

30-025-44238



PHOENIX
TECHNOLOGY SERVICES

October 11, 2019

Oil Conservation Division
State of New Mexico
1625 N. French Drive
District 1 - Hobbs
Hobbs, New Mexico 88240

Attention: Regulatory Department

Re: Conoco Phillips
Zia Hills 19 Fed Com 111H
Lea County, NM
API #30-025-44238
Job No. 64341

HOBBS OCD
OCT 30 2019
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:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Anthony Thigpen	111H	1,253	21,955	4/5/19	9/11/19	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

SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

Job #: 64341
 Client: ConocoPhillips
 County & State: Lea, NM
 Well: Zia Hills 19 Fed Com 111H
 API No: 30-025-44238
 Proposed Direction: 359.63°

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
1062.50 ft	1062.19 ft	2.31°	287.14°	3.51 S	8.71 W	Gyros
Data Source Company:						MS Directional

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
5-Apr-19	1,253 ft	1.66°	221.21°

Last Survey Date	Last Survey Depth	INC	AZM
11-Sep-19	21,955 ft	88.29°	0.16°

Survey Instrument Type
Velocity UTX

Projected TD Survey Date	Projected TD Survey Depth	INC	AZM
11-Sep-19	21,990 ft	88.29°	0.16°

CORRECTION INFORMATION

Magnetic Declination Used	6.74	degrees
Grid Convergence Used	0.33	degrees
Total Correction	6.41	degrees

Corrected to True/Grid North
Grid North

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

Anthony Thigpen
 Signature
 9/11/2019
 Date

ConocoPhillips MCBU - Permian-Panhandle Gold Data

Planning - NM East State Zone - 3001

ZIA HILLS 19 111H

ZIA HILLS 19 111H

OH/ 64261 / 64341

Survey: 1_ZIA_HILLS_19_111H

Standard Survey Report

17 September, 2019

ConocoPhillips

Survey Report

Company:	ConocoPhillips MCBU - Permian-Panhandle Gold Data	Local Co-ordinate Reference:	Well ZIA HILLS 19 111H
Project:	Planning - NM East State Zone - 3001	TVD Reference:	RKB @ 3210.00ft (Patterson 256)
Site:	ZIA HILLS 19 111H	MD Reference:	RKB @ 3210.00ft (Patterson 256)
Well:	ZIA HILLS 19 111H	North Reference:	Grid
Wellbore:	OH/ 64261 / 64341	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 256)	Database:	EDT 14 Central Planning

Project	Planning - NM East State Zone - 3001, Permian Basin - New Mexico - East/South East, Planning Project for Permian wells in NM		
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		Using geodetic scale factor

Site	ZIA HILLS 19 111H				
Site Position:		Northing:	374,653.300 usft	Latitude:	32° 1' 42.742 N
From:	Map	Easting:	690,941.310 usft	Longitude:	103° 43' 1.911 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well	ZIA HILLS 19 111H					
Well Position	+N/-S	0.00 ft	Northing:	374,653.300 usft	Latitude:	32° 1' 42.742 N
	+E/-W	0.00 ft	Easting:	690,941.310 usft	Longitude:	103° 43' 1.911 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,181.50 ft

Wellbore	OH/ 64261 / 64341				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2018	2/4/2019	6.92	59.78	47,670.97417781

Design	Surveys (Patterson 256)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	359.63	

Survey Program	Date 9/12/2019			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
118.50	1,064.50	0_ZIA_HILLS_19_111H (OH/ 64261 / 6434	GOOD GYRO	GOOD GYRO
1,253.00	21,990.00	1_ZIA_HILLS_19_111H (OH/ 64261 / 6434	MWD+IFR1+MS_CoP	Fixed:v2:Eagleford, crustal dec + 3-axis corr.

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,062.50	2.31	287.14	1,062.19	-3.51	-8.71	-3.46	0.00	0.00	0.00
Tie In									
1,253.00	1.66	221.21	1,252.59	-4.46	-14.20	-4.37	1.17	-0.34	-34.61
First Phoenix MWD Survey									
1,314.00	1.69	222.89	1,313.57	-5.78	-15.39	-5.68	0.09	0.05	2.75
1,405.00	1.76	224.02	1,404.52	-7.77	-17.27	-7.66	0.09	0.08	1.24
1,497.00	0.57	222.51	1,496.50	-9.12	-18.56	-9.00	1.29	-1.29	-1.64
1,590.00	0.52	218.57	1,589.50	-9.79	-19.14	-9.67	0.07	-0.05	-4.24
1,682.00	0.58	237.46	1,681.50	-10.37	-19.79	-10.24	0.21	0.07	20.53

ConocoPhillips

Survey Report

Company:	ConocoPhillips MCBU - Permian-Panhandle Gold Data	Local Co-ordinate Reference:	Well ZIA HILLS 19 111H
Project:	Planning - NM East State Zone - 3001	TVD Reference:	RKB @ 3210.00ft (Patterson 256)
Site:	ZIA HILLS 19 111H	MD Reference:	RKB @ 3210.00ft (Patterson 256)
Well:	ZIA HILLS 19 111H	North Reference:	Grid
Wellbore:	OH/ 64261 / 64341	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 256)	Database:	EDT 14 Central Planning

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,778.00	0.51	229.59	1,777.49	-10.91	-20.53	-10.78	0.11	-0.07	-8.20
1,873.00	0.32	26.22	1,872.49	-10.94	-20.73	-10.81	0.86	-0.20	164.87
1,969.00	0.28	343.55	1,968.49	-10.48	-20.68	-10.34	0.23	-0.04	-44.45
2,065.00	0.60	20.80	2,064.49	-9.78	-20.57	-9.65	0.43	0.33	38.80
2,160.00	0.22	358.89	2,159.48	-9.14	-20.40	-9.00	0.43	-0.40	-23.06
2,256.00	0.16	289.86	2,255.48	-8.91	-20.53	-8.77	0.23	-0.06	-71.91
2,352.00	0.35	195.72	2,351.48	-9.14	-20.73	-9.01	0.41	0.20	-98.06
2,447.00	0.46	226.42	2,446.48	-9.69	-21.09	-9.55	0.25	0.12	32.32
2,543.00	0.54	189.17	2,542.48	-10.40	-21.44	-10.26	0.34	0.08	-38.80
2,638.00	0.56	184.27	2,637.47	-11.30	-21.54	-11.16	0.05	0.02	-5.16
2,733.00	0.44	186.28	2,732.47	-12.13	-21.62	-11.99	0.13	-0.13	2.12
2,829.00	1.15	100.13	2,828.46	-12.66	-20.71	-12.53	1.25	0.74	-89.74
2,925.00	1.78	90.04	2,924.43	-12.83	-18.27	-12.72	0.71	0.66	-10.51
3,019.00	1.58	100.55	3,018.39	-13.07	-15.54	-12.97	0.39	-0.21	11.18
3,115.00	1.43	108.13	3,114.36	-13.69	-13.10	-13.60	0.26	-0.16	7.90
3,210.00	1.39	95.17	3,209.33	-14.16	-10.82	-14.09	0.34	-0.04	-13.64
3,305.00	1.18	79.11	3,304.30	-14.08	-8.71	-14.02	0.44	-0.22	-16.91
3,401.00	0.85	82.35	3,400.29	-13.80	-7.04	-13.75	0.35	-0.34	3.38
3,497.00	0.64	97.96	3,496.28	-13.78	-5.80	-13.74	0.30	-0.22	16.26
3,592.00	0.78	99.52	3,591.27	-13.96	-4.64	-13.93	0.15	0.15	1.64
3,688.00	1.23	93.38	3,687.26	-14.13	-2.97	-14.11	0.48	0.47	-6.40
3,784.00	1.17	105.95	3,783.24	-14.46	-0.99	-14.45	0.28	-0.06	13.09
3,879.00	1.08	119.67	3,878.22	-15.17	0.72	-15.17	0.30	-0.09	14.44
3,975.00	1.41	123.04	3,974.20	-16.26	2.49	-16.27	0.35	0.34	3.51
4,070.00	0.35	95.72	4,069.18	-16.92	3.76	-16.95	1.17	-1.12	-28.76
4,166.00	0.88	323.99	4,165.18	-16.36	3.62	-16.38	1.19	0.55	-137.22
4,261.00	0.32	287.62	4,260.18	-15.69	2.94	-15.71	0.68	-0.59	-38.28
4,356.00	0.33	304.96	4,355.17	-15.45	2.46	-15.47	0.10	0.01	18.25
4,452.00	0.10	351.63	4,451.17	-15.21	2.22	-15.22	0.28	-0.24	48.61
4,547.00	0.30	299.85	4,546.17	-15.00	1.99	-15.02	0.26	0.21	-54.51
4,643.00	0.43	329.16	4,642.17	-14.57	1.59	-14.58	0.23	0.14	30.53
4,738.00	0.19	21.67	4,737.17	-14.12	1.47	-14.13	0.37	-0.25	55.27
4,834.00	1.23	63.20	4,833.16	-13.50	2.45	-13.52	1.14	1.08	43.26
4,929.00	2.97	70.33	4,928.09	-12.22	5.67	-12.25	1.85	1.83	7.51
5,025.00	5.00	77.03	5,023.86	-10.44	12.09	-10.52	2.17	2.11	6.98
5,120.00	5.31	77.25	5,118.47	-8.54	20.41	-8.67	0.33	0.33	0.23
5,216.00	5.28	79.35	5,214.06	-6.74	29.09	-6.93	0.20	-0.03	2.19
5,312.00	5.58	77.63	5,309.63	-4.93	37.99	-5.17	0.36	0.31	-1.79
5,408.00	5.98	82.60	5,405.15	-3.28	47.51	-3.59	0.67	0.42	5.18
5,503.00	6.42	85.56	5,499.59	-2.23	57.71	-2.61	0.57	0.46	3.12
5,599.00	6.42	85.43	5,594.99	-1.39	68.41	-1.83	0.02	0.00	-0.14
5,695.00	6.54	91.53	5,690.38	-1.11	79.23	-1.62	0.73	0.13	6.35
5,790.00	6.79	101.31	5,784.74	-2.36	90.14	-2.94	1.22	0.26	10.29

ConocoPhillips

Survey Report

Company: ConocoPhillips MCBU - Permian-Panhandle Gold Data
Project: Planning - NM East State Zone - 3001
Site: ZIA HILLS 19 111H
Well: ZIA HILLS 19 111H
Wellbore: OH/ 64261 / 64341
Design: Surveys (Patterson 256)

Local Co-ordinate Reference: Well ZIA HILLS 19 111H
TVD Reference: RKB @ 3210.00ft (Patterson 256)
MD Reference: RKB @ 3210.00ft (Patterson 256)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDT 14 Central Planning

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,885.00	6.85	101.23	5,879.06	-4.56	101.20	-5.21	0.06	0.06	-0.08
5,981.00	6.99	105.33	5,974.37	-7.22	112.45	-7.95	0.53	0.15	4.27
6,076.00	6.71	108.53	6,068.69	-10.51	123.29	-11.31	0.50	-0.29	3.37
6,172.00	6.65	109.79	6,164.04	-14.18	133.84	-15.04	0.16	-0.06	1.31
6,266.00	6.61	109.77	6,257.41	-17.85	144.05	-18.78	0.04	-0.04	-0.02
6,362.00	6.56	107.78	6,352.77	-21.39	154.47	-22.39	0.24	-0.05	-2.07
6,458.00	6.54	105.97	6,448.15	-24.57	164.95	-25.64	0.22	-0.02	-1.89
6,553.00	6.29	112.34	6,542.55	-28.04	174.97	-29.17	0.79	-0.26	6.71
6,648.00	6.18	116.16	6,636.99	-32.27	184.37	-33.46	0.45	-0.12	4.02
6,744.00	6.42	115.44	6,732.41	-36.85	193.85	-38.10	0.26	0.25	-0.75
6,839.00	6.50	117.56	6,826.81	-41.62	203.42	-42.94	0.26	0.08	2.23
6,934.00	6.29	118.31	6,921.22	-46.58	212.77	-47.95	0.24	-0.22	0.79
7,030.00	6.45	115.56	7,016.63	-51.40	222.26	-52.83	0.36	0.17	-2.86
7,126.00	6.72	118.30	7,111.99	-56.39	232.07	-57.89	0.43	0.28	2.85
7,221.00	6.81	115.64	7,206.33	-61.46	242.04	-63.02	0.34	0.09	-2.80
7,317.00	6.50	119.34	7,301.69	-66.59	251.91	-68.21	0.55	-0.32	3.85
7,412.00	6.96	120.03	7,396.03	-72.10	261.58	-73.79	0.49	0.48	0.73
7,508.00	6.30	124.85	7,491.39	-78.02	270.94	-79.77	0.90	-0.69	5.02
7,603.00	5.96	127.88	7,585.85	-84.03	279.11	-85.83	0.49	-0.36	3.19
7,698.00	5.34	127.53	7,680.38	-89.75	286.51	-91.60	0.65	-0.65	-0.37
7,794.00	5.22	132.81	7,775.98	-95.44	293.25	-97.33	0.52	-0.13	5.50
7,889.00	4.70	135.37	7,870.62	-101.15	299.16	-103.08	0.59	-0.55	2.69
7,985.00	3.70	133.47	7,966.36	-106.08	304.17	-108.04	1.05	-1.04	-1.98
8,080.00	3.27	133.72	8,061.19	-110.06	308.35	-112.05	0.45	-0.45	0.26
8,176.00	2.83	137.27	8,157.05	-113.69	311.94	-115.70	0.50	-0.46	3.70
8,272.00	2.84	133.53	8,252.93	-117.07	315.27	-119.10	0.19	0.01	-3.90
8,368.00	2.56	133.23	8,348.83	-120.18	318.56	-122.23	0.29	-0.29	-0.31
8,464.00	2.25	138.96	8,444.74	-123.07	321.36	-125.14	0.41	-0.32	5.97
8,559.00	1.74	148.44	8,539.68	-125.70	323.34	-127.79	0.64	-0.54	9.98
8,655.00	1.54	159.81	8,635.64	-128.15	324.55	-130.25	0.40	-0.21	11.84
8,750.00	1.48	173.99	8,730.61	-130.57	325.11	-132.67	0.40	-0.06	14.93
8,863.00	1.34	182.39	8,843.58	-133.34	325.21	-135.44	0.22	-0.12	7.43
8,959.00	1.54	201.43	8,939.55	-135.67	324.69	-137.76	0.54	0.21	19.83
9,054.00	1.75	232.27	9,034.51	-137.74	323.08	-139.83	0.95	0.22	32.46
9,150.00	1.75	243.18	9,130.47	-139.30	320.61	-141.37	0.35	0.00	11.36
9,244.00	1.62	238.96	9,224.43	-140.63	318.19	-142.69	0.19	-0.14	-4.49
9,339.00	1.32	256.09	9,319.39	-141.59	315.98	-143.63	0.56	-0.32	18.03
9,434.00	1.19	255.12	9,414.37	-142.11	313.97	-144.13	0.14	-0.14	-1.02
9,530.00	1.27	259.28	9,510.35	-142.56	311.96	-144.57	0.12	0.08	4.33
9,625.00	1.28	265.38	9,605.33	-142.84	309.86	-144.84	0.14	0.01	6.42
9,721.00	1.00	268.94	9,701.31	-142.94	307.96	-144.93	0.30	-0.29	3.71
9,817.00	1.10	287.60	9,797.29	-142.68	306.24	-144.65	0.37	0.10	19.44

ConocoPhillips

Survey Report

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Project:	Planning - NM East State Zone - 3001	TVD Reference:	RKB @ 3210.00ft (Patterson 256)
Site:	ZIA HILLS 19 111H	MD Reference:	RKB @ 3210.00ft (Patterson 256)
Well:	ZIA HILLS 19 111H	North Reference:	Grid
Wellbore:	OH/ 64261 / 64341	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 256)	Database:	EDT 14 Central Planning

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,912.00	1.06	291.38	9,892.27	-142.08	304.56	-144.05	0.09	-0.04	3.98
10,008.00	0.75	263.53	9,988.26	-141.83	303.10	-143.79	0.55	-0.32	-29.01
10,103.00	0.49	265.23	10,083.26	-141.93	302.08	-143.88	0.27	-0.27	1.79
10,199.00	0.09	314.35	10,179.26	-141.92	301.62	-143.86	0.45	-0.42	51.17
10,295.00	0.30	354.88	10,275.25	-141.61	301.54	-143.56	0.25	0.22	42.22
10,390.00	0.43	310.85	10,370.25	-141.13	301.25	-143.07	0.31	0.14	-46.35
10,486.00	0.37	174.95	10,466.25	-141.21	301.00	-143.15	0.77	-0.06	-141.56
10,581.00	0.95	132.49	10,561.25	-142.04	301.61	-143.99	0.76	0.61	-44.69
10,676.00	1.22	147.19	10,656.23	-143.42	302.74	-145.38	0.41	0.28	15.47
10,772.00	1.48	134.97	10,752.20	-145.16	304.17	-147.12	0.40	0.27	-12.73
10,867.00	1.37	130.24	10,847.17	-146.76	305.91	-148.73	0.17	-0.12	-4.98
10,930.00	1.48	126.28	10,910.15	-147.73	307.14	-149.71	0.23	0.17	-6.29
10,964.00	1.40	122.35	10,944.14	-148.21	307.84	-150.20	0.37	-0.24	-11.56
10,996.00	1.49	71.08	10,976.13	-148.28	308.57	-150.27	3.92	0.28	-160.22
11,028.00	2.97	22.61	11,008.11	-147.38	309.28	-149.38	7.11	4.63	-151.47
11,060.00	5.16	15.66	11,040.03	-145.23	309.99	-147.23	7.00	6.84	-21.72
11,092.00	8.01	8.77	11,071.82	-141.64	310.71	-143.65	9.23	8.91	-21.53
11,123.00	10.60	4.35	11,102.40	-136.67	311.26	-138.67	8.66	8.35	-14.26
11,155.00	13.44	2.12	11,133.70	-130.01	311.62	-132.02	8.99	8.88	-6.97
11,203.00	18.57	359.53	11,179.82	-116.79	311.76	-118.80	10.79	10.69	-5.40
11,251.00	25.05	358.75	11,224.37	-98.96	311.48	-100.97	13.51	13.50	-1.63
11,299.00	30.86	358.96	11,266.75	-76.48	311.03	-78.48	12.11	12.10	0.44
11,347.00	38.55	358.91	11,306.18	-49.17	310.53	-51.18	16.02	16.02	-0.10
11,395.00	44.73	358.36	11,342.03	-17.31	309.76	-19.31	12.90	12.88	-1.15
11,442.00	48.48	359.30	11,374.32	16.83	309.07	14.84	8.11	7.98	2.00
11,490.00	50.80	0.16	11,405.40	53.40	308.90	51.41	5.02	4.83	1.79
11,538.00	53.42	0.47	11,434.88	91.28	309.11	89.28	5.48	5.46	0.65
11,586.00	55.76	0.64	11,462.69	130.40	309.49	128.40	4.88	4.88	0.35
11,634.00	59.14	0.87	11,488.51	170.85	310.03	168.84	7.05	7.04	0.48
11,682.00	61.38	0.98	11,512.32	212.52	310.70	210.51	4.67	4.67	0.23
11,729.00	64.03	0.48	11,533.87	254.28	311.23	252.26	5.72	5.64	-1.06
11,825.00	69.80	0.22	11,571.49	342.55	311.76	340.53	6.02	6.01	-0.27
11,882.00	71.91	1.16	11,590.19	396.39	312.41	394.37	4.02	3.70	1.65
11,974.00	72.41	1.57	11,618.37	483.94	314.50	481.90	0.69	0.54	0.45
12,065.00	72.68	0.18	11,645.67	570.74	315.83	568.69	1.49	0.30	-1.53
12,156.00	72.35	359.95	11,673.01	657.53	315.93	655.48	0.44	-0.36	-0.25
12,247.00	72.54	359.58	11,700.46	744.30	315.57	742.24	0.44	0.21	-0.41
12,338.00	72.38	359.73	11,727.88	831.06	315.05	829.01	0.24	-0.18	0.16
12,429.00	74.38	0.79	11,753.91	918.25	315.45	916.20	2.46	2.20	1.16
12,521.00	77.42	2.18	11,776.32	1,007.44	317.77	1,005.37	3.61	3.30	1.51
12,614.00	80.80	3.45	11,793.89	1,098.64	322.26	1,096.54	3.87	3.63	1.37
12,706.00	84.63	3.92	11,805.55	1,189.69	328.12	1,187.55	4.19	4.16	0.51
12,801.00	88.92	4.05	11,810.90	1,284.29	334.71	1,282.10	4.52	4.52	0.14

ConocoPhillips

Survey Report

Company:	ConocoPhillips MCBU - Permian-Panhandle Gold Data	Local Co-ordinate Reference:	Well ZIA HILLS 19 111H
Project:	Planning - NM East State Zone - 3001	TVD Reference:	RKB @ 3210.00ft (Patterson 256)
Site:	ZIA HILLS 19 111H	MD Reference:	RKB @ 3210.00ft (Patterson 256)
Well:	ZIA HILLS 19 111H	North Reference:	Grid
Wellbore:	OH/ 64261 / 64341	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 256)	Database:	EDT 14 Central Planning

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,897.00	92.07	2.59	11,810.07	1,380.11	340.27	1,377.88	3.62	3.28	-1.52
12,993.00	91.98	359.28	11,806.67	1,476.02	341.84	1,473.79	3.45	-0.09	-3.45
13,088.00	91.90	357.61	11,803.46	1,570.93	339.26	1,568.71	1.76	-0.08	-1.76
13,184.00	89.24	355.37	11,802.50	1,666.73	333.38	1,664.54	3.62	-2.77	-2.33
13,279.00	89.58	350.82	11,803.48	1,761.01	321.97	1,758.90	4.80	0.36	-4.79
13,375.00	88.10	351.20	11,805.43	1,855.81	306.97	1,853.79	1.59	-1.54	0.40
13,470.00	90.67	355.44	11,806.45	1,950.13	295.92	1,948.18	5.22	2.71	4.46
13,565.00	88.87	355.58	11,806.83	2,044.83	288.48	2,042.93	1.90	-1.89	0.15
13,661.00	90.25	358.80	11,807.56	2,140.70	283.78	2,138.82	3.65	1.44	3.35
13,757.00	88.64	358.90	11,808.49	2,236.67	281.85	2,234.81	1.68	-1.68	0.10
13,853.00	88.52	0.09	11,810.87	2,332.64	281.01	2,330.78	1.25	-0.13	1.24
13,948.00	88.55	1.16	11,813.30	2,427.60	282.04	2,425.73	1.13	0.03	1.13
14,044.00	89.38	2.89	11,815.04	2,523.52	285.43	2,521.63	2.00	0.86	1.80
14,140.00	88.58	3.32	11,816.75	2,619.36	290.63	2,617.43	0.95	-0.83	0.45
14,236.00	88.33	2.45	11,819.33	2,715.21	295.46	2,713.24	0.94	-0.26	-0.91
14,331.00	89.56	0.13	11,821.08	2,810.16	297.60	2,808.18	2.76	1.29	-2.44
14,427.00	89.22	358.93	11,822.11	2,906.15	296.81	2,904.17	1.30	-0.35	-1.25
14,522.00	88.90	357.34	11,823.66	3,001.08	293.72	2,999.12	1.71	-0.34	-1.67
14,617.00	89.36	357.47	11,825.11	3,095.97	289.42	3,094.04	0.50	0.48	0.14
14,713.00	90.42	357.73	11,825.29	3,191.89	285.40	3,189.98	1.14	1.10	0.27
14,809.00	90.02	358.62	11,824.92	3,287.84	282.35	3,285.94	1.02	-0.42	0.93
14,905.00	90.44	359.66	11,824.54	3,383.82	280.90	3,381.94	1.17	0.44	1.08
15,000.00	90.44	1.46	11,823.81	3,478.81	281.83	3,476.92	1.89	0.00	1.89
15,096.00	90.25	1.60	11,823.23	3,574.78	284.40	3,572.86	0.25	-0.20	0.15
15,191.00	90.08	2.88	11,822.96	3,669.70	288.11	3,667.76	1.36	-0.18	1.35
15,287.00	89.92	0.70	11,822.96	3,765.65	291.11	3,763.69	2.28	-0.17	-2.27
15,382.00	90.62	0.12	11,822.51	3,860.64	291.79	3,858.68	0.96	0.74	-0.61
15,478.00	90.22	359.91	11,821.80	3,956.64	291.81	3,954.67	0.47	-0.42	-0.22
15,574.00	90.36	2.37	11,821.32	4,052.61	293.72	4,050.63	2.57	0.15	2.56
15,669.00	89.90	1.19	11,821.10	4,147.57	296.67	4,145.56	1.33	-0.48	-1.24
15,764.00	89.96	0.87	11,821.22	4,242.55	298.38	4,240.53	0.34	0.06	-0.34
15,860.00	90.68	1.19	11,820.68	4,338.53	300.11	4,336.50	0.82	0.75	0.33
15,955.00	87.42	359.84	11,822.26	4,433.50	300.96	4,431.46	3.71	-3.43	-1.42
16,051.00	87.01	359.54	11,826.92	4,529.39	300.44	4,527.35	0.53	-0.43	-0.31
16,146.00	86.82	359.40	11,832.03	4,624.24	299.56	4,622.21	0.25	-0.20	-0.15
16,242.00	87.38	358.85	11,836.89	4,720.11	298.10	4,718.08	0.82	0.58	-0.57
16,337.00	87.02	358.74	11,841.53	4,814.97	296.10	4,812.96	0.40	-0.38	-0.12
16,435.00	90.64	0.06	11,843.53	4,912.93	295.08	4,910.92	3.93	3.69	1.35
16,530.00	91.50	359.63	11,841.76	5,007.91	294.82	5,005.90	1.01	0.91	-0.45
16,625.00	91.65	358.77	11,839.15	5,102.87	293.50	5,100.86	0.92	0.16	-0.91
16,720.00	91.74	358.70	11,836.34	5,197.80	291.40	5,195.81	0.12	0.09	-0.07
16,816.00	92.16	358.97	11,833.07	5,293.73	289.45	5,291.75	0.52	0.44	0.28

ConocoPhillips

Survey Report

Company: ConocoPhillips MCBU - Permian-Panhandle Gold Data
Project: Planning - NM East State Zone - 3001
Site: ZIA HILLS 19 111H
Well: ZIA HILLS 19 111H
Wellbore: OH/ 64261 / 64341
Design: Surveys (Patterson 256)

Local Co-ordinate Reference: Well ZIA HILLS 19 111H
TVD Reference: RKB @ 3210.00ft (Patterson 256)
MD Reference: RKB @ 3210.00ft (Patterson 256)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDT 14 Central Planning

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,911.00	91.50	359.11	11,830.04	5,388.66	287.86	5,386.69	0.71	-0.69	0.15
17,007.00	92.24	359.10	11,826.90	5,484.60	286.36	5,482.64	0.77	0.77	-0.01
17,102.00	93.11	358.63	11,822.47	5,579.48	284.48	5,577.52	1.04	0.92	-0.49
17,198.00	93.95	358.50	11,816.56	5,675.26	282.08	5,673.32	0.89	0.88	-0.14
17,292.00	94.12	357.99	11,809.95	5,768.99	279.21	5,767.06	0.57	0.18	-0.54
17,388.00	94.92	357.93	11,802.38	5,864.63	275.80	5,862.72	0.84	0.83	-0.06
17,487.00	91.10	358.55	11,797.18	5,963.42	272.77	5,961.54	3.91	-3.86	0.63
17,583.00	88.26	0.02	11,797.72	6,059.40	271.57	6,057.52	3.33	-2.96	1.53
17,678.00	88.23	359.05	11,800.63	6,154.35	270.80	6,152.48	1.02	-0.03	-1.02
17,774.00	87.87	358.03	11,803.90	6,250.27	268.35	6,248.40	1.13	-0.38	-1.06
17,870.00	88.73	358.56	11,806.74	6,346.18	265.50	6,344.33	1.05	0.90	0.55
17,964.00	88.56	359.01	11,808.97	6,440.13	263.51	6,438.30	0.51	-0.18	0.48
18,060.00	87.76	358.37	11,812.05	6,536.06	261.31	6,534.23	1.07	-0.83	-0.67
18,156.00	90.50	0.86	11,813.51	6,632.03	260.67	6,630.20	3.86	2.85	2.59
18,251.00	90.74	359.80	11,812.48	6,727.02	261.22	6,725.19	1.14	0.25	-1.12
18,347.00	90.29	358.64	11,811.62	6,823.00	259.91	6,821.18	1.30	-0.47	-1.21
18,443.00	90.25	358.62	11,811.16	6,918.97	257.61	6,917.17	0.05	-0.04	-0.02
18,538.00	90.10	357.39	11,810.87	7,013.91	254.31	7,012.13	1.30	-0.16	-1.29
18,634.00	90.27	358.45	11,810.56	7,109.85	250.82	7,108.08	1.12	0.18	1.10
18,730.00	90.66	357.54	11,809.78	7,205.79	247.46	7,204.04	1.03	0.41	-0.95
18,821.00	90.64	358.71	11,808.75	7,296.73	244.49	7,295.00	1.29	-0.02	1.29
18,917.00	86.96	358.59	11,810.76	7,392.67	242.23	7,390.95	3.84	-3.83	-0.13
19,012.00	93.36	3.06	11,810.50	7,487.58	243.59	7,485.85	8.22	6.74	4.71
19,107.00	89.88	2.31	11,807.81	7,582.42	248.04	7,580.66	3.75	-3.66	-0.79
19,203.00	91.79	2.88	11,806.41	7,678.31	252.39	7,676.52	2.08	1.99	0.59
19,298.00	87.18	1.68	11,807.27	7,773.20	256.16	7,771.39	5.01	-4.85	-1.26
19,394.00	89.22	1.19	11,810.28	7,869.12	258.57	7,867.29	2.19	2.13	-0.51
19,490.00	92.39	358.62	11,808.93	7,965.09	258.41	7,963.26	4.25	3.30	-2.68
19,585.00	89.24	359.82	11,807.58	8,060.06	257.12	8,058.23	3.55	-3.32	1.26
19,681.00	89.88	359.45	11,808.32	8,156.05	256.50	8,154.23	0.77	0.67	-0.39
19,777.00	89.76	359.66	11,808.62	8,252.05	255.76	8,250.23	0.25	-0.13	0.22
19,872.00	91.36	357.15	11,807.69	8,347.00	253.12	8,345.19	3.13	1.68	-2.64
19,967.00	90.56	356.04	11,806.10	8,441.82	247.47	8,440.04	1.44	-0.84	-1.17
20,063.00	85.47	356.72	11,809.42	8,537.53	241.42	8,535.80	5.35	-5.30	0.71
20,174.00	87.74	359.75	11,816.00	8,648.27	238.01	8,646.55	3.41	2.05	2.73
20,269.00	88.95	2.63	11,818.74	8,743.19	239.98	8,741.46	3.29	1.27	3.03
20,364.00	90.31	2.35	11,819.36	8,838.10	244.11	8,836.34	1.46	1.43	-0.29
20,460.00	90.36	2.09	11,818.79	8,934.03	247.83	8,932.24	0.28	0.05	-0.27
20,555.00	90.18	0.87	11,818.35	9,028.99	250.28	9,027.19	1.30	-0.19	-1.28
20,651.00	89.76	0.97	11,818.40	9,124.98	251.82	9,123.16	0.45	-0.44	0.10
20,747.00	91.08	359.19	11,817.69	9,220.97	251.96	9,219.15	2.31	1.38	-1.85
20,842.00	90.36	358.60	11,816.50	9,315.95	250.12	9,314.14	0.98	-0.76	-0.62
20,938.00	90.02	358.35	11,816.18	9,411.91	247.57	9,410.12	0.44	-0.35	-0.26

ConocoPhillips

Survey Report

Company: ConocoPhillips MCBU - Permian-Panhandle Gold Data
Project: Planning - NM East State Zone - 3001
Site: ZIA HILLS 19 111H
Well: ZIA HILLS 19 111H
Wellbore: OH/ 64261 / 64341
Design: Surveys (Patterson 256)

Local Co-ordinate Reference: Well ZIA HILLS 19 111H
TVD Reference: RKB @ 3210.00ft (Patterson 256)
MD Reference: RKB @ 3210.00ft (Patterson 256)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDT 14 Central Planning

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
21,033.00	90.28	359.78	11,815.93	9,506.89	246.02	9,505.11	1.53	0.27	1.51
21,129.00	90.28	359.58	11,815.46	9,602.89	245.48	9,601.11	0.21	0.00	-0.21
21,224.00	88.87	358.97	11,816.17	9,697.88	244.28	9,696.10	1.62	-1.48	-0.64
21,319.00	89.93	358.63	11,817.16	9,792.85	242.29	9,791.08	1.17	1.12	-0.36
21,415.00	91.50	358.99	11,815.96	9,888.82	240.30	9,887.06	1.68	1.64	0.38
21,510.00	91.57	359.02	11,813.42	9,983.77	238.65	9,982.02	0.08	0.07	0.03
21,606.00	91.89	359.39	11,810.52	10,079.72	237.32	10,077.98	0.51	0.33	0.39
21,701.00	89.98	359.34	11,808.97	10,174.70	236.26	10,172.96	2.01	-2.01	-0.05
21,796.00	91.04	0.22	11,808.13	10,269.69	235.90	10,267.95	1.45	1.12	0.93
21,890.00	91.56	2.17	11,805.99	10,363.64	237.86	10,361.89	2.15	0.55	2.07
21,955.00	88.29	0.16	11,806.08	10,428.61	239.18	10,426.85	5.90	-5.03	-3.09
Final Phoenix MWD Survey									
21,990.00	88.29	0.16	11,807.12	10,463.60	239.28	10,461.83	0.00	0.00	0.00
Projection to TD									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,400.20	2,399.68	4 1/2" x 5"	10-3/4	14-3/4
9,400.00	9,380.38	4 1/2" x 5"	8-5/8	10-5/8
22,073.75		4 1/2" x 5"	5-1/2	7-7/8

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
1,062.50	1,062.19	-3.51	-8.71	Tie In
1,253.00	1,252.59	-4.46	-14.20	First Phoenix MWD Survey
21,955.00	11,806.08	10,428.61	239.18	Final Phoenix MWD Survey
21,990.00	11,807.12	10,463.60	239.28	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	3 Pool Name
4 Property Code	5 Property Name	6 Well Number
7 UGRID No.	8 Operator Name	9 Elevation

"Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	19	26S	32E		2498	NORTH	1666	WEST	LEA

"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
K	7	26S	32E		2618	SOUTH	1980	WEST	LEA
10 Dedicated Acres	11 Jolt or Infill	12 Consolidation Code	13 Order No.						
320									

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.

