



PHOENIX
TECHNOLOGY SERVICES

November 17, 2016

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

Dear District 2 - Artesia

Attention: Regulatory Department

Re: BC Operating
Sterling 20 State #1H
Eddy County, NM
API #30-015-42731
Job No. 60459

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 05 2016

RECEIVED

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. 664171). Other information required by your office is as follows:

*plat should reflect
actual 'AS DRILLED'
BHL footages as per
survey.
Resubmit
C102*

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Larry Seebeck	1H	445	14,069	11/05/16	11/17/16	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,

Brittany Carley

Brittany Carley
Operations Administrator

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 60459

ENERGY COMPANY BC Operating

WELL NAME Sterling 20 State #1H

COUNTY & STATE

Eddy, New Mexico

API WELL NUMBER	30-015-42731
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PROPOSED DIRECTION	180.90
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TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
413.00 ft	412.96 ft	1.60	342.34	3.75 N	0.30 E	Gyro

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
5-Nov-16	445.00 ft	1.75	340.95

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
17-Nov-16	14,069.00 ft	84.88	177.59

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

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
17-Nov-16	14,111.00 ft	84.88	177.59

Larry Seebeck

PRINT YOUR NAME ABOVE

[Signature]
SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.42
DECLINATION OR GRID	GRID

17-Nov

TODAY'S DATE

MWD SUPERVISOR 1

Larry Seebeck

DIRECTIONAL DRILLER 1

Vinn Adams

MWD SUPERVISOR 2

Clinton Kelly

DIRECTIONAL DRILLER 2

Ruben Cano

12329 Cutten Rd., Houston, Texas 777066

(713)337-0600 (Voice), (713)337-0599 (Fax)



BC Operating, Inc.

Lea County, NM (NAD27 NME)

Sterling 20 State

#1H

OH / Job #60459

Survey: Phoenix MWD Surveys

Standard Survey Report

17 November, 2016



Company: BC Operating, Inc.
Project: Lea County, NM (NAD27 NME)
Site: Sterling 20 State
Well: #1H
Wellbore: OH / Job #60459
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well #1H
TVD Reference: GL + KB @ 3205.50usft (Patterson 244)
MD Reference: GL + KB @ 3205.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Project Lea County, NM (NAD27 NME)

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Sterling 20 State

Site Position:
From: Map
Position Uncertainty: 0.00 usft
Northing: 472,190.16 usft
Easting: 538,602.35 usft
Slot Radius: 13-3/16 "
Latitude: 32° 17' 53.17962 N
Longitude: 104° 12' 30.24594 W
Grid Convergence: 0.07 °

Well #1H

Well Position +N/-S 0.00 usft
 +E/-W 0.00 usft
Position Uncertainty 0.00 usft
Northing: 472,190.16 usft
Easting: 538,602.35 usft
Wellhead Elevation: 0.00 usft
Latitude: 32° 17' 53.17962 N
Longitude: 104° 12' 30.24594 W
Ground Level: 3,177.00 usft

Wellbore OH / Job #60459

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/5/2016	7.48	60.10	48,163

Design Surveys (Patterson 244)

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	180.90

Survey Program Date 11/17/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
107.55	413.00	Phoenix Gyro Surveys (OH / Job #60459)	PHX_SPT_GTD	PHX Continuous north-seeking gyro
445.00	14,111.00	Phoenix MWD Surveys (OH / Job #60459)	MWD+HDGM	OWSG Rev.2 MWD + HDGM

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)
413.00	1.60	342.34	412.96	3.75	0.30	-3.75	0.00	0.00	0.00
445.00	1.75	340.95	444.95	4.63	0.00	-4.63	0.49	0.47	-4.34
First Phoenix MWD survey									
539.00	0.47	283.17	538.93	6.08	-0.84	-6.06	1.65	-1.36	-61.47
601.00	0.49	254.61	600.93	6.07	-1.34	-6.04	0.38	0.03	-46.06
693.00	0.54	213.90	692.92	5.60	-1.96	-5.57	0.39	0.05	-44.25
785.00	0.52	227.16	784.92	4.96	-2.51	-4.92	0.13	-0.02	14.41
878.00	0.68	212.68	877.91	4.21	-3.12	-4.16	0.24	0.17	-15.57
971.00	0.73	191.46	970.91	3.16	-3.54	-3.11	0.28	0.05	-22.82
1,063.00	0.51	172.89	1,062.90	2.18	-3.60	-2.12	0.32	-0.24	-20.18

Company: BC Operating, Inc.
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Wellbore: OH / Job #60459
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Survey Calculation Method: Minimum Curvature
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)
1,156.00	0.57	180.81	1,155.90	1.31	-3.56	-1.25	0.10	0.06	8.52
1,248.00	1.17	145.27	1,247.89	0.08	-3.03	-0.03	0.85	0.65	-38.63
1,340.00	2.17	125.60	1,339.85	-1.71	-1.08	1.72	1.24	1.09	-21.38
1,432.00	0.83	154.00	1,431.81	-3.32	0.63	3.31	1.62	-1.46	30.87
1,524.00	0.61	129.01	1,523.81	-4.23	1.30	4.21	0.41	-0.24	-27.16
1,617.00	1.22	116.85	1,616.80	-4.99	2.57	4.95	0.68	0.66	-13.08
1,802.00	0.67	96.61	1,801.77	-6.00	5.40	5.92	0.34	-0.30	-10.94
1,895.00	0.11	188.20	1,894.77	-6.15	5.93	6.06	0.73	-0.60	98.48
1,989.00	0.32	261.48	1,988.77	-6.28	5.66	6.19	0.33	0.22	77.96
2,077.00	0.11	2.14	2,076.77	-6.23	5.42	6.15	0.41	-0.24	114.39
2,172.00	0.39	26.94	2,171.77	-5.85	5.57	5.76	0.31	0.29	26.11
2,266.00	0.41	32.98	2,265.76	-5.29	5.90	5.19	0.05	0.02	6.43
2,360.00	0.52	32.37	2,359.76	-4.64	6.31	4.54	0.12	0.12	-0.65
2,455.00	0.46	36.79	2,454.76	-3.97	6.77	3.87	0.07	-0.06	4.65
2,549.00	0.28	8.78	2,548.75	-3.44	7.03	3.33	0.27	-0.19	-29.80
2,643.00	0.12	218.59	2,642.75	-3.29	7.00	3.18	0.41	-0.17	-159.78
2,737.00	1.57	277.77	2,736.74	-3.20	5.66	3.11	1.61	1.54	62.96
2,832.00	1.65	272.34	2,831.70	-2.97	3.01	2.92	0.18	0.08	-5.72
2,924.00	1.48	268.39	2,923.67	-2.94	0.50	2.94	0.22	-0.18	-4.29
3,018.00	1.55	266.57	3,017.64	-3.05	-1.98	3.09	0.09	0.07	-1.94
3,112.00	1.54	269.88	3,111.60	-3.13	-4.52	3.20	0.10	-0.01	3.52
3,206.00	1.71	268.37	3,205.57	-3.18	-7.18	3.29	0.19	0.18	-1.61
3,300.00	1.88	271.31	3,299.52	-3.18	-10.13	3.34	0.21	0.18	3.13
3,394.00	1.67	275.99	3,393.47	-3.00	-13.03	3.21	0.27	-0.22	4.98
3,488.00	1.74	271.51	3,487.43	-2.82	-15.82	3.07	0.16	0.07	-4.77
3,582.00	1.77	276.52	3,581.39	-2.62	-18.69	2.91	0.17	0.03	5.33
3,676.00	1.90	275.19	3,675.34	-2.31	-21.68	2.65	0.15	0.14	-1.41
3,771.00	1.76	279.00	3,770.29	-1.94	-24.69	2.33	0.20	-0.15	4.01
3,865.00	1.66	271.56	3,864.25	-1.68	-27.48	2.11	0.26	-0.11	-7.91
3,959.00	1.63	269.76	3,958.21	-1.65	-30.18	2.12	0.06	-0.03	-1.91
4,053.00	1.63	274.70	4,052.17	-1.54	-32.84	2.06	0.15	0.00	5.26
4,148.00	1.60	275.67	4,147.14	-1.30	-35.51	1.86	0.04	-0.03	1.02
4,242.00	1.50	271.88	4,241.10	-1.13	-38.05	1.73	0.15	-0.11	-4.03
4,336.00	1.52	276.29	4,335.07	-0.96	-40.52	1.59	0.13	0.02	4.69
4,430.00	1.48	270.07	4,429.04	-0.82	-42.97	1.49	0.18	-0.04	-6.62
4,525.00	1.46	278.27	4,524.01	-0.64	-45.39	1.35	0.22	-0.02	8.63
4,619.00	1.43	278.88	4,617.98	-0.29	-47.74	1.04	0.04	-0.03	0.65
4,713.00	1.39	270.25	4,711.95	-0.10	-50.04	0.89	0.23	-0.04	-9.18
4,807.00	1.25	278.98	4,805.92	0.06	-52.19	0.76	0.26	-0.15	9.29
4,900.00	0.94	275.26	4,898.91	0.29	-53.95	0.55	0.34	-0.33	-4.00
4,995.00	0.78	280.73	4,993.89	0.48	-55.36	0.39	0.19	-0.17	5.76
5,089.00	0.80	264.15	5,087.89	0.53	-56.64	0.35	0.24	0.02	-17.64
5,183.00	0.73	240.14	5,181.88	0.17	-57.82	0.74	0.35	-0.07	-25.54

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5,277.00	0.97	231.65	5,275.87	-0.62	-58.96	1.55	0.29	0.26	-9.03
5,371.00	1.00	207.27	5,369.85	-1.85	-59.96	2.78	0.44	0.03	-25.94
5,465.00	1.89	259.17	5,463.83	-2.87	-61.86	3.83	1.59	0.95	55.21
5,559.00	1.23	258.03	5,557.79	-3.37	-64.37	4.37	0.70	-0.70	-1.21
5,653.00	1.01	311.52	5,651.78	-3.03	-65.97	4.06	1.09	-0.23	56.90
5,748.00	0.58	4.33	5,746.77	-1.99	-66.56	3.03	0.85	-0.45	55.59
5,841.00	0.73	343.35	5,839.76	-0.95	-66.70	2.00	0.30	0.16	-22.56
5,935.00	0.48	332.00	5,933.76	-0.03	-67.05	1.08	0.29	-0.27	-12.07
6,030.00	1.12	342.22	6,028.75	1.20	-67.53	-0.14	0.69	0.67	10.76
6,124.00	0.51	321.75	6,122.74	2.41	-68.06	-1.34	0.71	-0.65	-21.78
6,219.00	0.60	345.27	6,217.73	3.22	-68.45	-2.15	0.26	0.09	24.76
6,313.00	0.77	25.85	6,311.73	4.26	-68.30	-3.19	0.53	0.18	43.17
6,407.00	0.87	190.39	6,405.72	4.13	-68.16	-3.06	1.73	0.11	175.04
6,502.00	0.37	155.87	6,500.72	3.14	-68.16	-2.07	0.63	-0.53	-36.34
6,596.00	1.67	240.24	6,594.70	2.18	-69.23	-1.10	1.78	1.38	89.76
6,690.00	1.35	241.50	6,688.67	0.97	-71.39	0.14	0.34	-0.34	1.34
6,784.00	0.91	239.81	6,782.65	0.07	-73.01	1.07	0.47	-0.47	-1.80
6,879.00	0.41	257.18	6,877.65	-0.38	-73.99	1.54	0.56	-0.53	18.28
6,973.00	0.37	242.03	6,971.64	-0.60	-74.59	1.77	0.12	-0.04	-16.12
7,068.00	0.50	256.39	7,066.64	-0.84	-75.26	2.02	0.18	0.14	15.12
7,162.00	1.93	304.16	7,160.62	-0.05	-76.97	1.26	1.74	1.52	50.82
7,257.00	1.49	301.46	7,255.58	1.49	-79.35	-0.25	0.47	-0.46	-2.84
7,351.00	1.52	291.66	7,349.54	2.59	-81.55	-1.31	0.28	0.03	-10.43
7,445.00	1.34	270.83	7,443.51	3.07	-83.80	-1.75	0.58	-0.19	-22.16
7,539.00	1.32	268.24	7,537.49	3.05	-85.99	-1.70	0.07	-0.02	-2.76
7,632.00	1.03	274.18	7,630.47	3.08	-87.89	-1.70	0.34	-0.31	6.39
7,726.00	1.47	352.15	7,724.45	4.33	-88.90	-2.94	1.71	0.47	82.95
7,820.00	0.46	90.25	7,818.44	5.53	-88.68	-4.14	1.70	-1.07	104.36
7,914.00	0.55	241.25	7,912.44	5.31	-88.70	-3.92	1.04	0.10	160.64
8,008.00	2.18	300.80	8,006.41	6.01	-90.63	-4.59	2.08	1.73	63.35
8,102.00	1.69	295.76	8,100.36	7.52	-93.42	-6.06	0.55	-0.52	-5.36
8,196.00	0.61	259.67	8,194.34	8.04	-95.16	-6.55	1.33	-1.15	-38.39
8,291.00	0.51	253.30	8,289.34	7.83	-96.06	-6.32	0.12	-0.11	-6.71
8,393.00	0.38	275.12	8,391.33	7.72	-96.83	-6.21	0.21	-0.13	21.39
8,487.00	5.98	194.99	8,485.16	3.02	-98.41	-1.48	6.30	5.96	-85.24
8,536.00	12.96	182.64	8,533.47	-4.95	-99.33	6.50	14.76	14.24	-25.20
8,581.00	18.23	178.71	8,576.80	-17.03	-99.40	18.59	11.94	11.71	-8.73
8,628.00	23.35	179.42	8,620.72	-33.71	-99.14	35.26	10.91	10.89	1.51
8,676.00	28.43	180.97	8,663.89	-54.66	-99.24	56.21	10.68	10.58	3.23
8,723.00	33.55	181.23	8,704.17	-78.84	-99.71	80.40	10.90	10.89	0.55
8,770.00	37.97	181.50	8,742.30	-106.30	-100.36	107.86	9.41	9.40	0.57
8,817.00	42.16	181.27	8,778.26	-136.53	-101.09	138.10	8.92	8.91	-0.49
8,864.00	45.63	180.79	8,812.12	-169.11	-101.67	170.68	7.42	7.38	-1.02

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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)
8,911.00	48.44	181.08	8,844.15	-203.49	-102.24	205.07	6.00	5.98	0.62
8,958.00	52.25	181.18	8,874.14	-239.67	-102.95	241.25	8.11	8.11	0.21
9,005.00	55.38	180.69	8,901.89	-277.59	-103.57	279.18	6.71	6.66	-1.04
9,052.00	58.42	180.73	8,927.55	-316.96	-104.05	318.55	6.47	6.47	0.09
9,099.00	61.04	179.29	8,951.24	-357.54	-104.05	359.13	6.17	5.57	-3.06
9,147.00	64.97	178.28	8,973.02	-400.29	-103.14	401.86	8.40	8.19	-2.10
9,194.00	70.22	178.05	8,990.93	-443.71	-101.75	445.25	11.18	11.17	-0.49
9,241.00	74.38	178.46	9,005.22	-488.45	-100.39	489.97	8.89	8.85	0.87
9,288.00	78.09	179.57	9,016.40	-534.09	-99.61	535.58	8.22	7.89	2.36
9,325.00	81.33	179.78	9,023.01	-570.49	-99.40	571.97	8.77	8.75	0.57
Hardline Crossing - 9325' MD									
9,357.00	84.13	179.96	9,027.06	-602.23	-99.33	603.71	8.77	8.75	0.56
9,450.00	93.44	180.47	9,029.03	-695.10	-99.68	696.58	10.03	10.01	0.55
9,544.00	89.00	180.05	9,027.03	-789.06	-100.10	790.53	4.74	-4.72	-0.45
9,639.00	90.71	180.35	9,027.27	-884.05	-100.44	885.52	1.83	1.80	0.32
9,733.00	90.31	180.33	9,026.43	-978.05	-100.99	979.51	0.43	-0.43	-0.02
9,827.00	90.96	180.77	9,025.39	-1,072.04	-101.90	1,073.50	0.84	0.69	0.47
9,921.00	90.29	180.55	9,024.36	-1,166.02	-102.98	1,167.49	0.75	-0.71	-0.23
10,015.00	88.72	179.39	9,025.18	-1,260.01	-102.93	1,261.47	2.08	-1.67	-1.23
10,109.00	87.81	178.56	9,028.02	-1,353.95	-101.25	1,355.37	1.31	-0.97	-0.88
10,204.00	90.04	180.22	9,029.80	-1,448.92	-100.24	1,450.32	2.93	2.35	1.75
10,298.00	90.47	180.57	9,029.39	-1,542.92	-100.89	1,544.31	0.59	0.46	0.37
10,392.00	90.24	181.29	9,028.80	-1,636.90	-102.41	1,638.31	0.80	-0.24	0.77
10,486.00	90.76	181.29	9,027.98	-1,730.88	-104.53	1,732.30	0.55	0.55	0.00
10,581.00	90.79	181.17	9,026.70	-1,825.85	-106.57	1,827.29	0.13	0.03	-0.13
10,675.00	91.11	180.92	9,025.14	-1,919.82	-108.28	1,921.28	0.43	0.34	-0.27
10,769.00	87.55	182.06	9,026.24	-2,013.76	-110.72	2,015.25	3.98	-3.79	1.21
10,863.00	89.55	183.59	9,028.62	-2,107.61	-115.36	2,109.16	2.68	2.13	1.63
10,956.00	87.01	181.20	9,031.41	-2,200.47	-119.24	2,202.07	3.75	-2.73	-2.57
11,050.00	87.21	181.13	9,036.15	-2,294.33	-121.15	2,295.95	0.23	0.21	-0.07
11,144.00	89.01	178.67	9,039.25	-2,388.27	-120.98	2,389.87	3.24	1.91	-2.62
11,239.00	91.49	179.97	9,038.83	-2,483.26	-119.86	2,484.83	2.95	2.61	1.37
11,334.00	89.97	179.02	9,037.62	-2,578.24	-119.02	2,579.79	1.89	-1.60	-1.00
11,428.00	90.92	179.68	9,036.89	-2,672.23	-117.95	2,673.75	1.23	1.01	0.70
11,522.00	91.47	179.77	9,034.93	-2,766.21	-117.50	2,767.71	0.59	0.59	0.10
11,616.00	90.50	179.73	9,033.32	-2,860.19	-117.09	2,861.67	1.03	-1.03	-0.04
11,710.00	89.03	178.87	9,033.70	-2,954.18	-115.94	2,955.63	1.81	-1.56	-0.91
11,804.00	89.70	179.64	9,034.74	-3,048.17	-114.72	3,049.59	1.09	0.71	0.82
11,898.00	90.80	179.93	9,034.33	-3,142.16	-114.37	3,143.57	1.21	1.17	0.31
11,991.00	90.26	180.19	9,033.47	-3,235.16	-114.47	3,236.55	0.64	-0.58	0.28
12,086.00	91.00	180.55	9,032.43	-3,330.15	-115.08	3,331.54	0.87	0.78	0.38
12,180.00	90.16	180.49	9,031.48	-3,424.14	-115.93	3,425.54	0.90	-0.89	-0.06
12,274.00	88.78	179.96	9,032.35	-3,518.13	-116.30	3,519.52	1.57	-1.47	-0.56
12,368.00	89.58	181.28	9,033.69	-3,612.11	-117.32	3,613.51	1.64	0.85	1.40

Company: BC Operating, Inc.
Project: Lea County, NM (NAD27 NME)
Site: Sterling 20 State
Well: #1H
Wellbore: OH / Job #60459
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well #1H
TVD Reference: GL + KB @ 3205.50usft (Patterson 244)
MD Reference: GL + KB @ 3205.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
12,462.00	87.91	181.29	9,035.75	-3,706.06	-119.43	3,707.48	1.78	-1.78	0.01
12,557.00	90.58	183.76	9,037.00	-3,800.95	-123.61	3,802.42	3.83	2.81	2.60
12,651.00	91.98	184.13	9,034.90	-3,894.70	-130.08	3,896.26	1.54	1.49	0.39
12,745.00	89.85	182.26	9,033.40	-3,988.53	-135.31	3,990.16	3.02	-2.27	-1.99
12,838.00	89.45	183.20	9,033.97	-4,081.42	-139.74	4,083.11	1.10	-0.43	1.01
12,932.00	92.29	184.65	9,032.54	-4,175.18	-146.18	4,176.96	3.39	3.02	1.54
13,026.00	87.22	181.03	9,032.95	-4,269.02	-150.83	4,270.86	6.63	-5.39	-3.85
13,120.00	90.17	178.86	9,035.09	-4,362.98	-150.74	4,364.80	3.90	3.14	-2.31
13,215.00	88.58	179.01	9,036.12	-4,457.95	-148.97	4,459.74	1.68	-1.67	0.16
13,309.00	88.71	178.67	9,038.35	-4,551.91	-147.07	4,553.65	0.39	0.14	-0.36
13,404.00	89.58	179.14	9,039.76	-4,646.88	-145.26	4,648.58	1.04	0.92	0.49
13,497.00	93.66	180.51	9,037.13	-4,739.82	-144.97	4,741.51	4.63	4.39	1.47
13,591.00	87.27	177.11	9,036.37	-4,833.73	-143.02	4,835.38	7.70	-6.80	-3.62
13,684.00	88.07	176.58	9,040.15	-4,926.51	-137.91	4,928.07	1.03	0.86	-0.57
13,779.00	91.23	178.38	9,040.73	-5,021.40	-133.73	5,022.88	3.83	3.33	1.89
13,873.00	90.93	179.17	9,038.96	-5,115.36	-131.72	5,116.80	0.90	-0.32	0.84
13,943.00	86.75	177.28	9,040.38	-5,185.30	-129.55	5,186.69	6.55	-5.97	-2.70
13,965.00	86.35	177.25	9,041.70	-5,207.23	-128.51	5,208.61	1.83	-1.83	-0.13
Hardline Crossing - 13965' MD									
14,037.00	85.03	177.16	9,047.11	-5,278.94	-125.01	5,280.25	1.83	-1.83	-0.13
14,069.00	84.88	177.59	9,049.93	-5,310.78	-123.55	5,312.07	1.42	-0.47	1.34
Final Phoenix MWD Survey									
14,111.00	84.88	177.59	9,053.68	-5,352.58	-121.79	5,353.83	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
445.00	444.95	4.63	0.00	First Phoenix MWD survey
9,325.00	9,023.01	-570.49	-99.40	Hardline Crossing - 9325' MD
13,965.00	9,041.70	-5,207.23	-128.51	Hardline Crossing - 13965' MD
14,069.00	9,049.93	-5,310.78	-123.55	Final Phoenix MWD Survey
14,111.00	9,053.68	-5,352.58	-121.79	Projection to TD

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) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 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
☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-42731		² Pool Code 96409		³ Pool Name FOREHAND RANCH; WOLFCAMP SOUTHWEST	
⁴ Property Code 313796		⁵ Property Name STERLING 20 STATE			⁶ Well Number 1H
⁷ OGRID No. 160825		⁸ Operator Name B.C. OPERATING, INC.			⁹ Elevation 3177

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	17	T23S	R27E		240'	SOUTH	1650'	EAST	EDDY

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
0	20	T23S	R27E		240'	SOUTH	1650'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160.00			

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 CORNER COORDINATES NAD 83, SPCS NM EAST A - Y: 472018.44' / X: 578789.62' B - Y: 472008.28' / X: 580131.35' C - Y: 466709.48' / X: 580131.35' D - Y: 466718.61' / X: 578813.90'		CORNER COORDINATES NAD 83, SPCS NM EAST A - Y: 471951.73' / X: 537607.49' B - Y: 471949.53' / X: 538930.22' C - Y: 466630.89' / X: 538949.09' D - Y: 466660.04' / X: 537631.66'		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 unlicensed 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. Signature: <i>Sarah Presley</i> Date: 9.29.16 Printed Name: Sarah Presley E-mail Address: spresley@bcoperating.com	
SECTION 18		SECTION 17		SECTION 16	
SECTION 19		SECTION 20		SECTION 21	
SURFACE HOLE LOCATION 240' FSL 1650' FEL NAD 83, SPCS NM EAST X: 579784.49' / Y: 472248.89' LAT: 32.29822434N / LON: 104.208990162W NAD 83, SPCS NM EAST X: 538602.35' / Y: 472190.16' LAT: 32.29810543N / LON: 104.20840163W		FIRST TAKE POINT 330' FSL 1650' FEL NAD 83, SPCS NM EAST X: 579783.92' / Y: 471678.82' LAT: 32.29665728N / LON: 104.20889902W NAD 83, SPCS NM EAST X: 538603.80' / Y: 471620.11' LAT: 32.29653838N / LON: 104.20839910W		LAST TAKE POINT 330' FSL 1650' FEL NAD 83, SPCS NM EAST X: 579497.91' / Y: 466704.80' LAT: 32.28391069N / LON: 104.20887772W NAD 83, SPCS NM EAST X: 538315.67' / Y: 466693.21' LAT: 32.28379172N / LON: 104.20837817W	
SECTION 19		SECTION 20		SECTION 21	
SECTION 30		SECTION 29		SECTION 28	
BOTTOM HOLE LOCATION 240' FSL 1650' FEL NAD 83, SPCS NM EAST X: 579784.49' / Y: 466693.21' LAT: 32.2836328N / LON: 104.20887731W NAD 83, SPCS NM EAST X: 538603.90' / Y: 466693.21' LAT: 32.2834431N / LON: 104.20987777W		PRODUCING AREA		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. Date of Survey: AUGUST 25, 2016 Signature and Seal of Professional Surveyor: <i>Lloyd P. Short</i> Certificate Number: LLOYD P. SHORT 21653	