01	0.31	0.16	18.12
5,224.00	0.95	113.96	5,222.86	-38.07	1.98	-37.73	0.11	-0.03	6.00
5,413.00	0.93	122.29	5,411.83	-39.53	4.71	-38.94	0.07	-0.01	4.41
5,603.00	0.91	340.06	5,601.82	-38.93	5.50	-38.27	0.92	-0.01	-74.86
5,792.00	0.99	340.26	5,790.80	-35.99	4.43	-35.43	0.04	0.04	0.11
5,981.00	1.07	340.88	5,979.77	-32.78	3.31	-32.35	0.04	0.04	0.33
6,171.00	1.09	348.07	6,169.73	-29.35	2.29	-29.02	0.05	0.01	2.73
6,360.00	0.82	343.83	6,358.71	-26.31	1.48	-26.06	0.14	-0.14	-1.19
6,551.00	0.54	4.65	6,549.69	-24.10	1.17	-23.89	0.19	-0.15	10.90
6,740.00	0.20	333.55	6,738.69	-22.91	1.10	-22.72	0.20	-0.18	-16.46
6,930.00	0.59	266.39	6,928.68	-22.68	-0.03	-22.59	0.29	0.21	-35.35
7,121.00	1.55	254.77	7,119.65	-23.42	-3.50	-23.64	0.51	0.50	-6.08
7,311.00	1.17	289.33	7,309.60	-23.45	-7.81	-24.07	0.47	-0.20	18.19
7,502.00	0.70	314.88	7,500.57	-21.98	-10.48	-22.84	0.32	-0.25	13.38
Tie-in to WB1									
7,600.00	0.74	25.00	7,598.57	-20.99	-10.63	-21.87	0.84	0.04	71.55
Sidetrack KOP at 25° Azm									
7,675.33	3.00	25.00	7,673.86	-18.76	-9.60	-19.55	3.00	3.00	0.00
Build and Continue Hold at 25° Azm									
7,700.00	3.23	25.00	7,698.49	-17.54	-9.03	-18.29	0.94	0.94	0.00
7,800.00	4.17	25.00	7,798.28	-11.69	-6.30	-12.22	0.94	0.94	0.00
7,900.00	5.11	25.00	7,897.95	-4.36	-2.88	-4.61	0.94	0.94	0.00
7,994.83	6.00	25.00	7,992.33	3.96	1.00	4.03	0.94	0.94	0.00
Curve KOP: Start Build 12°/100'									
8,000.00	6.62	25.00	7,997.47	4.47	1.24	4.57	12.00	12.00	0.00
8,025.00	9.62	25.00	8,022.22	7.67	2.73	7.89	12.00	12.00	0.00
8,050.00	12.62	25.00	8,046.74	12.04	4.77	12.42	12.00	12.00	0.00
8,075.00	15.62	25.00	8,070.99	17.57	7.34	18.16	12.00	12.00	0.00



Phoenix Technology Services
Planning Report



Database:	Compass 5000 GCR epdm	Local Co-ordinate Reference:	Well 3H
Company:	Chevron	TVD Reference:	RKB @ 2949.00usft (Ensign 767)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	RKB @ 2949.00usft (Ensign 767)
Site:	Rustler Bluff 19 24 29 Federal	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 Job #1412116		
Design:	Plan 2-11-10-14		

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)
8,100.00	18.62	25.00	8,094.88	24.24	10.45	25.09	12.00	12.00	0.00
8,125.00	21.62	25.00	8,118.35	32.03	14.09	33.18	12.00	12.00	0.00
8,150.00	24.62	25.00	8,141.34	40.93	18.24	42.41	12.00	12.00	0.00
8,175.00	27.62	25.00	8,163.78	50.90	22.89	52.77	12.00	12.00	0.00
8,200.00	30.62	25.00	8,185.62	61.92	28.03	64.21	12.00	12.00	0.00
8,225.00	33.62	25.00	8,206.79	73.97	33.65	76.72	12.00	12.00	0.00
8,250.00	36.62	25.00	8,227.24	87.00	39.72	90.25	12.00	12.00	0.00
8,275.00	39.62	25.00	8,246.90	100.99	46.24	104.77	12.00	12.00	0.00
8,300.00	42.62	25.00	8,265.73	115.89	53.19	120.24	12.00	12.00	0.00
8,325.00	45.62	25.00	8,283.68	131.66	60.55	136.62	12.00	12.00	0.00
8,350.00	48.62	25.00	8,300.69	148.26	68.29	153.85	12.00	12.00	0.00
8,375.00	51.62	25.00	8,316.72	165.65	76.39	171.90	12.00	12.00	0.00
8,400.00	54.62	25.00	8,331.72	183.77	84.84	190.72	12.00	12.00	0.00
8,425.00	57.62	25.00	8,345.65	202.58	93.62	210.24	12.00	12.00	0.00
8,450.00	60.62	25.00	8,358.48	222.02	102.68	230.43	12.00	12.00	0.00
8,475.00	63.62	25.00	8,370.17	242.04	112.02	251.22	12.00	12.00	0.00
8,500.00	66.62	25.00	8,380.69	262.60	121.60	272.56	12.00	12.00	0.00
8,525.00	69.62	25.00	8,390.00	283.62	131.41	294.39	12.00	12.00	0.00
8,550.00	72.62	25.00	8,398.09	305.06	141.40	316.64	12.00	12.00	0.00
8,575.00	75.62	25.00	8,404.93	326.85	151.56	339.27	12.00	12.00	0.00
8,600.00	78.62	25.00	8,410.50	348.93	161.86	362.20	12.00	12.00	0.00
8,625.00	81.62	25.00	8,414.79	371.25	172.27	385.37	12.00	12.00	0.00
8,650.00	84.62	25.00	8,417.79	393.74	182.76	408.72	12.00	12.00	0.00
8,675.00	87.62	25.00	8,419.48	416.35	193.30	432.19	12.00	12.00	0.00
8,694.83	90.00	25.00	8,419.89	434.32	201.68	450.84	12.00	12.00	0.00
LP: 90° Inc, Start Turn 3°/100'									
8,700.00	90.00	24.85	8,419.89	439.00	203.85	455.71	3.00	0.00	-3.00
8,800.00	90.00	21.85	8,419.89	530.80	243.48	550.73	3.00	0.00	-3.00
8,900.00	90.00	18.85	8,419.89	624.56	278.24	647.25	3.00	0.00	-3.00
9,000.00	90.00	15.85	8,419.89	720.00	308.05	745.01	3.00	0.00	-3.00
9,100.00	90.00	12.85	8,419.89	816.87	332.82	843.73	3.00	0.00	-3.00
9,200.00	90.00	9.85	8,419.90	914.90	352.49	943.15	3.00	0.00	-3.00
9,300.00	90.00	6.85	8,419.90	1,013.83	367.00	1,042.99	3.00	0.00	-3.00
9,400.00	90.00	3.85	8,419.90	1,113.39	376.32	1,142.97	3.00	0.00	-3.00
9,501.31	90.00	0.81	8,419.90	1,214.60	380.43	1,244.14	3.00	0.00	-3.00
EOT: Hold 0° Azim									
9,600.00	90.00	0.81	8,419.91	1,313.28	381.82	1,342.54	0.00	0.00	0.00
9,700.00	90.00	0.81	8,419.91	1,413.27	383.22	1,442.25	0.00	0.00	0.00
9,800.00	90.00	0.81	8,419.91	1,513.26	384.63	1,541.95	0.00	0.00	0.00
9,900.00	90.00	0.81	8,419.91	1,613.25	386.03	1,641.65	0.00	0.00	0.00
10,000.00	90.00	0.81	8,419.92	1,713.24	387.44	1,741.36	0.00	0.00	0.00
10,100.00	90.00	0.81	8,419.92	1,813.23	388.85	1,841.06	0.00	0.00	0.00
10,200.00	90.00	0.81	8,419.92	1,913.22	390.25	1,940.77	0.00	0.00	0.00
10,300.00	90.00	0.81	8,419.92	2,013.21	391.66	2,040.47	0.00	0.00	0.00
10,400.00	90.00	0.81	8,419.93	2,113.20	393.06	2,140.18	0.00	0.00	0.00
10,500.00	90.00	0.81	8,419.93	2,213.19	394.47	2,239.88	0.00	0.00	0.00
10,600.00	90.00	0.81	8,419.93	2,313.18	395.88	2,339.58	0.00	0.00	0.00
10,700.00	90.00	0.81	8,419.94	2,413.17	397.28	2,439.29	0.00	0.00	0.00
10,800.00	90.00	0.81	8,419.94	2,513.16	398.69	2,538.99	0.00	0.00	0.00
10,900.00	90.00	0.81	8,419.94	2,613.15	400.09	2,638.70	0.00	0.00	0.00
11,000.00	90.00	0.81	8,419.94	2,713.14	401.50	2,738.40	0.00	0.00	0.00
11,100.00	90.00	0.81	8,419.95	2,813.13	402.91	2,838.11	0.00	0.00	0.00
11,200.00	90.00	0.81	8,419.95	2,913.12	404.31	2,937.81	0.00	0.00	0.00



Phoenix Technology Services Planning Report



Database:	Compass 5000 GCR epdm	Local Co-ordinate Reference:	Well 3H
Company:	Chevron	TVD Reference:	RKB @ 2949.00usft (Ensign 767)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	RKB @ 2949.00usft (Ensign 767)
Site:	Rustler Bluff 19 24 29 Federal	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 Job #1412116		
Design:	Plan 2 11-10-14		

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)	
11,300.00	90.00	0.81	8,419.95	3,013.11	405.72	3,037.51	0.00	0.00	0.00	
11,400.00	90.00	0.81	8,419.96	3,113.10	407.12	3,137.22	0.00	0.00	0.00	
11,500.00	90.00	0.81	8,419.96	3,213.09	408.53	3,236.92	0.00	0.00	0.00	
11,600.00	90.00	0.81	8,419.96	3,313.08	409.94	3,336.63	0.00	0.00	0.00	
11,700.00	90.00	0.81	8,419.96	3,413.07	411.34	3,436.33	0.00	0.00	0.00	
11,800.00	90.00	0.81	8,419.97	3,513.06	412.75	3,536.04	0.00	0.00	0.00	
11,900.00	90.00	0.81	8,419.97	3,613.05	414.16	3,635.74	0.00	0.00	0.00	
12,000.00	90.00	0.81	8,419.97	3,713.04	415.56	3,735.44	0.00	0.00	0.00	
12,100.00	90.00	0.81	8,419.98	3,813.03	416.97	3,835.15	0.00	0.00	0.00	
12,200.00	90.00	0.81	8,419.98	3,913.02	418.37	3,934.85	0.00	0.00	0.00	
12,300.00	90.00	0.81	8,419.98	4,013.02	419.78	4,034.56	0.00	0.00	0.00	
12,400.00	90.00	0.81	8,419.98	4,113.01	421.19	4,134.26	0.00	0.00	0.00	
12,500.00	90.00	0.81	8,419.99	4,213.00	422.59	4,233.97	0.00	0.00	0.00	
12,600.00	90.00	0.81	8,419.99	4,312.99	424.00	4,333.67	0.00	0.00	0.00	
12,700.00	90.00	0.81	8,419.99	4,412.98	425.40	4,433.37	0.00	0.00	0.00	
12,800.00	90.00	0.81	8,419.99	4,512.97	426.81	4,533.08	0.00	0.00	0.00	
12,900.00	90.00	0.81	8,420.00	4,612.96	428.22	4,632.78	0.00	0.00	0.00	
12,994.79	90.00	0.81	8,420.00	4,707.73	429.55	4,727.29	0.00	0.00	0.00	
TD at 12994.79										

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude Longitude
BHL v2 Rustler Bluff 19:		0.00	0.00	8,420.00	4,707.73	429.55	440,067.73	595,251.55	32° 12' 34.15752 N 104° 1' 31.30824 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
7,502.00	7,500.57	-21.98	-10.48	Tie-in to WB1
7,600.00	7,598.57	-20.99	-10.63	Sidetrack KOP at 25° Azm
7,675.33	7,673.86	-18.76	-9.80	Build and Continue Hold at 25° Azm
7,994.83	7,992.33	3.96	1.00	Curve KOP; Start Build 12°/100'
8,694.83	8,419.89	434.32	201.68	LP: 90° Inc; Start Turn 3°/100'
9,501.31	8,419.90	1,214.60	380.43	EOT: Hold 0° Azm
12,994.79	8,420.00	4,707.73	429.55	TD at 12994.79