

Burnett Oil Company

Well: Partition Federal Well No. 4H
 Site: Partition Federal
 Project: Eddy County, New Mexico
 Design: rev5
 Rig:

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5322.39	0.00	0.00	5322.39	0.00	0.00	0.00	0.00	0.00	KOP Begin 10°/100' build
3	6242.40	92.00	1.93	5895.00	592.63	19.99	10.00	1.93	592.97	Begin 92.00° lateral
4	10695.02	92.00	1.93	5739.50	5040.00	189.98	0.00	0.00	5042.87	PBHL/TD

Approx Surf Loc RKB Elevation: RKB @ 3903.00usft
 US State Plane 1927 (Exact solution)
 New Mexico East 3001

Northing 664994.97 Easting 655728.39 Latitude 32.82713128 Longitude -103.82637425

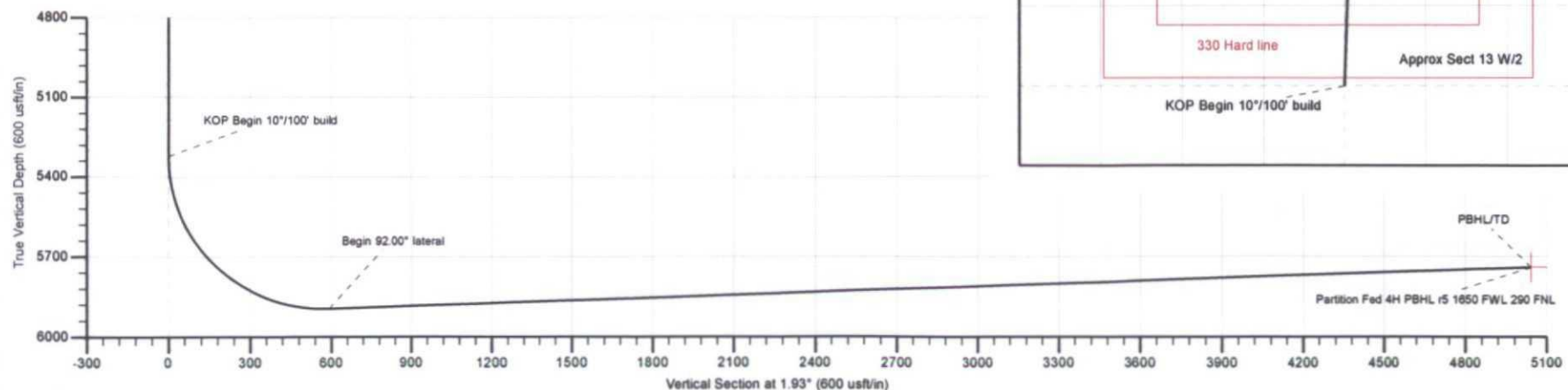
Total Correction (M => G) To convert a Magnetic Direction to a Grid Direction, Add 7.13°

COKER
 DIRECTIONAL

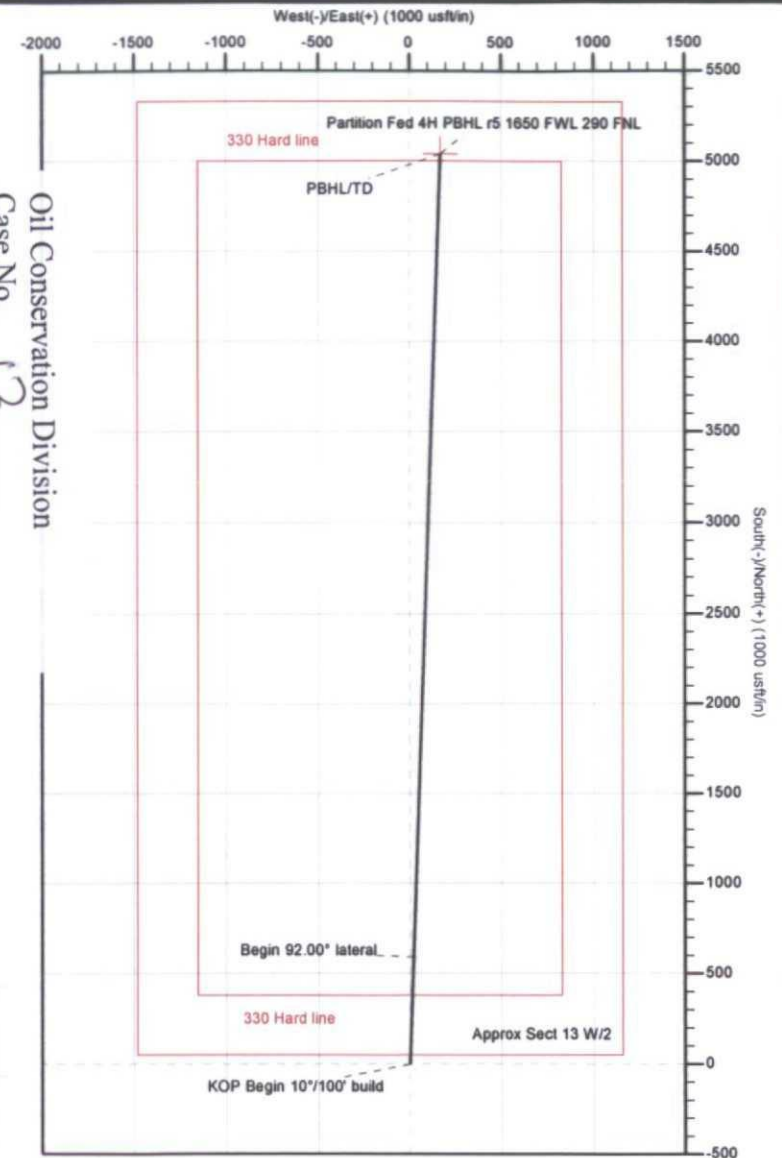


Azimuths to Grid North
 True North: -0.28°
 Magnetic North: 7.13°

Magnetic Field
 Strength: 48666.6snT
 Dip Angle: 60.63°
 Date: 4/5/2014
 Model: IGRF2010



Oil Conservation Division
 Case No. 13
 Exhibit No. 13



Standard_report

Company:	Burnett Oil Company	Local Co-ordinate Reference:	Well Partition Federal Well No. 4H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3903.00usft
Site:	Partition Federal	MD Reference:	RKB @ 3903.00usft
Well:	Partition Federal Well No. 4H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	rev5	Database:	EDM 5000.1 Ddatabase

Project	Eddy County, New Mexico		
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	Partition Federal		
Site Position:		Northing:	665,474.97 usft
From:	Map	Easting:	654,678.37 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.82846442
		Longitude:	-103.82978493
		Grid Convergence:	0.27 °

Well	Partition Federal Well No. 4H, Approx Surf loc 1480 FWL 50 FNL Sect 24 (assume reg section)		
Well Position	+N-S	0.00 usft	Northing: 664,994.97 usft
	+E-W	0.00 usft	Easting: 655,728.39 usft
Position Uncertainty		0.00 usft	Wellhead Elevation: usft
			Latitude: 32.82713128
			Longitude: -103.82637425
			Ground Level: 3,903.00 usft

Wellbore	Original hole		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	4/5/2014	7.40
			Dip Angle (°) 60.63
			Field Strength (nT) 48,667

Design	rev5		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction (°) 1.93

Survey Tool Program	Date 10/2/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.00	10,695.00	rev5 (Original hole)	MWD
			Description MWD - Standard

Standard_report

Company:	Burnett Oil Company	Local Co-ordinate Reference:	Well Partition Federal Well No. 4H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3903.00usft
Site:	Partition Federal	MD Reference:	RKB @ 3903.00usft
Well:	Partition Federal Well No. 4H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	rev5	Database:	EDM 5000.1 Ddatabase

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		

Standard_report

Company: Burnett Oil Company				Local Co-ordinate Reference:				Well Partition Federal Well No. 4H			
Project: Eddy County, New Mexico				TVD Reference:				RKB @ 3903.00usft			
Site: Partition Federal				MD Reference:				RKB @ 3903.00usft			
Well: Partition Federal Well No. 4H				North Reference:				Grid			
Wellbore: Original hole				Survey Calculation Method:				Minimum Curvature			
Design: rev5				Database:				EDM 5000.1 Ddatabase			

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)		
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	664,994.97	655,728.39		

Standard_report

Company:

Project:

Site:

Well:

Wellbore:

Design:

Burnett Oil Company

Eddy County, New Mexico

Partition Federal

Partition Federal Well No. 4H

Original hole

rev5

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well Partition Federal Well No. 4H

RKB @ 3903.00usft

RKB @ 3903.00usft

Grid

Minimum Curvature

EDM 5000.1 Database

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
5,322.39	0.00	0.00	5,322.39	0.00	0.00	0.00	0.00	664,994.97	655,728.39
KOP Begin 10°/100' build									
5,400.00	7.76	1.93	5,399.76	5.25	0.18	10.00	5.25	665,000.21	655,728.56
5,500.00	17.76	1.93	5,497.17	27.29	0.92	10.00	27.31	665,022.26	655,729.31
5,600.00	27.76	1.93	5,589.26	65.91	2.22	10.00	65.95	665,060.88	655,730.61
5,700.00	37.76	1.93	5,673.25	119.93	4.04	10.00	119.99	665,114.89	655,732.43
5,800.00	47.76	1.93	5,746.58	187.69	6.33	10.00	187.80	665,182.66	655,734.72
5,900.00	57.76	1.93	5,807.02	267.16	9.01	10.00	267.31	665,262.13	655,737.40
6,000.00	67.76	1.93	5,852.73	355.91	12.00	10.00	356.11	665,350.87	655,740.39
6,100.00	77.76	1.93	5,882.33	451.24	15.22	10.00	451.50	665,446.21	655,743.61
6,200.00	87.76	1.93	5,894.91	550.26	18.56	10.00	550.57	665,545.23	655,746.95
6,242.40	92.00	1.93	5,895.00	592.63	19.99	10.00	592.97	665,587.60	655,748.38
Begin 92.00° lateral									
6,300.00	92.00	1.93	5,892.99	650.16	21.93	0.00	650.53	665,645.12	655,750.32
6,400.00	92.00	1.93	5,889.49	750.04	25.30	0.00	750.47	665,745.01	655,753.68
6,500.00	92.00	1.93	5,886.00	848.92	28.66	0.00	850.41	665,844.89	655,757.05
6,600.00	92.00	1.93	5,882.51	948.81	32.03	0.00	850.35	665,944.77	655,760.42
6,700.00	92.00	1.93	5,879.02	1,048.69	35.40	0.00	1,050.28	666,044.65	655,763.79
6,800.00	92.00	1.93	5,875.53	1,148.57	38.77	0.00	1,150.22	666,144.54	655,767.16
6,900.00	92.00	1.93	5,872.03	1,248.45	42.14	0.00	1,250.16	666,244.42	655,770.53
7,000.00	92.00	1.93	5,868.54	1,348.33	45.51	0.00	1,350.10	666,344.30	655,773.90
7,100.00	92.00	1.93	5,865.05	1,448.22	48.88	0.00	1,450.04	666,444.18	655,777.27
7,200.00	92.00	1.93	5,861.56	1,548.10	52.25	0.00	1,549.98	666,544.06	655,780.63
7,300.00	92.00	1.93	5,858.06	1,648.98	55.61	0.00	1,649.92	666,643.95	655,784.00
7,400.00	92.00	1.93	5,854.57	1,748.86	58.98	0.00	1,749.86	666,743.83	655,787.37
7,500.00	92.00	1.93	5,851.08	1,848.75	62.35	0.00	1,849.80	666,843.71	655,790.74
7,600.00	92.00	1.93	5,847.59	1,948.63	65.72	0.00	1,949.74	666,943.59	655,794.11

Standard_report

Company:	Burnett Oil Company	Local Co-ordinate Reference:	Well Partition Federal Well No. 4H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3903.00usft
Site:	Partition Federal	MD Reference:	RKB @ 3903.00usft
Well:	Partition Federal Well No. 4H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	rev5	Database:	EDM 5000.1 Ddatabase

Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
7,700.00	92.00	1.93	5,844.09	2,048.51	69.09	0.00	2,049.67	667,043.48	655,797.48	
7,800.00	92.00	1.93	5,840.60	2,148.39	72.46	0.00	2,149.61	667,143.36	655,800.85	
7,900.00	92.00	1.93	5,837.11	2,248.27	75.83	0.00	2,249.55	667,243.24	655,804.21	
8,000.00	92.00	1.93	5,833.62	2,348.16	79.20	0.00	2,349.49	667,343.12	655,807.58	
8,100.00	92.00	1.93	5,830.13	2,448.04	82.56	0.00	2,449.43	667,443.00	655,810.95	
8,200.00	92.00	1.93	5,826.63	2,547.92	85.93	0.00	2,549.37	667,542.89	655,814.32	
8,300.00	92.00	1.93	5,823.14	2,647.80	89.30	0.00	2,649.31	667,642.77	655,817.69	
8,400.00	92.00	1.93	5,819.65	2,747.69	92.67	0.00	2,749.25	667,742.65	655,821.06	
8,500.00	92.00	1.93	5,816.16	2,847.57	96.04	0.00	2,849.19	667,842.53	655,824.43	
8,600.00	92.00	1.93	5,812.66	2,947.45	99.41	0.00	2,949.13	667,942.42	655,827.80	
8,700.00	92.00	1.93	5,809.17	3,047.33	102.78	0.00	3,049.06	668,042.30	655,831.16	
8,800.00	92.00	1.93	5,805.68	3,147.21	106.14	0.00	3,149.00	668,142.18	655,834.53	
8,900.00	92.00	1.93	5,802.19	3,247.10	109.51	0.00	3,248.94	668,242.06	655,837.90	
9,000.00	92.00	1.93	5,798.70	3,346.98	112.88	0.00	3,348.88	668,341.94	655,841.27	
9,100.00	92.00	1.93	5,795.20	3,446.86	116.25	0.00	3,448.82	668,441.83	655,844.64	
9,200.00	92.00	1.93	5,791.71	3,546.74	119.62	0.00	3,548.76	668,541.71	655,848.01	
9,300.00	92.00	1.93	5,788.22	3,646.63	122.99	0.00	3,648.70	668,641.59	655,851.38	
9,400.00	92.00	1.93	5,784.73	3,746.51	126.36	0.00	3,748.64	668,741.47	655,854.74	
9,500.00	92.00	1.93	5,781.23	3,846.39	129.73	0.00	3,848.58	668,841.36	655,858.11	
9,600.00	92.00	1.93	5,777.74	3,946.27	133.09	0.00	3,948.52	668,941.24	655,861.48	
9,700.00	92.00	1.93	5,774.25	4,046.15	136.46	0.00	4,048.45	669,041.12	655,864.85	
9,800.00	92.00	1.93	5,770.76	4,146.04	139.83	0.00	4,148.39	669,141.00	655,868.22	
9,900.00	92.00	1.93	5,767.26	4,245.92	143.20	0.00	4,248.33	669,240.88	655,871.59	
10,000.00	92.00	1.93	5,763.77	4,345.80	146.57	0.00	4,348.27	669,340.77	655,874.96	
10,100.00	92.00	1.93	5,760.28	4,445.68	149.94	0.00	4,448.21	669,440.65	655,878.33	
10,200.00	92.00	1.93	5,756.79	4,545.57	153.31	0.00	4,548.15	669,540.53	655,881.69	
10,300.00	92.00	1.93	5,753.30	4,645.45	156.67	0.00	4,648.09	669,640.41	655,885.06	

Standard_report

Company:	Burnett Oil Company	Local Co-ordinate Reference:	Well Partition Federal Well No. 4H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3903.00usft
Site:	Partition Federal	MD Reference:	RKB @ 3903.00usft
Well:	Partition Federal Well No. 4H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	rev5	Database:	EDM 5000.1 Ddatabase

Planned Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
10,400.00	92.00	1.93	5,749.80	4,745.33	160.04	0.00	4,748.03	669,740.30	655,888.43
10,500.00	92.00	1.93	5,746.31	4,845.21	163.41	0.00	4,847.97	669,840.18	655,891.80
10,600.00	92.00	1.93	5,742.82	4,945.09	166.78	0.00	4,947.91	669,940.06	655,895.17
10,695.02	92.00	1.93	5,739.50	5,040.00	169.98	0.00	5,042.87	670,034.97	655,898.37
PBHL/TD									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,322.39	5,322.39	0.00	0.00	KOP Begin 10"/100' build
6,242.40	5,895.00	592.63	19.99	Begin 92.00" lateral
10,695.02	5,739.50	5,040.00	169.98	PBHL/TD