DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

"AS DRILLED PLAT"

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-35109	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
305236	HEATON COM A	100S

[7] OGRID No.	[8] Operator Name	[9] Elevation
217817	CONOCOPHILLIPS COMPANY	5920

[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
C	30	31 N	11 W		481	NORTH	1693	WEST	SAN JUAN

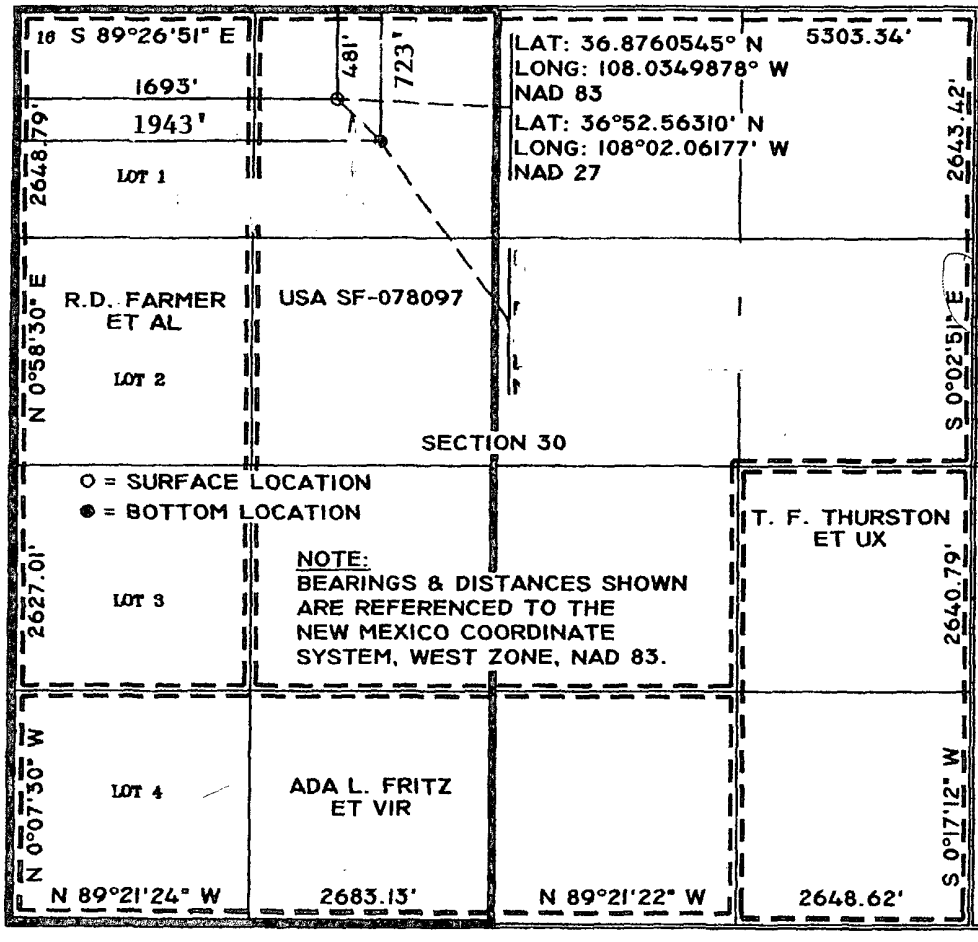
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	30	31 N	11 W		723	NORTH	1943	WEST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
323.4 (W/2)			

RCVD APR 25 '11
OIL CONS. DIV.
DIST. 3

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



[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: 4/18/11

Dollie L. Busse

Printed Name

[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.

5/07/09

Date of Survey

Signature and Seal of Professional Surveyor:

MARSHALL W. LINDEEN
NEW MEXICO
8-26-09
LICENSED PROFESSIONAL SURVEYOR

17078

Certificate Number

COP Deviation Report ConocoPhillips **API: 3004535109**

RCVD APR 25 '11
OIL CONS. DIV.
DIST. 3

Legal WellName : HEATON COM A #100S	**API / UWI:** 3004535109
Operator: CONOCOPHILLIPS COMPANY	**Surf Loc:** 030-031N-011W-C
St/Prov: NEW MEXICO	**N/S Dist (ft):** 481.00 - FNL
County: SAN JUAN	**E/W Dist (ft):** 1,693.00 - FWL

Wellbore Name : Original Hole

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
INCLINATION SURVEY	11/22/2010	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
11/22/2010	112.00	.75	.00	Inc-Drop	MO-TE DRILLING INC
11/22/2010	232.00	.50	.00	Inc-Drop	MO-TE DRILLING INC

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
MWD SURVEY	01/07/2011	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
01/07/2011	280.00	.17	228.19	IncAzi-MWD	Scientific Drilling
01/07/2011	311.00	.14	225.95	IncAzi-MWD	Scientific Drilling
01/07/2011	342.00	.54	130.35	IncAzi-MWD	Scientific Drilling
01/07/2011	373.00	1.90	125.35	IncAzi-MWD	Scientific Drilling
01/07/2011	404.00	3.28	126.28	IncAzi-MWD	Scientific Drilling
01/07/2011	434.00	4.65	128.52	IncAzi-MWD	Scientific Drilling
01/07/2011	465.00	5.87	127.17	IncAzi-MWD	Scientific Drilling
01/07/2011	496.00	7.27	126.37	IncAzi-MWD	Scientific Drilling
01/07/2011	526.00	8.41	131.20	IncAzi-MWD	Scientific Drilling
01/07/2011	588.00	10.82	138.61	IncAzi-MWD	Scientific Drilling
01/07/2011	649.00	12.44	131.07	IncAzi-MWD	Scientific Drilling
01/07/2011	740.00	16.75	129.18	IncAzi-MWD	Scientific Drilling
01/07/2011	802.00	20.13	131.87	IncAzi-MWD	Scientific Drilling
01/07/2011	863.00	20.93	133.58	IncAzi-MWD	Scientific Drilling
01/07/2011	925.00	18.97	135.22	IncAzi-MWD	Scientific Drilling
01/07/2011	987.00	18.48	135.21	IncAzi-MWD	Scientific Drilling
01/07/2011	1,048.00	19.35	135.31	IncAzi-MWD	Scientific Drilling
01/07/2011	1,112.00	21.31	132.15	IncAzi-MWD	Scientific Drilling
01/07/2011	1,179.00	21.31	132.15	IncAzi-MWD	Scientific Drilling
01/07/2011	1,207.00	21.42	132.72	IncAzi-MWD	Scientific Drilling
01/07/2011	1,239.00	21.84	134.13	IncAzi-MWD	Scientific Drilling
01/07/2011	1,270.00	20.72	136.53	IncAzi-MWD	Scientific Drilling
01/07/2011	1,334.00	18.07	142.56	IncAzi-MWD	Scientific Drilling
01/07/2011	1,398.00	16.26	143.66	IncAzi-MWD	Scientific Drilling
01/07/2011	1,461.00	13.72	146.08	IncAzi-MWD	Scientific Drilling
01/08/2011	1,525.00	11.89	139.94	IncAzi-MWD	Scientific Drilling
01/08/2011	1,588.00	9.82	130.41	IncAzi-MWD	Scientific Drilling

01/08/2011	1,651.00	7.70	121.29	IncAzi-MWD	Scientific Drilling
01/08/2011	1,715.00	5.18	126.11	IncAzi-MWD	Scientific Drilling
01/08/2011	1,778.00	3.63	138.94	IncAzi-MWD	Scientific Drilling
01/08/2011	1,841.00	1.54	162.58	IncAzi-MWD	Scientific Drilling
01/08/2011	1,904.00	.44	5.70	IncAzi-MWD	Scientific Drilling
01/08/2011	1,968.00	1.25	358.82	IncAzi-MWD	Scientific Drilling
01/08/2011	2,032.00	1.47	359.71	IncAzi-MWD	Scientific Drilling
01/08/2011	2,095.00	1.55	353.38	IncAzi-MWD	Scientific Drilling
01/08/2011	2,158.00	1.36	350.57	IncAzi-MWD	Scientific Drilling
01/08/2011	2,221.00	.94	355.15	IncAzi-MWD	Scientific Drilling
01/08/2011	2,285.00	.69	34.68	IncAzi-MWD	Scientific Drilling
01/08/2011	2,348.00	.64	101.31	IncAzi-MWD	Scientific Drilling
01/08/2011	2,411.00	.91	108.85	IncAzi-MWD	Scientific Drilling
01/08/2011	2,475.00	1.53	151.66	IncAzi-MWD	Scientific Drilling
01/08/2011	2,539.00	1.41	163.09	IncAzi-MWD	Scientific Drilling
01/09/2011	2,621.00	1.69	172.40	IncAzi-MWD	Scientific Drilling
01/09/2011	2,675.00	1.69	172.40	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I, acting in my capacity as DRILLING ENGINEER for ConocoPhillips Company am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

Subscribed and sworn to me this April 20, 2011

Notary Public in and for San Juan County, New Mexico

My Commission expires AUGUST 6, 2014

ConocoPhillips

ConocoPhillips

SJB (NM West)
SEC 30-T31N-R11W
Heaton Com A #100S
API 30-045-35109
Original Hole

Survey: Actual

Standard Survey Report

08 February, 2011

This survey is correct to the best of my knowledge and is supported by actual field data.

Notarized this date 8th of February, 2011.

Notary Signature
County of Midland
State of Texas

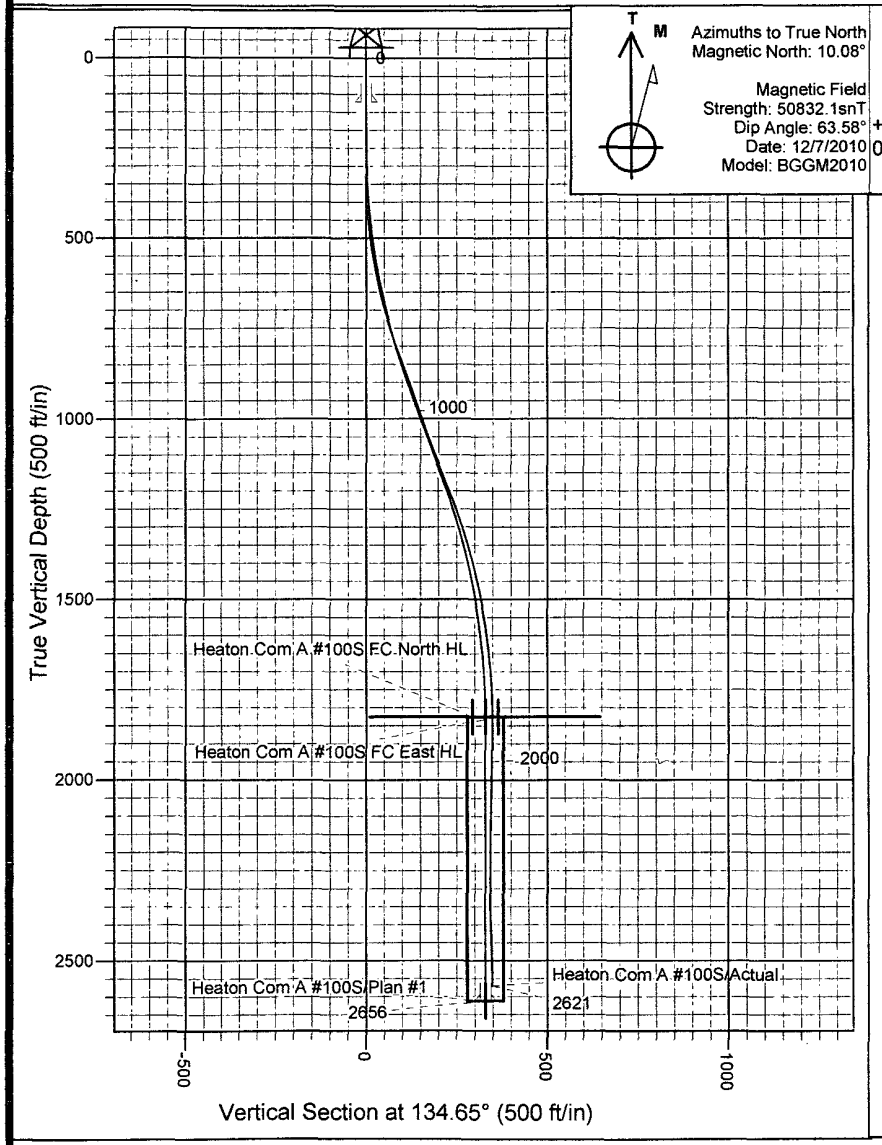
NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

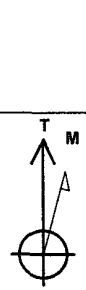
Scientific Drilling
Directional Drilling Operations

Scientific Drilling
Directional Drilling Operations

Project: SJB (NM West)
Site: SEC 30-T31N-R11W
Well: Heaton Com A #100S
Wellbore: Original Hole
Design: Plan #1

ConocoPhillips



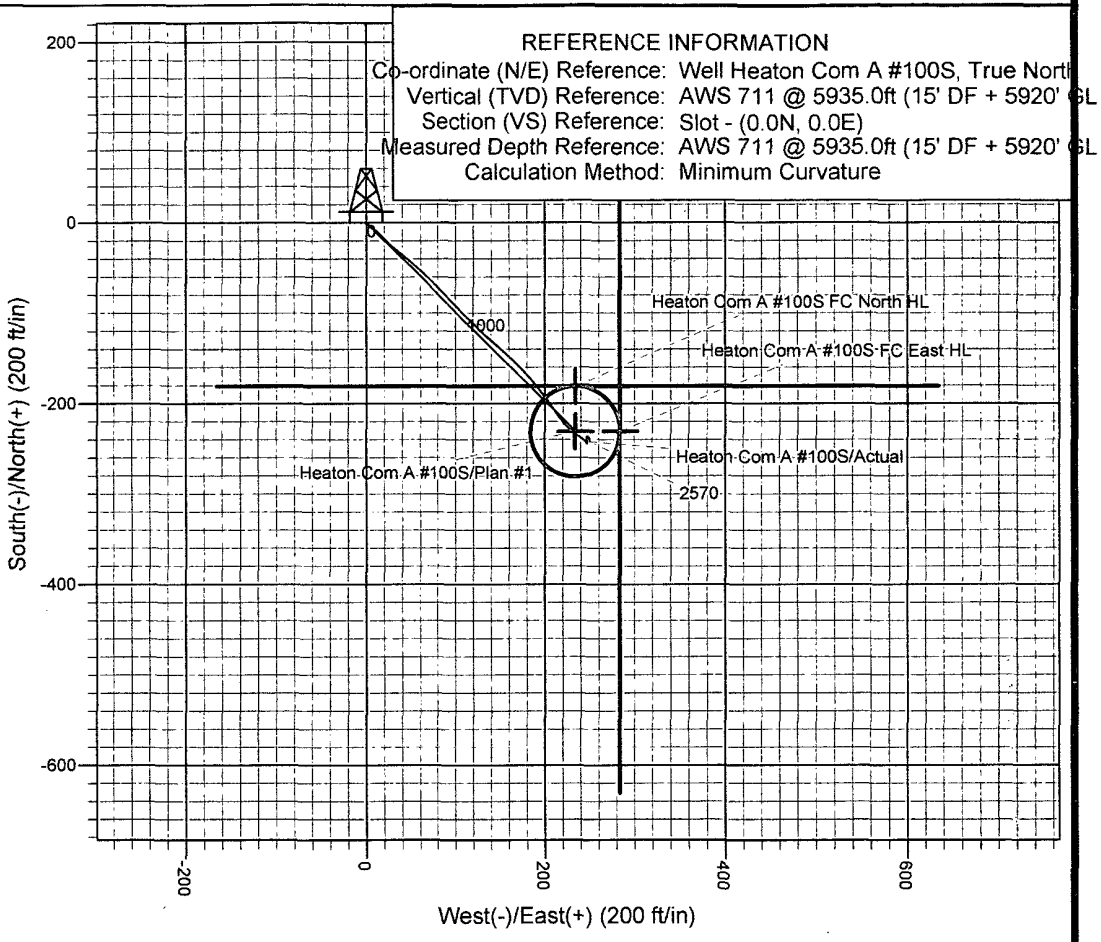


Azimuths to True North
Magnetic North: 10.08°

Magnetic Field
Strength: 50832.1snT
Dip Angle: 63.58°
Date: 12/7/2010
Model: BGGM2010

WELL DETAILS: Heaton Com A #100S
AWS 711 @ 5935.0ft (15' DF + 5920' GL)
Ground Level: 5920.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	2138207.36	441201.14	36° 52' 33.786 N	108° 2' 3.706 W	



REFERENCE INFORMATION
Co-ordinate (N/E) Reference: Well Heaton Com A #100S, True North
Vertical (TVD) Reference: AWS 711 @ 5935.0ft (15' DF + 5920' GL
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: AWS 711 @ 5935.0ft (15' DF + 5920' GL
Calculation Method: Minimum Curvature

COMPANY DETAILS: ConocoPhillips
Calculation Method: Minimum Curvature
Error System: ISCWSA
Scan Method: Closest Approach 3D
Error Surface: Combined Covariances
Warning Method: Risk Ratio

PROJECT DETAILS: SJB (NM West)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

SITE DETAILS: SEC 30-T31N-R11W
San Juan County NM
Site Centre Latitude: 36° 52' 33.786 N
Longitude: 108° 2' 3.706 W
Positional Uncertainity: 7.5
Convergence: -0.12
Local North: True

Company:	ConocoPhillips	**Local Co-ordinate Reference:**	Well Heaton Com A #100S
Project:	SJB (NM West)	**TVD Reference:**	AWS 711 @ 5935.0ft (15' DF + 5920' GL)
Site:	SEC 30-T31N-R11W	**MD Reference:**	AWS 711 @ 5935.0ft (15' DF + 5920' GL)
Well:	Heaton Com A #100S	**North Reference:**	True
Wellbore:	Original Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Hole	**Database:**	edmCOP

Project	SJB (NM West), New Mexico, S-Type MV/DK Wells		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		Using Well Reference Point
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	SEC 30-T31N-R11W				
Site Position:		**Northing:**	2,138,207.36 ft	**Latitude:**	36° 52' 33.786 N
From:	Lat/Long	**Easting:**	441,201.14 ft	**Longitude:**	108° 2' 3.706 W
Position Uncertainty:	15.0 ft	**Slot Radius:**	4-3/8"	**Grid Convergence:**	-0.12 °

Well	Heaton Com A #100S, FC Nudge					
Well Position	**+N/-S**	0.0 ft	**Northing:**	2,138,207.36 ft	**Latitude:**	36° 52' 33.786 N
	+E/-W	0.0 ft	**Easting:**	441,201.14 ft	**Longitude:**	108° 2' 3.706 W
Position Uncertainty		3.5 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,920.0 ft

Wellbore	Original Hole				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2010	12/7/2010	10.08	63.58	50,832

Design	Original Hole				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.0	0.0	0.0	134.02

Survey Program **Date** 2/8/2011

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
280.0	2,621.0	Actual (Original Hole)	MWD SDI	MWD - Standard ver 1.0.1

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)**
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.17	228.19	280.0	-0.3	-0.3	0.0	0.06	0.06	0.00
311.0	0.14	225.95	311.0	-0.3	-0.4	0.0	0.10	-0.10	-7.23
342.0	0.54	130.35	342.0	-0.5	-0.3	0.1	1.84	1.29	-308.39
373.0	1.90	125.35	373.0	-0.8	0.2	0.8	4.40	4.39	-16.13
404.0	3.28	126.28	404.0	-1.7	1.4	2.2	4.45	4.45	3.00
434.0	4.65	128.52	433.9	-2.9	3.0	4.2	4.59	4.57	7.47
465.0	5.87	127.17	464.8	-4.7	5.3	7.0	3.96	3.94	-4.35
496.0	7.27	126.37	495.6	-6.8	8.1	10.6	4.53	4.52	-2.58
526.0	8.41	131.20	525.3	-9.4	11.3	14.6	4.39	3.80	16.10
588.0	10.82	138.61	586.4	-16.7	18.5	25.0	4.36	3.89	11.95
649.0	12.44	131.07	646.1	-25.3	27.3	37.2	3.64	2.66	-12.36
740.0	16.75	129.18	734.2	-40.1	44.9	60.1	4.76	4.74	-2.08

Company:	ConocoPhillips	**Local Co-ordinate Reference:**	Well Heaton Com A #100S
Project:	SJB (NM West)	**TVD Reference:**	AWS 711 @ 5935.0ft (15' DF + 5920' GL)
Site:	SEC 30-T31N-R11W	**MD Reference:**	AWS 711 @ 5935.0ft (15' DF + 5920' GL)
Well:	Heaton Com A #100S	**North Reference:**	True
Wellbore:	Original Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Hole	**Database:**	edmCOP

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)
802.0	20.13	131.87	793.0	-52.8	59.7	79.7	5.62	5.45	4.34
863.0	20.93	133.58	850.1	-67.3	75.4	101.0	1.64	1.31	2.80
925.0	18.97	135.22	908.4	-82.1	90.6	122.2	3.29	-3.16	2.65
987.0	18.48	135.21	967.1	-96.3	104.6	142.1	0.79	-0.79	-0.02
1,048.0	19.35	135.31	1,024.8	-110.3	118.5	161.9	1.43	1.43	0.16
1,112.0	21.31	132.15	1,084.8	-125.7	134.6	184.1	3.51	3.06	-4.94
1,179.0	21.31	132.15	1,147.3	-142.0	152.6	208.4	0.00	0.00	0.00
1,207.0	21.42	132.72	1,173.3	-148.9	160.2	218.6	0.84	0.39	2.04
1,239.0	21.84	134.13	1,203.1	-157.0	168.7	230.4	2.09	1.31	4.41
1,270.0	20.72	136.53	1,232.0	-165.0	176.6	241.7	4.58	-3.61	7.74
1,334.0	18.07	142.56	1,292.3	-181.1	190.5	262.8	5.18	-4.14	9.42
1,398.0	16.26	143.66	1,353.5	-196.2	201.8	281.4	2.87	-2.83	1.72
1,461.0	13.72	146.08	1,414.3	-209.5	211.2	297.5	4.15	-4.03	3.84
1,525.0	11.89	139.94	1,476.7	-220.8	219.7	311.4	3.56	-2.86	-9.59
1,588.0	9.82	130.41	1,538.6	-229.3	228.0	323.3	4.34	-3.29	-15.13
1,651.0	7.70	121.29	1,600.9	-235.0	235.7	332.7	4.01	-3.37	-14.48
1,715.0	5.18	126.11	1,664.5	-238.9	241.7	339.8	4.02	-3.94	7.53
1,778.0	3.63	138.94	1,727.3	-242.1	245.3	344.6	2.90	-2.46	20.37
1,841.0	1.54	162.58	1,790.2	-244.4	246.8	347.3	3.66	-3.32	37.52
1,904.0	0.44	5.70	1,853.2	-245.0	247.1	347.9	3.10	-1.75	-249.02
1,968.0	1.25	358.82	1,917.2	-244.0	247.1	347.3	1.27	1.27	-10.75
2,032.0	1.47	359.71	1,981.2	-242.5	247.1	346.2	0.35	0.34	1.39
2,095.0	1.55	353.38	2,044.2	-240.8	247.0	345.0	0.29	0.13	-10.05
2,158.0	1.36	350.57	2,107.1	-239.3	246.8	343.7	0.32	-0.30	-4.46
2,221.0	0.94	355.15	2,170.1	-238.0	246.6	342.7	0.68	-0.67	7.27
2,285.0	0.69	34.68	2,234.1	-237.2	246.8	342.3	0.94	-0.39	61.77
2,348.0	0.64	101.31	2,297.1	-236.9	247.3	342.5	1.16	-0.08	105.76
2,411.0	0.91	108.85	2,360.1	-237.1	248.2	343.2	0.46	0.43	11.97
2,475.0	1.53	151.66	2,424.1	-238.1	249.0	344.5	1.66	0.97	66.89
2,539.0	1.41	163.09	2,488.1	-239.6	249.7	346.0	0.49	-0.19	17.86
2,621.0	1.69	172.40	2,570.1	-241.7	250.1	347.9	0.46	0.34	11.35