

INTREPID

Directional Services

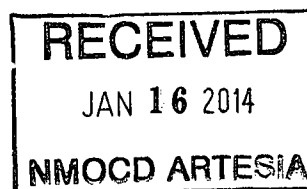
15-41508

SM Energy

Eddy County, NM (NAD 83)

Sec 34, T19S, R29E

Osage 34 Fed #1H



Original Wellbore

Design: Original Wellbore

Survey Report - Geographic

14 August, 2013



Company:	SM Energy	Local Co-ordinate Reference:	Well Osage 34 Fed #1H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	WELL @ 3327.0usft (Original Well Elev)
Site:	Sec 34, T19S, R29E	MD Reference:	WELL @ 3327.0usft (Original Well Elev)
Well:	Osage 34 Fed #1H.	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Project	Eddy 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	Sec 34, T19S, R29E		
Site Position:	Map	Northing:	0.00 usft
From:	Map	Easting:	0.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	30° 59' 18.404 N
		Longitude:	106° 3' 38.987 W
		Grid Convergence:	-0.89 °

Well	Osage 34 Fed #1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,327.0 usft
		Latitude:	32° 37' 23.447 N
		Longitude:	104° 3' 18.729 W
		Ground Level:	3,309.0 usft

Wellbore	Original Wellbore		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	7/2/2013	7.59
			Dip Angle
			(°)
			Field Strength
			(nT)
			60.42
			48,599

Design	Original Wellbore		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			271.45

Survey Program	Date 8/14/2013		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	7,348.0	Gyro Survey (Original Wellbore)	NS-GYRO-MS
7,434.0	12,386.0	MWD Surveys (Original Wellbore)	MWD
			Description
			North sensing gyrocompassing m/s
			MWD - Standard

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude	
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting			
(usft)			(usft)			(usft)	(usft)			
0.0	0.00	0.00	0.0	0.0	0.0	590,555.66	626,966.61	32° 37' 23.447 N	104° 3' 18.729 W	
100.0	0.18	141.00	100.0	-0.1	0.1	590,555.54	626,966.71	32° 37' 23.446 N	104° 3' 18.728 W	
First Gyro Survey										
200.0	0.72	119.97	200.0	-0.6	0.7	590,555.11	626,967.35	32° 37' 23.442 N	104° 3' 18.721 W	
300.0	1.23	102.02	300.0	-1.1	2.3	590,554.57	626,968.95	32° 37' 23.436 N	104° 3' 18.702 W	
400.0	1.17	107.77	400.0	-1.6	4.4	590,554.03	626,970.97	32° 37' 23.431 N	104° 3' 18.679 W	
500.0	1.23	101.78	499.9	-2.2	6.4	590,553.50	626,972.99	32° 37' 23.426 N	104° 3' 18.655 W	
600.0	1.07	90.54	599.9	-2.4	8.4	590,553.27	626,974.98	32° 37' 23.423 N	104° 3' 18.632 W	
700.0	1.10	74.86	699.9	-2.1	10.2	590,553.52	626,976.84	32° 37' 23.426 N	104° 3' 18.610 W	
800.0	1.13	76.04	799.9	-1.7	12.1	590,554.00	626,978.72	32° 37' 23.430 N	104° 3' 18.588 W	
900.0	1.14	76.23	899.9	-1.2	14.0	590,554.48	626,980.64	32° 37' 23.435 N	104° 3' 18.565 W	

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Site:	Sec 34, T19S, R29E	MD Reference:	WELL @ 3327.0usft (Original Well Elev)
Well:	Osage 34 Fed #1H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,000.0	1.30	78.90	999.8	-0.7	16.1	590,554.93	626,982.72	32° 37' 23.439 N	104° 3' 18.541 W
1,100.0	1.23	84.82	1,099.8	-0.4	18.3	590,555.25	626,984.91	32° 37' 23.443 N	104° 3' 18.516 W
1,200.0	1.34	89.83	1,199.8	-0.3	20.5	590,555.35	626,987.14	32° 37' 23.443 N	104° 3' 18.489 W
1,300.0	1.12	99.04	1,299.8	-0.5	22.7	590,555.20	626,989.28	32° 37' 23.442 N	104° 3' 18.464 W
1,400.0	0.97	99.57	1,399.7	-0.8	24.5	590,554.91	626,991.08	32° 37' 23.439 N	104° 3' 18.443 W
1,500.0	0.91	82.46	1,499.7	-0.8	26.1	590,554.87	626,992.70	32° 37' 23.439 N	104° 3' 18.424 W
1,600.0	0.77	94.34	1,599.7	-0.7	27.5	590,554.92	626,994.16	32° 37' 23.439 N	104° 3' 18.407 W
1,700.0	0.77	101.04	1,699.7	-0.9	28.9	590,554.74	626,995.49	32° 37' 23.437 N	104° 3' 18.392 W
1,800.0	0.74	113.86	1,799.7	-1.3	30.1	590,554.35	626,996.74	32° 37' 23.433 N	104° 3' 18.377 W
1,900.0	0.50	127.83	1,899.7	-1.8	31.1	590,553.82	626,997.67	32° 37' 23.428 N	104° 3' 18.366 W
2,000.0	0.29	199.43	1,999.7	-2.3	31.3	590,553.32	626,997.93	32° 37' 23.423 N	104° 3' 18.363 W
2,100.0	0.55	224.61	2,099.7	-2.9	30.9	590,552.74	626,997.51	32° 37' 23.417 N	104° 3' 18.368 W
2,200.0	0.83	227.81	2,199.7	-3.8	30.0	590,551.91	626,996.64	32° 37' 23.409 N	104° 3' 18.378 W
2,300.0	0.72	216.74	2,299.7	-4.7	29.1	590,550.92	626,995.72	32° 37' 23.399 N	104° 3' 18.389 W
2,400.0	0.84	200.50	2,399.7	-5.9	28.5	590,549.73	626,995.09	32° 37' 23.388 N	104° 3' 18.397 W
2,500.0	1.01	220.18	2,499.7	-7.3	27.7	590,548.37	626,994.27	32° 37' 23.374 N	104° 3' 18.406 W
2,600.0	0.92	213.08	2,599.6	-8.6	26.6	590,547.02	626,993.26	32° 37' 23.361 N	104° 3' 18.418 W
2,700.0	1.02	216.32	2,699.6	-10.0	25.7	590,545.63	626,992.29	32° 37' 23.347 N	104° 3' 18.429 W
2,800.0	0.87	213.28	2,799.6	-11.4	24.7	590,544.28	626,991.35	32° 37' 23.334 N	104° 3' 18.441 W
2,900.0	0.98	216.36	2,899.6	-12.7	23.8	590,542.96	626,990.43	32° 37' 23.321 N	104° 3' 18.451 W
3,000.0	0.91	211.74	2,999.6	-14.1	22.9	590,541.59	626,989.50	32° 37' 23.307 N	104° 3' 18.462 W
3,100.0	0.97	211.95	3,099.6	-15.5	22.0	590,540.20	626,988.64	32° 37' 23.294 N	104° 3' 18.472 W
3,200.0	0.98	218.97	3,199.6	-16.8	21.0	590,538.82	626,987.65	32° 37' 23.280 N	104° 3' 18.484 W
3,300.0	0.72	212.61	3,299.6	-18.0	20.2	590,537.62	626,986.77	32° 37' 23.268 N	104° 3' 18.494 W
3,400.0	1.01	228.14	3,399.5	-19.2	19.2	590,536.51	626,985.78	32° 37' 23.257 N	104° 3' 18.506 W
3,500.0	1.04	220.84	3,499.5	-20.4	17.9	590,535.23	626,984.53	32° 37' 23.244 N	104° 3' 18.521 W
3,600.0	1.05	230.60	3,599.5	-21.7	16.6	590,533.96	626,983.23	32° 37' 23.232 N	104° 3' 18.536 W
3,700.0	1.16	232.34	3,699.5	-22.9	15.1	590,532.76	626,981.72	32° 37' 23.220 N	104° 3' 18.554 W
3,800.0	1.00	232.69	3,799.5	-24.0	13.6	590,531.62	626,980.22	32° 37' 23.209 N	104° 3' 18.571 W
3,900.0	0.86	222.20	3,899.5	-25.1	12.4	590,530.53	626,979.03	32° 37' 23.198 N	104° 3' 18.585 W
4,000.0	0.77	239.44	3,999.4	-26.0	11.3	590,529.63	626,977.94	32° 37' 23.189 N	104° 3' 18.598 W
4,100.0	0.60	247.77	4,099.4	-26.6	10.3	590,529.09	626,976.88	32° 37' 23.184 N	104° 3' 18.610 W
4,200.0	0.83	225.75	4,199.4	-27.3	9.3	590,528.39	626,975.88	32° 37' 23.177 N	104° 3' 18.622 W
4,300.0	0.61	233.48	4,299.4	-28.1	8.3	590,527.57	626,974.93	32° 37' 23.169 N	104° 3' 18.633 W
4,400.0	0.91	244.47	4,399.4	-28.8	7.2	590,526.91	626,973.79	32° 37' 23.162 N	104° 3' 18.646 W
4,500.0	0.31	288.25	4,499.4	-29.0	6.2	590,526.65	626,972.81	32° 37' 23.160 N	104° 3' 18.658 W
4,600.0	0.44	300.95	4,599.4	-28.7	5.6	590,526.93	626,972.23	32° 37' 23.163 N	104° 3' 18.665 W
4,700.0	0.55	316.48	4,699.4	-28.2	5.0	590,527.48	626,971.57	32° 37' 23.168 N	104° 3' 18.672 W
4,800.0	0.38	322.39	4,799.4	-27.6	4.4	590,528.09	626,971.03	32° 37' 23.174 N	104° 3' 18.679 W
4,900.0	0.57	321.86	4,899.4	-26.9	3.9	590,528.74	626,970.52	32° 37' 23.181 N	104° 3' 18.685 W
5,000.0	0.62	309.58	4,999.4	-26.2	3.2	590,529.48	626,969.80	32° 37' 23.188 N	104° 3' 18.693 W
5,100.0	0.64	319.31	5,099.4	-25.4	2.4	590,530.25	626,969.02	32° 37' 23.196 N	104° 3' 18.702 W
5,200.0	0.92	313.82	5,199.4	-24.4	1.5	590,531.23	626,968.07	32° 37' 23.205 N	104° 3' 18.713 W
5,300.0	0.84	312.46	5,299.4	-23.4	0.3	590,532.28	626,966.95	32° 37' 23.216 N	104° 3' 18.726 W
5,400.0	0.92	299.74	5,399.4	-22.5	-0.9	590,533.17	626,965.72	32° 37' 23.225 N	104° 3' 18.741 W
5,500.0	1.25	283.33	5,499.3	-21.8	-2.7	590,533.82	626,963.96	32° 37' 23.231 N	104° 3' 18.761 W
5,600.0	1.59	290.68	5,599.3	-21.1	-5.0	590,534.56	626,961.60	32° 37' 23.238 N	104° 3' 18.789 W
5,700.0	1.32	300.86	5,699.3	-20.0	-7.3	590,535.64	626,959.31	32° 37' 23.249 N	104° 3' 18.815 W
5,800.0	0.87	325.86	5,799.3	-18.8	-8.7	590,536.86	626,957.90	32° 37' 23.261 N	104° 3' 18.832 W
5,900.0	0.90	324.35	5,899.2	-17.5	-9.6	590,538.13	626,957.01	32° 37' 23.274 N	104° 3' 18.842 W
6,000.0	1.08	320.22	5,999.2	-16.2	-10.7	590,539.49	626,955.95	32° 37' 23.287 N	104° 3' 18.855 W
6,100.0	1.27	311.49	6,099.2	-14.7	-12.1	590,540.95	626,954.52	32° 37' 23.302 N	104° 3' 18.871 W
6,200.0	1.18	309.05	6,199.2	-13.3	-13.7	590,542.33	626,952.89	32° 37' 23.316 N	104° 3' 18.890 W
6,300.0	1.37	300.06	6,299.2	-12.1	-15.6	590,543.58	626,951.06	32° 37' 23.328 N	104° 3' 18.912 W
6,400.0	1.15	281.01	6,399.1	-11.3	-17.6	590,544.37	626,949.04	32° 37' 23.336 N	104° 3' 18.935 W

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Well:	Osage 34 Fed #1H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,500.0	1.03	270.86	6,499.1	-11.1	-19.5	590,544.58	626,947.15	32° 37' 23.338 N	104° 3' 18.957 W
6,600.0	1.30	273.40	6,599.1	-11.0	-21.5	590,544.66	626,945.12	32° 37' 23.339 N	104° 3' 18.981 W
6,700.0	1.51	286.02	6,699.1	-10.6	-23.9	590,545.09	626,942.72	32° 37' 23.343 N	104° 3' 19.009 W
6,800.0	0.27	306.76	6,799.1	-10.1	-25.3	590,545.59	626,941.27	32° 37' 23.348 N	104° 3' 19.026 W
6,900.0	0.55	322.36	6,899.1	-9.6	-25.8	590,546.11	626,940.79	32° 37' 23.353 N	104° 3' 19.032 W
7,000.0	0.96	256.75	6,999.0	-9.4	-26.9	590,546.30	626,939.68	32° 37' 23.355 N	104° 3' 19.045 W
7,100.0	1.09	254.52	7,099.0	-9.8	-28.7	590,545.86	626,937.94	32° 37' 23.351 N	104° 3' 19.065 W
7,200.0	1.10	258.87	7,199.0	-10.2	-30.5	590,545.42	626,936.09	32° 37' 23.347 N	104° 3' 19.087 W
7,300.0	1.14	243.36	7,299.0	-10.9	-32.4	590,544.78	626,934.26	32° 37' 23.340 N	104° 3' 19.108 W
7,348.0	1.09	226.51	7,347.0	-11.4	-33.1	590,544.26	626,933.50	32° 37' 23.335 N	104° 3' 19.117 W
Last Gyro Survey									
7,434.0	1.70	200.90	7,433.0	-13.2	-34.2	590,542.50	626,932.45	32° 37' 23.318 N	104° 3' 19.129 W
First MWD Survey									
7,466.0	3.90	241.90	7,464.9	-14.1	-35.3	590,541.55	626,931.32	32° 37' 23.308 N	104° 3' 19.143 W
7,498.0	6.50	247.60	7,496.8	-15.3	-37.9	590,540.34	626,928.68	32° 37' 23.296 N	104° 3' 19.173 W
7,529.0	9.60	257.70	7,527.5	-16.5	-42.1	590,539.12	626,924.54	32° 37' 23.285 N	104° 3' 19.222 W
7,561.0	12.60	259.70	7,558.9	-17.7	-48.1	590,537.93	626,918.49	32° 37' 23.273 N	104° 3' 19.293 W
7,593.0	15.50	261.00	7,589.9	-19.0	-55.8	590,536.64	626,910.83	32° 37' 23.260 N	104° 3' 19.382 W
7,625.0	19.00	264.50	7,620.5	-20.2	-65.2	590,535.47	626,901.42	32° 37' 23.249 N	104° 3' 19.492 W
7,657.0	22.10	265.90	7,650.4	-21.1	-76.4	590,534.54	626,890.23	32° 37' 23.240 N	104° 3' 19.623 W
7,689.0	24.80	267.40	7,679.8	-21.9	-89.1	590,533.80	626,877.52	32° 37' 23.233 N	104° 3' 19.772 W
7,720.0	28.50	269.10	7,707.5	-22.3	-103.0	590,533.39	626,863.62	32° 37' 23.229 N	104° 3' 19.934 W
7,752.0	31.20	271.50	7,735.2	-22.2	-118.9	590,533.49	626,847.70	32° 37' 23.231 N	104° 3' 20.121 W
7,784.0	34.20	269.70	7,762.2	-22.0	-136.2	590,533.66	626,830.42	32° 37' 23.233 N	104° 3' 20.323 W
7,816.0	36.80	270.10	7,788.2	-22.0	-154.8	590,533.63	626,811.84	32° 37' 23.233 N	104° 3' 20.540 W
7,848.0	38.30	270.40	7,813.6	-21.9	-174.3	590,533.71	626,792.34	32° 37' 23.234 N	104° 3' 20.768 W
7,879.0	40.90	273.40	7,837.5	-21.3	-194.0	590,534.38	626,772.59	32° 37' 23.242 N	104° 3' 20.999 W
7,911.0	43.00	276.70	7,861.3	-19.4	-215.3	590,536.28	626,751.29	32° 37' 23.261 N	104° 3' 21.248 W
7,943.0	45.80	277.70	7,884.1	-16.6	-237.5	590,539.09	626,729.08	32° 37' 23.289 N	104° 3' 21.507 W
7,975.0	49.60	280.30	7,905.7	-12.9	-260.9	590,542.81	626,705.72	32° 37' 23.327 N	104° 3' 21.780 W
8,007.0	50.60	276.70	7,926.2	-9.2	-285.2	590,546.43	626,681.45	32° 37' 23.363 N	104° 3' 22.064 W
8,038.0	53.30	276.30	7,945.3	-6.5	-309.4	590,549.19	626,657.19	32° 37' 23.391 N	104° 3' 22.348 W
8,070.0	57.00	275.20	7,963.6	-3.8	-335.5	590,551.82	626,631.07	32° 37' 23.418 N	104° 3' 22.653 W
8,102.0	60.50	274.10	7,980.2	-1.6	-362.8	590,554.03	626,603.81	32° 37' 23.440 N	104° 3' 22.972 W
8,134.0	64.50	274.20	7,995.0	0.4	-391.1	590,556.08	626,575.50	32° 37' 23.461 N	104° 3' 23.303 W
8,166.0	67.30	272.70	8,008.0	2.2	-420.3	590,557.84	626,546.35	32° 37' 23.479 N	104° 3' 23.644 W
8,198.0	69.90	271.40	8,019.7	3.2	-450.0	590,558.90	626,516.58	32° 37' 23.491 N	104° 3' 23.992 W
8,230.0	73.40	271.20	8,029.8	3.9	-480.4	590,559.59	626,486.22	32° 37' 23.498 N	104° 3' 24.347 W
8,261.0	76.70	271.60	8,037.8	4.7	-510.3	590,560.32	626,456.28	32° 37' 23.506 N	104° 3' 24.697 W
8,293.0	79.80	270.80	8,044.3	5.3	-541.7	590,560.97	626,424.96	32° 37' 23.514 N	104° 3' 25.063 W
8,325.0	83.90	271.10	8,048.8	5.8	-573.3	590,561.50	626,393.29	32° 37' 23.520 N	104° 3' 25.433 W
8,443.0	90.00	271.60	8,055.1	8.6	-691.1	590,564.28	626,275.55	32° 37' 23.550 N	104° 3' 26.810 W
8,538.0	89.90	269.40	8,055.2	9.4	-786.1	590,565.10	626,180.56	32° 37' 23.561 N	104° 3' 27.920 W
8,633.0	89.00	270.70	8,056.1	9.5	-881.0	590,565.19	626,085.57	32° 37' 23.564 N	104° 3' 29.031 W
8,728.0	90.60	271.80	8,056.4	11.6	-976.0	590,567.26	625,990.60	32° 37' 23.587 N	104° 3' 30.142 W
8,823.0	90.60	270.90	8,055.4	13.8	-1,071.0	590,569.50	625,895.63	32° 37' 23.612 N	104° 3' 31.252 W
8,917.0	91.40	271.20	8,053.8	15.6	-1,165.0	590,571.22	625,801.66	32° 37' 23.631 N	104° 3' 32.351 W
9,012.0	91.30	271.30	8,051.5	17.6	-1,259.9	590,573.29	625,706.71	32° 37' 23.654 N	104° 3' 33.461 W
9,107.0	91.00	270.70	8,049.6	19.3	-1,354.9	590,574.95	625,611.74	32° 37' 23.673 N	104° 3' 34.571 W
9,202.0	91.60	271.70	8,047.5	21.3	-1,449.8	590,576.94	625,516.79	32° 37' 23.695 N	104° 3' 35.682 W
9,298.0	91.40	272.10	8,045.0	24.5	-1,545.7	590,580.12	625,420.87	32° 37' 23.729 N	104° 3' 36.803 W
9,392.0	92.40	272.30	8,041.9	28.1	-1,639.6	590,583.73	625,327.00	32° 37' 23.767 N	104° 3' 37.901 W
9,487.0	90.70	270.40	8,039.3	30.3	-1,734.5	590,585.96	625,232.07	32° 37' 23.791 N	104° 3' 39.011 W
9,583.0	90.60	270.70	8,038.2	31.2	-1,830.5	590,586.88	625,136.08	32° 37' 23.803 N	104° 3' 40.133 W
9,678.0	90.80	272.30	8,037.0	33.7	-1,925.5	590,589.37	625,041.12	32° 37' 23.830 N	104° 3' 41.243 W

Company:	SM Energy	Local Co-ordinate Reference:	Well Osage 34 Fed #1H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	WELL @ 3327.0usft (Original Well Elev)
Site:	Sec 34, T19S, R29E	MD Reference:	WELL @ 3327.0usft (Original Well Elev)
Well:	Osage 34 Fed #1H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,772.0	90.40	273.00	8,036.1	38.1	-2,019.4	590,593.72	624,947.23	32° 37' 23.875 N	104° 3' 42.341 W	
9,868.0	91.50	275.50	8,034.5	45.2	-2,115.1	590,600.83	624,851.51	32° 37' 23.948 N	104° 3' 43.460 W	
9,963.0	91.60	276.70	8,031.9	55.3	-2,209.5	590,610.92	624,757.09	32° 37' 24.050 N	104° 3' 44.564 W	
10,057.0	91.50	277.10	8,029.3	66.5	-2,302.8	590,622.21	624,663.80	32° 37' 24.164 N	104° 3' 45.654 W	
10,152.0	91.60	277.40	8,026.8	78.5	-2,397.0	590,634.19	624,569.60	32° 37' 24.285 N	104° 3' 46.755 W	
10,245.0	91.90	275.30	8,023.9	88.8	-2,489.4	590,644.47	624,477.21	32° 37' 24.389 N	104° 3' 47.835 W	
10,340.0	91.90	275.60	8,020.8	97.8	-2,583.9	590,653.49	624,382.70	32° 37' 24.481 N	104° 3' 48.940 W	
10,434.0	91.60	273.90	8,017.9	105.6	-2,677.5	590,661.27	624,289.07	32° 37' 24.560 N	104° 3' 50.035 W	
10,530.0	91.50	272.80	8,015.3	111.2	-2,773.3	590,666.88	624,193.27	32° 37' 24.618 N	104° 3' 51.155 W	
10,624.0	91.40	271.60	8,012.9	114.8	-2,867.2	590,670.49	624,099.37	32° 37' 24.656 N	104° 3' 52.253 W	
10,719.0	90.80	270.60	8,011.1	116.6	-2,962.2	590,672.31	624,004.40	32° 37' 24.677 N	104° 3' 53.363 W	
10,813.0	90.90	270.00	8,009.7	117.1	-3,056.2	590,672.80	623,910.42	32° 37' 24.684 N	104° 3' 54.462 W	
10,908.0	90.90	268.20	8,008.2	115.6	-3,151.2	590,671.31	623,815.44	32° 37' 24.672 N	104° 3' 55.573 W	
11,002.0	90.90	266.40	8,006.8	111.2	-3,245.0	590,666.88	623,721.56	32° 37' 24.630 N	104° 3' 56.671 W	
11,097.0	91.80	266.60	8,004.5	105.4	-3,339.8	590,661.08	623,626.77	32° 37' 24.575 N	104° 3' 57.779 W	
11,192.0	90.20	265.10	8,002.9	98.5	-3,434.6	590,654.21	623,532.04	32° 37' 24.509 N	104° 3' 58.887 W	
11,287.0	90.50	267.00	8,002.3	92.0	-3,529.3	590,647.67	623,437.27	32° 37' 24.447 N	104° 3' 59.995 W	
11,383.0	89.70	267.00	8,002.1	87.0	-3,625.2	590,642.64	623,341.40	32° 37' 24.400 N	104° 4' 1.116 W	
11,477.0	88.60	268.30	8,003.5	83.1	-3,719.1	590,638.79	623,247.49	32° 37' 24.364 N	104° 4' 2.215 W	
11,571.0	89.10	270.10	8,005.4	81.8	-3,813.1	590,637.48	623,153.53	32° 37' 24.353 N	104° 4' 3.313 W	
11,666.0	90.30	272.50	8,005.9	84.0	-3,908.1	590,639.63	623,058.56	32° 37' 24.377 N	104° 4' 4.424 W	
11,761.0	91.20	272.70	8,004.6	88.3	-4,002.9	590,643.94	622,963.67	32° 37' 24.422 N	104° 4' 5.533 W	
11,856.0	93.10	273.60	8,001.1	93.5	-4,097.7	590,649.16	622,868.88	32° 37' 24.476 N	104° 4' 6.641 W	
11,951.0	92.20	272.70	7,996.7	98.7	-4,192.5	590,654.37	622,774.13	32° 37' 24.530 N	104° 4' 7.749 W	
12,046.0	92.20	273.40	7,993.0	103.8	-4,287.3	590,659.42	622,679.34	32° 37' 24.582 N	104° 4' 8.858 W	
12,141.0	91.50	271.60	7,990.0	107.9	-4,382.1	590,663.56	622,584.48	32° 37' 24.625 N	104° 4' 9.967 W	
12,236.0	91.60	271.60	7,987.4	110.6	-4,477.1	590,666.22	622,489.55	32° 37' 24.654 N	104° 4' 11.077 W	
12,330.0	92.10	272.10	7,984.4	113.6	-4,571.0	590,669.25	622,395.65	32° 37' 24.686 N	104° 4' 12.174 W	
Last MWD Survey.										
12,386.0	92.10	272.10	7,982.3	115.6	-4,626.9	590,671.30	622,339.73	32° 37' 24.708 N	104° 4' 12.828 W	
PTB - TD										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
100.0	100.0	-0.1	0.1	First Gyro Survey	
7,348.0	7,347.0	-11.4	-33.1	Last Gyro Survey	
7,434.0	7,433.0	-13.2	-34.2	First MWD Survey	
12,330.0	7,984.4	113.6	-4,571.0	Last MWD Survey	
12,386.0	7,982.3	115.6	-4,626.9	PTB - TD	

Checked By: _____ Approved By: _____ Date: _____