



PHOENIX
TECHNOLOGY SERVICES

December 13, 2016

BC Operating
Attention: Regulatory Department
303 Veterans Airpark Lane #6101
PO Box 50820, Midland, TX. 70710
Midland, TX 79705

NEW MEXICO OIL CONSERVATION
ARTESIA DISTRICT

APR 10 2017

RECEIVED

Re: BC Operating
Red Light 27-34 State Com 2H
Eddy County, NM
API #30-015-43917
Job No. 60566

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced well with the State of New Mexico Oil Conservation Division – District 2 via certified mail. A copy of the filing is attached for your records.

Name of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Larry Seebeck	2H	502	15,974	11/26/16	12/8/16	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 60566

ENERGY COMPANY BC Operating

WELL NAME Red Light 27-34 State Com 2H

COUNTY & STATE

Eddy, New Mexico

API WELL NUMBER	30-015-43917
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PROPOSED DIRECTION	179.91
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TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
443.00 ft	442.96 ft	1.30	89.01	3.76 ft	1.58 ft	Gyro

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
26-Nov-16	502.00 ft	0.90	77.70

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
8-Dec-16	15,974.00 ft	89.09	178.95

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
8-Dec-16	16,026.00 ft	89.09	178.95

Larry Seebeck

PRINT YOUR NAME ABOVE

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.51
DECLINATION OR GRID	GRID

8-Dec

TODAY'S DATE

MWD SUPERVISOR 1 Larry Seebeck

DIRECTIONAL DRILLER 1

Ruben Cano

MWD SUPERVISOR 2 Clinton Kelly

DIRECTIONAL DRILLER 2

Vinn Adams



NEW OIL CONSERVATION

ARTESIA DISTRICT

APR 10 2017

RECEIVED

BC Operating, Inc.

**Eddy County, New Mexico (NAD27)
Red Light 27-34 State Com
2H**

OH / Job #60566

Survey: Phoenix MWD Surveys

Standard Survey Report

09 December, 2016



Company: BC Operating, Inc.
Project: Eddy County, New Mexico (NAD27)
Site: Red Light 27-34 State Com
Well: 2H
Wellbore: OH / Job #60566
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well 2H
TVD Reference: GL + KB @ 3341.50usft (Patterson 244)
MD Reference: GL + KB @ 3341.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Project	Eddy County, New Mexico (NAD27)		
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 Red Light 27-34 State Com

Site Position: **From:** Map **Northings:** 466,299.24 usft **Latitude:** 32° 16' 55.07195 N
Easting: 514,646.58 usft **Longitude:** 104° 17' 9.38360 W
Position Uncertainty: 0.00 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 0.03 °

Well 2H

Well Position **+N/-S** 0.00 usft **Northings:** 466,299.24 usft **Latitude:** 32° 16' 55.07195 N
+E/-W 0.00 usft **Easting:** 514,646.58 usft **Longitude:** 104° 17' 9.38360 W
Position Uncertainty 0.00 usft **Wellhead Elevation:** 0.00 usft **Ground Level:** 3,313.00 usft

Wellbore OH / Job #60566

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/20/2016	7.53	60.05	48,130

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	179.91

Survey Program Date 12/9/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
115.24	443.00	Phoenix Gyro Surveys (OH / Job #60566)	PHX_SPT_GTD	PHX Continuous north-seeking gyro
502.00	16,026.00	Phoenix MWD Surveys (OH / Job #60566)	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)
443.00	1.30	89.01	442.96	3.76	1.58	-3.76	0.00	0.00	0.00
502.00	0.90	77.70	501.95	3.87	2.70	-3.86	0.77	-0.68	-19.17
First Phoenix MWD Survey									
691.00	1.40	92.50	690.91	4.08	6.46	-4.07	0.31	0.26	7.83
876.00	1.40	14.40	875.87	6.18	9.28	-6.16	0.95	0.00	-42.22
1,061.00	1.90	47.90	1,060.80	10.42	12.12	-10.40	0.58	0.27	18.11
1,246.00	2.30	47.80	1,245.68	14.97	17.15	-14.94	0.22	0.22	-0.05
1,431.00	3.70	17.90	1,430.43	23.14	21.73	-23.11	1.11	0.76	-16.16
1,616.00	1.20	265.50	1,615.30	28.68	21.63	-28.64	2.33	-1.35	-60.76
1,800.00	1.80	251.30	1,799.24	27.60	16.98	-27.57	0.38	0.33	-7.72

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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)
1,867.00	0.50	279.50	1,866.22	27.31	15.69	-27.28	2.06	-1.94	42.09
1,980.00	0.61	294.50	1,979.22	27.64	14.66	-27.62	0.16	0.10	13.27
2,074.00	0.46	287.99	2,073.21	27.96	13.84	-27.94	0.17	-0.16	-6.93
2,168.00	0.44	301.66	2,167.21	28.27	13.18	-28.25	0.12	-0.02	14.54
2,262.00	0.44	280.44	2,261.21	28.52	12.51	-28.50	0.17	0.00	-22.57
2,355.00	0.38	287.83	2,354.21	28.68	11.87	-28.66	0.09	-0.06	7.95
2,449.00	0.38	279.75	2,448.20	28.83	11.27	-28.81	0.06	0.00	-8.60
2,543.00	0.39	290.16	2,542.20	28.99	10.66	-28.98	0.08	0.01	11.07
2,637.00	0.23	298.11	2,636.20	29.19	10.19	-29.18	0.18	-0.17	8.46
2,731.00	0.43	293.16	2,730.20	29.42	9.70	-29.41	0.21	0.21	-5.27
2,826.00	0.43	303.29	2,825.20	29.76	9.07	-29.74	0.08	0.00	10.66
2,920.00	0.34	302.78	2,919.19	30.10	8.55	-30.09	0.10	-0.10	-0.54
3,014.00	0.39	292.72	3,013.19	30.38	8.02	-30.36	0.09	0.05	-10.70
3,109.00	0.40	292.11	3,108.19	30.63	7.41	-30.61	0.01	0.01	-0.64
3,203.00	0.33	22.71	3,202.19	31.00	7.21	-30.99	0.55	-0.07	96.38
3,297.00	0.57	45.80	3,296.19	31.58	7.65	-31.56	0.32	0.26	24.56
3,391.00	0.61	57.68	3,390.18	32.17	8.41	-32.16	0.14	0.04	12.64
3,485.00	0.56	52.33	3,484.18	32.72	9.20	-32.70	0.08	-0.05	-5.69
3,578.00	0.70	50.01	3,577.17	33.36	9.99	-33.34	0.15	0.15	-2.49
3,672.00	0.70	71.14	3,671.16	33.91	10.97	-33.90	0.27	0.00	22.48
3,766.00	0.81	67.91	3,765.16	34.35	12.13	-34.33	0.13	0.12	-3.44
3,861.00	1.25	66.33	3,860.14	35.02	13.70	-35.00	0.46	0.46	-1.66
3,955.00	0.37	120.26	3,954.13	35.28	14.91	-35.25	1.14	-0.94	57.37
4,049.00	0.27	129.46	4,048.13	34.98	15.34	-34.96	0.12	-0.11	9.79
4,144.00	0.36	108.60	4,143.13	34.75	15.79	-34.72	0.15	0.09	-21.96
4,238.00	0.34	78.33	4,237.13	34.71	16.35	-34.68	0.20	-0.02	-32.20
4,332.00	0.35	94.09	4,331.12	34.74	16.91	-34.72	0.10	0.01	16.77
4,426.00	0.51	210.40	4,425.12	34.36	16.98	-34.34	0.78	0.17	123.73
4,520.00	0.60	198.64	4,519.12	33.54	16.61	-33.51	0.15	0.10	-12.51
4,614.00	1.12	229.40	4,613.11	32.47	15.76	-32.45	0.72	0.55	32.72
4,708.00	1.18	227.63	4,707.09	31.22	14.34	-31.20	0.07	0.06	-1.88
4,803.00	0.96	219.93	4,802.07	29.95	13.11	-29.93	0.28	-0.23	-8.11
4,897.00	0.66	234.09	4,896.06	29.03	12.17	-29.01	0.38	-0.32	15.06
4,992.00	0.59	210.84	4,991.06	28.29	11.47	-28.27	0.27	-0.07	-24.47
5,086.00	0.67	193.24	5,085.05	27.34	11.10	-27.32	0.22	0.09	-18.72
5,180.00	0.86	199.69	5,179.04	26.14	10.74	-26.12	0.22	0.20	6.86
5,274.00	0.98	199.98	5,273.03	24.72	10.22	-24.70	0.13	0.13	0.31
5,368.00	1.26	153.99	5,367.02	23.04	10.40	-23.02	0.97	0.30	-48.93
5,462.00	2.10	169.12	5,460.97	20.42	11.18	-20.40	1.00	0.89	16.10
5,556.00	1.53	218.90	5,554.93	17.75	10.72	-17.73	1.72	-0.61	52.96
5,650.00	2.06	247.78	5,648.89	16.13	8.37	-16.12	1.10	0.56	30.72
5,744.00	1.62	291.52	5,742.84	15.98	5.56	-15.97	1.52	-0.47	46.53
5,839.00	1.35	321.07	5,837.81	17.34	3.61	-17.34	0.84	-0.28	31.11

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5,933.00	0.40	259.17	5,931.80	18.14	2.59	-18.14	1.29	-1.01	-65.85
6,027.00	0.76	227.62	6,025.80	17.66	1.81	-17.66	0.50	0.38	-33.56
6,121.00	1.36	249.19	6,119.78	16.85	0.31	-16.84	0.76	0.64	22.95
6,216.00	0.88	239.92	6,214.76	16.08	-1.38	-16.08	0.54	-0.51	-9.76
6,310.00	0.60	238.13	6,308.76	15.46	-2.42	-15.46	0.30	-0.30	-1.90
6,404.00	0.63	252.16	6,402.75	15.04	-3.33	-15.04	0.16	0.03	14.93
6,498.00	1.08	235.10	6,496.74	14.37	-4.55	-14.38	0.54	0.48	-18.15
6,592.00	0.25	274.43	6,590.73	13.88	-5.48	-13.89	0.96	-0.88	41.84
6,686.00	1.03	19.29	6,684.73	14.70	-5.40	-14.70	1.19	0.83	111.55
6,780.00	0.71	40.77	6,778.72	15.93	-4.74	-15.94	0.48	-0.34	22.85
6,875.00	0.11	217.15	6,873.71	16.31	-4.42	-16.31	0.86	-0.63	185.66
6,969.00	0.07	287.44	6,967.71	16.25	-4.52	-16.26	0.12	-0.04	74.78
7,063.00	0.58	249.83	7,061.71	16.11	-5.03	-16.11	0.56	0.54	-40.01
7,157.00	1.35	229.84	7,155.70	15.23	-6.32	-15.24	0.88	0.82	-21.27
7,251.00	0.67	246.15	7,249.68	14.29	-7.67	-14.30	0.78	-0.72	17.35
7,345.00	0.26	136.62	7,343.68	13.91	-8.02	-13.93	0.85	-0.44	-116.52
7,439.00	0.74	156.38	7,437.68	13.20	-7.63	-13.22	0.54	0.51	21.02
7,533.00	1.77	166.42	7,531.65	11.24	-7.05	-11.25	1.12	1.10	10.68
7,627.00	0.10	346.49	7,625.64	9.90	-6.73	-9.91	1.99	-1.78	-191.41
7,721.00	0.40	215.49	7,719.64	9.72	-6.94	-9.73	0.50	0.32	-139.36
7,816.00	0.63	237.52	7,814.64	9.17	-7.57	-9.18	0.32	0.24	23.19
7,909.00	0.53	173.52	7,907.63	8.46	-7.95	-8.48	0.67	-0.11	-68.82
8,004.00	0.84	158.77	8,002.62	7.38	-7.65	-7.39	0.37	0.33	-15.53
8,108.00	1.23	184.79	8,106.61	5.56	-7.47	-5.57	0.58	0.38	25.02
8,155.00	3.70	189.72	8,153.56	3.56	-7.77	-3.57	5.27	5.26	10.49
8,202.00	8.44	179.82	8,200.29	-1.39	-8.01	1.38	10.29	10.09	-21.06
8,250.00	14.08	177.88	8,247.34	-10.75	-7.79	10.74	11.77	11.75	-4.04
8,297.00	18.71	177.98	8,292.42	-24.01	-7.31	24.00	9.85	9.85	0.21
8,344.00	23.30	178.21	8,336.28	-40.84	-6.75	40.83	9.77	9.77	0.49
8,390.00	27.95	177.54	8,377.75	-60.71	-6.00	60.71	10.13	10.11	-1.46
8,438.00	32.69	177.66	8,419.17	-84.92	-4.99	84.91	9.88	9.88	0.25
8,485.00	36.31	177.83	8,457.90	-111.51	-3.95	111.51	7.70	7.70	0.36
8,532.00	40.17	178.67	8,494.81	-140.59	-3.07	140.58	8.29	8.21	1.79
8,579.00	44.03	178.64	8,529.67	-172.08	-2.33	172.08	8.21	8.21	-0.06
8,591.00	44.96	178.92	8,538.23	-180.49	-2.15	180.49	7.93	7.76	2.32
Hardline Crossing - 8591' MD									
8,626.00	47.68	179.68	8,562.40	-205.80	-1.84	205.79	7.93	7.77	2.18
8,672.00	51.14	180.06	8,592.33	-240.72	-1.77	240.72	7.55	7.52	0.83
8,720.00	55.54	180.03	8,620.98	-279.22	-1.80	279.22	9.17	9.17	-0.06
8,767.00	60.12	179.48	8,646.00	-318.99	-1.62	318.99	9.79	9.74	-1.17
8,814.00	63.89	179.67	8,668.06	-360.48	-1.32	360.48	8.03	8.02	0.40
8,861.00	66.97	178.62	8,687.60	-403.22	-0.67	403.22	6.86	6.55	-2.23
8,908.00	71.20	178.84	8,704.37	-447.10	0.30	447.10	9.01	9.00	0.47
8,955.00	75.19	178.99	8,717.96	-492.08	1.15	492.08	8.49	8.49	0.32

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9,002.00	79.79	179.04	8,728.13	-537.94	1.94	537.94	9.79	9.79	0.11
9,128.00	87.42	177.07	8,742.16	-662.99	6.20	662.99	6.25	6.06	-1.56
9,174.00	87.60	176.36	8,744.16	-708.87	8.83	708.88	1.59	0.39	-1.54
9,267.00	93.09	178.69	8,743.60	-801.74	12.85	801.76	6.41	5.90	2.51
9,358.00	91.11	180.84	8,740.26	-892.66	13.22	892.68	3.21	-2.18	2.36
9,453.00	91.20	180.67	8,738.35	-987.64	11.97	987.65	0.20	0.09	-0.18
9,547.00	90.40	180.41	8,737.04	-1,081.62	11.08	1,081.64	0.89	-0.85	-0.28
9,641.00	89.87	180.68	8,736.81	-1,175.62	10.19	1,175.63	0.63	-0.56	0.29
9,734.00	87.68	179.47	8,738.80	-1,268.59	10.07	1,268.60	2.69	-2.35	-1.30
9,829.00	89.07	176.89	8,741.50	-1,363.49	13.08	1,363.51	3.08	1.46	-2.72
9,923.00	91.32	176.62	8,741.18	-1,457.34	18.40	1,457.36	2.41	2.39	-0.29
10,016.00	91.55	177.42	8,738.85	-1,550.18	23.24	1,550.21	0.89	0.25	0.86
10,110.00	89.81	176.84	8,737.73	-1,644.05	27.94	1,644.09	1.95	-1.85	-0.62
10,204.00	92.10	176.47	8,736.17	-1,737.87	33.43	1,737.92	2.47	2.44	-0.39
10,298.00	90.62	175.85	8,733.93	-1,831.63	39.72	1,831.69	1.71	-1.57	-0.66
10,392.00	89.93	177.18	8,733.48	-1,925.45	45.43	1,925.52	1.59	-0.73	1.41
10,485.00	88.24	176.18	8,734.97	-2,018.28	50.82	2,018.36	2.11	-1.82	-1.08
10,579.00	92.35	180.09	8,734.48	-2,112.19	53.88	2,112.27	6.03	4.37	4.16
10,674.00	89.41	178.29	8,733.03	-2,207.16	55.22	2,207.24	3.63	-3.09	-1.89
10,768.00	90.98	182.35	8,732.71	-2,301.13	54.70	2,301.21	4.63	1.67	4.32
10,862.00	89.10	181.48	8,732.64	-2,395.07	51.56	2,395.15	2.20	-2.00	-0.93
10,956.00	89.63	181.89	8,733.68	-2,489.03	48.79	2,489.10	0.71	0.56	0.44
11,051.00	91.87	182.63	8,732.44	-2,583.94	45.05	2,584.01	2.48	2.36	0.78
11,144.00	88.38	181.66	8,732.24	-2,676.86	41.57	2,676.92	3.89	-3.75	-1.04
11,238.00	90.96	183.11	8,732.78	-2,770.76	37.65	2,770.82	3.15	2.74	1.54
11,332.00	91.31	182.00	8,730.91	-2,864.65	33.46	2,864.70	1.24	0.37	-1.18
11,426.00	90.78	181.25	8,729.20	-2,958.60	30.80	2,958.64	0.98	-0.56	-0.80
11,520.00	89.93	180.94	8,728.62	-3,052.58	29.00	3,052.62	0.96	-0.90	-0.33
11,614.00	92.87	181.56	8,726.32	-3,146.52	26.95	3,146.55	3.20	3.13	0.66
11,708.00	89.29	180.05	8,724.55	-3,240.47	25.63	3,240.51	4.13	-3.81	-1.61
11,803.00	89.02	179.97	8,725.95	-3,335.46	25.62	3,335.50	0.30	-0.28	-0.08
11,897.00	88.63	179.37	8,727.88	-3,429.44	26.16	3,429.48	0.76	-0.41	-0.64
11,991.00	89.86	179.54	8,729.12	-3,523.42	27.05	3,523.46	1.32	1.31	0.18
12,085.00	89.89	178.15	8,729.32	-3,617.40	28.95	3,617.44	1.48	0.03	-1.48
12,180.00	88.57	177.14	8,730.60	-3,712.31	32.85	3,712.36	1.75	-1.39	-1.06
12,274.00	91.66	177.53	8,730.41	-3,806.20	37.22	3,806.25	3.31	3.29	0.41
12,368.00	88.96	176.99	8,729.90	-3,900.08	41.71	3,900.14	2.93	-2.87	-0.57
12,462.00	90.03	177.73	8,730.73	-3,993.97	46.04	3,994.04	1.38	1.14	0.79
12,556.00	93.02	178.14	8,728.23	-4,087.87	49.43	4,087.94	3.21	3.18	0.44
12,650.00	92.13	178.72	8,724.01	-4,181.74	52.00	4,181.81	1.13	-0.95	0.62
12,745.00	89.66	178.46	8,722.52	-4,276.69	54.34	4,276.77	2.61	-2.60	-0.27
12,838.00	92.25	178.23	8,720.97	-4,369.63	57.02	4,369.71	2.80	2.78	-0.25
12,932.00	88.90	177.40	8,720.03	-4,463.54	60.61	4,463.63	3.67	-3.56	-0.88

Company: BC Operating, Inc.
Project: Eddy County, New Mexico (NAD27)
Site: Red Light 27-34 State Com
Well: 2H
Wellbore: OH / Job #60566
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well 2H
TVD Reference: GL + KB @ 3341.50usft (Patterson 244)
MD Reference: GL + KB @ 3341.50usft (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)
13,026.00	90.70	180.17	8,720.36	-4,557.51	62.60	4,557.60	3.51	1.91	2.95
13,120.00	91.22	180.23	8,718.78	-4,651.49	62.27	4,651.59	0.56	0.55	0.06
13,214.00	91.62	181.25	8,716.45	-4,745.46	61.06	4,745.55	1.17	0.43	1.09
13,309.00	89.99	184.41	8,715.12	-4,840.32	56.37	4,840.40	3.74	-1.72	3.33
13,402.00	87.69	183.58	8,717.00	-4,933.06	49.89	4,933.14	2.63	-2.47	-0.89
13,497.00	87.55	183.42	8,720.95	-5,027.80	44.10	5,027.87	0.22	-0.15	-0.17
13,591.00	86.87	183.34	8,725.52	-5,121.53	38.56	5,121.58	0.73	-0.72	-0.09
13,685.00	87.88	179.59	8,729.83	-5,215.38	36.16	5,215.43	4.13	1.07	-3.99
13,780.00	90.71	180.90	8,731.00	-5,310.36	35.76	5,310.41	3.28	2.98	1.38
13,874.00	90.00	180.18	8,730.41	-5,404.35	34.87	5,404.40	1.08	-0.76	-0.77
13,968.00	89.37	180.53	8,730.93	-5,498.35	34.29	5,498.40	0.77	-0.67	0.37
14,061.00	88.02	180.51	8,733.05	-5,591.32	33.44	5,591.37	1.45	-1.45	-0.02
14,156.00	91.98	181.25	8,733.05	-5,686.29	31.99	5,686.33	4.24	4.17	0.78
14,250.00	90.46	181.21	8,731.05	-5,780.24	29.97	5,780.28	1.62	-1.62	-0.04
14,344.00	88.03	180.53	8,732.29	-5,874.22	28.54	5,874.26	2.68	-2.59	-0.72
14,439.00	90.20	182.90	8,733.75	-5,969.15	25.70	5,969.18	3.38	2.28	2.49
14,533.00	88.65	181.82	8,734.70	-6,063.06	21.83	6,063.09	2.01	-1.65	-1.15
14,628.00	91.51	183.68	8,734.56	-6,157.94	17.27	6,157.96	3.59	3.01	1.96
14,721.00	89.86	183.48	8,733.45	-6,250.75	11.46	6,250.76	1.79	-1.77	-0.22
14,815.00	88.84	182.64	8,734.52	-6,344.61	6.45	6,344.61	1.41	-1.09	-0.89
14,910.00	90.34	184.14	8,735.20	-6,439.43	0.83	6,439.42	2.23	1.58	1.58
15,004.00	91.24	183.77	8,733.90	-6,533.20	-5.65	6,533.18	1.04	0.96	-0.39
15,099.00	90.04	183.27	8,732.84	-6,628.01	-11.49	6,627.98	1.37	-1.26	-0.53
15,193.00	90.93	183.49	8,732.05	-6,721.84	-17.03	6,721.81	0.98	0.95	0.23
15,287.00	88.73	182.28	8,732.32	-6,815.72	-21.76	6,815.67	2.67	-2.34	-1.29
15,381.00	92.01	181.19	8,731.72	-6,909.66	-24.60	6,909.61	3.68	3.49	-1.16
15,476.00	90.16	180.61	8,729.92	-7,004.62	-26.10	7,004.57	2.04	-1.95	-0.61
15,569.00	89.54	180.00	8,730.16	-7,097.62	-26.59	7,097.57	0.94	-0.67	-0.66
15,663.00	90.24	180.81	8,730.34	-7,191.62	-27.26	7,191.56	1.14	0.74	0.86
15,758.00	89.47	179.57	8,730.58	-7,286.61	-27.57	7,286.56	1.54	-0.81	-1.31
15,852.00	88.94	178.80	8,731.89	-7,380.59	-26.23	7,380.54	0.99	-0.56	-0.82
15,910.00	89.50	178.71	8,732.68	-7,438.57	-24.98	7,438.53	0.97	0.96	-0.15
Hardline Crossing - 15910' MD									
15,946.00	89.84	178.66	8,732.89	-7,474.56	-24.15	7,474.52	0.97	0.96	-0.15
15,974.00	89.09	178.95	8,733.15	-7,502.56	-23.57	7,502.51	2.87	-2.68	1.04
Final Phoenix MWD Survey									
16,026.00	89.09	178.95	8,733.98	-7,554.54	-22.61	7,554.50	0.00	0.00	0.00
Projection to TD									



Phoenix Technology Services LP

Survey Report



Company: BC Operating, Inc.
Project: Eddy County, New Mexico (NAD27)
Site: Red Light 27-34 State Com
Well: 2H
Wellbore: OH / Job #60566
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well 2H
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MD Reference: GL + KB @ 3341.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
502.00	501.95	3.87	2.70	First Phoenix MWD Survey
8,591.00	8,538.23	-180.49	-2.15	Hardline Crossing - 8591' MD
15,910.00	8,732.68	-7,438.57	-24.98	Hardline Crossing - 15910' MD
15,974.00	8,733.15	-7,502.56	-23.57	Final Phoenix MWD Survey
16,026.00	8,733.98	-7,554.54	-22.61	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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98204	³ Pool Name WC-015 S232627B; Wolfcamp (Gas)
⁴ Property Code	⁵ Property Name RED LIGHT 27-34 STATE COM	⁶ Well Number 2H
⁷ OGRID No. 160825	⁸ Operator Name B.C. OPERATING, INC.	⁹ Elevation 3313

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
D	27	T23S	R26E		150'	NORTH	990'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

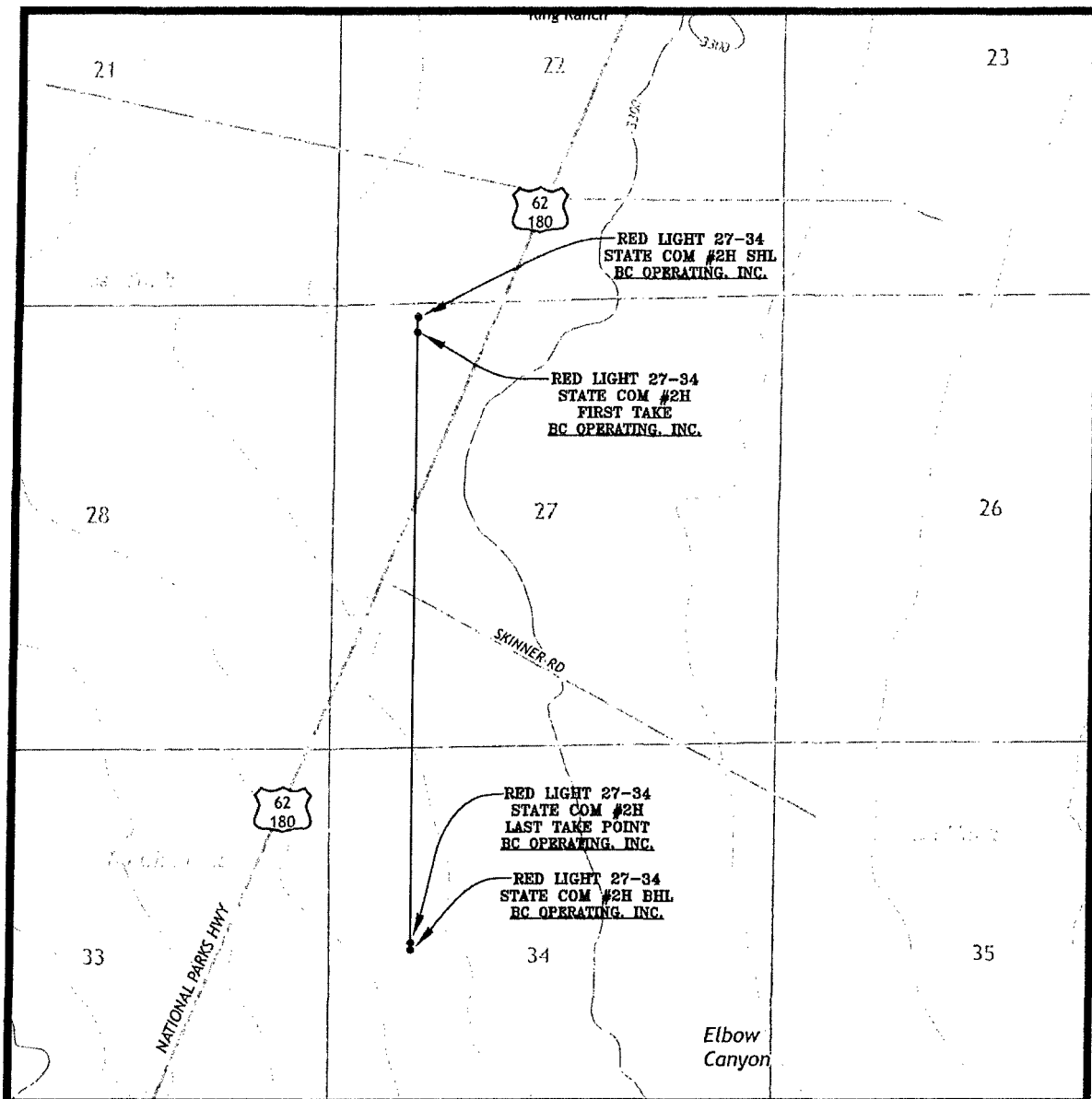
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	T23S	R26E		2400'	NORTH	990'	WEST	EDDY

¹² Dedicated Acres 480.00	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 SECTION 21 SECTION 28 SECTION 33 SECTION 4 CORNER COORDINATES NAD 83, SPCS NM EAST A - Y: 466485.27' / X: 554938.48' B - Y: 466545.58' / X: 557527.50' C - Y: 461251.35' / X: 557514.89' D - Y: 458605.48' / X: 557523.27' E - Y: 458579.67' / X: 554852.59' F - Y: 461213.49' / X: 554836.53'		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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Sarah Presley Printed Name spresley@bcoperating.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. MAY 18, 2016 Date of Survey Signature and Seal of Professional Surveyor LLOYD P. SHORT 21653 Certificate Number		¹⁹ SURFACE HOLE LOCATION 150' FNL 990' FWL, SECTION 27 NAD 83, SPCS NM EAST X:555828.49' / Y:466357.39' LAT:32.28208193N / LON:104.28644227W NAD 27, SPCS NM EAST X:514646.58' / Y:466299.24' LAT:32.28196443N / LON:104.28593989W FIRST TAKE POINT 330' FNL 990' FWL, SECTION 27 NAD 83, SPCS NM EAST X:555828.37' / Y:466177.38' LAT:32.28158713N / LON:104.28644293W NAD 27, SPCS NM EAST X:514646.45' / Y:466119.24' LAT:32.28146963N / LON:104.28594057W LAST TAKE POINT 2310' FNL 990' FWL, SECTION 34 NAD 83, SPCS NM EAST X:555840.55' / Y:458917.45' LAT:32.26163040N / LON:104.28641379W NAD 27, SPCS NM EAST X:514658.48' / Y:458859.51' LAT:32.26151282N / LON:104.28591203W BOTTOM HOLE LOCATION 2400' FNL 990' FWL, SECTION 34 NAD 83, SPCS NM EAST X:555841.10' / Y:458827.45' LAT:32.26138299N / LON:104.28641214W NAD 27, SPCS NM EAST X:514659.03' / Y:458769.52' LAT:32.26126541N / LON:104.28591038W	

LOCATION VERIFICATION MAP

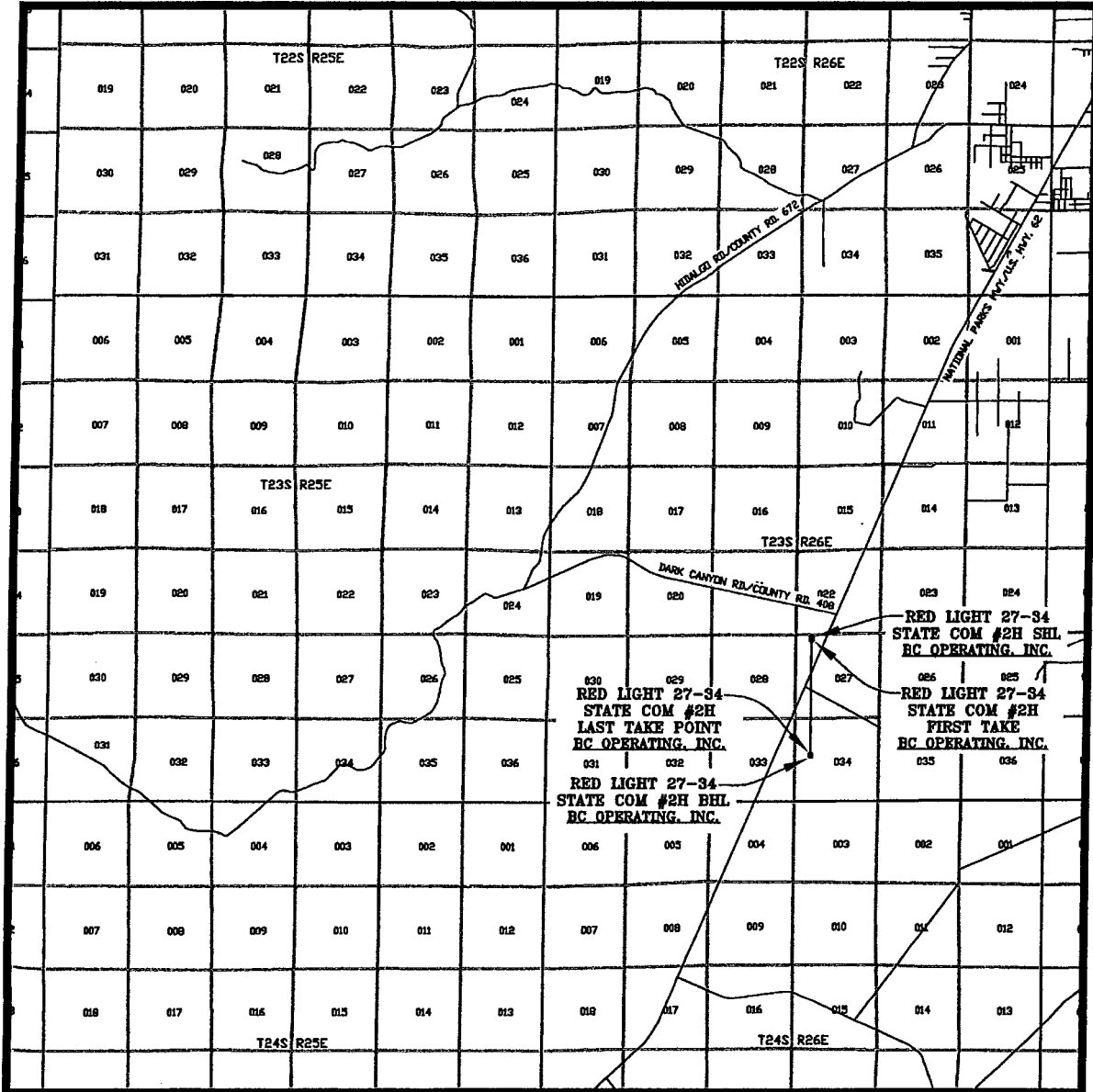


SEC. 27 TWP. 23 S RGE. 26 E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 150' FNL & 990' FWL
 ELEVATION: 3313'
 OPERATOR: B.C. OPERATING, INC.
 LEASE: RED LIGHT 27-34 STATE COM
 U.S.G.S. TOPOGRAPHIC MAP: KITCHEN COVE, N.M.

SCALE: 1" = 2000'
 CONTOUR INTERVAL = 20'

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-8900 OFFICE
 JOB No. R3642_002

VICINITY MAP



SEC. 27 TWP. 23 S RGE. 26 E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 150' FNL & 990' FWL
 ELEVATION: 3313'
 OPERATOR: B.C. OPERATING, INC.
 LEASE: RED LIGHT 27-34 STATE COM
 U.S.G.S. TOPOGRAPHIC MAP: KITCHEN COVE, N.M.

SCALE: 1" = 2 MILES

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-8900 OFFICE
 JOB No. R3642_002