



30-025-43687

McElvain Energy

Lea County, NM (NAD 83)
EK 29 BS2 Federal Com
#2H

OH

HOBBS OCD

JAN 08 2017

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Design: OH Surveys 125'-14808' PTB 14849'

Standard Survey Report

23 August, 2017





Pro Directional Survey Report



Company:	McElvain Energy	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB = 25' @ 4075.00usft (H&P 262)
Site:	EK 29 BS2 Federal Com	MD Reference:	KB = 25' @ 4075.00usft (H&P 262)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH Surveys 125'-14808' PTB 14849'	Database:	WellPlanner1

Project	Lea County, NM (NAD 83)		
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 BS2 Federal Com			
Site Position:		Northing:	628,432.50 usft	Latitude:	32.7253281
From:	Map	Easting:	773,460.90 usft	Longitude:	-103.5785260
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	#2H					
Well Position	+N/-S	0.00 usft	Northing:	628,457.30 usft	Latitude:	32.7253968
	+E/-W	0.00 usft	Easting:	773,430.60 usft	Longitude:	-103.5786239
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,050.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/21/2017	6.72	60.78	48,359.90

Design	OH Surveys 125'-14808' PTB 14849'				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	180.00	

Survey Program	Date 8/23/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
125.00	1,845.00	Gyro (OH)	GYRO-NS-CT	OWSG XYZ Accel with XY Static and Continuous
1,956.00	14,849.00	ProMWD (OH)	MWD+HDGM	OWSG MWD + HRGM

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
125.00	0.46	300.75	125.00	0.26	-0.43	-0.26	0.37	0.37	0.00	
225.00	0.50	350.89	225.00	0.89	-0.85	-0.89	0.41	0.04	50.14	
325.00	0.28	316.85	324.99	1.50	-1.08	-1.50	0.31	-0.22	-34.04	
425.00	0.37	11.71	424.99	2.00	-1.18	-2.00	0.31	0.09	54.86	
525.00	0.47	355.66	524.99	2.72	-1.15	-2.72	0.15	0.10	-16.05	
625.00	0.55	337.84	624.99	3.57	-1.36	-3.57	0.18	0.08	-17.82	
725.00	0.93	351.87	724.98	4.82	-1.66	-4.82	0.42	0.38	14.03	
825.00	1.25	16.95	824.96	6.67	-1.45	-6.67	0.57	0.32	25.08	
925.00	1.21	3.28	924.94	8.77	-1.07	-8.77	0.30	-0.04	-13.67	



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Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH Surveys 125'-14808' PTB 14849'	Database:	WellPlanner1

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)
1,025.00	1.40	3.73	1,024.91	11.04	-0.93	-11.04	0.19	0.19	0.45
1,125.00	1.36	1.01	1,124.88	13.45	-0.83	-13.45	0.08	-0.04	-2.72
1,225.00	0.88	4.98	1,224.86	15.40	-0.75	-15.40	0.49	-0.48	3.97
1,325.00	0.95	35.04	1,324.85	16.84	-0.20	-16.84	0.48	0.07	30.06
1,425.00	0.53	29.36	1,424.84	17.92	0.50	-17.92	0.43	-0.42	-5.68
1,525.00	0.83	12.79	1,524.83	19.03	0.89	-19.03	0.36	0.30	-16.57
1,625.00	0.34	6.21	1,624.83	20.03	1.08	-20.03	0.49	-0.49	-6.58
1,725.00	0.52	7.96	1,724.83	20.78	1.17	-20.78	0.18	0.18	1.75
1,825.00	0.42	334.40	1,824.82	21.56	1.08	-21.56	0.29	-0.10	-33.56
1,845.00	0.45	352.03	1,844.82	21.70	1.03	-21.70	0.68	0.15	88.15
1,956.00	0.10	338.70	1,955.82	22.22	0.94	-22.22	0.32	-0.32	-12.01
2,009.00	0.10	292.10	2,008.82	22.28	0.88	-22.28	0.15	0.00	-87.92
2,103.00	1.20	306.00	2,102.81	22.89	0.01	-22.89	1.17	1.17	14.79
2,198.00	2.60	314.40	2,197.76	24.99	-2.34	-24.99	1.50	1.47	8.84
2,293.00	4.50	316.00	2,292.57	29.17	-6.47	-29.17	2.00	2.00	1.68
2,388.00	5.70	319.00	2,387.19	35.42	-12.15	-35.42	1.29	1.26	3.16
2,482.00	7.00	309.60	2,480.62	42.59	-19.63	-42.59	1.77	1.38	-10.00
2,577.00	8.50	301.20	2,574.75	49.92	-30.09	-49.92	1.97	1.58	-8.84
2,671.00	8.20	289.10	2,667.76	55.71	-42.37	-55.71	1.89	-0.32	-12.87
2,766.00	7.30	273.90	2,761.90	58.34	-54.80	-58.34	2.35	-0.95	-16.00
2,861.00	6.30	254.30	2,856.25	57.34	-65.84	-57.34	2.64	-1.05	-20.63
2,955.00	5.20	235.80	2,949.78	53.55	-74.33	-53.55	2.28	-1.17	-19.68
3,050.00	4.30	249.40	3,044.46	49.88	-81.22	-49.88	1.51	-0.95	14.32
3,145.00	3.90	256.20	3,139.21	47.85	-87.69	-47.85	0.66	-0.42	7.16
3,239.00	4.00	279.00	3,233.00	47.60	-94.04	-47.60	1.66	0.11	24.26
3,334.00	4.00	286.10	3,327.76	49.04	-100.49	-49.04	0.52	0.00	7.47
3,428.00	4.30	289.10	3,421.52	51.10	-106.97	-51.10	0.39	0.32	3.19
3,523.00	4.90	288.10	3,516.21	53.53	-114.19	-53.53	0.64	0.63	-1.05
3,618.00	4.30	288.00	3,610.91	55.89	-121.44	-55.89	0.63	-0.63	-0.11
3,712.00	4.00	287.60	3,704.66	57.97	-127.91	-57.97	0.32	-0.32	-0.43
3,807.00	4.00	286.90	3,799.43	59.93	-134.24	-59.93	0.05	0.00	-0.74
3,901.00	4.70	286.00	3,893.16	61.95	-141.08	-61.95	0.75	0.74	-0.96
3,996.00	5.00	287.10	3,987.82	64.24	-148.78	-64.24	0.33	0.32	1.16
4,090.00	5.30	285.10	4,081.44	66.57	-156.89	-66.57	0.37	0.32	-2.13
4,185.00	5.30	282.90	4,176.03	68.70	-165.40	-68.70	0.21	0.00	-2.32
4,279.00	5.10	285.10	4,269.64	70.75	-173.67	-70.75	0.30	-0.21	2.34
4,374.00	4.60	285.80	4,364.30	72.89	-181.41	-72.89	0.53	-0.53	0.74
4,469.00	5.20	286.70	4,458.96	75.17	-189.20	-75.17	0.64	0.63	0.95
4,563.00	5.80	284.40	4,552.52	77.57	-197.88	-77.57	0.68	0.64	-2.45
4,658.00	5.60	280.00	4,647.05	79.57	-207.09	-79.57	0.51	-0.21	-4.63
4,752.00	4.50	279.30	4,740.69	80.96	-215.25	-80.96	1.17	-1.17	-0.74
4,847.00	4.80	278.20	4,835.37	82.13	-222.86	-82.13	0.33	0.32	-1.16
4,926.00	5.00	278.40	4,914.08	83.11	-229.54	-83.11	0.25	0.25	0.25



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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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)
5,025.00	5.50	280.20	5,012.67	84.58	-238.47	-84.58	0.53	0.51	1.82
5,119.00	5.50	282.40	5,106.24	86.34	-247.31	-86.34	0.22	0.00	2.34
5,214.00	5.40	282.90	5,200.81	88.32	-256.11	-88.32	0.12	-0.11	0.53
5,308.00	5.40	284.00	5,294.39	90.37	-264.71	-90.37	0.11	0.00	1.17
5,403.00	5.60	299.20	5,388.96	93.72	-273.10	-93.72	1.54	0.21	16.00
5,497.00	5.60	302.50	5,482.51	98.42	-280.97	-98.42	0.34	0.00	3.51
5,592.00	5.70	304.50	5,577.05	103.58	-288.77	-103.58	0.23	0.11	2.11
5,687.00	5.70	305.40	5,671.58	108.99	-296.50	-108.99	0.09	0.00	0.95
5,781.00	4.80	293.10	5,765.19	113.23	-303.92	-113.23	1.53	-0.96	-13.09
5,876.00	4.80	291.80	5,859.85	116.27	-311.27	-116.27	0.11	0.00	-1.37
5,970.00	4.80	291.50	5,953.52	119.17	-318.58	-119.17	0.03	0.00	-0.32
6,064.00	4.70	292.00	6,047.20	122.06	-325.81	-122.06	0.12	-0.11	0.53
6,159.00	4.70	291.40	6,141.88	124.93	-333.04	-124.93	0.05	0.00	-0.63
6,253.00	4.70	293.20	6,235.56	127.86	-340.17	-127.86	0.16	0.00	1.91
6,348.00	4.50	293.00	6,330.26	130.85	-347.18	-130.85	0.21	-0.21	-0.21
6,443.00	4.50	293.10	6,424.97	133.76	-354.04	-133.76	0.01	0.00	0.11
6,537.00	4.50	289.70	6,518.68	136.45	-360.90	-136.45	0.28	0.00	-3.62
6,632.00	4.70	291.30	6,613.37	139.12	-368.03	-139.12	0.25	0.21	1.68
6,727.00	4.50	289.70	6,708.06	141.79	-375.17	-141.79	0.25	-0.21	-1.68
6,821.00	4.30	285.40	6,801.79	143.97	-382.04	-143.97	0.41	-0.21	-4.57
6,916.00	3.80	285.90	6,896.55	145.78	-388.50	-145.78	0.53	-0.53	0.53
7,010.00	3.60	283.70	6,990.35	147.33	-394.36	-147.33	0.26	-0.21	-2.34
7,104.00	3.50	283.30	7,084.17	148.69	-400.02	-148.69	0.11	-0.11	-0.43
7,199.00	3.40	284.80	7,179.00	150.08	-405.57	-150.08	0.14	-0.11	1.58
7,293.00	3.40	283.20	7,272.84	151.43	-410.98	-151.43	0.10	0.00	-1.70
7,388.00	3.50	281.50	7,367.66	152.65	-416.56	-152.65	0.15	0.11	-1.79
7,482.00	3.30	286.80	7,461.50	154.00	-421.96	-154.00	0.40	-0.21	5.64
7,576.00	3.30	286.30	7,555.34	155.54	-427.15	-155.54	0.03	0.00	-0.53
7,671.00	3.00	297.40	7,650.20	157.46	-431.98	-157.46	0.71	-0.32	11.68
7,765.00	2.70	299.50	7,744.08	159.68	-436.09	-159.68	0.34	-0.32	2.23
7,860.00	2.80	301.60	7,838.97	162.00	-440.01	-162.00	0.15	0.11	2.21
7,954.00	2.50	299.90	7,932.87	164.22	-443.75	-164.22	0.33	-0.32	-1.81
8,049.00	2.30	299.30	8,027.79	166.19	-447.21	-166.19	0.21	-0.21	-0.63
8,143.00	2.20	300.40	8,121.72	168.02	-450.41	-168.02	0.12	-0.11	1.17
8,238.00	2.30	299.80	8,216.64	169.89	-453.63	-169.89	0.11	0.11	-0.63
8,332.00	2.00	295.80	8,310.58	171.54	-456.75	-171.54	0.36	-0.32	-4.26
8,427.00	1.70	292.30	8,405.53	172.80	-459.54	-172.80	0.34	-0.32	-3.68
8,522.00	1.50	306.30	8,500.49	174.07	-461.85	-174.07	0.46	-0.21	14.74
8,616.00	0.70	276.30	8,594.47	174.86	-463.41	-174.86	1.02	-0.85	-31.91
8,710.00	0.70	251.90	8,688.47	174.75	-464.53	-174.75	0.31	0.00	-25.96
8,805.00	0.60	222.20	8,783.46	174.20	-465.41	-174.20	0.37	-0.11	-31.26
8,900.00	1.70	179.60	8,878.44	172.42	-465.74	-172.42	1.39	1.16	-44.84
8,994.00	1.90	179.70	8,972.40	169.47	-465.72	-169.47	0.21	0.21	0.11



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9,089.00	2.00	172.90	9,067.34	166.25	-465.51	-166.25	0.27	0.11	-7.16
9,184.00	2.00	170.80	9,162.28	162.97	-465.04	-162.97	0.08	0.00	-2.21
9,278.00	1.60	161.20	9,256.24	160.10	-464.35	-160.10	0.53	-0.43	-10.21
9,373.00	1.30	144.60	9,351.21	157.97	-463.30	-157.97	0.54	-0.32	-17.47
9,441.00	0.80	132.40	9,419.20	157.02	-462.50	-157.02	0.80	-0.74	-17.94
9,504.00	1.10	159.80	9,482.19	156.16	-461.97	-156.16	0.85	0.48	43.49
9,535.00	5.10	184.70	9,513.14	154.50	-461.98	-154.50	13.32	12.90	80.32
9,566.00	9.90	188.40	9,543.86	150.49	-462.48	-150.49	15.55	15.48	11.94
9,598.00	14.20	187.40	9,575.15	143.88	-463.39	-143.88	13.45	13.44	-3.13
9,629.00	18.00	186.50	9,604.93	135.34	-464.42	-135.34	12.28	12.26	-2.90
9,661.00	21.60	186.30	9,635.03	124.57	-465.63	-124.57	11.25	11.25	-0.63
9,692.00	23.90	185.40	9,663.62	112.65	-466.85	-112.65	7.50	7.42	-2.90
9,724.00	26.20	182.40	9,692.61	99.13	-467.75	-99.13	8.21	7.19	-9.38
9,755.00	28.90	181.90	9,720.09	84.81	-468.29	-84.81	8.74	8.71	-1.61
9,787.00	31.10	183.50	9,747.80	68.83	-469.05	-68.83	7.31	6.88	5.00
9,818.00	34.50	181.60	9,773.86	52.06	-469.78	-52.06	11.46	10.97	-6.13
9,850.00	38.00	180.10	9,799.66	33.14	-470.05	-33.14	11.28	10.94	-4.69
9,881.00	40.60	178.80	9,823.65	13.51	-469.86	-13.51	8.80	8.39	-4.19
9,912.00	43.70	178.30	9,846.63	-7.29	-469.33	7.29	10.06	10.00	-1.61
9,944.00	47.30	179.90	9,869.05	-30.10	-468.98	30.10	11.80	11.25	5.00
9,975.00	49.50	181.40	9,889.63	-53.28	-469.25	53.28	7.97	7.10	4.84
10,007.00	51.90	183.20	9,909.90	-78.02	-470.25	78.02	8.67	7.50	5.63
10,038.00	53.60	183.60	9,928.66	-102.65	-471.71	102.65	5.58	5.48	1.29
10,062.70	55.53	183.06	9,942.98	-122.74	-472.88	122.74	8.01	7.81	-2.20
330' Hardline Entry:10062.70' MD, 9942.98' TVD									
10,070.00	56.10	182.90	9,947.09	-128.77	-473.19	128.77	8.01	7.82	-2.14
10,102.00	60.40	182.40	9,963.92	-155.95	-474.45	155.95	13.50	13.44	-1.56
10,133.00	64.50	181.90	9,978.26	-183.41	-475.48	183.41	13.30	13.23	-1.61
10,164.00	67.10	181.70	9,990.96	-211.67	-476.37	211.67	8.41	8.39	-0.65
10,196.00	71.30	181.90	10,002.32	-241.56	-477.31	241.56	13.14	13.13	0.63
10,227.00	75.50	181.60	10,011.18	-271.25	-478.21	271.25	13.58	13.55	-0.97
10,259.00	79.40	182.30	10,018.13	-302.46	-479.28	302.46	12.37	12.19	2.19
10,354.00	86.40	182.00	10,029.87	-396.60	-482.81	396.60	7.38	7.37	-0.32
10,386.00	86.30	181.60	10,031.90	-428.52	-483.81	428.52	1.29	-0.31	-1.25
10,481.00	86.60	181.00	10,037.78	-523.32	-485.96	523.32	0.71	0.32	-0.63
10,513.00	87.00	180.80	10,039.57	-555.26	-486.46	555.26	1.40	1.25	-0.63
10,575.00	87.80	180.50	10,042.38	-617.19	-487.17	617.19	1.38	1.29	-0.48
10,670.00	87.40	179.40	10,046.36	-712.11	-487.08	712.11	1.23	-0.42	-1.16
10,764.00	87.70	178.40	10,050.38	-806.00	-485.28	806.00	1.11	0.32	-1.06
10,859.00	88.80	179.10	10,053.28	-900.93	-483.21	900.93	1.37	1.16	0.74
10,953.00	89.00	178.20	10,055.09	-994.89	-481.00	994.89	0.98	0.21	-0.96
11,048.00	88.00	178.70	10,057.57	-1,089.82	-478.43	1,089.82	1.18	-1.05	0.53
11,143.00	88.20	179.60	10,060.72	-1,184.76	-477.02	1,184.76	0.97	0.21	0.95
11,237.00	88.40	182.10	10,063.51	-1,278.70	-478.41	1,278.70	2.67	0.21	2.66



Pro Directional Survey Report



Company:	McElvain Energy	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB = 25' @ 4075.00usft (H&P 262)
Site:	EK 29 BS2 Federal Com	MD Reference:	KB = 25' @ 4075.00usft (H&P 262)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH Surveys 125'-14808' PTB 14849'	Database:	WellPlanner1

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)
11,332.00	88.80	181.80	10,065.83	-1,373.61	-481.64	1,373.61	0.53	0.42	-0.32
11,426.00	89.80	181.30	10,066.98	-1,467.57	-484.19	1,467.57	1.19	1.06	-0.53
11,520.00	89.30	180.60	10,067.72	-1,561.55	-485.74	1,561.55	0.92	-0.53	-0.74
11,615.00	88.80	180.20	10,069.29	-1,656.54	-486.41	1,656.54	0.67	-0.53	-0.42
11,709.00	89.70	179.80	10,070.52	-1,750.53	-486.41	1,750.53	1.05	0.96	-0.43
11,804.00	88.30	180.10	10,072.18	-1,845.51	-486.32	1,845.51	1.51	-1.47	0.32
11,899.00	87.10	180.10	10,076.00	-1,940.43	-486.49	1,940.43	1.26	-1.26	0.00
11,993.00	87.40	179.40	10,080.51	-2,034.32	-486.08	2,034.32	0.81	0.32	-0.74
12,088.00	89.40	179.80	10,083.16	-2,129.28	-485.42	2,129.28	2.15	2.11	0.42
12,183.00	88.00	179.40	10,085.31	-2,224.25	-484.75	2,224.25	1.53	-1.47	-0.42
12,277.00	86.50	179.20	10,089.82	-2,318.13	-483.61	2,318.13	1.61	-1.60	-0.21
12,372.00	88.10	179.20	10,094.30	-2,413.02	-482.28	2,413.02	1.68	1.68	0.00
12,466.00	88.60	179.20	10,097.00	-2,506.97	-480.97	2,506.97	0.53	0.53	0.00
12,560.00	86.90	179.30	10,100.69	-2,600.88	-479.74	2,600.88	1.81	-1.81	0.11
12,655.00	87.60	179.20	10,105.25	-2,695.76	-478.50	2,695.76	0.74	0.74	-0.11
12,750.00	87.80	178.90	10,109.07	-2,790.67	-476.93	2,790.67	0.38	0.21	-0.32
12,844.00	88.40	178.90	10,112.18	-2,884.61	-475.12	2,884.61	0.64	0.64	0.00
12,938.00	88.90	178.90	10,114.40	-2,978.56	-473.32	2,978.56	0.53	0.53	0.00
13,032.00	89.30	179.20	10,115.87	-3,072.54	-471.76	3,072.54	0.53	0.43	0.32
13,127.00	90.70	179.20	10,115.87	-3,167.53	-470.43	3,167.53	1.47	1.47	0.00
13,221.00	92.40	179.00	10,113.33	-3,261.48	-468.96	3,261.48	1.82	1.81	-0.21
13,316.00	91.30	179.40	10,110.26	-3,356.42	-467.63	3,356.42	1.23	-1.16	0.42
13,410.00	91.40	181.10	10,108.05	-3,450.38	-468.04	3,450.38	1.81	0.11	1.81
13,505.00	90.20	181.60	10,106.72	-3,545.35	-470.28	3,545.35	1.37	-1.26	0.53
13,599.00	89.00	182.40	10,107.38	-3,639.29	-473.56	3,639.29	1.53	-1.28	0.85
13,694.00	90.10	182.20	10,108.12	-3,734.20	-477.37	3,734.20	1.18	1.16	-0.21
13,789.00	88.30	182.00	10,109.45	-3,829.13	-480.85	3,829.13	1.91	-1.89	-0.21
13,883.00	90.00	181.40	10,110.85	-3,923.07	-483.64	3,923.07	1.92	1.81	-0.64
13,978.00	89.20	181.00	10,111.51	-4,018.05	-485.63	4,018.05	0.94	-0.84	-0.42
14,072.00	90.30	180.60	10,111.92	-4,112.04	-486.94	4,112.04	1.25	1.17	-0.43
14,166.00	89.10	181.10	10,112.41	-4,206.02	-488.34	4,206.02	1.38	-1.28	0.53
14,261.00	89.80	180.80	10,113.32	-4,301.00	-489.91	4,301.00	0.80	0.74	-0.32
14,355.00	90.90	180.90	10,112.75	-4,394.99	-491.31	4,394.99	1.18	1.17	0.11
14,450.00	89.30	180.90	10,112.58	-4,489.98	-492.80	4,489.98	1.68	-1.68	0.00
14,544.00	90.90	180.90	10,112.42	-4,583.96	-494.28	4,583.96	1.70	1.70	0.00
14,639.00	89.90	180.70	10,111.76	-4,678.95	-495.60	4,678.95	1.07	-1.05	-0.21
14,705.32	91.24	180.56	10,111.10	-4,745.26	-496.33	4,745.26	2.03	2.02	-0.21
330' Hardline Exit:14705.32' MD, 10111.10' TVD									
14,733.00	91.80	180.50	10,110.36	-4,772.93	-496.59	4,772.93	2.03	2.02	-0.21
14,808.00	90.70	179.40	10,108.72	-4,847.91	-496.52	4,847.91	2.07	-1.47	-1.47
Last Survey: 14808.00' MD, 10108.72' TVD									
14,849.00	90.70	179.40	10,108.22	-4,888.90	-496.09	4,888.90	0.00	0.00	0.00
PTB: 14849.00' MD, 10108.22' TVD									



Pro Directional Survey Report



Company: McElvain Energy
Project: Lea County, NM (NAD 83)
Site: EK 29 BS2 Federal Com
Well: #2H
Wellbore: OH
Design: OH Surveys 125'-14808' PTB 14849'

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 25' @ 4075.00usft (H&P 262)
MD Reference: KB = 25' @ 4075.00usft (H&P 262)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,062.70	9,942.98	-122.74	-472.88	330' Hardline Entry: 10062.70' MD, 9942.98' TVD
14,705.32	10,111.10	-4,745.26	-496.33	330' Hardline Exit: 14705.32' MD, 10111.10' TVD
14,808.00	10,108.72	-4,847.91	-496.52	Last Survey: 14808.00' MD, 10108.72' TVD
14,849.00	10,108.22	-4,888.90	-496.09	PTB: 14849.00' MD, 10108.22' TVD

Checked By: _____ Approved By: _____ Date: _____