

30 015 43148



Job Number: SYMO-150919
 Company: Yates Petroleum Corporation
 Lease/Well: Baroque BTO Federal Com 1H
 Location: Eddy County, NM
 Rig Name: Nomac #22
 RKB: 21.5'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.18°
 Grid: East To Grid North
 File name: W:\WINSER-1\2015SU-1\YATESP-1\MOBAROCU-1\1H.SV
 Date/Time: 02-Dec-15 / 11:04
 Curve Name: Surface - 328' M.D. (Rate Gyro)

NM OIL CONSERVATION

ARTESIA DISTRICT

MAR 25 2016

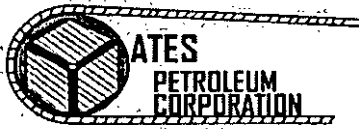
RECEIVED

MS Survey

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 90.03
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 328' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
 Curtis Burman 12/21/15
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.36	222.85	100.00	-.23	-.21	-.21	.31	222.85	.36
200.00	.45	205.96	200.00	-.81	-.60	-.60	1.01	216.37	.15
300.00	.40	216.89	299.99	-1.45	-.98	-.98	1.75	214.14	.10
Last Survey Depth Recorded									
328.00	.43	216.14	327.99	-1.61	-1.10	-1.10	1.95	214.39	.11



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Yates Petroleum Corp.

Eddy County, NM (NAD-83 2015)

Baroque BTQ Federal Com #1H

Baroque BTQ Federal Com #1H

Lateral #1

Design: Lateral #1

Survey Report - Geographic

18 December, 2015





TDS
Survey Report - Geographic



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well Baroque BTQ Federal Com #1H
Project:	Eddy County, NM.(NAD-83 2015)	TVD Reference:	KB @ 3429.50usft (Nomac 22)
Site:	Baroque BTQ Federal Com #1H	MD Reference:	KB @ 3429.50usft (Nomac 22)
Well:	Baroque BTQ Federal Com #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy County, NM.(NAD-83 2015)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Baroque BTQ Federal Com #1H		
Site Position:		Northing:	614,050.10 usft
From:	Map	Easting:	640,619.05 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	32° 41' 15.548 N
		Longitude:	104° 0' 38.257 W
		Grid Convergence:	0.17 °

Well	Baroque BTQ Federal Com #1H					
Well Position	+N/-S	0.00 usft	Northing:	614,050.10 usft	Latitude:	32° 41' 15.548 N
	+E/-W	0.00 usft	Easting:	640,619.05 usft	Longitude:	104° 0' 38.257 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,408.00 usft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/29/2015	7.37	60.44	48,335

Design:		Lateral #1		
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	90.03

Survey Program		Date	12/18/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	328.00	MS Gyro #1 (Lateral #1)	ISCWSA-GYRO-3	Biaxial Semi-Cont. Gyro	
469.00	15,391.00	TDS MWD #2 (Lateral #1)	MWD	MWD - Standard	

Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	North	East	Latitude	Longitude	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.00	0.00	0.00	0.00	0.00	614,050.10	640,619.05	32° 41' 15.548 N	104° 0' 38.257 W	
100.00	0.36	222.85	100.00	-0.23	-0.21	614,049.87	640,618.84	32° 41' 15.546 N	104° 0' 38.260 W	
200.00	0.45	205.96	200.00	-0.81	-0.60	614,049.29	640,618.46	32° 41' 15.540 N	104° 0' 38.264 W	
300.00	0.40	216.89	299.99	-1.45	-0.98	614,048.66	640,618.07	32° 41' 15.534 N	104° 0' 38.269 W	
328.00	0.43	216.14	327.99	-1.61	-1.10	614,048.49	640,617.95	32° 41' 15.532 N	104° 0' 38.270 W	
469.00	0.70	227.50	468.99	-2.62	-2.05	614,047.49	640,617.01	32° 41' 15.522 N	104° 0' 38.281 W	
556.00	0.60	213.20	555.98	-3.36	-2.69	614,046.75	640,616.36	32° 41' 15.515 N	104° 0' 38.289 W	
647.00	0.50	211.50	646.98	-4.10	-3.16	614,046.01	640,615.90	32° 41' 15.508 N	104° 0' 38.294 W	
833.00	0.20	185.50	832.97	-5.11	-3.61	614,044.99	640,615.44	32° 41' 15.498 N	104° 0' 38.300 W	
1,019.00	0.20	103.80	1,018.97	-5.51	-3.33	614,044.59	640,615.73	32° 41' 15.494 N	104° 0' 38.296 W	
1,206.00	0.40	79.10	1,205.97	-5.47	-2.37	614,044.64	640,616.68	32° 41' 15.494 N	104° 0' 38.285 W	



TDS
Survey Report - Geographic



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well Baroque BTQ Federal Com #1H
Project:	Eddy County, NM (NAD-83 2015)	TVD Reference:	KB @ 3429.50usft (Nomac 22)
Site:	Baroque BTQ Federal Com #1H	MD Reference:	KB @ 3429.50usft (Nomac 22)
Well:	Baroque BTQ Federal Com #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	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
1,392.00	0.40	66.60	1,391.97	-5.09	-1.14	614,045.02	640,617.92	32° 41' 15.498 N	104° 0' 38.271 W
1,578.00	0.40	10.90	1,577.96	-4.19	-0.42	614,045.91	640,618.64	32° 41' 15.507 N	104° 0' 38.262 W
1,765.00	0.50	354.80	1,764.96	-2.74	-0.37	614,047.37	640,618.68	32° 41' 15.521 N	104° 0' 38.261 W
1,952.00	0.70	335.90	1,951.95	-0.88	-0.91	614,049.22	640,618.14	32° 41' 15.540 N	104° 0' 38.268 W
2,140.00	0.50	337.10	2,139.94	0.92	-1.70	614,051.03	640,617.36	32° 41' 15.557 N	104° 0' 38.277 W
2,326.00	0.40	334.50	2,325.93	2.26	-2.29	614,052.36	640,616.76	32° 41' 15.571 N	104° 0' 38.284 W
2,514.00	0.40	323.90	2,513.92	3.38	-2.96	614,053.48	640,616.09	32° 41' 15.582 N	104° 0' 38.292 W
2,700.00	0.30	309.60	2,699.92	4.21	-3.72	614,054.32	640,615.33	32° 41' 15.590 N	104° 0' 38.300 W
2,888.00	0.40	323.90	2,887.92	5.06	-4.49	614,055.16	640,614.57	32° 41' 15.598 N	104° 0' 38.309 W
3,075.00	0.40	334.20	3,074.91	6.17	-5.15	614,056.28	640,613.90	32° 41' 15.609 N	104° 0' 38.317 W
3,260.00	0.40	345.10	3,259.91	7.38	-5.60	614,057.48	640,613.45	32° 41' 15.621 N	104° 0' 38.322 W
3,456.00	0.30	312.20	3,455.91	8.38	-6.16	614,058.49	640,612.90	32° 41' 15.631 N	104° 0' 38.329 W
3,643.00	0.40	320.50	3,642.90	9.22	-6.94	614,059.32	640,612.12	32° 41' 15.640 N	104° 0' 38.338 W
3,830.00	0.60	314.60	3,829.89	10.41	-8.05	614,060.51	640,611.01	32° 41' 15.651 N	104° 0' 38.351 W
4,018.00	0.70	312.70	4,017.88	11.88	-9.59	614,061.98	640,609.46	32° 41' 15.666 N	104° 0' 38.369 W
4,205.00	0.90	328.30	4,204.86	13.90	-11.20	614,064.01	640,607.85	32° 41' 15.686 N	104° 0' 38.388 W
4,393.00	0.80	313.80	4,392.84	16.07	-12.93	614,066.17	640,606.13	32° 41' 15.708 N	104° 0' 38.408 W
4,580.00	0.60	269.50	4,579.83	16.96	-14.85	614,067.07	640,604.21	32° 41' 15.717 N	104° 0' 38.430 W
4,767.00	0.70	147.70	4,766.83	15.99	-15.22	614,066.09	640,603.84	32° 41' 15.707 N	104° 0' 38.435 W
4,954.00	0.60	124.40	4,953.81	14.47	-13.80	614,064.57	640,605.26	32° 41' 15.692 N	104° 0' 38.418 W
5,141.00	0.50	109.10	5,140.80	13.65	-12.22	614,063.75	640,606.83	32° 41' 15.684 N	104° 0' 38.400 W
5,328.00	0.60	161.10	5,327.80	12.46	-11.13	614,062.56	640,607.92	32° 41' 15.672 N	104° 0' 38.387 W
5,515.00	0.60	179.90	5,514.79	10.55	-10.81	614,060.65	640,608.24	32° 41' 15.653 N	104° 0' 38.383 W
5,703.00	0.70	207.90	5,702.78	8.55	-11.35	614,058.65	640,607.71	32° 41' 15.633 N	104° 0' 38.390 W
5,890.00	0.70	215.30	5,889.76	6.61	-12.54	614,056.71	640,606.51	32° 41' 15.614 N	104° 0' 38.404 W
6,077.00	1.60	258.80	6,076.73	5.17	-15.76	614,055.27	640,603.29	32° 41' 15.600 N	104° 0' 38.441 W
6,264.00	0.90	295.90	6,263.68	5.30	-19.65	614,055.41	640,599.41	32° 41' 15.601 N	104° 0' 38.487 W
6,451.00	0.20	325.60	6,450.67	6.22	-21.15	614,056.32	640,597.90	32° 41' 15.610 N	104° 0' 38.504 W
6,637.00	0.30	353.40	6,636.67	6.97	-21.39	614,057.07	640,597.66	32° 41' 15.618 N	104° 0' 38.507 W
6,824.00	0.50	288.40	6,823.67	7.71	-22.22	614,057.81	640,596.83	32° 41' 15.625 N	104° 0' 38.517 W
7,012.00	0.20	123.90	7,011.67	7.79	-22.73	614,057.89	640,596.33	32° 41' 15.626 N	104° 0' 38.523 W
7,199.00	0.70	206.80	7,198.66	6.58	-22.97	614,056.69	640,596.08	32° 41' 15.614 N	104° 0' 38.526 W
7,386.00	0.90	143.20	7,385.65	4.39	-22.61	614,054.49	640,596.45	32° 41' 15.592 N	104° 0' 38.521 W
7,574.00	0.90	152.60	7,573.62	1.90	-21.04	614,052.00	640,598.01	32° 41' 15.568 N	104° 0' 38.503 W
7,617.00	0.80	150.40	7,616.62	1.34	-20.74	614,051.44	640,598.31	32° 41' 15.562 N	104° 0' 38.500 W
As-Drilled KOP									
7,692.00	3.50	83.90	7,691.56	1.12	-18.20	614,051.23	640,600.85	32° 41' 15.560 N	104° 0' 38.470 W
7,739.00	10.80	82.20	7,738.17	1.87	-12.41	614,051.98	640,606.65	32° 41' 15.567 N	104° 0' 38.402 W
7,786.00	17.40	80.10	7,783.73	3.68	-1.11	614,053.79	640,617.95	32° 41' 15.585 N	104° 0' 38.270 W
7,833.00	20.90	84.40	7,828.12	5.71	14.16	614,055.81	640,633.22	32° 41' 15.604 N	104° 0' 38.091 W
7,881.00	23.60	88.80	7,872.55	6.75	32.29	614,056.85	640,651.35	32° 41' 15.614 N	104° 0' 37.879 W
7,928.00	27.80	90.40	7,914.89	6.87	52.67	614,056.97	640,671.72	32° 41' 15.615 N	104° 0' 37.641 W
7,974.00	32.70	91.60	7,954.61	6.44	75.83	614,056.55	640,694.89	32° 41' 15.610 N	104° 0' 37.370 W
8,020.00	38.00	91.30	7,992.12	5.78	102.43	614,055.88	640,721.48	32° 41' 15.602 N	104° 0' 37.058 W
8,061.98	40.50	90.13	8,024.62	5.45	128.98	614,055.56	640,748.04	32° 41' 15.598 N	104° 0' 36.748 W
As-Drilled Crosses 330' HL									
8,067.00	40.80	90.00	8,028.43	5.45	132.25	614,055.55	640,751.31	32° 41' 15.598 N	104° 0' 36.709 W
8,114.00	44.60	87.90	8,062.97	6.05	164.11	614,056.16	640,783.17	32° 41' 15.603 N	104° 0' 36.337 W
8,161.00	48.40	86.50	8,095.32	7.73	198.16	614,057.83	640,817.21	32° 41' 15.619 N	104° 0' 35.938 W
8,208.00	52.50	87.50	8,125.24	9.62	234.34	614,059.72	640,853.39	32° 41' 15.636 N	104° 0' 35.515 W
8,253.00	57.40	89.10	8,151.07	10.69	271.15	614,060.80	640,890.20	32° 41' 15.646 N	104° 0' 35.084 W
8,299.00	61.80	91.40	8,174.35	10.50	310.81	614,060.61	640,929.86	32° 41' 15.643 N	104° 0' 34.620 W
8,346.00	65.40	91.30	8,195.24	9.51	352.89	614,059.62	640,971.94	32° 41' 15.632 N	104° 0' 34.127 W
8,392.00	69.50	90.90	8,212.88	8.70	395.36	614,058.80	641,014.41	32° 41' 15.622 N	104° 0' 33.631 W
8,439.00	73.30	90.60	8,227.87	8.12	439.89	614,058.22	641,058.94	32° 41' 15.615 N	104° 0' 33.110 W



TDS
Survey Report - Geographic



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well Baroque BTQ Federal Com #1H
Project:	Eddy County, NM (NAD-83 2015)	TVD Reference:	KB @ 3429.50usft (Nomac 22)
Site:	Baroque BTQ Federal Com #1H	MD Reference:	KB @ 3429.50usft (Nomac 22)
Well:	Baroque BTQ Federal Com #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	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	
8,468.00	75.80	89.50	8,235.59	8.09	467.84	614,058.20	641,086.89	32° 41' 15.614 N	104° 0' 32.782 W	
8,500.00	79.10	87.70	8,242.55	8.86	499.06	614,058.96	641,118.11	32° 41' 15.621 N	104° 0' 32.417 W	
8,531.00	80.80	87.50	8,247.96	10.14	529.55	614,060.24	641,148.61	32° 41' 15.633 N	104° 0' 32.060 W	
8,563.00	81.50	87.60	8,252.88	11.49	561.14	614,061.59	641,180.20	32° 41' 15.645 N	104° 0' 31.691 W	
8,594.00	83.00	88.40	8,257.06	12.56	591.84	614,062.67	641,210.90	32° 41' 15.655 N	104° 0' 31.331 W	
8,625.00	86.20	89.10	8,259.98	13.24	622.69	614,063.34	641,241.75	32° 41' 15.660 N	104° 0' 30.970 W	
8,656.00	88.50	90.30	8,261.41	13.40	653.66	614,063.50	641,272.71	32° 41' 15.661 N	104° 0' 30.608 W	
8,749.00	89.20	90.40	8,263.28	12.83	746.64	614,062.93	641,365.69	32° 41' 15.653 N	104° 0' 29.520 W	
As-Drilled EOC										
8,843.00	90.00	90.90	8,263.93	11.76	840.63	614,061.87	641,459.68	32° 41' 15.639 N	104° 0' 28.420 W	
8,936.00	89.40	90.30	8,264.42	10.79	933.62	614,060.89	641,552.67	32° 41' 15.627 N	104° 0' 27.332 W	
9,029.00	89.70	89.70	8,265.15	10.79	1,026.62	614,060.89	641,645.67	32° 41' 15.624 N	104° 0' 26.244 W	
9,123.00	90.20	90.10	8,265.23	10.95	1,120.61	614,061.06	641,739.67	32° 41' 15.623 N	104° 0' 25.144 W	
9,217.00	88.80	90.00	8,266.05	10.87	1,214.61	614,060.97	641,833.66	32° 41' 15.619 N	104° 0' 24.044 W	
9,310.00	87.90	90.50	8,268.73	10.47	1,307.57	614,060.57	641,926.62	32° 41' 15.612 N	104° 0' 22.956 W	
9,403.00	88.30	90.70	8,271.81	9.49	1,400.51	614,059.60	642,019.57	32° 41' 15.600 N	104° 0' 21.869 W	
9,496.00	88.60	90.20	8,274.33	8.76	1,493.47	614,058.87	642,112.53	32° 41' 15.590 N	104° 0' 20.781 W	
9,590.00	89.50	90.40	8,275.89	8.27	1,587.46	614,058.37	642,206.51	32° 41' 15.582 N	104° 0' 19.681 W	
9,684.00	89.70	90.40	8,276.54	7.61	1,681.45	614,057.72	642,300.51	32° 41' 15.573 N	104° 0' 18.582 W	
9,777.00	88.90	91.00	8,277.68	6.48	1,774.44	614,056.58	642,393.49	32° 41' 15.558 N	104° 0' 17.494 W	
9,871.00	89.20	91.50	8,279.24	4.43	1,868.40	614,054.53	642,487.46	32° 41' 15.535 N	104° 0' 16.394 W	
9,965.00	89.70	90.90	8,280.14	2.46	1,962.38	614,052.56	642,581.43	32° 41' 15.513 N	104° 0' 15.295 W	
10,058.00	88.70	89.60	8,281.44	2.05	2,055.36	614,052.16	642,674.42	32° 41' 15.506 N	104° 0' 14.206 W	
10,153.00	89.00	89.90	8,283.35	2.47	2,150.34	614,052.57	642,769.40	32° 41' 15.507 N	104° 0' 13.095 W	
10,246.00	88.50	89.50	8,285.37	2.95	2,243.32	614,053.06	642,862.37	32° 41' 15.509 N	104° 0' 12.007 W	
10,339.00	88.70	89.60	8,287.65	3.68	2,336.29	614,053.79	642,955.34	32° 41' 15.514 N	104° 0' 10.919 W	
10,432.00	89.10	89.80	8,289.43	4.17	2,429.27	614,054.27	643,048.33	32° 41' 15.516 N	104° 0' 9.831 W	
10,525.00	87.60	90.10	8,292.11	4.25	2,522.23	614,054.36	643,141.28	32° 41' 15.513 N	104° 0' 8.743 W	
10,619.00	87.70	90.10	8,295.96	4.09	2,616.15	614,054.19	643,235.20	32° 41' 15.509 N	104° 0' 7.644 W	
10,713.00	88.10	90.20	8,299.41	3.84	2,710.09	614,053.95	643,329.14	32° 41' 15.504 N	104° 0' 6.545 W	
10,806.00	88.60	90.30	8,302.09	3.44	2,803.05	614,053.54	643,422.10	32° 41' 15.497 N	104° 0' 5.458 W	
10,900.00	89.10	90.30	8,303.97	2.94	2,897.03	614,053.05	643,516.08	32° 41' 15.489 N	104° 0' 4.358 W	
10,993.00	89.50	90.20	8,305.11	2.54	2,990.02	614,052.64	643,609.07	32° 41' 15.482 N	104° 0' 3.270 W	
11,087.00	89.80	90.40	8,305.68	2.05	3,084.02	614,052.15	643,703.07	32° 41' 15.474 N	104° 0' 2.170 W	
11,180.00	89.20	89.80	8,306.50	1.88	3,177.01	614,051.99	643,796.07	32° 41' 15.470 N	104° 0' 1.082 W	
11,272.00	89.70	90.00	8,307.38	2.05	3,269.01	614,052.15	643,888.06	32° 41' 15.468 N	104° 0' 0.005 W	
11,365.00	90.10	90.30	8,307.54	1.80	3,362.01	614,051.91	643,981.06	32° 41' 15.463 N	103° 59' 58.917 W	
11,459.00	88.50	90.10	8,308.69	1.47	3,455.99	614,051.58	644,075.05	32° 41' 15.457 N	103° 59' 57.817 W	
11,552.00	88.90	89.90	8,310.80	1.47	3,548.97	614,051.58	644,168.02	32° 41' 15.454 N	103° 59' 56.729 W	
11,646.00	89.30	89.70	8,312.28	1.80	3,642.96	614,051.91	644,262.01	32° 41' 15.454 N	103° 59' 55.630 W	
11,740.00	88.70	89.40	8,313.92	2.54	3,736.94	614,052.64	644,355.99	32° 41' 15.459 N	103° 59' 54.530 W	
11,834.00	89.80	89.60	8,315.15	3.36	3,830.93	614,053.46	644,449.98	32° 41' 15.464 N	103° 59' 53.430 W	
11,927.00	89.70	90.00	8,315.55	3.68	3,923.93	614,053.79	644,542.98	32° 41' 15.464 N	103° 59' 52.342 W	
12,020.00	88.40	90.20	8,317.09	3.52	4,016.91	614,053.63	644,635.97	32° 41' 15.460 N	103° 59' 51.254 W	
12,114.00	88.60	90.20	8,319.55	3.19	4,110.88	614,053.30	644,729.93	32° 41' 15.454 N	103° 59' 50.154 W	
12,208.00	89.20	90.10	8,321.36	2.95	4,204.86	614,053.05	644,823.91	32° 41' 15.448 N	103° 59' 49.055 W	
12,301.00	87.70	90.10	8,323.87	2.79	4,297.82	614,052.89	644,916.88	32° 41' 15.444 N	103° 59' 47.967 W	
12,395.00	88.20	89.80	8,327.24	2.87	4,391.76	614,052.97	645,010.82	32° 41' 15.442 N	103° 59' 46.868 W	
12,489.00	88.40	90.00	8,330.03	3.03	4,485.72	614,053.14	645,104.78	32° 41' 15.440 N	103° 59' 45.768 W	
12,582.00	89.00	89.60	8,332.14	3.36	4,578.70	614,053.46	645,197.75	32° 41' 15.440 N	103° 59' 44.680 W	
12,675.00	89.30	89.90	8,333.52	3.76	4,671.68	614,053.87	645,290.74	32° 41' 15.442 N	103° 59' 43.592 W	
12,768.00	88.20	89.60	8,335.54	4.17	4,764.66	614,054.27	645,383.71	32° 41' 15.443 N	103° 59' 42.504 W	
12,862.00	88.90	89.40	8,337.92	4.99	4,858.63	614,055.09	645,477.68	32° 41' 15.448 N	103° 59' 41.405 W	
12,956.00	89.50	89.50	8,339.24	5.89	4,952.61	614,055.99	645,571.67	32° 41' 15.454 N	103° 59' 40.305 W	
13,048.00	90.40	88.20	8,339.32	7.74	5,044.59	614,057.84	645,663.64	32° 41' 15.469 N	103° 59' 39.228 W	



TDS
Survey Report - Geographic



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well Baroque BTQ Federal Com #1H
Project:	Eddy County, NM (NAD-83 2015)	TVD Reference:	KB @ 3429.50usft (Nomac 22)
Site:	Baroque BTQ Federal Com #1H	MD Reference:	KB @ 3429.50usft (Nomac 22)
Well:	Baroque BTQ Federal Com #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	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	
13,142.00	89.90	89.00	8,339.07	10.03	5,138.56	614,060.14	645,757.61	32° 41' 15.489 N	103° 59' 38.129 W	
13,235.00	89.90	89.80	8,339.23	11.01	5,231.55	614,061.11	645,850.61	32° 41' 15.496 N	103° 59' 37.041 W	
13,328.00	88.70	91.60	8,340.37	9.87	5,324.54	614,059.97	645,943.59	32° 41' 15.481 N	103° 59' 35.953 W	
13,422.00	89.40	91.40	8,341.93	7.41	5,418.49	614,057.51	646,037.54	32° 41' 15.454 N	103° 59' 34.853 W	
13,515.00	90.50	91.50	8,342.01	5.06	5,511.46	614,055.16	646,130.51	32° 41' 15.428 N	103° 59' 33.766 W	
13,609.00	91.20	91.10	8,340.61	2.93	5,605.42	614,053.03	646,224.48	32° 41' 15.404 N	103° 59' 32.666 W	
13,703.00	88.20	89.90	8,341.11	2.10	5,699.41	614,052.21	646,318.46	32° 41' 15.393 N	103° 59' 31.566 W	
13,797.00	88.70	90.00	8,343.65	2.19	5,793.37	614,052.29	646,412.43	32° 41' 15.390 N	103° 59' 30.467 W	
13,891.00	87.60	89.90	8,346.68	2.27	5,887.32	614,052.37	646,506.37	32° 41' 15.388 N	103° 59' 29.368 W	
13,984.00	88.30	90.60	8,350.01	1.86	5,980.26	614,051.97	646,599.31	32° 41' 15.381 N	103° 59' 28.280 W	
14,078.00	89.20	90.90	8,352.06	0.63	6,074.23	614,050.74	646,693.28	32° 41' 15.366 N	103° 59' 27.181 W	
14,171.00	89.80	90.90	8,352.87	-0.83	6,167.21	614,049.28	646,786.27	32° 41' 15.349 N	103° 59' 26.093 W	
14,264.00	90.50	90.90	8,352.63	-2.29	6,260.20	614,047.82	646,879.25	32° 41' 15.331 N	103° 59' 25.005 W	
14,359.00	91.30	91.20	8,351.14	-4.03	6,355.17	614,046.07	646,974.23	32° 41' 15.311 N	103° 59' 23.893 W	
14,452.00	92.00	89.60	8,348.46	-4.68	6,448.13	614,045.43	647,067.18	32° 41' 15.302 N	103° 59' 22.806 W	
14,546.00	92.00	89.40	8,345.18	-3.86	6,542.07	614,046.25	647,161.12	32° 41' 15.307 N	103° 59' 21.706 W	
14,639.00	89.70	90.90	8,343.80	-4.10	6,635.05	614,046.00	647,254.10	32° 41' 15.301 N	103° 59' 20.618 W	
14,733.00	90.50	91.10	8,343.63	-5.74	6,729.03	614,044.36	647,348.09	32° 41' 15.282 N	103° 59' 19.519 W	
14,827.00	90.60	91.50	8,342.73	-7.88	6,823.00	614,042.23	647,442.06	32° 41' 15.258 N	103° 59' 18.419 W	
14,920.00	91.60	91.30	8,340.95	-10.15	6,915.96	614,039.96	647,535.01	32° 41' 15.232 N	103° 59' 17.332 W	
15,014.00	90.70	89.50	8,339.06	-10.80	7,009.93	614,039.30	647,628.98	32° 41' 15.223 N	103° 59' 16.232 W	
15,107.00	90.20	89.40	8,338.33	-9.91	7,102.92	614,040.19	647,721.98	32° 41' 15.229 N	103° 59' 15.144 W	
15,202.00	89.50	88.90	8,338.58	-8.50	7,197.91	614,041.60	647,816.97	32° 41' 15.240 N	103° 59' 14.032 W	
15,297.00	90.60	88.60	8,338.49	-6.43	7,292.89	614,043.68	647,911.94	32° 41' 15.257 N	103° 59' 12.921 W	
Final MWD Survey										
15,391.00	90.60	88.60	8,337.51	-4.13	7,386.85	614,045.97	648,005.91	32° 41' 15.277 N	103° 59' 11.821 W	
Projection to Bit/TD										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
7,617.00	7,616.62	1.34	-20.74	As-Drilled KOP
8,061.98	8,024.62	5.45	128.98	As-Drilled Crosses 330' HL
8,749.00	8,263.28	12.83	746.64	As-Drilled EOC
15,297.00	8,338.49	-6.43	7,292.89	Final MWD Survey
15,391.00	8,337.51	-4.13	7,386.85	Projection to Bit/TD

Checked By: _____	Approved By: _____	Date: _____
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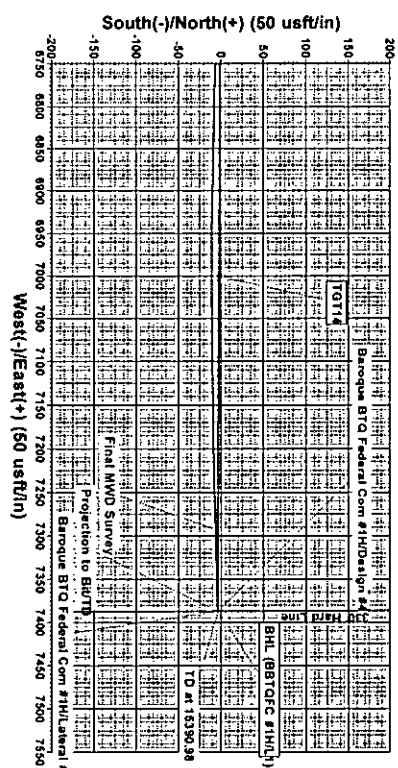
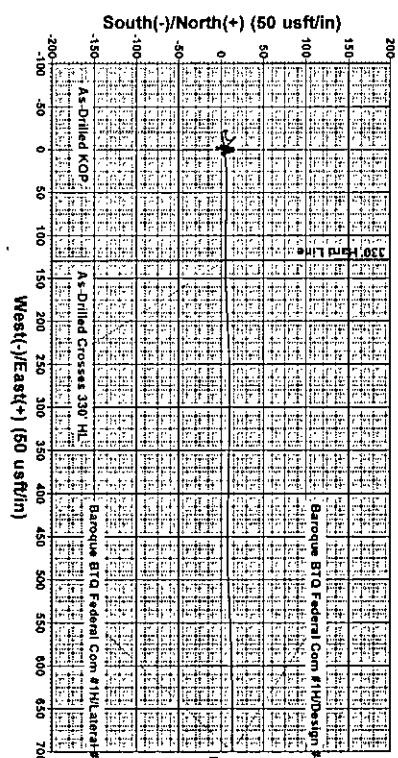
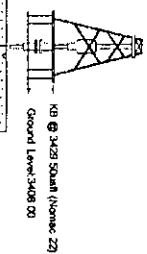


ATES
 Yates Petroleum Corp.
 Project: Eddy County, NM (NAD-83 2015)
 Site: Baroque BTQ Federal Com #1H
 Well: Baroque BTQ Federal Com #1H
 Wellbore: Lateral #1
 Plan: Design #4

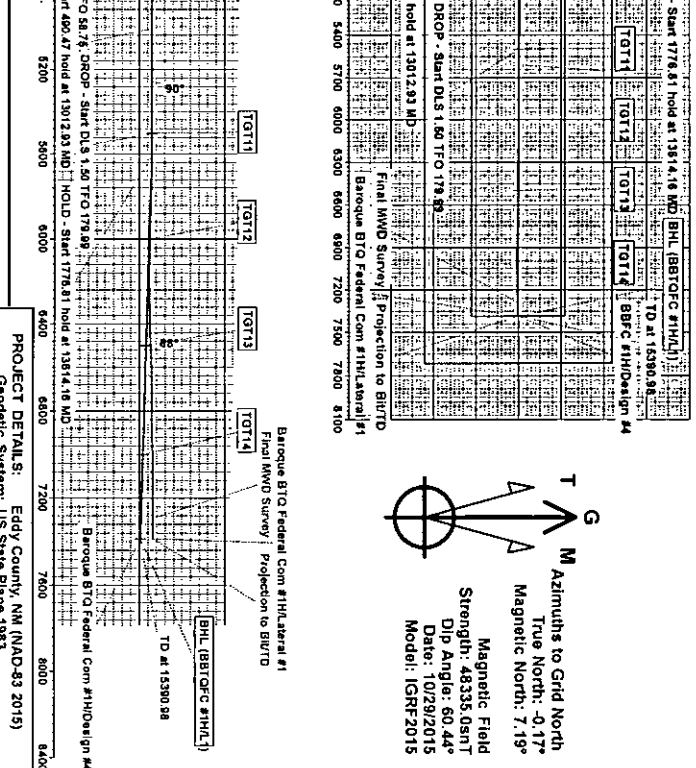
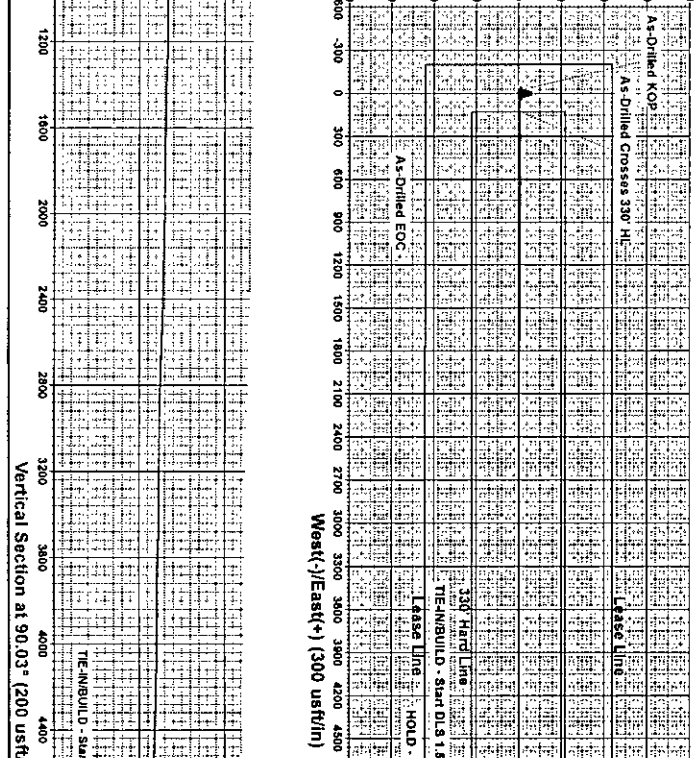
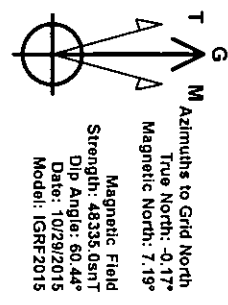
Section Details

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dieg	Tface	Vsect	Target
1	12956.00	89.50	89.50	8339.24	5.89	4932.61	0.00	0.00	4932.61	
2	13012.93	89.94	90.23	8339.51	6.02	5009.54	1.50	58.75	5009.53	
3	13503.40	89.94	90.23	8340.00	4.06	5500.00	0.00	0.00	5500.00	
4	13614.16	88.28	90.23	8341.72	3.61	5610.75	1.50	178.99	5610.75	
5	15390.98	88.28	90.23	8395.00	-3.55	7386.75	0.00	0.00	7386.75	BHL (BBTQFC #1H/L1)

WELL DETAILS: Baroque BTQ Federal Com #1H
 Ground Elevation: 3408.00
 RKB Elevation: KB @ 3429.50usft (Nomac 22)
 Rig Name: Nomac 22
 Northing: 614050.10
 Easting: 640619.05
 Latitude: 32° 41' 15.548 N
 Longitude: 104° 0' 38.257 W



Magnetic Field
 Strength: 48335.0usT
 Dip Angle: 60.44°
 Date: 10/29/2015
 Model: IGRF2015



Terra Directional Services LLC
 3705 S CR 1210, Midland, TX 79706
 Phone: (432) 618-1210

PROJECT DETAILS: Eddy County, NM (NAD-83 2015)
 Geoid System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level
 Local North: Grid