



McElvain Energy, Inc.

Sec. 29 T18S R34E

EK 29 Federal Com

EK 29 BS2 Fed Com 2H - Slot WCD 2H

Wellbore #1

Plan: Design #1 15Dec15 kjs

HOBBS OCD
MAR 09 2017
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Standard Planning Report - Geographic

22 December, 2015



Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well EK 29 BS2 Fed Com 2H - Slot WCD 2H
Company:	McElvain Energy, Inc.	TVD Reference:	WELL @ 4070.0usft (Original Well Elev)
Project:	Sec. 29 T18S R34E	MD Reference:	WELL @ 4070.0usft (Original Well Elev)
Site:	EK 29 Federal Com	North Reference:	True
Well:	EK 29 BS2 Fed Com 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 15Dec15 kjs		

Project	Sec. 29 T18S R34E		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	EK 29 Federal Com			
Site Position:		Northing:	628,457.30 usft	Latitude: 32° 43' 31.429 N
From:	Map	Easting:	773,430.60 usft	Longitude: 103° 34' 43.046 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.41 °

Well	EK 29 BS2 Fed Com 2H - Slot WCD 2H			
Well Position	+N/-S	0.0 usft	Northing:	628,457.30 usft
	+E/-W	0.0 usft	Easting:	773,430.60 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level: 4,050.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/15/15	7.07	60.53	48,461

Design	Design #1 15Dec15 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	180.00

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,182.2	4.23	292.56	2,182.0	4.0	-9.6	1.50	1.50	0.00	292.56	
9,456.3	4.23	292.56	9,436.2	210.0	-505.5	0.00	0.00	0.00	0.00	
10,070.2	72.00	180.00	9,903.3	-120.0	-529.9	12.00	11.04	-18.34	-113.76	
10,206.8	88.40	180.00	9,926.5	-254.2	-529.9	12.00	12.00	0.00	0.00	
14,794.5	88.40	180.00	10,055.0	-4,840.1	-529.9	0.00	0.00	0.00	0.00	EK 29 BS2 Fed Com



Planning Report - Geographic

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Project: Sec. 29 T18S R34E
Site: EK 29 Federal Com
Well: EK 29 BS2 Fed Com 2H
Wellbore: Wellbore #1
Design: Design #1 15Dec15 kjs

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well EK 29 BS2 Fed Com 2H - Slot WCD 2H
WELL @ 4070.0usft (Original Well Elev)
WELL @ 4070.0usft (Original Well Elev)
True
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
200.0	0.00	0.00	200.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
400.0	0.00	0.00	400.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
600.0	0.00	0.00	600.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
800.0	0.00	0.00	800.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
1,870.0	0.00	0.00	1,870.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
Rustler									
1,900.0	0.00	0.00	1,900.0	0.0	0.0	628,457.30	773,430.60	32° 43' 31.429 N	103° 34' 43.046 W
Start Build 1.50									
1,930.0	0.45	292.56	1,930.0	0.0	-0.1	628,457.35	773,430.49	32° 43' 31.429 N	103° 34' 43.047 W
Salt									
2,000.0	1.50	292.56	2,000.0	0.5	-1.2	628,457.80	773,429.38	32° 43' 31.434 N	103° 34' 43.060 W
2,182.2	4.23	292.56	2,181.9	4.0	-9.6	628,461.23	773,420.95	32° 43' 31.468 N	103° 34' 43.159 W
Hold 4.23 Inc, 292.56 Az									
2,200.0	4.23	292.56	2,199.7	4.5	-10.8	628,461.73	773,419.73	32° 43' 31.473 N	103° 34' 43.173 W
2,400.0	4.23	292.56	2,399.1	10.2	-24.5	628,467.29	773,406.05	32° 43' 31.529 N	103° 34' 43.333 W
2,600.0	4.23	292.56	2,598.6	15.8	-38.1	628,472.86	773,392.38	32° 43' 31.585 N	103° 34' 43.492 W
2,800.0	4.23	292.56	2,798.1	21.5	-51.7	628,478.43	773,378.71	32° 43' 31.641 N	103° 34' 43.652 W
3,000.0	4.23	292.56	2,997.5	27.2	-65.4	628,483.99	773,365.03	32° 43' 31.697 N	103° 34' 43.811 W
3,200.0	4.23	292.56	3,197.0	32.8	-79.0	628,489.56	773,351.36	32° 43' 31.753 N	103° 34' 43.971 W
3,400.0	4.23	292.56	3,396.4	38.5	-92.6	628,495.13	773,337.68	32° 43' 31.809 N	103° 34' 44.131 W
3,422.5	4.23	292.56	3,418.9	39.1	-94.2	628,495.75	773,336.14	32° 43' 31.816 N	103° 34' 44.149 W
Yates									
3,600.0	4.23	292.56	3,595.9	44.1	-106.3	628,500.69	773,324.01	32° 43' 31.865 N	103° 34' 44.290 W
3,800.0	4.23	292.56	3,795.3	49.8	-119.9	628,506.26	773,310.33	32° 43' 31.921 N	103° 34' 44.450 W
3,848.4	4.23	292.56	3,843.6	51.2	-123.2	628,507.61	773,307.03	32° 43' 31.935 N	103° 34' 44.488 W
Seven Rivers									
4,000.0	4.23	292.56	3,994.8	55.5	-133.5	628,511.83	773,296.66	32° 43' 31.977 N	103° 34' 44.609 W
4,200.0	4.23	292.56	4,194.2	61.1	-147.2	628,517.39	773,282.98	32° 43' 32.033 N	103° 34' 44.769 W
4,400.0	4.23	292.56	4,393.7	66.8	-160.8	628,522.96	773,269.31	32° 43' 32.090 N	103° 34' 44.929 W
4,600.0	4.23	292.56	4,593.1	72.5	-174.5	628,528.52	773,255.63	32° 43' 32.146 N	103° 34' 45.088 W
4,624.9	4.23	292.56	4,618.0	73.2	-176.1	628,529.22	773,253.93	32° 43' 32.153 N	103° 34' 45.108 W
Queen									
4,800.0	4.23	292.56	4,792.6	78.1	-188.1	628,534.09	773,241.96	32° 43' 32.202 N	103° 34' 45.248 W
4,925.5	4.23	292.56	4,917.7	81.7	-196.6	628,537.58	773,233.38	32° 43' 32.237 N	103° 34' 45.348 W
Penrose									
5,000.0	4.23	292.56	4,992.1	83.8	-201.7	628,539.66	773,228.28	32° 43' 32.258 N	103° 34' 45.407 W
5,200.0	4.23	292.56	5,191.5	89.5	-215.4	628,545.22	773,214.61	32° 43' 32.314 N	103° 34' 45.567 W
5,400.0	4.23	292.56	5,391.0	95.1	-229.0	628,550.79	773,200.94	32° 43' 32.370 N	103° 34' 45.727 W
5,451.5	4.23	292.56	5,442.3	96.6	-232.5	628,552.22	773,197.42	32° 43' 32.384 N	103° 34' 45.768 W
San Andres									
5,600.0	4.23	292.56	5,590.4	100.8	-242.6	628,556.36	773,187.26	32° 43' 32.426 N	103° 34' 45.886 W
5,676.9	4.23	292.56	5,667.1	103.0	-247.9	628,558.50	773,182.00	32° 43' 32.447 N	103° 34' 45.948 W
Delaware									
5,717.0	4.23	292.56	5,707.1	104.1	-250.6	628,559.61	773,179.26	32° 43' 32.459 N	103° 34' 45.980 W
1st Delaware Sand									
5,800.0	4.23	292.56	5,789.9	106.4	-256.3	628,561.92	773,173.59	32° 43' 32.482 N	103° 34' 46.046 W



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Well EK 29 BS2 Fed Com 2H - Slot WCD 2H
WELL @ 4070.0usft (Original Well Elev)
WELL @ 4070.0usft (Original Well Elev)
True
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,877.3	4.23	292.56	5,867.0	108.6	-261.5	628,564.07	773,168.30	32° 43' 32.503 N	103° 34' 46.108 W
2nd Delaware Sand									
6,000.0	4.23	292.56	5,989.3	112.1	-269.9	628,567.49	773,159.91	32° 43' 32.538 N	103° 34' 46.205 W
6,200.0	4.23	292.56	6,188.8	117.8	-283.5	628,573.06	773,146.24	32° 43' 32.594 N	103° 34' 46.365 W
6,400.0	4.23	292.56	6,388.2	123.4	-297.2	628,578.62	773,132.56	32° 43' 32.650 N	103° 34' 46.525 W
6,600.0	4.23	292.56	6,587.7	129.1	-310.8	628,584.19	773,118.89	32° 43' 32.706 N	103° 34' 46.684 W
6,628.8	4.23	292.56	6,616.4	129.9	-312.8	628,584.99	773,116.92	32° 43' 32.714 N	103° 34' 46.707 W
Brushy Canyon									
6,800.0	4.23	292.56	6,787.1	134.8	-324.4	628,589.75	773,105.21	32° 43' 32.762 N	103° 34' 46.844 W
7,000.0	4.23	292.56	6,986.6	140.4	-338.1	628,595.32	773,091.54	32° 43' 32.818 N	103° 34' 47.003 W
7,200.0	4.23	292.56	7,186.1	146.1	-351.7	628,600.89	773,077.86	32° 43' 32.874 N	103° 34' 47.163 W
7,400.0	4.23	292.56	7,385.5	151.8	-365.3	628,606.45	773,064.19	32° 43' 32.930 N	103° 34' 47.323 W
7,600.0	4.23	292.56	7,585.0	157.4	-379.0	628,612.02	773,050.51	32° 43' 32.986 N	103° 34' 47.482 W
7,800.0	4.23	292.56	7,784.4	163.1	-392.6	628,617.59	773,036.84	32° 43' 33.042 N	103° 34' 47.642 W
7,856.1	4.23	292.56	7,840.4	164.7	-396.4	628,619.15	773,033.00	32° 43' 33.058 N	103° 34' 47.687 W
Bone Spring									
8,000.0	4.23	292.56	7,983.9	168.7	-406.2	628,623.15	773,023.17	32° 43' 33.098 N	103° 34' 47.801 W
8,200.0	4.23	292.56	8,183.3	174.4	-419.9	628,628.72	773,009.49	32° 43' 33.154 N	103° 34' 47.961 W
8,400.0	4.23	292.56	8,382.8	180.1	-433.5	628,634.29	772,995.82	32° 43' 33.210 N	103° 34' 48.121 W
8,600.0	4.23	292.56	8,582.2	185.7	-447.1	628,639.85	772,982.14	32° 43' 33.266 N	103° 34' 48.280 W
8,800.0	4.23	292.56	8,781.7	191.4	-460.8	628,645.42	772,968.47	32° 43' 33.322 N	103° 34' 48.440 W
9,000.0	4.23	292.56	8,981.1	197.1	-474.4	628,650.99	772,954.79	32° 43' 33.378 N	103° 34' 48.600 W
9,083.5	4.23	292.56	9,064.4	199.4	-480.1	628,653.31	772,949.08	32° 43' 33.402 N	103° 34' 48.666 W
1st Bone Spring Sand									
9,200.0	4.23	292.56	9,180.6	202.7	-488.0	628,656.55	772,941.12	32° 43' 33.434 N	103° 34' 48.759 W
9,400.0	4.23	292.56	9,380.0	208.4	-501.7	628,662.12	772,927.44	32° 43' 33.490 N	103° 34' 48.919 W
9,456.3	4.23	292.56	9,436.2	210.0	-505.5	628,663.68	772,923.59	32° 43' 33.506 N	103° 34' 48.964 W
KOP 12/100 Build & Turn									
9,600.0	16.00	192.40	9,578.0	192.5	-514.7	628,646.18	772,914.50	32° 43' 33.334 N	103° 34' 49.072 W
9,694.3	27.11	186.34	9,665.6	158.4	-519.9	628,611.98	772,909.56	32° 43' 32.996 N	103° 34' 49.132 W
2nd Bone Spring Sand									
9,800.0	39.69	183.42	9,753.6	100.5	-524.6	628,554.08	772,905.28	32° 43' 32.423 N	103° 34' 49.187 W
10,000.0	63.60	180.67	9,876.8	-55.1	-529.5	628,398.45	772,901.47	32° 43' 30.883 N	103° 34' 49.245 W
10,070.2	72.00	180.00	9,903.4	-120.0	-529.9	628,333.49	772,901.57	32° 43' 30.241 N	103° 34' 49.249 W
Top Target Window - TOP TARGET WINDOW									
10,200.0	87.58	180.00	9,926.3	-247.4	-529.9	628,206.16	772,902.47	32° 43' 28.981 N	103° 34' 49.249 W
10,206.8	88.40	180.00	9,926.5	-254.2	-529.9	628,199.36	772,902.52	32° 43' 28.914 N	103° 34' 49.249 W
Landing Pt 88.4 Inc, 180 Az									
10,400.0	88.40	180.00	9,931.9	-447.3	-529.9	628,006.25	772,903.90	32° 43' 27.003 N	103° 34' 49.249 W
10,600.0	88.40	180.00	9,937.5	-647.2	-529.9	627,806.33	772,905.32	32° 43' 25.025 N	103° 34' 49.249 W
10,800.0	88.40	180.00	9,943.1	-847.1	-529.9	627,606.41	772,906.75	32° 43' 23.046 N	103° 34' 49.249 W
11,000.0	88.40	180.00	9,948.7	-1,047.1	-529.9	627,406.50	772,908.17	32° 43' 21.068 N	103° 34' 49.249 W
11,200.0	88.40	180.00	9,954.3	-1,247.0	-529.9	627,206.58	772,909.60	32° 43' 19.090 N	103° 34' 49.249 W
11,400.0	88.40	180.00	9,959.9	-1,446.9	-529.9	627,006.66	772,911.02	32° 43' 17.112 N	103° 34' 49.249 W
11,600.0	88.40	180.00	9,965.5	-1,646.8	-529.9	626,806.75	772,912.45	32° 43' 15.134 N	103° 34' 49.249 W
11,800.0	88.40	180.00	9,971.1	-1,846.7	-529.9	626,606.83	772,913.88	32° 43' 13.156 N	103° 34' 49.248 W
12,000.0	88.40	180.00	9,976.7	-2,046.7	-529.9	626,406.91	772,915.30	32° 43' 11.177 N	103° 34' 49.248 W
12,200.0	88.40	180.00	9,982.3	-2,246.6	-529.9	626,207.00	772,916.73	32° 43' 9.199 N	103° 34' 49.248 W
12,400.0	88.40	180.00	9,987.9	-2,446.5	-529.9	626,007.08	772,918.15	32° 43' 7.221 N	103° 34' 49.248 W
12,600.0	88.40	180.00	9,993.5	-2,646.4	-529.9	625,807.16	772,919.58	32° 43' 5.243 N	103° 34' 49.248 W
12,800.0	88.40	180.00	9,999.1	-2,846.4	-529.9	625,607.25	772,921.00	32° 43' 3.265 N	103° 34' 49.248 W
13,000.0	88.40	180.00	10,004.7	-3,046.3	-529.9	625,407.33	772,922.43	32° 43' 1.287 N	103° 34' 49.248 W
13,200.0	88.40	180.00	10,010.3	-3,246.2	-529.9	625,207.41	772,923.85	32° 42' 59.308 N	103° 34' 49.248 W
13,400.0	88.40	180.00	10,015.9	-3,446.1	-529.9	625,007.50	772,925.28	32° 42' 57.330 N	103° 34' 49.248 W



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Company:	McElvain Energy, Inc.	TVD Reference:	WELL @ 4070.0usft (Original Well Elev)
Project:	Sec. 29 T18S R34E	MD Reference:	WELL @ 4070.0usft (Original Well Elev)
Site:	EK 29 Federal Com	North Reference:	True
Well:	EK 29 BS2 Fed Com 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 15Dec15 kjs		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,600.0	88.40	180.00	10,021.5	-3,646.0	-529.9	624,807.58	772,926.70	32° 42' 55.352 N	103° 34' 49.248 W
13,800.0	88.40	180.00	10,027.1	-3,846.0	-529.9	624,607.67	772,928.13	32° 42' 53.374 N	103° 34' 49.248 W
14,000.0	88.40	180.00	10,032.7	-4,045.9	-529.9	624,407.75	772,929.55	32° 42' 51.396 N	103° 34' 49.248 W
14,200.0	88.40	180.00	10,038.4	-4,245.8	-529.9	624,207.83	772,930.98	32° 42' 49.418 N	103° 34' 49.248 W
14,400.0	88.40	180.00	10,044.0	-4,445.7	-529.9	624,007.92	772,932.40	32° 42' 47.439 N	103° 34' 49.248 W
14,600.0	88.40	180.00	10,049.6	-4,645.6	-529.9	623,808.00	772,933.83	32° 42' 45.461 N	103° 34' 49.248 W
14,794.5	88.40	180.00	10,055.0	-4,840.1	-529.9	623,613.58	772,935.22	32° 42' 43.538 N	103° 34' 49.248 W
TD at 14794.5 - EK 29 BS2 Fed Com 2H									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
EK 29 BS2 Fed Com 2H	0.00	0.00	10,055.0	-4,840.1	-529.9	623,613.58	772,935.22	32° 42' 43.538 N	103° 34' 49.248 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
3,403.6	3,400.0	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,870.0	1,870.0	Rustler		1.60	180.00
1,930.0	1,930.0	Salt		1.60	180.00
3,422.5	3,418.9	Yates		1.60	180.00
3,848.4	3,843.6	Seven Rivers		1.60	180.00
4,624.9	4,618.0	Queen		1.60	180.00
4,925.5	4,917.7	Penrose		1.60	180.00
5,451.5	5,442.3	San Andres		1.60	180.00
5,676.9	5,667.1	Delaware		1.60	180.00
5,717.0	5,707.1	1st Delaware Sand		1.60	180.00
5,877.3	5,867.0	2nd Delaware Sand		1.60	180.00
6,628.8	6,616.4	Brushy Canyon		1.60	180.00
7,856.1	7,840.4	Bone Spring		1.60	180.00
9,083.5	9,064.4	1st Bone Spring Sand		1.60	180.00
9,694.3	9,665.6	2nd Bone Spring Sand		1.60	180.00
10,070.2	9,903.4	TOP TARGET WINDOW		1.60	180.00



Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: McElvain Energy, Inc.
Project: Sec. 29 T18S R34E
Site: EK 29 Federal Com
Well: EK 29 BS2 Fed Com 2H
Wellbore: Wellbore #1
Design: Design #1 15Dec15 kjs

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well EK 29 BS2 Fed Com 2H - Slot WCD 2H
WELL @ 4070.0usft (Original Well Elev)
WELL @ 4070.0usft (Original Well Elev)
True
Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,900.0	1,900.0	0.0	0.0	Start Build 1.50
2,182.2	2,181.9	4.0	-9.6	Hold 4.23 Inc, 292.56 Az
9,456.3	9,436.2	210.0	-505.5	KOP 12/100 Build & Turn
10,070.2	9,903.3	-120.0	-529.9	Top Target Window
10,206.8	9,926.5	-254.2	-529.9	Landing Pt 88.4 Inc, 180 Az
14,794.5	10,055.0	-4,840.1	-529.9	TD at 14794.5

[illegible]



Well Name: EK 29 BS2 Fed Com 2H
 Surface Location: EK 29 Federal Com
 North American Datum 1983
 US State Plane 1983 , New Mexico Eastern Zone
 Ground Elevation: 4050.0
 WELL @ 4070.0usft (Original Well Elev)

+N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 628457.30 773430.60 32° 43' 31.429 N 103° 34' 43.046 W WCD 2H

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	0.0
21900.0	0.00	0.00	1900.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
32182.2	4.23	292.56	2182.0	4.0	-9.6	1.50	292.56	-4.0		
49456.3	4.23	292.56	9436.2	210.0	-505.5	0.00	0.00	-210.0		
50070.2	72.00	180.00	9903.3	-120.0	-529.9	12.00	-113.76	120.0		
60206.8	88.40	180.00	9926.5	-254.2	-529.9	12.00	0.00	254.2		
74794.5	88.40	180.00	10055.0	-4840.1	-529.9	0.00	0.00	4840.1	EK 29 BS2 Fed Com 2H	

Project: Sec. 29 T18S R34E
 Site: EK 29 Federal Com
 Well: EK 29 BS2 Fed Com 2H
 Wellbore: Wellbore #1
 Design: Design #1 15Dec15 kjs

FORMATION TOP DETAILS

TVDPth	MDPth	Formation	DipAngle	DipDir
1870.0	1870.0	Rustler	1.60	180.00
1930.0	1930.0	Salt	1.60	180.00
3418.9	3422.5	Yates	1.60	180.00
3843.6	3848.4	Seven Rivers	1.60	180.00
4618.0	4624.9	Queen	1.60	180.00
4917.7	4925.5	Penrose	1.60	180.00
5442.3	5451.5	San Andres	1.60	180.00
5667.1	5676.9	Delaware	1.60	180.00
5707.1	5717.0	1st Delaware Sand	1.60	180.00
5867.0	5877.3	2nd Delaware Sand	1.60	180.00
6616.4	6628.8	Brushy Canyon	1.60	180.00
7840.4	7856.1	Bone Spring	1.60	180.00
9064.4	9083.5	1st Bone Spring Sand	1.60	180.00
9665.6	9694.3	2nd Bone Spring Sand	1.60	180.00
9903.4	10070.2	ZOP TARGET WINDOW	1.60	180.00



Azimuths to True North
 Magnetic North: 7.07°

Magnetic Field
 Strength: 48460.6snT
 Dip Angle: 60.53°
 Date: 12/15/2015
 Model: IGRF2010

