



## Survey Certification

7327 West Barton Road  
Casper, WY 82604  
(307)-472-6621 Fax (307) 472-5439

Operator	KP Kauffman Co, Inc.
Well Name & No.	Robert Burge 1
API #	05-123-07566
County & State	Weld County, CO
SDI Job No.	410114K240937
Rig	N/A
Survey Date	2-Jan-2015

I, Seth M. Burstad, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 0 feet to a measured depth of 4766.97 feet is true and correct as determined from all available records.

Seth M. Burstad  
Signature

2-Feb-2015  
Date

**Seth M. Burstad**  
Rockies Region Well Planner  
Scientific Drilling - Rocky Mountain District

# **KP Kauffman Co, Inc.**

Weld County, CO

Robert Burge

Robert Burge 1

OH

Design: OH

## **Standard Survey Report**

02 February, 2015



<b>Company:</b>	KP Kauffman Co, Inc.	<b>Local Co-ordinate Reference:</b>	Well Robert Burge 1
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	GL 4984' @ 4984.00ft
<b>Site:</b>	Robert Burge	<b>MD Reference:</b>	GL 4984' @ 4984.00ft
<b>Well:</b>	Robert Burge 1	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

<b>Project</b>	Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		Robert Burge			
Site Position:		Northing:	1,270,665.75 usft	Latitude:	40° 4' 28.452 N
From:	Lat/Long	Easting:	3,180,287.21 usft	Longitude:	104° 51' 20.736 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.42 °

Well	Robert Burge 1, 660' FSL 1980' FEL Sec 2 T1N R67W					
Well Position	+N/-S	0.00 ft	Northing:	1,270,665.75 usft	Latitude:	40° 4' 28.452 N
	+E/-W	0.00 ft	Easting:	3,180,287.21 usft	Longitude:	104° 51' 20.736 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,984.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	1/2/2015	8.51	66.64	52,461

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	247.92	

<b>Survey Program</b>	<b>Date</b>	2/2/2015			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
87.20	4,766.97	Survey #1 - Gyro Survey (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.20	0.56	28.87	87.20	0.37	0.21	-0.33	0.64	0.64	0.00
<b>First SDI Gyro Survey</b>									
99.68	0.61	22.36	99.68	0.49	0.26	-0.42	0.67	0.40	-52.16
122.15	0.48	19.37	122.15	0.69	0.34	-0.57	0.59	-0.58	-13.31
146.99	0.38	20.40	146.99	0.86	0.40	-0.70	0.40	-0.40	4.15
173.51	0.16	40.55	173.51	0.97	0.46	-0.79	0.89	-0.83	75.98
197.99	0.08	106.33	197.99	0.99	0.49	-0.83	0.60	-0.33	268.71
224.28	0.11	174.71	224.28	0.96	0.51	-0.84	0.42	0.11	260.10
247.00	0.11	207.18	247.00	0.92	0.51	-0.82	0.27	0.00	142.91
274.61	0.24	193.11	274.61	0.84	0.48	-0.76	0.49	0.47	-50.96

<b>Company:</b>	KP Kauffman Co, Inc.	<b>Local Co-ordinate Reference:</b>	Well Robert Burge 1
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	GL 4984' @ 4984.00ft
<b>Site:</b>	Robert Burge	<b>MD Reference:</b>	GL 4984' @ 4984.00ft
<b>Well:</b>	Robert Burge 1	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

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)
298.32	0.29	164.18	298.32	0.74	0.49	-0.73	0.59	0.21	-122.02
322.09	0.25	168.10	322.09	0.63	0.51	-0.71	0.19	-0.17	16.49
349.90	0.15	195.15	349.90	0.53	0.52	-0.68	0.49	-0.36	97.27
374.19	0.33	188.15	374.18	0.43	0.50	-0.62	0.75	0.74	-28.82
397.75	0.34	177.97	397.74	0.30	0.49	-0.57	0.26	0.04	-43.21
422.19	0.32	169.12	422.18	0.16	0.51	-0.53	0.22	-0.08	-36.21
445.95	0.21	171.56	445.94	0.05	0.52	-0.50	0.47	-0.46	10.27
470.49	0.21	181.34	470.48	-0.04	0.53	-0.48	0.15	0.00	39.85
499.84	0.35	171.78	499.83	-0.18	0.54	-0.43	0.50	0.48	-32.57
523.59	0.34	161.80	523.58	-0.32	0.57	-0.41	0.26	-0.04	-42.02
548.11	0.35	138.07	548.10	-0.45	0.65	-0.43	0.58	0.04	-96.78
571.06	0.34	129.73	571.05	-0.54	0.75	-0.49	0.22	-0.04	-36.34
596.35	0.34	146.93	596.34	-0.65	0.84	-0.54	0.40	0.00	68.01
624.90	0.43	149.13	624.89	-0.82	0.95	-0.57	0.32	0.32	7.71
649.40	0.47	135.57	649.39	-0.97	1.06	-0.62	0.46	0.16	-55.35
673.63	0.49	123.10	673.62	-1.09	1.22	-0.72	0.44	0.08	-51.47
697.33	0.41	110.84	697.32	-1.18	1.38	-0.84	0.53	-0.34	-51.73
722.07	0.36	135.72	722.06	-1.27	1.52	-0.93	0.70	-0.20	100.57
745.77	0.37	130.18	745.76	-1.37	1.63	-1.00	0.15	0.04	-23.38
770.24	0.60	135.57	770.23	-1.51	1.78	-1.08	0.96	0.94	22.03
798.73	0.55	125.84	798.72	-1.70	2.00	-1.21	0.38	-0.18	-34.15
823.05	0.53	134.54	823.03	-1.85	2.17	-1.32	0.35	-0.08	35.77
847.64	0.46	132.44	847.62	-1.99	2.33	-1.41	0.29	-0.28	-8.54
871.44	0.65	148.91	871.42	-2.17	2.47	-1.47	1.03	0.80	69.20
895.89	0.65	141.29	895.87	-2.40	2.62	-1.53	0.35	0.00	-31.17
924.23	0.57	135.83	924.21	-2.63	2.82	-1.63	0.35	-0.28	-19.27
948.68	0.61	154.65	948.66	-2.83	2.96	-1.68	0.81	0.16	76.97
972.35	0.57	163.54	972.33	-3.06	3.05	-1.68	0.42	-0.17	37.56
996.50	0.76	163.09	996.47	-3.33	3.13	-1.65	0.79	0.79	-1.86
1,020.52	0.78	150.70	1,020.49	-3.62	3.26	-1.66	0.70	0.08	-51.58
1,048.29	0.72	154.73	1,048.26	-3.94	3.42	-1.69	0.29	-0.22	14.51
1,072.21	0.61	154.55	1,072.18	-4.19	3.54	-1.71	0.46	-0.46	-0.75
1,095.50	0.61	161.92	1,095.47	-4.42	3.64	-1.71	0.34	0.00	31.64
1,124.01	0.74	161.36	1,123.98	-4.74	3.74	-1.68	0.46	0.46	-1.96
1,147.93	0.84	158.72	1,147.89	-5.05	3.85	-1.67	0.44	0.42	-11.04
1,171.08	0.67	147.98	1,171.04	-5.33	3.99	-1.69	0.95	-0.73	-46.39
1,199.71	0.69	156.98	1,199.67	-5.63	4.14	-1.72	0.38	0.07	31.44
1,222.87	0.72	163.87	1,222.83	-5.89	4.24	-1.71	0.39	0.13	29.75
1,246.79	0.88	167.59	1,246.74	-6.22	4.32	-1.67	0.70	0.67	15.55
1,270.71	0.81	157.51	1,270.66	-6.55	4.42	-1.64	0.69	-0.29	-42.14
1,298.58	0.73	154.40	1,298.53	-6.90	4.58	-1.65	0.32	-0.29	-11.16
1,322.51	0.69	164.18	1,322.46	-7.17	4.68	-1.64	0.53	-0.17	40.87
1,345.66	0.91	172.68	1,345.61	-7.49	4.74	-1.58	1.08	0.95	36.72

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<b>Site:</b>	Robert Burge	<b>MD Reference:</b>	GL 4984' @ 4984.00ft
<b>Well:</b>	Robert Burge 1	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

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)
1,374.30	0.79	170.57	1,374.24	-7.91	4.80	-1.48	0.43	-0.42	-7.37
1,397.46	0.78	160.88	1,397.40	-8.21	4.88	-1.44	0.57	-0.04	-41.84
1,421.38	0.68	157.37	1,421.32	-8.50	4.99	-1.43	0.46	-0.42	-14.67
1,449.89	0.50	156.04	1,449.83	-8.77	5.11	-1.43	0.63	-0.63	-4.67
1,473.07	0.48	161.22	1,473.01	-8.95	5.18	-1.43	0.21	-0.09	22.35
1,497.11	0.31	153.73	1,497.05	-9.11	5.24	-1.43	0.74	-0.71	-31.16
1,520.29	0.39	152.68	1,520.23	-9.23	5.30	-1.44	0.35	0.35	-4.53
1,548.79	0.40	143.94	1,548.72	-9.40	5.41	-1.48	0.21	0.04	-30.67
1,572.73	0.29	133.85	1,572.66	-9.51	5.50	-1.52	0.52	-0.46	-42.15
1,596.02	0.18	138.86	1,595.95	-9.58	5.57	-1.56	0.48	-0.47	21.51
1,624.49	0.31	176.13	1,624.42	-9.69	5.60	-1.55	0.70	0.46	130.91
1,647.63	0.40	164.51	1,647.56	-9.83	5.63	-1.52	0.50	0.39	-50.22
1,671.53	0.37	154.18	1,671.46	-9.98	5.68	-1.51	0.32	-0.13	-43.22
1,695.45	0.39	149.63	1,695.38	-10.12	5.76	-1.53	0.15	0.08	-19.02
1,723.29	0.28	152.00	1,723.22	-10.26	5.84	-1.55	0.40	-0.40	8.51
1,746.84	0.26	185.63	1,746.77	-10.36	5.86	-1.53	0.67	-0.08	142.80
1,774.05	0.19	181.05	1,773.98	-10.47	5.85	-1.49	0.27	-0.26	-16.83
1,797.46	0.29	193.49	1,797.39	-10.57	5.84	-1.44	0.48	0.43	53.14
1,820.11	0.32	182.19	1,820.04	-10.69	5.82	-1.38	0.30	0.13	-49.89
1,847.98	0.30	172.77	1,847.91	-10.84	5.83	-1.33	0.20	-0.07	-33.80
1,871.50	0.22	174.06	1,871.43	-10.94	5.84	-1.30	0.34	-0.34	5.48
1,898.60	0.21	214.97	1,898.53	-11.03	5.82	-1.24	0.56	-0.04	150.96
1,921.98	0.24	235.05	1,921.91	-11.10	5.75	-1.16	0.36	0.13	85.89
1,949.95	0.29	232.99	1,949.88	-11.17	5.65	-1.03	0.18	0.18	-7.37
1,972.55	0.27	227.36	1,972.48	-11.24	5.56	-0.93	0.15	-0.09	-24.91
1,995.91	0.35	224.73	1,995.84	-11.33	5.47	-0.81	0.35	0.34	-11.26
2,023.00	0.30	236.73	2,022.93	-11.43	5.35	-0.66	0.31	-0.18	44.30
2,046.05	0.30	257.96	2,045.98	-11.48	5.24	-0.55	0.48	0.00	92.10
2,073.50	0.43	254.36	2,073.43	-11.52	5.08	-0.37	0.48	0.47	-13.11
2,095.80	0.60	259.96	2,095.73	-11.56	4.88	-0.18	0.79	0.76	25.11
2,123.24	0.63	256.24	2,123.16	-11.62	4.59	0.11	0.18	0.11	-13.56
2,145.52	0.57	242.75	2,145.44	-11.70	4.37	0.35	0.69	-0.27	-60.55
2,172.95	0.55	252.62	2,172.87	-11.80	4.13	0.61	0.36	-0.07	35.98
2,196.21	0.43	252.35	2,196.13	-11.86	3.94	0.81	0.52	-0.52	-1.16
2,222.90	0.55	262.50	2,222.82	-11.91	3.71	1.04	0.55	0.45	38.03
2,246.03	0.48	263.17	2,245.95	-11.94	3.51	1.24	0.30	-0.30	2.90
2,273.43	0.64	260.53	2,273.35	-11.98	3.24	1.50	0.59	0.58	-9.64
2,295.69	0.61	262.72	2,295.61	-12.01	3.00	1.73	0.17	-0.13	9.84
2,323.20	0.67	262.39	2,323.12	-12.05	2.70	2.03	0.22	0.22	-1.20
2,345.81	0.61	264.32	2,345.72	-12.08	2.45	2.27	0.28	-0.27	8.54
2,374.45	0.62	252.33	2,374.36	-12.14	2.15	2.57	0.45	0.03	-41.86
2,397.89	0.58	253.80	2,397.80	-12.21	1.91	2.82	0.18	-0.17	6.27
2,422.09	0.60	262.11	2,422.00	-12.27	1.67	3.06	0.36	0.08	34.34



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<b>Design:</b>	OH	<b>Database:</b>	Casper District

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)	
2,446.12	0.66	264.93	2,446.03	-12.30	1.41	3.32	0.28	0.25	11.74	
2,473.63	0.69	265.26	2,473.54	-12.32	1.09	3.63	0.11	0.11	1.20	
2,497.32	0.77	260.60	2,497.22	-12.36	0.79	3.92	0.42	0.34	-19.67	
2,520.06	0.79	253.65	2,519.96	-12.43	0.49	4.22	0.42	0.09	-30.56	
2,548.11	0.78	250.75	2,548.01	-12.55	0.12	4.61	0.15	-0.04	-10.34	
2,571.42	0.75	263.23	2,571.32	-12.62	-0.18	4.91	0.72	-0.13	53.54	
2,599.04	0.66	244.23	2,598.94	-12.71	-0.50	5.25	0.90	-0.33	-68.79	
2,622.58	0.68	241.46	2,622.47	-12.83	-0.75	5.52	0.16	0.08	-11.77	
2,649.96	0.71	235.54	2,649.85	-13.01	-1.03	5.85	0.28	0.11	-21.62	
2,673.50	0.77	239.04	2,673.39	-13.17	-1.29	6.15	0.32	0.25	14.87	
2,697.09	0.83	237.87	2,696.98	-13.34	-1.57	6.47	0.26	0.25	-4.96	
2,724.39	1.05	235.49	2,724.27	-13.59	-1.94	6.91	0.82	0.81	-8.72	
2,748.05	1.10	236.58	2,747.93	-13.84	-2.31	7.34	0.23	0.21	4.61	
2,770.81	1.37	229.08	2,770.68	-14.14	-2.70	7.82	1.38	1.19	-32.95	
2,798.89	1.36	230.77	2,798.76	-14.57	-3.21	8.45	0.15	-0.04	6.02	
2,822.45	1.36	229.98	2,822.31	-14.92	-3.64	8.98	0.08	0.00	-3.35	
2,849.85	1.40	226.06	2,849.70	-15.37	-4.13	9.60	0.37	0.15	-14.31	
2,873.40	1.37	226.67	2,873.25	-15.76	-4.54	10.13	0.14	-0.13	2.59	
2,896.20	1.41	226.56	2,896.04	-16.14	-4.94	10.65	0.18	0.18	-0.48	
2,924.40	1.38	230.29	2,924.23	-16.59	-5.46	11.30	0.34	-0.11	13.23	
2,947.98	1.20	229.10	2,947.80	-16.94	-5.86	11.80	0.77	-0.76	-5.05	
2,970.77	1.29	233.90	2,970.59	-17.24	-6.25	12.27	0.60	0.39	21.06	
2,998.93	1.20	238.87	2,998.74	-17.58	-6.76	12.87	0.50	-0.32	17.65	
3,021.73	1.25	238.15	3,021.54	-17.84	-7.17	13.35	0.23	0.22	-3.16	
3,049.05	1.31	229.38	3,048.85	-18.20	-7.66	13.94	0.75	0.22	-32.10	
3,073.35	1.25	229.64	3,073.14	-18.55	-8.08	14.46	0.25	-0.25	1.07	
3,096.12	1.17	232.03	3,095.91	-18.86	-8.45	14.92	0.42	-0.35	10.50	
3,124.29	1.11	228.51	3,124.07	-19.21	-8.88	15.45	0.33	-0.21	-12.50	
3,147.11	1.07	224.83	3,146.89	-19.51	-9.20	15.86	0.35	-0.18	-16.13	
3,170.61	1.12	228.07	3,170.38	-19.82	-9.52	16.28	0.34	0.21	13.79	
3,198.17	1.04	234.85	3,197.94	-20.14	-9.93	16.77	0.55	-0.29	24.60	
3,224.89	1.08	231.71	3,224.66	-20.44	-10.32	17.25	0.26	0.15	-11.75	
3,248.05	1.15	233.12	3,247.81	-20.71	-10.68	17.68	0.32	0.30	6.09	
3,270.34	1.22	237.47	3,270.10	-20.98	-11.06	18.13	0.51	0.31	19.52	
3,297.86	1.28	238.40	3,297.61	-21.29	-11.57	18.73	0.23	0.22	3.38	
3,320.89	1.37	236.96	3,320.63	-21.58	-12.02	19.25	0.42	0.39	-6.25	
3,347.69	1.43	234.98	3,347.43	-21.95	-12.56	19.89	0.29	0.22	-7.39	
3,370.71	1.34	238.85	3,370.44	-22.25	-13.03	20.44	0.56	-0.39	16.81	
3,397.38	1.35	237.07	3,397.10	-22.58	-13.56	21.05	0.16	0.04	-6.67	
3,424.81	1.34	236.38	3,424.52	-22.94	-14.10	21.68	0.07	-0.04	-2.52	
3,447.86	1.29	241.17	3,447.57	-23.21	-14.55	22.21	0.52	-0.22	20.78	
3,474.42	1.30	241.32	3,474.12	-23.50	-15.07	22.80	0.04	0.04	0.56	
3,497.65	1.30	241.14	3,497.35	-23.75	-15.54	23.32	0.02	0.00	-0.77	
3,525.00	1.19	245.76	3,524.69	-24.02	-16.07	23.92	0.54	-0.40	16.89	

<b>Company:</b>	KP Kauffman Co, Inc.	<b>Local Co-ordinate Reference:</b>	Well Robert Burge 1
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	GL 4984' @ 4984.00ft
<b>Site:</b>	Robert Burge	<b>MD Reference:</b>	GL 4984' @ 4984.00ft
<b>Well:</b>	Robert Burge 1	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

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)
3,547.36	1.17	249.17	3,547.04	-24.20	-16.49	24.38	0.33	-0.09	15.25
3,574.77	1.24	251.16	3,574.45	-24.39	-17.03	24.95	0.30	0.26	7.26
3,597.01	1.11	250.86	3,596.68	-24.54	-17.46	25.41	0.59	-0.58	-1.35
3,624.49	1.17	254.67	3,624.16	-24.70	-17.99	25.95	0.35	0.22	13.86
3,647.16	1.16	252.50	3,646.82	-24.83	-18.43	26.41	0.20	-0.04	-9.57
3,673.29	1.05	255.33	3,672.95	-24.97	-18.91	26.91	0.47	-0.42	10.83
3,697.13	1.08	260.58	3,696.78	-25.06	-19.35	27.35	0.43	0.13	22.02
3,723.73	1.07	262.84	3,723.38	-25.13	-19.84	27.83	0.16	-0.04	8.50
3,746.62	1.21	260.99	3,746.26	-25.20	-20.29	28.27	0.63	0.61	-8.08
3,774.07	1.18	259.97	3,773.71	-25.29	-20.85	28.83	0.13	-0.11	-3.72
3,796.29	1.27	260.54	3,795.92	-25.37	-21.32	29.30	0.41	0.41	2.57
3,823.74	1.31	269.00	3,823.37	-25.43	-21.94	29.89	0.71	0.15	30.82
3,846.67	1.47	267.32	3,846.29	-25.45	-22.49	30.41	0.72	0.70	-7.33
3,873.23	1.34	271.28	3,872.84	-25.46	-23.14	31.02	0.61	-0.49	14.91
3,895.67	1.49	271.92	3,895.28	-25.44	-23.70	31.52	0.67	0.67	2.85
3,921.79	1.49	276.08	3,921.39	-25.39	-24.37	32.13	0.41	0.00	15.93
3,948.53	1.51	282.49	3,948.12	-25.28	-25.06	32.73	0.63	0.07	23.97
3,971.01	1.59	284.24	3,970.59	-25.14	-25.66	33.22	0.41	0.36	7.78
3,997.20	1.52	286.84	3,996.77	-24.95	-26.34	33.79	0.38	-0.27	9.93
4,024.05	1.58	295.44	4,023.61	-24.69	-27.01	34.31	0.89	0.22	32.03
4,045.78	1.46	294.14	4,045.33	-24.45	-27.54	34.71	0.57	-0.55	-5.98
4,072.52	1.38	295.11	4,072.06	-24.17	-28.14	35.16	0.31	-0.30	3.63
4,099.39	1.53	298.28	4,098.93	-23.86	-28.75	35.61	0.63	0.56	11.80
4,121.14	1.48	300.73	4,120.67	-23.58	-29.25	35.97	0.37	-0.23	11.26
4,147.86	1.26	293.26	4,147.38	-23.29	-29.81	36.38	1.06	-0.82	-27.96
4,174.73	1.20	297.22	4,174.24	-23.04	-30.33	36.77	0.39	-0.22	14.74
4,196.47	1.23	297.84	4,195.98	-22.83	-30.74	37.07	0.15	0.14	2.85
4,223.30	1.25	289.35	4,222.80	-22.60	-31.27	37.48	0.69	0.07	-31.64
4,245.77	1.38	285.54	4,245.27	-22.45	-31.77	37.87	0.70	0.58	-16.96
4,271.84	1.31	285.59	4,271.33	-22.28	-32.36	38.36	0.27	-0.27	0.19
4,298.25	1.25	290.97	4,297.73	-22.10	-32.92	38.81	0.51	-0.23	20.37
4,324.77	1.34	282.65	4,324.25	-21.93	-33.49	39.27	0.79	0.34	-31.37
4,346.19	1.59	277.51	4,345.66	-21.83	-34.03	39.74	1.32	1.17	-24.00
4,372.53	1.50	274.69	4,371.99	-21.76	-34.73	40.36	0.45	-0.34	-10.71
4,398.03	1.61	273.22	4,397.48	-21.71	-35.42	40.99	0.46	0.43	-5.76
4,424.07	1.97	272.91	4,423.51	-21.67	-36.24	41.72	1.38	1.38	-1.19
4,445.75	2.00	271.28	4,445.17	-21.64	-36.99	42.41	0.29	0.14	-7.52
4,470.96	2.13	274.74	4,470.37	-21.59	-37.89	43.23	0.71	0.52	13.72
4,496.64	2.10	275.34	4,496.03	-21.51	-38.84	44.07	0.15	-0.12	2.34
4,521.42	2.29	271.88	4,520.79	-21.45	-39.78	44.93	0.93	0.77	-13.96
4,549.34	2.28	278.82	4,548.69	-21.34	-40.89	45.91	0.99	-0.04	24.86
4,573.57	2.18	282.17	4,572.90	-21.17	-41.82	46.71	0.68	-0.41	13.83
4,596.54	2.19	283.79	4,595.86	-20.98	-42.67	47.43	0.27	0.04	7.05

<b>Company:</b>	KP Kauffman Co, Inc.	<b>Local Co-ordinate Reference:</b>	Well Robert Burge 1
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	GL 4984' @ 4984.00ft
<b>Site:</b>	Robert Burge	<b>MD Reference:</b>	GL 4984' @ 4984.00ft
<b>Well:</b>	Robert Burge 1	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

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)
4,621.71	2.14	288.42	4,621.01	-20.71	-43.58	48.17	0.72	-0.20	18.39
4,648.21	2.08	280.29	4,647.49	-20.47	-44.53	48.96	1.15	-0.23	-30.68
4,673.14	2.14	277.43	4,672.40	-20.33	-45.43	49.74	0.49	0.24	-11.47
4,697.62	1.79	287.06	4,696.87	-20.16	-46.25	50.44	1.96	-1.43	39.34
4,724.32	2.35	276.66	4,723.55	-19.97	-47.19	51.24	2.52	2.10	-38.95
4,748.10	2.00	277.30	4,747.31	-19.86	-48.09	52.03	1.48	-1.47	2.69
4,766.97	1.99	278.54	4,766.17	-19.77	-48.74	52.60	0.23	-0.05	6.57
Last SDI Gyro Survey									

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_