



**PHOENIX
TECHNOLOGY SERVICES**

October 13, 2016

Oil Conservation Division
State of New Mexico
1625 N. French Drive
Hobbs, New Mexico 88240

**HOBBS OCD
OCT 17 2016
RECEIVED**

Dear District 1 - Hobbs

Re: BC Operating
Chili Parlor 17 Federal 2H
Lea County, NM
API #30-025-43137
Job No. 60336

Enclosed please find the Survey Data Certification, and the original plat and one copy of the survey report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 606018). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Larry Seebeck	2H	879	15886	9/19/16	10/5/16	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Bobbi Jo Jorgensen

Bobbi Jo Jorgensen
Operations Administrator

Certified mail receipt number: 7015 0640 0000 9907 5449

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 60336

ENERGY COMPANY BC Operating

WELL NAME Chili Parlor 17 Federal 2H

COUNTY & STATE

Lea, New Mexico

API WELL NUMBER 30-025-43137

PROPOSED DIRECTION 182.73

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
781.00 ft	780.94 ft	2.05	241.16	-2.55 ft	-4.38 ft	Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
19-Sep-16	879.00 ft	1.94	246.71

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
5-Oct-16	15,886.00 ft	85.77	182.73

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
5-Oct-16	15,945.00 ft	85.77	182.73

Larry Seebeck

PRINT YOUR NAME ABOVE

SIGN YOUR NAME ABOVE

8-Sep

TODAY'S DATE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.43
DECLINATION OR GRID	GRID

MWD SUPERVISOR 1

Larry Seebeck

DIRECTIONAL DRILLER 1

Vinn Adams

MWD SUPERVISOR 2

Seth Theriot

DIRECTIONAL DRILLER 2

Ruben Cano



BC Operating, Inc.

**Lea County, NM (NAD27 NME)
Chili Parlor 17 Federal
#2H**

OH / Job #60336

Survey: Phoenix MWD Surveys

Standard Survey Report

05 October, 2016

HOBBS OCD

OCT 17 2016

RECEIVED



Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Site:	Chili Parlor 17 Federal	MD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Well:	#2H	North Reference:	Grid
Wellbore:	OH / Job #60336	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 244)	Database:	Compass 5000 GCR

Project	Lea 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	Chili Parlor 17 Federal		
Site Position:		Northing:	509,891.16 usft
From:	Map	Easting:	730,443.09 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 23' 58.53638 N
		Longitude:	103° 35' 12.15148 W
		Grid Convergence:	0.40 °

Well	#2H		
Well Position	+N/-S	0.00 usft	Northing: 509,891.16 usft
	+E/-W	0.00 usft	Easting: 730,443.09 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 23' 58.53638 N
		Longitude:	103° 35' 12.15148 W
		Ground Level:	3,592.00 usft

Wellbore	OH / Job #60336		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/7/2016	6.95	60.30	48,360

Design	Surveys (Patterson 244)		
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Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	182.73

Survey Program	Date 10/5/2016		
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From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
80.84	781.00	VES Gyro Surveys (OH / Job #60336)	ISCWSA-GYRO-3	VES Gyro
880.00	15,945.00	Phoenix MWD Surveys (OH / Job #60336)	PHX+MWD+HDGM	PHX+MWD+HDGM

Survey									
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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)
781.00	2.05	241.16	780.94	-2.55	-4.38	2.76	0.00	0.00	0.00
Tie In									
879.00	1.94	246.71	878.88	-4.05	-7.44	4.40	0.23	-0.11	5.66
First Phoenix MWD Survey									
972.00	0.64	272.67	971.86	-4.65	-9.40	5.09	1.50	-1.40	27.91
1,065.00	0.61	347.54	1,064.85	-4.14	-10.03	4.62	0.82	-0.03	80.51
1,157.00	0.55	359.85	1,156.85	-3.22	-10.14	3.70	0.15	-0.07	13.38
1,250.00	0.40	36.90	1,249.84	-2.52	-9.94	2.99	0.36	-0.16	39.84
1,342.00	0.42	49.79	1,341.84	-2.04	-9.49	2.49	0.10	0.02	14.01

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Well:	#2H	North Reference:	Grid
Wellbore:	OH / Job #60336	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 244)	Database:	Compass 5000 GCR

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)
1,435.00	0.48	78.78	1,434.84	-1.75	-8.85	2.17	0.25	0.06	31.17
1,527.00	0.51	71.96	1,526.84	-1.55	-8.08	1.93	0.07	0.03	-7.41
1,620.00	0.57	85.18	1,619.83	-1.38	-7.23	1.72	0.15	0.06	14.22
1,712.00	0.69	76.68	1,711.83	-1.21	-6.23	1.51	0.16	0.13	-9.24
1,805.00	0.63	77.73	1,804.82	-0.98	-5.19	1.22	0.07	-0.06	1.13
1,897.00	1.01	73.90	1,896.81	-0.64	-3.92	0.83	0.42	0.41	-4.16
1,989.00	1.22	64.54	1,988.79	0.00	-2.25	0.10	0.30	0.23	-10.17
2,083.00	1.74	70.40	2,082.76	0.91	0.00	-0.91	0.58	0.55	6.23
2,177.00	0.37	63.97	2,176.74	1.52	1.61	-1.60	1.46	-1.46	-6.84
2,271.00	0.16	20.75	2,270.74	1.78	1.93	-1.87	0.29	-0.22	-45.98
2,366.00	0.56	73.26	2,365.74	2.04	2.42	-2.15	0.50	0.42	55.27
2,460.00	1.04	75.80	2,459.73	2.38	3.69	-2.55	0.51	0.51	2.70
2,555.00	0.15	110.69	2,554.73	2.55	4.64	-2.76	0.97	-0.94	36.73
2,649.00	0.26	52.30	2,648.73	2.63	4.93	-2.86	0.24	0.12	-62.12
2,743.00	0.66	68.33	2,742.72	2.96	5.60	-3.23	0.44	0.43	17.05
2,838.00	1.16	53.20	2,837.71	3.74	6.88	-4.06	0.58	0.53	-15.93
2,932.00	0.11	99.64	2,931.70	4.30	7.73	-4.66	1.16	-1.12	49.40
3,027.00	0.31	131.89	3,026.70	4.11	8.01	-4.49	0.24	0.21	33.95
3,121.00	1.49	102.72	3,120.69	3.67	9.39	-4.11	1.31	1.26	-31.03
3,215.00	0.72	170.29	3,214.67	2.82	10.68	-3.32	1.47	-0.82	71.88
3,309.00	0.83	230.63	3,308.67	1.81	10.26	-2.29	0.83	0.12	64.19
3,403.00	0.46	200.56	3,402.66	1.02	9.60	-1.48	0.52	-0.39	-31.99
3,497.00	0.63	164.54	3,496.66	0.17	9.60	-0.63	0.40	0.18	-38.32
3,591.00	0.75	159.04	3,590.65	-0.90	9.96	0.43	0.15	0.13	-5.85
3,685.00	0.64	146.22	3,684.64	-1.91	10.47	1.41	0.20	-0.12	-13.64
3,780.00	0.97	128.52	3,779.63	-2.86	11.40	2.31	0.43	0.35	-18.63
3,874.00	1.30	132.42	3,873.62	-4.07	12.81	3.46	0.36	0.35	4.15
3,969.00	1.20	234.90	3,968.60	-5.37	12.79	4.76	2.05	-0.11	107.87
4,064.00	2.29	259.53	4,063.56	-6.29	10.11	5.80	1.37	1.15	25.93
4,158.00	0.58	326.99	4,157.53	-6.23	8.00	5.84	2.27	-1.82	71.77
4,252.00	2.63	29.47	4,251.49	-3.95	8.80	3.53	2.57	2.18	66.47
4,346.00	1.95	31.03	4,345.42	-0.70	10.69	0.19	0.73	-0.72	1.66
4,440.00	0.66	41.87	4,439.39	1.07	11.87	-1.63	1.39	-1.37	11.53
4,535.00	0.34	67.88	4,534.39	1.58	12.50	-2.18	0.40	-0.34	27.38
4,566.00	0.49	67.71	4,565.38	1.67	12.71	-2.27	0.48	0.48	-0.55
4,656.00	0.18	68.43	4,655.38	1.87	13.20	-2.49	0.34	-0.34	0.80
4,718.00	0.05	29.64	4,717.38	1.92	13.30	-2.56	0.23	-0.21	-62.56
4,811.00	0.08	227.16	4,810.38	1.92	13.27	-2.55	0.14	0.03	-174.71
4,905.00	0.19	225.70	4,904.38	1.76	13.11	-2.38	0.12	0.12	-1.55
4,999.00	0.24	230.00	4,998.38	1.53	12.85	-2.14	0.06	0.05	4.57
5,094.00	0.16	240.87	5,093.38	1.33	12.58	-1.93	0.09	-0.08	11.44
5,189.00	0.24	180.30	5,188.38	1.07	12.47	-1.66	0.22	0.08	-63.76
5,283.00	0.35	150.80	5,282.38	0.62	12.60	-1.22	0.20	0.12	-31.38

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Wellbore:	OH / Job #60336	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 244)	Database:	Compass 5000 GCR

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)
5,378.00	0.59	163.54	5,377.38	-0.10	12.88	-0.51	0.27	0.25	13.41
5,471.00	0.63	168.23	5,470.37	-1.06	13.12	0.43	0.07	0.04	5.04
5,565.00	0.71	157.52	5,564.36	-2.10	13.45	1.46	0.16	0.09	-11.39
5,659.00	0.80	148.33	5,658.36	-3.20	14.02	2.53	0.16	0.10	-9.78
5,754.00	0.90	150.43	5,753.35	-4.41	14.74	3.71	0.11	0.11	2.21
5,848.00	0.92	152.31	5,847.33	-5.72	15.45	4.98	0.04	0.02	2.00
5,943.00	0.98	150.71	5,942.32	-7.11	16.20	6.33	0.07	0.06	-1.68
6,037.00	0.99	153.34	6,036.31	-8.53	16.96	7.72	0.05	0.01	2.80
6,131.00	0.97	160.69	6,130.29	-10.01	17.59	9.16	0.14	-0.02	7.82
6,225.00	0.92	157.36	6,224.28	-11.46	18.14	10.58	0.08	-0.05	-3.54
6,319.00	0.89	156.14	6,318.27	-12.82	18.73	11.92	0.04	-0.03	-1.30
6,413.00	0.85	163.44	6,412.26	-14.16	19.22	13.23	0.13	-0.04	7.77
6,507.00	0.83	159.18	6,506.25	-15.46	19.66	14.51	0.07	-0.02	-4.53
6,601.00	0.83	156.86	6,600.24	-16.72	20.17	15.75	0.04	0.00	-2.47
6,695.00	0.97	160.27	6,694.23	-18.10	20.71	17.09	0.16	0.15	3.63
6,789.00	1.04	161.30	6,788.21	-19.66	21.25	18.62	0.08	0.07	1.10
6,883.00	0.03	16.96	6,882.21	-20.44	21.53	19.39	1.13	-1.07	-153.55
6,977.00	0.00	282.48	6,976.21	-20.42	21.54	19.37	0.03	-0.03	0.00
7,071.00	0.15	102.60	7,070.21	-20.44	21.66	19.39	0.16	0.16	0.00
7,165.00	0.55	304.38	7,164.21	-20.22	21.41	19.17	0.74	0.43	-168.32
7,259.00	0.50	302.85	7,258.20	-19.74	20.69	18.73	0.06	-0.05	-1.63
7,354.00	0.47	296.33	7,353.20	-19.34	19.99	18.37	0.07	-0.03	-6.86
7,448.00	0.32	294.11	7,447.20	-19.06	19.41	18.12	0.16	-0.16	-2.36
7,542.00	0.19	268.57	7,541.20	-18.96	19.01	18.03	0.18	-0.14	-27.17
7,636.00	0.20	219.58	7,635.19	-19.09	18.75	18.18	0.17	0.01	-52.12
7,731.00	0.23	207.04	7,730.19	-19.39	18.56	18.48	0.06	0.03	-13.20
7,825.00	0.36	201.04	7,824.19	-19.83	18.37	18.93	0.14	0.14	-6.38
7,919.00	0.62	185.38	7,918.19	-20.61	18.21	19.72	0.31	0.28	-16.66
8,013.00	0.93	298.99	8,012.18	-20.75	17.50	19.89	1.39	0.33	120.86
8,107.00	0.87	286.55	8,106.17	-20.18	16.15	19.39	0.22	-0.06	-13.23
8,201.00	0.90	272.77	8,200.16	-19.94	14.72	19.21	0.23	0.03	-14.66
8,295.00	0.80	266.15	8,294.15	-19.95	13.33	19.29	0.15	-0.11	-7.04
8,389.00	0.80	263.32	8,388.14	-20.07	12.03	19.47	0.04	0.00	-3.01
8,483.00	1.02	322.47	8,482.13	-19.48	10.86	18.94	0.98	0.23	62.93
8,577.00	0.90	311.89	8,576.12	-18.32	9.81	17.84	0.23	-0.13	-11.26
8,671.00	0.91	300.46	8,670.11	-17.45	8.61	17.02	0.19	0.01	-12.16
8,765.00	0.98	289.24	8,764.09	-16.81	7.21	16.45	0.21	0.07	-11.94
8,859.00	1.02	291.55	8,858.08	-16.24	5.67	15.95	0.06	0.04	2.46
8,954.00	1.18	348.73	8,953.07	-14.97	4.70	14.73	1.12	0.17	60.19
9,048.00	0.89	337.26	9,047.05	-13.34	4.22	13.13	0.38	-0.31	-12.20
9,142.00	1.09	341.79	9,141.04	-11.82	3.66	11.63	0.23	0.21	4.82
9,236.00	0.79	338.01	9,235.02	-10.37	3.14	10.21	0.33	-0.32	-4.02
9,331.00	1.02	230.59	9,330.02	-10.30	2.24	10.18	1.54	0.24	-113.07
9,425.00	1.24	296.84	9,424.00	-10.37	0.69	10.33	1.33	0.23	70.48

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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)
9,519.00	1.79	285.70	9,517.97	-9.52	-1.63	9.58	0.66	0.59	-11.85
9,614.00	2.71	321.51	9,612.90	-7.36	-4.46	7.56	1.72	0.97	37.69
9,708.00	1.23	354.98	9,706.84	-4.61	-5.93	4.89	1.93	-1.57	35.61
9,802.00	1.43	345.81	9,800.82	-2.47	-6.31	2.77	0.31	0.21	-9.76
9,896.00	1.35	317.91	9,894.79	-0.51	-7.34	0.86	0.72	-0.09	-29.68
9,991.00	1.25	303.67	9,989.77	0.89	-8.95	-0.47	0.35	-0.11	-14.99
10,084.00	1.17	280.48	10,082.75	1.63	-10.73	-1.12	0.53	-0.09	-24.94
10,178.00	1.18	254.15	10,176.73	1.54	-12.60	-0.94	0.57	0.01	-28.01
10,185.00	1.28	252.65	10,183.73	1.50	-12.75	-0.89	1.50	1.43	-21.43
10,279.00	1.32	168.61	10,277.71	0.12	-13.53	0.52	1.85	0.04	-89.40
10,327.00	6.02	176.65	10,325.60	-2.94	-13.28	3.56	9.83	9.79	16.75
10,374.00	12.97	176.08	10,371.93	-10.67	-12.77	11.26	14.79	14.79	-1.21
10,421.00	18.90	177.14	10,417.10	-23.54	-12.03	24.09	12.63	12.62	2.26
10,468.00	23.04	177.63	10,460.98	-40.34	-11.27	40.83	8.82	8.81	1.04
10,515.00	27.27	177.44	10,503.51	-60.30	-10.41	60.72	9.00	9.00	-0.40
10,562.00	31.37	180.80	10,544.48	-83.30	-10.10	83.68	9.40	8.72	7.15
10,610.00	34.92	183.14	10,584.67	-109.52	-11.03	109.92	7.86	7.40	4.88
10,657.00	37.68	183.08	10,622.54	-137.30	-12.54	137.74	5.87	5.87	-0.13
10,704.00	40.25	184.18	10,659.08	-166.79	-14.41	167.29	5.66	5.47	2.34
10,751.00	45.18	183.70	10,693.61	-198.59	-16.60	199.15	10.51	10.49	-1.02
10,798.00	49.26	182.97	10,725.52	-233.02	-18.60	233.64	8.76	8.68	-1.55
10,845.00	53.28	181.48	10,754.92	-269.65	-20.01	270.29	8.90	8.55	-3.17
10,892.00	56.86	181.53	10,781.83	-308.16	-21.02	308.81	7.62	7.62	0.11
10,940.00	60.73	181.81	10,806.69	-349.19	-22.22	349.85	8.08	8.06	0.58
10,987.00	64.06	181.40	10,828.47	-390.82	-23.38	391.49	7.13	7.09	-0.87
11,034.00	66.30	182.07	10,848.20	-433.45	-24.68	434.14	4.94	4.77	1.43
11,081.00	69.44	182.95	10,865.90	-476.94	-26.59	477.67	6.90	6.68	1.87
11,129.00	73.72	183.33	10,881.06	-522.41	-29.08	523.20	8.95	8.92	0.79
11,176.00	78.11	183.46	10,892.50	-567.90	-31.78	568.77	9.34	9.34	0.28
11,177.00	78.19	183.46	10,892.70	-568.88	-31.84	569.75	7.69	7.68	-0.47
Hardline Crossing									
11,223.00	81.72	183.24	10,900.73	-614.09	-34.48	615.03	7.69	7.68	-0.47
11,266.00	85.69	182.83	10,905.44	-656.76	-36.75	657.77	9.28	9.23	-0.95
11,313.00	86.92	182.57	10,908.47	-703.61	-38.95	704.67	2.67	2.62	-0.55
11,407.00	86.86	184.01	10,913.57	-797.31	-44.34	798.52	1.53	-0.06	1.53
11,501.00	88.32	183.76	10,917.52	-891.01	-50.70	892.42	1.58	1.55	-0.27
11,595.00	88.93	183.61	10,919.78	-984.79	-56.74	986.38	0.67	0.65	-0.16
11,689.00	89.27	183.85	10,921.26	-1,078.58	-62.86	1,080.35	0.44	0.36	0.26
11,783.00	90.50	185.24	10,921.44	-1,172.28	-70.31	1,174.30	1.97	1.31	1.48
11,877.00	88.63	185.03	10,922.16	-1,265.90	-78.72	1,268.21	2.00	-1.99	-0.22
11,971.00	87.73	185.31	10,925.14	-1,359.47	-87.19	1,362.07	1.00	-0.96	0.30
12,065.00	88.32	184.43	10,928.38	-1,453.07	-95.16	1,455.95	1.13	0.63	-0.94
12,160.00	89.36	183.71	10,930.31	-1,547.81	-101.90	1,550.90	1.33	1.09	-0.76

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Site:	Chili Parlor 17 Federal	MD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Well:	#2H	North Reference:	Grid
Wellbore:	OH / Job #60336	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 244)	Database:	Compass 5000 GCR

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)
12,253.00	89.86	181.28	10,930.94	-1,640.71	-105.95	1,643.89	2.67	0.54	-2.61
12,348.00	90.39	180.92	10,930.73	-1,735.69	-107.77	1,738.86	0.67	0.56	-0.38
12,442.00	90.34	181.40	10,930.13	-1,829.67	-109.68	1,832.82	0.51	-0.05	0.51
12,536.00	89.30	182.05	10,930.43	-1,923.63	-112.51	1,926.80	1.30	-1.11	0.69
12,630.00	88.96	182.47	10,931.86	-2,017.54	-116.21	2,020.79	0.57	-0.36	0.45
12,724.00	90.50	181.43	10,932.30	-2,111.48	-119.41	2,114.77	1.98	1.64	-1.11
12,818.00	89.69	181.90	10,932.14	-2,205.44	-122.14	2,208.76	1.00	-0.86	0.50
12,912.00	89.27	182.65	10,933.00	-2,299.36	-125.87	2,302.75	0.91	-0.45	0.80
13,006.00	89.94	181.38	10,933.64	-2,393.30	-129.18	2,396.74	1.53	0.71	-1.35
13,101.00	90.14	181.08	10,933.58	-2,488.28	-131.22	2,491.70	0.38	0.21	-0.32
13,195.00	89.64	180.73	10,933.76	-2,582.27	-132.70	2,585.65	0.65	-0.53	-0.37
13,289.00	90.95	180.60	10,933.27	-2,676.26	-133.79	2,679.59	1.40	1.39	-0.14
13,383.00	89.41	181.20	10,932.98	-2,770.24	-135.27	2,773.54	1.76	-1.64	0.64
13,477.00	90.98	180.86	10,932.66	-2,864.22	-136.96	2,867.49	1.71	1.67	-0.36
13,571.00	91.74	181.13	10,930.43	-2,958.18	-138.59	2,961.42	0.86	0.81	0.29
13,665.00	90.84	181.23	10,928.31	-3,052.14	-140.53	3,055.36	0.96	-0.96	0.11
13,760.00	90.73	181.57	10,927.01	-3,147.10	-142.85	3,150.33	0.38	-0.12	0.36
13,854.00	89.75	182.02	10,926.62	-3,241.05	-145.79	3,244.31	1.15	-1.04	0.48
13,948.00	89.52	181.86	10,927.22	-3,334.99	-148.97	3,338.30	0.30	-0.24	-0.17
14,043.00	91.04	182.88	10,926.75	-3,429.91	-152.90	3,433.30	1.93	1.60	1.07
14,137.00	90.22	183.78	10,925.72	-3,523.74	-158.36	3,527.28	1.30	-0.87	0.96
14,232.00	90.19	184.06	10,925.38	-3,618.52	-164.86	3,622.26	0.30	-0.03	0.29
14,326.00	89.50	184.35	10,925.63	-3,712.26	-171.75	3,716.23	0.80	-0.73	0.31
14,420.00	89.19	184.47	10,926.71	-3,805.98	-178.98	3,810.18	0.35	-0.33	0.13
14,514.00	89.19	183.11	10,928.04	-3,899.76	-185.19	3,904.16	1.45	0.00	-1.45
14,609.00	89.02	183.14	10,929.52	-3,994.61	-190.37	3,999.14	0.18	-0.18	0.03
14,703.00	90.76	182.01	10,929.70	-4,088.51	-194.59	4,093.14	2.21	1.85	-1.20
14,797.00	90.87	182.76	10,928.36	-4,182.42	-198.50	4,187.13	0.81	0.12	0.80
14,891.00	90.28	183.16	10,927.42	-4,276.29	-203.35	4,281.12	0.76	-0.63	0.43
14,986.00	89.83	183.48	10,927.33	-4,371.13	-208.86	4,376.11	0.58	-0.47	0.34
15,080.00	89.39	183.54	10,927.97	-4,464.95	-214.61	4,470.10	0.47	-0.47	0.06
15,174.00	89.39	182.96	10,928.97	-4,558.79	-219.94	4,564.09	0.62	0.00	-0.62
15,268.00	89.36	183.78	10,929.99	-4,652.62	-225.47	4,658.08	0.87	-0.03	0.87
15,362.00	89.02	183.27	10,931.32	-4,746.43	-231.24	4,752.06	0.65	-0.36	-0.54
15,456.00	87.57	183.56	10,934.12	-4,840.22	-236.84	4,846.01	1.57	-1.54	0.31
15,550.00	87.96	182.46	10,937.79	-4,934.02	-241.77	4,939.94	1.24	0.41	-1.17
15,644.00	87.43	182.01	10,941.57	-5,027.87	-245.44	5,033.86	0.74	-0.56	-0.48
15,739.00	86.44	182.49	10,946.65	-5,122.66	-249.16	5,128.72	1.16	-1.04	0.51
15,805.00	85.75	182.45	10,951.14	-5,188.45	-252.00	5,194.56	1.04	-1.04	-0.05
Hardline Crossing									
15,833.00	85.46	182.44	10,953.28	-5,216.34	-253.19	5,222.48	1.04	-1.04	-0.05
15,886.00	85.77	182.73	10,957.34	-5,269.13	-255.58	5,275.32	0.80	0.58	0.55
Final Phoenix MWD Survey									
15,945.00	85.77	182.73	10,961.69	-5,327.90	-258.38	5,334.16	0.00	0.00	0.00

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Site:	Chili Parlor 17 Federal	MD Reference:	GL + KB @ 3620.50usft (Patterson 244)
Well:	#2H	North Reference:	Grid
Wellbore:	OH / Job #60336	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 244)	Database:	Compass 5000 GCR

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)
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Projection to TD

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
781.00	780.94	-2.55	-4.38	Tie In
879.00	878.88	-4.05	-7.44	First Phoenix MWD Survey
11,177.00	10,892.70	-568.88	-31.84	Hardline Crossing
15,805.00	10,951.14	-5,188.45	-252.00	Hardline Crossing
15,886.00	10,957.34	-5,269.13	-255.58	Final Phoenix MWD Survey
15,945.00	10,961.69	-5,327.90	-258.38	Projection to TD