PHOENIX
TECHNOLOGY SERVICES

September 15, 2016

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

NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 03 2016
RECEIVED

Dear District 2 - Artesia

Attention: Regulatory Department

Re: BC Operating
Cass 16 State 1H
Eddy County, NM
API #30-015-42730
Job No. 60279

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:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Larry Seebeck	1H	480	14,577	08/19/16	09/07/16	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,

Claudia Carreon

Claudia Carreon
Operations Administrator

Certified mail receipt number: 7015 0640 0000 9907 5593

12329 Cutten Rd. Houston, TX 77066 • Phone (713) 337-0600 • Fax (713) 337-0599
www.phxtech.com

Phoenix Technology Services
SURVEY DATA CERTIFICATION

PHOENIX TECHNOLOGY SERVICES

PHOENIX JOB NUMBER 60279 ENERGY COMPANY BC Operating

WELL NAME Cass 16 State 1H COUNTY & STATE Eddy, New Mexico

API WELL NUMBER	30-015-42730

PROPOSED DIRECTION	88.77

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
388.50 ft	388.33 ft	3.49	41.99	7.00 ft	5.75 ft	Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
19-Aug-16	480.00 ft	4.10	36.30

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
7-Sep-16	14,577.00 ft	91.58	94.36

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
7-Sep-16	14,642.00 ft	91.58	94.36

Larry Seebeck

PRINT YOUR NAME ABOVE

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.43
DECLINATION OR GRID	GRID

8-Sep

TODAY'S DATE

MWD SUPERVISOR 1 Larry Seebeck DIRECTIONAL DRILLER 1 Vinn Adams

MWD SUPERVISOR 2 Jeff Arenas DIRECTIONAL DRILLER 2 Ruben Cano

12329 Cutten Rd., Houston, Texas 777066 (713)337-0600 (Voice), (713)337-0599 (Fax)

BC OPERATING, INC.

BC Operating, Inc.

Eddy County, New Mexico (NAD27)
Cass 16 State
1H

OH / Job #60279

Survey: Phoenix MWD Surveys

Standard Survey Report

08 September, 2016

PHOENIX
TECHNOLOGY SERVICES

BC OPERATING, INC.

Phoenix Technology Services LP

Survey Report

PHOENIX TECHNOLOGY SERVICES

Company:	BC Operating, Inc.	**Local Co-ordinate Reference:**	Well 1H
Project:	Eddy County, New Mexico (NAD27)	**TVD Reference:**	GL + KB @ 3187.50usft (Patterson 244)
Site:	Cass 16 State	**MD Reference:**	GL + KB @ 3187.50usft (Patterson 244)
Well:	1H	**North Reference:**	Grid
Wellbore:	OH / Job #60279	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Patterson 244)	**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 Cass 16 State

Site Position:		**Northing:**	476,926.94 usft	**Latitude:**	32° 18' 40.03950 N
From:	Map	**Easting:**	539,999.78 usft	**Longitude:**	104° 12' 13.89793 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.07 °

Well 1H

Well Position	**+N/-S**	0.00 usft	**Northing:**	476,926.94 usft	**Latitude:**	32° 18' 40.03950 N
	+E/-W	0.00 usft	**Easting:**	539,999.78 usft	**Longitude:**	104° 12' 13.89793 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,159.00 usft

Wellbore OH / Job #60279

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	8/16/2016	7.50	60.12	48,194

Design Surveys (Patterson 244)

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	388.50

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.00	0.00	0.00	88.77

Survey Program **Date** 9/8/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
128.50	388.50	Phoenix Gyro Surveys (OH)	PHX_SPT_GTD	PHX Continuous north-seeking gyro
480.00	14,642.00	Phoenix MWD Surveys (OH / Job #60279)	PHX+MWD+HDGM	PHX+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)
388.50	3.49	41.99	388.33	7.00	5.75	5.90	0.00	0.00	0.00
480.00	4.10	36.30	479.63	11.70	9.55	9.80	0.78	0.67	-6.22
First Phoenix MWD Survey									
572.00	2.50	32.00	571.47	16.06	12.56	12.90	1.76	-1.74	-4.67
695.00	0.30	205.60	694.44	18.04	13.84	14.23	2.28	-1.79	141.14
880.00	1.00	175.00	879.42	16.00	13.78	14.12	0.41	0.38	-16.54
1,065.00	1.40	171.00	1,064.38	12.15	14.27	14.53	0.22	0.22	-2.16
1,249.00	1.60	145.60	1,248.32	7.82	16.07	16.24	0.37	0.11	-13.80
1,434.00	0.60	192.30	1,433.29	4.74	17.33	17.42	0.68	-0.54	25.24
1,619.00	1.90	112.80	1,618.25	2.60	19.95	20.00	1.02	0.70	-42.97

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Well:	1H	**North Reference:**	Grid
Wellbore:	OH / Job #60279	**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)
1,803.00	0.40	284.80	1,802.22	1.58	22.14	22.17	1.25	-0.82	93.48
1,990.00	0.90	203.70	1,989.21	0.41	20.92	20.92	0.50	0.27	-43.37
2,067.00	0.90	282.50	2,066.20	-0.02	20.08	20.08	1.48	0.00	102.34
2,140.00	1.01	291.64	2,139.19	0.35	18.92	18.93	0.26	0.15	12.52
2,171.00	0.95	290.44	2,170.19	0.54	18.43	18.44	0.20	-0.19	-3.87
2,265.00	2.39	227.60	2,264.15	-0.51	16.25	16.24	2.27	1.53	-66.85
2,359.00	2.38	234.50	2,358.07	-2.97	13.22	13.15	0.31	-0.01	7.34
2,454.00	2.24	234.89	2,453.00	-5.18	10.09	9.98	0.15	-0.15	0.41
2,548.00	2.37	235.76	2,546.92	-7.33	6.98	6.82	0.14	0.14	0.93
2,642.00	2.33	234.05	2,640.84	-9.55	3.83	3.62	0.09	-0.04	-1.82
2,737.00	2.38	238.00	2,735.76	-11.73	0.59	0.34	0.18	0.05	4.16
2,831.00	2.38	240.51	2,829.68	-13.72	-2.76	-3.06	0.11	0.00	2.67
2,925.00	1.00	207.02	2,923.64	-15.41	-4.83	-5.16	1.75	-1.47	-35.63
3,019.00	1.08	189.85	3,017.62	-17.02	-5.36	-5.72	0.34	0.09	-18.27
3,114.00	1.03	190.80	3,112.61	-18.74	-5.67	-6.07	0.06	-0.05	1.00
3,207.00	1.17	198.66	3,205.59	-20.46	-6.13	-6.57	0.22	0.15	8.45
3,301.00	1.37	203.25	3,299.57	-22.40	-6.88	-7.36	0.24	0.21	4.88
3,396.00	1.59	152.38	3,394.54	-24.61	-6.72	-7.25	1.35	0.23	-53.55
3,490.00	1.07	171.17	3,488.51	-26.63	-5.98	-6.55	0.71	-0.55	19.99
3,584.00	0.92	181.19	3,582.50	-28.26	-5.86	-6.47	0.24	-0.16	10.66
3,678.00	1.00	172.91	3,676.49	-29.82	-5.78	-6.41	0.17	0.09	-8.81
3,772.00	1.00	173.99	3,770.47	-31.45	-5.59	-6.26	0.02	0.00	1.15
3,866.00	0.95	178.94	3,864.46	-33.05	-5.49	-6.20	0.10	-0.05	5.27
3,961.00	1.02	174.46	3,959.44	-34.68	-5.39	-6.13	0.11	0.07	-4.72
4,055.00	0.92	191.37	4,053.43	-36.25	-5.46	-6.24	0.32	-0.11	17.99
4,150.00	1.04	198.15	4,148.42	-37.82	-5.88	-6.69	0.18	0.13	7.14
4,244.00	0.93	207.23	4,242.40	-39.31	-6.49	-7.34	0.20	-0.12	9.66
4,338.00	0.96	202.46	4,336.39	-40.71	-7.14	-8.02	0.09	0.03	-5.07
4,433.00	0.78	201.17	4,431.38	-42.05	-7.68	-8.58	0.19	-0.19	-1.36
4,527.00	0.86	212.76	4,525.37	-43.24	-8.29	-9.22	0.20	0.09	12.33
4,622.00	0.68	211.36	4,620.36	-44.32	-8.97	-9.92	0.19	-0.19	-1.47
4,717.00	0.70	225.82	4,715.35	-45.21	-9.68	-10.65	0.18	0.02	15.22
4,811.00	0.66	218.85	4,809.35	-46.03	-10.43	-11.42	0.10	-0.04	-7.41
4,905.00	0.69	230.07	4,903.34	-46.81	-11.21	-12.21	0.14	0.03	11.94
4,999.00	0.57	230.52	4,997.34	-47.48	-12.00	-13.02	0.13	-0.13	0.48
5,093.00	0.67	211.45	5,091.33	-48.24	-12.65	-13.68	0.24	0.11	-20.29
5,187.00	0.65	213.90	5,185.32	-49.15	-13.23	-14.29	0.04	-0.02	2.61
5,280.00	0.51	208.62	5,278.32	-49.95	-13.73	-14.80	0.16	-0.15	-5.68
5,375.00	0.63	220.04	5,373.31	-50.72	-14.26	-15.35	0.17	0.13	12.02
5,470.00	0.46	233.48	5,468.31	-51.35	-14.91	-16.01	0.22	-0.18	14.15
5,565.00	0.37	264.98	5,563.31	-51.61	-15.52	-16.62	0.25	-0.09	33.16
5,659.00	0.38	292.91	5,657.31	-51.51	-16.11	-17.21	0.19	0.01	29.71
5,753.00	0.81	263.08	5,751.30	-51.47	-17.06	-18.16	0.55	0.46	-31.73

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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)
5,847.00	1.08	227.82	5,845.29	-52.14	-18.37	-19.49	0.67	0.29	-37.51
5,941.00	0.96	212.97	5,939.27	-53.40	-19.46	-20.60	0.31	-0.13	-15.80
6,034.00	1.94	197.15	6,032.24	-55.56	-20.34	-21.53	1.13	1.05	-17.01
6,128.00	1.02	214.40	6,126.21	-57.77	-21.29	-22.52	1.08	-0.98	18.35
6,222.00	0.47	222.37	6,220.20	-58.74	-22.02	-23.28	0.59	-0.59	8.48
6,317.00	0.38	253.91	6,315.20	-59.12	-22.58	-23.85	0.26	-0.09	33.20
6,412.00	0.41	233.97	6,410.20	-59.41	-23.16	-24.43	0.15	0.03	-20.99
6,506.00	0.24	135.28	6,504.20	-59.74	-23.30	-24.57	0.54	-0.18	-104.99
6,600.00	0.68	184.16	6,598.19	-60.44	-23.20	-24.49	0.59	0.47	52.00
6,694.00	0.75	137.91	6,692.19	-61.45	-22.83	-24.14	0.60	0.07	-49.20
6,788.00	0.72	107.84	6,786.18	-62.09	-21.85	-23.18	0.41	-0.03	-31.99
6,882.00	1.02	85.63	6,880.17	-62.21	-20.45	-21.79	0.47	0.32	-23.63
6,976.00	1.15	78.72	6,974.15	-61.96	-18.70	-20.02	0.20	0.14	-7.35
7,070.00	1.01	76.08	7,068.14	-61.58	-16.97	-18.28	0.16	-0.15	-2.81
7,164.00	0.92	76.15	7,162.12	-61.20	-15.43	-16.74	0.10	-0.10	0.07
7,258.00	0.54	50.11	7,256.11	-60.73	-14.36	-15.66	0.53	-0.40	-27.70
7,352.00	0.43	350.48	7,350.11	-60.10	-14.08	-15.36	0.52	-0.12	-63.44
7,446.00	0.69	320.32	7,444.11	-59.32	-14.49	-15.76	0.41	0.28	-32.09
7,540.00	0.92	300.74	7,538.10	-58.49	-15.50	-16.76	0.38	0.24	-20.83
7,634.00	0.77	312.79	7,632.09	-57.68	-16.62	-17.85	0.25	-0.16	12.82
7,727.00	1.77	343.50	7,725.07	-55.88	-17.48	-18.68	1.26	1.08	33.02
7,821.00	1.02	53.50	7,819.04	-53.99	-17.22	-18.38	1.82	-0.80	74.47
7,915.00	1.94	69.76	7,913.01	-52.94	-15.06	-16.19	1.07	0.98	17.30
8,010.00	1.82	72.38	8,007.96	-51.93	-12.11	-13.22	0.16	-0.13	2.76
8,103.00	1.21	102.53	8,100.93	-51.69	-9.75	-10.85	1.06	-0.66	32.42
8,197.00	1.10	116.60	8,194.91	-52.31	-7.97	-9.09	0.32	-0.12	14.97
8,291.00	1.05	112.48	8,288.89	-53.05	-6.37	-7.50	0.10	-0.05	-4.38
8,385.00	0.62	121.27	8,382.88	-53.64	-5.14	-6.29	0.48	-0.46	9.35
8,479.00	0.25	55.27	8,476.88	-53.79	-4.53	-5.69	0.60	-0.39	-70.21
8,573.00	0.52	19.27	8,570.88	-53.27	-4.22	-5.37	0.37	0.29	-38.30
8,667.00	0.68	14.64	8,664.87	-52.32	-3.94	-5.06	0.18	0.17	-4.93
8,761.00	0.52	17.26	8,758.87	-51.38	-3.67	-4.78	0.17	-0.17	2.79
8,855.00	0.54	31.81	8,852.86	-50.59	-3.31	-4.40	0.14	0.02	15.48
8,949.00	0.60	40.15	8,946.86	-49.84	-2.76	-3.83	0.11	0.06	8.87
8,990.00	0.81	43.11	8,987.86	-49.46	-2.43	-3.49	0.52	0.51	7.22
9,037.00	2.72	83.32	9,034.83	-49.09	-1.09	-2.15	4.61	4.06	85.55
9,084.00	5.43	110.09	9,081.71	-49.73	2.10	1.04	6.90	5.77	56.96
9,131.00	11.16	99.87	9,128.20	-51.27	8.68	7.58	12.54	12.19	-21.74
9,178.00	16.52	93.02	9,173.83	-52.40	19.84	18.71	11.91	11.40	-14.57
9,225.00	20.76	89.67	9,218.35	-52.71	34.85	33.71	9.30	9.02	-7.13
9,272.00	22.73	87.10	9,262.01	-52.20	52.25	51.12	4.65	4.19	-5.47
9,319.00	26.33	89.62	9,304.76	-51.67	71.75	70.63	7.97	7.66	5.36
9,366.00	30.39	90.18	9,346.11	-51.64	94.07	92.94	8.66	8.64	1.19

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9,413.00	34.10	94.27	9,385.86	-52.66	119.11	117.95	9.15	7.89	8.70
9,460.00	36.84	91.01	9,424.14	-53.89	146.34	145.15	7.08	5.83	-6.94
9,507.00	41.41	86.02	9,460.60	-53.06	175.96	174.78	11.80	9.72	-10.62
9,554.00	46.87	86.80	9,494.31	-51.02	208.62	207.47	11.67	11.62	1.66
9,601.00	52.77	86.90	9,524.62	-49.05	244.46	243.35	12.55	12.55	0.21
9,648.00	56.59	88.83	9,551.79	-47.64	282.77	281.68	8.79	8.13	4.11
9,696.00	60.34	90.20	9,576.89	-47.30	323.67	322.58	8.18	7.81	2.85
9,743.00	62.49	89.16	9,599.38	-47.07	364.94	363.84	4.97	4.57	-2.21
9,790.00	67.16	90.21	9,619.37	-46.84	407.46	406.36	10.14	9.94	2.23
9,837.00	70.50	91.31	9,636.34	-47.43	451.28	450.15	7.43	7.11	2.34
9,884.00	73.45	91.38	9,650.88	-48.47	495.95	494.80	6.28	6.28	0.15
9,931.00	75.81	90.53	9,663.34	-49.23	541.26	540.08	5.32	5.02	-1.81
9,956.00	77.81	90.27	9,669.04	-49.40	565.60	564.41	8.06	8.00	-1.04
10,003.00	83.08	89.56	9,676.84	-49.33	611.93	610.73	11.31	11.21	-1.51
10,050.00	87.03	86.19	9,680.89	-47.59	658.71	657.54	11.03	8.40	-7.17
10,097.00	90.21	86.36	9,682.03	-44.53	705.59	704.47	6.78	6.77	0.36
10,191.00	90.84	90.03	9,681.16	-41.57	799.52	798.45	3.96	0.67	3.90
10,285.00	88.68	91.59	9,681.56	-42.90	893.50	892.38	2.83	-2.30	1.66
10,379.00	86.07	91.05	9,685.86	-45.07	987.37	986.18	2.84	-2.78	-0.57
10,472.00	85.18	89.95	9,692.96	-45.88	1,080.09	1,078.86	1.52	-0.96	-1.18
10,566.00	85.11	88.41	9,700.91	-44.54	1,173.74	1,172.52	1.63	-0.07	-1.64
10,660.00	83.20	87.51	9,710.49	-41.21	1,267.19	1,266.02	2.24	-2.03	-0.96
10,757.00	85.98	84.64	9,719.63	-34.59	1,363.51	1,362.46	4.11	2.87	-2.96
10,851.00	87.98	84.15	9,724.58	-25.43	1,456.93	1,456.05	2.19	2.13	-0.52
10,945.00	92.56	86.03	9,724.14	-17.38	1,550.55	1,549.82	5.27	4.87	2.00
11,039.00	92.09	88.51	9,720.33	-12.91	1,644.36	1,643.71	2.68	-0.50	2.64
11,134.00	89.74	91.23	9,718.81	-12.70	1,739.33	1,738.66	3.78	-2.47	2.86
11,228.00	86.71	89.65	9,721.72	-13.42	1,833.27	1,832.56	3.63	-3.22	-1.68
11,323.00	86.39	89.52	9,727.44	-12.73	1,928.10	1,927.38	0.36	-0.34	-0.14
11,417.00	91.33	92.25	9,729.31	-14.18	2,022.03	2,021.26	6.00	5.26	2.90
11,512.00	85.50	90.82	9,731.93	-16.73	2,116.92	2,116.07	6.32	-6.14	-1.51
11,606.00	84.34	89.59	9,740.26	-17.06	2,210.54	2,209.67	1.79	-1.23	-1.31
11,701.00	86.57	87.24	9,747.79	-14.44	2,305.19	2,304.35	3.40	2.35	-2.47
11,795.00	89.54	87.89	9,750.98	-10.45	2,399.04	2,398.27	3.23	3.16	0.69
11,890.00	88.20	86.12	9,752.85	-5.49	2,493.89	2,493.20	2.34	-1.41	-1.86
11,984.00	87.73	85.03	9,756.19	1.76	2,587.55	2,586.99	1.26	-0.50	-1.16
12,079.00	88.77	86.47	9,759.09	8.79	2,682.24	2,681.81	1.87	1.09	1.52
12,173.00	88.88	84.85	9,761.02	15.91	2,775.95	2,775.65	1.73	0.12	-1.72
12,266.00	88.66	83.82	9,763.01	25.08	2,868.47	2,868.35	1.13	-0.24	-1.11
12,361.00	90.33	85.47	9,763.85	33.95	2,963.05	2,963.09	2.47	1.76	1.74
12,456.00	90.47	88.05	9,763.19	39.32	3,057.88	3,058.02	2.72	0.15	2.72
12,550.00	87.66	87.37	9,764.72	43.07	3,151.79	3,151.98	3.08	-2.99	-0.72
12,645.00	89.35	88.64	9,767.20	46.38	3,246.69	3,246.94	2.22	1.78	1.34
12,739.00	88.45	87.96	9,769.01	49.17	3,340.63	3,340.92	1.20	-0.96	-0.72

Company:	BC Operating, Inc.	**Local Co-ordinate Reference:**	Well 1H
Project:	Eddy County, New Mexico (NAD27)	**TVD Reference:**	GL + KB @ 3187.50usft (Patterson 244)
Site:	Cass 16 State	**MD Reference:**	GL + KB @ 3187.50usft (Patterson 244)
Well:	1H	**North Reference:**	Grid
Wellbore:	OH / Job #60279	**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)
12,834.00	93.31	87.43	9,767.55	52.99	3,435.51	3,435.86	5.15	5.12	-0.56
12,928.00	88.21	84.82	9,766.30	59.34	3,529.25	3,529.71	6.09	-5.43	-2.78
13,022.00	87.07	85.55	9,770.17	67.22	3,622.84	3,623.45	1.44	-1.21	0.78
13,116.00	89.73	86.78	9,772.80	73.50	3,716.58	3,717.30	3.12	2.83	1.31
13,210.00	89.68	84.84	9,773.28	80.37	3,810.32	3,811.17	2.06	-0.05	-2.06
13,304.00	89.14	84.44	9,774.25	89.15	3,903.91	3,904.92	0.71	-0.57	-0.43
13,389.00	91.45	84.45	9,773.81	97.38	3,988.50	3,989.67	2.72	2.72	0.01
13,486.00	86.66	85.91	9,775.41	105.53	4,085.11	4,086.44	5.16	-4.94	1.51
13,580.00	89.92	91.65	9,778.22	107.52	4,179.00	4,180.34	7.02	3.47	6.11
13,674.00	89.45	90.98	9,778.73	105.36	4,272.97	4,274.25	0.87	-0.50	-0.71
13,768.00	86.31	88.91	9,782.21	105.45	4,366.89	4,368.15	4.00	-3.34	-2.20
13,863.00	89.04	91.31	9,786.06	105.27	4,461.80	4,463.03	3.82	2.87	2.53
13,957.00	90.05	93.16	9,786.81	101.60	4,555.72	4,556.85	2.24	1.07	1.97
14,051.00	89.38	93.01	9,787.28	96.54	4,649.58	4,650.58	0.73	-0.71	-0.16
14,145.00	88.33	93.75	9,789.16	91.00	4,743.40	4,744.26	1.37	-1.12	0.79
14,239.00	88.96	90.32	9,791.38	87.67	4,837.30	4,838.06	3.71	0.67	-3.65
14,334.00	90.23	93.28	9,792.05	84.68	4,932.23	4,932.91	3.39	1.34	3.12
14,428.00	88.25	89.76	9,793.30	82.19	5,026.17	5,026.78	4.30	-2.11	-3.74
14,523.00	91.09	92.79	9,793.85	80.08	5,121.13	5,121.67	4.37	2.99	3.19
14,577.00	91.58	94.36	9,792.59	76.71	5,175.01	5,175.46	3.04	0.91	2.91
Final Phoenix MWD Survey									
14,642.00	91.58	94.36	9,790.80	71.77	5,239.79	5,240.13	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
480.00	479.63	11.70	9.55	First Phoenix MWD Survey
14,577.00	9,792.59	76.71	5,175.01	Final Phoenix MWD Survey
14,642.00	9,790.80	71.77	5,239.79	Projection to TD