

OPERATOR
WELL/LEASE
COUNTY

YATES PETROLEUM CORPORATION
VESPA BME FEDERAL # 1 H
CHAVES

HOBBS OCD

30-005 29095

AUG 30 2011

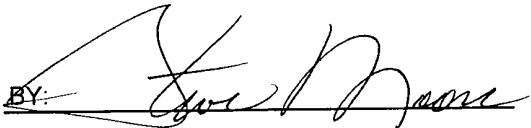
STATE OF NEW MEXICO
DEVIATION REPORT

RECEIVED

253	0.52
380	0.40
633	0.31
1,138	0.47
1,637	0.86
2,123	0.35
2,598	1.33
2,885	1.16
3,138	0.99
3,424	0.72
3,709	0.58
4,128	0.61
4,603	0.63
5,048	0.36
5,493	0.69
5,937	0.32
6,382	0.00
6,827	0.35
7,272	0.72
7,750	0.49
8,227	0.59

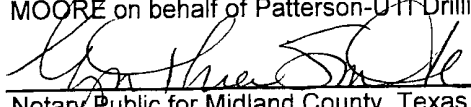
STATE OF TEXAS

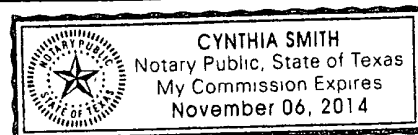
COUNTY OF MIDLAND

BY: 

The foregoing instrument was acknowledged before me on
MOORE on behalf of Patterson-UTI Drilling Company LLC.

April 25, 2011, by STEVE


Notary Public for Midland County, Texas
My Commission Expires:



SEP 01 2011



Yates Petroleum Corporation

Location Chaves County, NM
Field (Vespa) Sec 9, T15S, R31E
Facility Vespa BME Fed No 1H

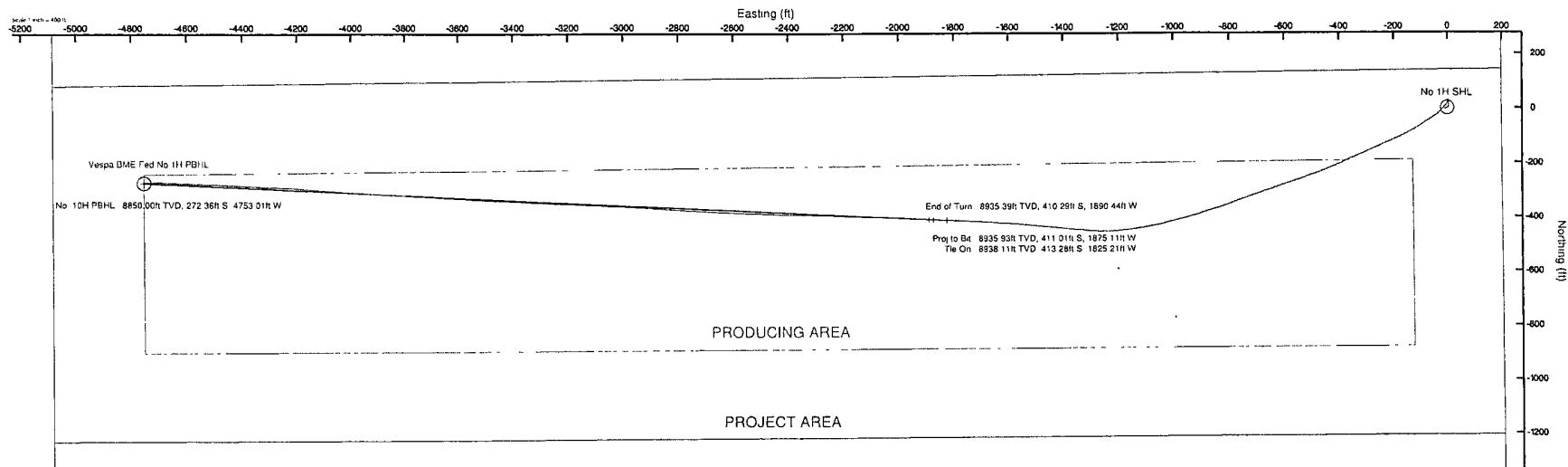
Slot No 1H SHL
Well No 1H
Wellbore No 1H PW8



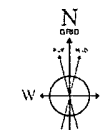
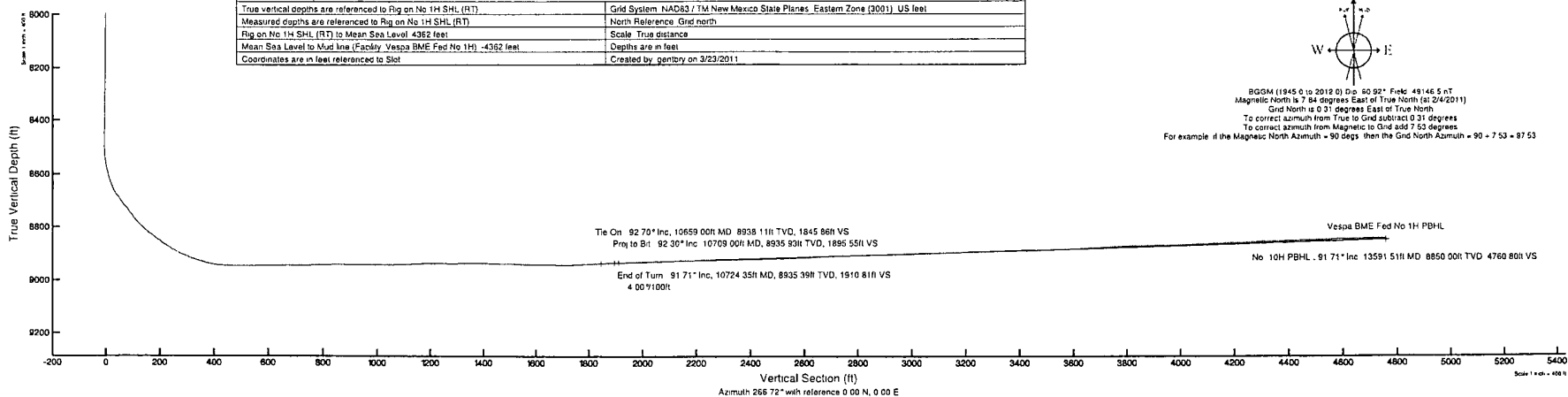
INTEQ

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	10659.00	92.700	272.600	8938.11	-413.28	-1825.21	0.00	1845.86
Proj to Bit	10709.00	92.300	272.600	8935.93	-411.01	-1875.11	0.80	1895.55
End of Turn	10724.35	91.707	272.759	8935.39	-410.29	-1890.44	4.00	1910.81
No 10H PBHL	13591.51	91.707	272.759	8850.00	-272.36	-4753.01	0.00	4760.80



Plot reference wellpath is Plan 2	
True vertical depths are referenced to Rig on No 1H SHL (RT)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001) US feet
Measured depths are referenced to Rig on No 1H SHL (RT)	North Reference Grid north
Rig on No 1H SHL (RT) to Mean Sea Level 4362 feet	Scale True distance
Mean Sea Level to Mud line (Facility Vespa BME Fed No 1H) 4362 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by gentry on 3/23/2011



BGOM (1945 to 2012) D= 50.92° Field 49146.5 mT
Magnetic North is 7.84 degrees East of True North (at 2/4/2011)
Grid North is 0.31 degrees East of True North
To correct azimuth from True to Grid subtract 0.31 degrees
To correct azimuth from Magnetic to Grid add 7.53 degrees
For example if the Magnetic North Azimuth = 90 degs then the Grid North Azimuth = 90 + 7.53 = 97.53



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Yates Petroleum Corporation	Slot	No.1H SHL
Area	Chaves County, NM	Well	No.1H
Field	(Vespa) Sec 9, T15S, R31E	Wellbore	No. 1H AWB
Facility	Vespa BME Fed No.1H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Calhphik
Scale	0.999944	Report Generated	3/28/2011 at 8:07:00 AM
Convergence at slot	0.31° East	Database/Source file	WA Midland/No._1H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	714866.44	738989.57	33°01'48.702"N	103°46'01.641"W
Facility Reference Pt			714866.44	738989.57	33°01'48.702"N	103°46'01.641"W
Field Reference Pt			694142.20	737264.09	33°01'32.668"N	103°50'05.166"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.1H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (RT) to Mean Sea Level	4362.00ft
Vertical Reference Pt	Rig on No.1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	266.72°



Actual Wellpath Report

No. 1H AWP

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Field	(Vespa) Sec 9, T15S, R31E	Wellbore	No. 1H AWP
Facility	Vespa BME Fed No.1H		

WELLPATH DATA (151 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	271.270	0.00	0.00	0.00	0.00	714866.44	738989.57	33°01'48.702"N	103°46'01.641"W	0.00	
200.00	0.250	271.270	200.00	0.43	0.01	-0.44	714866.01	738989.58	33°01'48.702"N	103°46'01.646"W	0.12	
400.00	0.250	218.150	400.00	1.16	-0.32	-1.14	714865.30	738989.24	33°01'48.699"N	103°46'01.655"W	0.11	
600.00	0.250	237.020	600.00	1.83	-0.90	-1.78	714864.67	738988.66	33°01'48.693"N	103°46'01.662"W	0.04	
800.00	0.250	256.900	799.99	2.64	-1.24	-2.57	714863.87	738988.33	33°01'48.690"N	103°46'01.672"W	0.04	
1000.00	0.250	225.770	999.99	3.39	-1.64	-3.31	714863.14	738987.92	33°01'48.686"N	103°46'01.680"W	0.07	
1200.00	0.250	245.640	1199.99	4.13	-2.13	-4.02	714862.43	738987.44	33°01'48.681"N	103°46'01.689"W	0.04	
1400.00	0.250	267.520	1399.99	4.97	-2.33	-4.85	714861.59	738987.24	33°01'48.679"N	103°46'01.698"W	0.05	
1600.00	0.500	255.390	1599.98	6.27	-2.57	-6.13	714860.31	738987.00	33°01'48.677"N	103°46'01.713"W	0.13	
1800.00	0.250	251.260	1799.98	7.54	-2.93	-7.39	714859.06	738986.64	33°01'48.673"N	103°46'01.728"W	0.13	
2000.00	0.250	212.140	1999.98	8.22	-3.44	-8.03	714858.41	738986.13	33°01'48.668"N	103°46'01.736"W	0.08	
2200.00	0.500	62.010	2199.98	7.68	-3.40	-7.49	714858.95	738986.17	33°01'48.669"N	103°46'01.730"W	0.36	
2400.00	1.000	70.880	2399.96	5.20	-2.41	-5.08	714861.37	738987.15	33°01'48.678"N	103°46'01.701"W	0.26	
2600.00	1.250	78.760	2599.92	1.37	-1.42	-1.29	714865.16	738988.15	33°01'48.688"N	103°46'01.656"W	0.15	
2800.00	0.750	66.000	2799.89	2.02	-0.46	-2.05	714868.49	738989.11	33°01'48.697"N	103°46'01.617"W	0.27	
3000.00	0.750	34.870	2999.87	-4.05	1.15	3.99	714870.44	738990.71	33°01'48.713"N	103°46'01.594"W	0.20	
3200.00	0.750	19.750	3199.86	-5.37	3.45	5.18	714871.63	738993.02	33°01'48.736"N	103°46'01.580"W	0.10	
3400.00	0.250	7.620	3399.85	-5.97	5.12	5.68	714872.13	738994.68	33°01'48.752"N	103°46'01.574"W	0.25	
3600.00	0.250	27.490	3599.85	-6.27	5.94	5.94	714872.39	738995.50	33°01'48.760"N	103°46'01.571"W	0.04	
3800.00	0.250	20.370	3799.84	-6.67	6.73	6.30	714872.74	738996.30	33°01'48.768"N	103°46'01.567"W	0.02	
4000.00	0.250	331.240	3999.84	-6.66	7.52	6.24	714872.68	738997.09	33°01'48.776"N	103°46'01.568"W	0.10	
4200.00	0.500	4.120	4199.84	-6.58	8.78	6.09	714872.53	738998.34	33°01'48.788"N	103°46'01.569"W	0.16	
4400.00	0.500	0.860	4399.83	-6.76	10.52	6.17	714872.61	739000.09	33°01'48.805"N	103°46'01.568"W	0.01	
4600.00	0.750	10.740	4599.82	-7.14	12.68	6.42	714872.87	739002.25	33°01'48.827"N	103°46'01.565"W	0.14	
4800.00	0.500	349.610	4799.81	-7.35	14.82	6.51	714872.95	739004.39	33°01'48.848"N	103°46'01.564"W	0.17	
5000.00	0.500	332.480	4999.80	-6.88	16.45	5.95	714872.39	739006.02	33°01'48.864"N	103°46'01.570"W	0.07	
5200.00	0.250	7.360	5199.79	-6.60	17.66	5.60	714872.05	739007.23	33°01'48.876"N	103°46'01.574"W	0.16	
5400.00	0.250	0.230	5399.79	-6.71	18.53	5.66	714872.10	739008.10	33°01'48.885"N	103°46'01.574"W	0.02	
5600.00	0.250	351.100	5599.79	-6.70	19.40	5.59	714872.04	739008.96	33°01'48.893"N	103°46'01.574"W	0.02	
5800.00	0.250	329.980	5799.79	-6.46	20.21	5.31	714871.75	739009.77	33°01'48.901"N	103°46'01.578"W	0.05	
6000.00	0.250	320.850	5999.79	-6.00	20.92	4.82	714871.26	739010.49	33°01'48.908"N	103°46'01.583"W	0.02	
6200.00	0.250	346.730	6199.78	-5.67	21.69	4.44	714870.88	739011.25	33°01'48.916"N	103°46'01.588"W	0.06	
6400.00	0.500	351.600	6399.78	-5.52	22.97	4.21	714870.65	739012.54	33°01'48.929"N	103°46'01.590"W	0.13	
6600.00	0.250	328.840	6599.78	-5.24	24.21	3.86	714870.30	739013.78	33°01'48.941"N	103°46'01.594"W	0.14	
6800.00	0.250	309.720	6799.77	-4.71	24.86	3.30	714869.74	739014.43	33°01'48.948"N	103°46'01.601"W	0.04	
7000.00	0.500	313.590	6999.77	-3.80	25.74	2.33	714868.77	739015.31	33°01'48.956"N	103°46'01.612"W	0.13	
7200.00	0.500	281.460	7199.76	-2.36	26.52	0.84	714867.29	739016.08	33°01'48.964"N	103°46'01.630"W	0.14	
7400.00	0.500	296.340	7399.76	-0.76	27.08	-0.80	714865.65	739016.65	33°01'48.970"N	103°46'01.649"W	0.06	
7600.00	0.000	0.000	7599.75	0.00	27.47	-1.58	714864.87	739017.03	33°01'48.974"N	103°46'01.658"W	0.25	
7800.00	0.250	78.080	7799.75	-0.43	27.56	-1.15	714865.29	739017.12	33°01'48.974"N	103°46'01.653"W	0.12	
8000.00	0.500	85.960	7999.75	-1.73	27.71	0.15	714866.59	739017.27	33°01'48.976"N	103°46'01.638"W	0.13	
8200.00	0.500	86.830	8199.74	-3.48	27.82	1.89	714868.33	739017.38	33°01'48.977"N	103°46'01.617"W	0.00	
8320.00	0.500	78.580	8319.74	-4.52	27.95	2.93	714869.37	739017.52	33°01'48.978"N	103°46'01.605"W	0.06	
8405.00	1.000	90.000	8404.73	-5.63	28.02	4.03	714870.47	739017.59	33°01'48.979"N	103°46'01.592"W	0.61	
8433.00	1.500	92.900	8432.72	-6.24	28.00	4.64	714871.08	739017.57	33°01'48.979"N	103°46'01.585"W	1.80	



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Yates Petroleum Corporation	Slot	No.1H SHL
Area	Chaves County, NM	Well	No.1H
Field	(Vespa) Sec 9, T15S, R31E	Wellbore	No. 1H AWB
Facility	Vespa BME Fed No.1H		

WELLPATH DATA (151 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8465.00	1.800	107.300	8464.71	-7.12	27.83	5.54	714871.98	739017.40	33°01'48.977"N	103°46'01.574"W	1.59	
8497.00	3.500	197.300	8496.68	-7.25	26.75	5.73	714872.17	739016.32	33°01'48.966"N	103°46'01.572"W	12.30	
8528.00	8.600	210.600	8527.50	-5.62	23.85	4.27	714870.71	739013.42	33°01'48.937"N	103°46'01.590"W	16.95	
8560.00	13.900	217.300	8558.88	-1.79	18.73	0.72	714867.16	739008.30	33°01'48.887"N	103°46'01.632"W	17.03	
8592.00	19.200	216.800	8589.54	4.11	11.45	4.77	714861.67	739001.02	33°01'48.815"N	103°46'01.697"W	16.57	
8624.00	24.500	221.300	8619.23	12.16	2.25	-12.31	714854.14	738991.82	33°01'48.725"N	103°46'01.786"W	17.36	
8655.00	30.400	224.700	8646.73	22.51	-8.16	-22.07	714844.37	738981.40	33°01'48.622"N	103°46'01.901"W	19.69	
8686.00	35.800	230.200	8672.70	35.63	-19.55	-34.57	714831.88	738970.01	33°01'48.510"N	103°46'02.049"W	19.92	
8719.00	40.000	235.800	8698.74	52.50	-31.70	-50.77	714815.68	738957.87	33°01'48.391"N	103°46'02.240"W	16.44	
8751.00	39.900	237.100	8723.27	70.25	-43.06	-67.89	714798.55	738946.51	33°01'48.279"N	103°46'02.441"W	2.63	
8782.00	41.400	236.700	8746.79	87.76	-54.09	-84.81	714781.64	738935.48	33°01'48.171"N	103°46'02.641"W	4.91	
8814.00	44.100	237.800	8770.29	106.68	-65.83	-103.08	714763.37	738923.74	33°01'48.056"N	103°46'02.856"W	8.75	
8846.00	47.700	240.400	8792.55	127.04	-77.62	-122.80	714743.65	738911.96	33°01'47.940"N	103°46'03.088"W	12.67	
8877.00	51.300	241.800	8812.68	148.29	-89.00	-143.43	714723.02	738900.57	33°01'47.829"N	103°46'03.332"W	12.11	
8909.00	53.900	244.300	8832.12	171.57	-100.51	-166.09	714700.56	738889.06	33°01'47.716"N	103°46'03.598"W	10.22	
8941.00	55.300	246.000	8850.66	195.83	-111.47	-189.76	714676.69	738878.11	33°01'47.609"N	103°46'03.877"W	6.16	
8973.00	57.400	245.900	8868.39	220.73	-122.32	-214.09	714652.37	738867.25	33°01'47.503"N	103°46'04.164"W	6.57	
9004.00	60.700	245.700	8884.33	245.56	-133.22	-238.33	714628.12	738856.36	33°01'47.396"N	103°46'04.449"W	10.66	
9036.00	65.000	246.200	8898.93	272.18	-144.82	-264.33	714602.13	738844.76	33°01'47.283"N	103°46'04.755"W	13.51	
9068.00	68.600	246.300	8911.53	299.73	-156.66	-291.25	714575.21	738832.91	33°01'47.167"N	103°46'05.072"W	11.25	
9100.00	71.200	246.000	8922.53	327.87	-168.81	-318.73	714547.73	738820.76	33°01'47.049"N	103°46'05.396"W	8.17	
9131.00	74.400	245.500	8931.69	355.51	-180.98	-345.73	714520.74	738808.60	33°01'46.930"N	103°46'05.713"W	10.44	
9163.00	78.300	245.500	8939.24	384.50	-193.87	-374.02	714492.45	738795.71	33°01'46.804"N	103°46'06.046"W	12.19	
9195.00	83.200	246.400	8944.39	414.02	-206.73	-402.85	714463.62	738782.85	33°01'46.678"N	103°46'06.386"W	15.56	
9227.00	87.400	247.200	8947.01	444.00	-219.29	-432.16	714434.31	738770.29	33°01'46.555"N	103°46'06.731"W	13.36	
9258.00	90.600	249.200	8947.55	473.38	-230.80	-460.93	714405.54	738758.78	33°01'46.443"N	103°46'07.070"W	12.17	
9290.00	90.300	249.700	8947.30	503.94	-242.04	-490.89	714375.58	738747.55	33°01'46.333"N	103°46'07.422"W	1.82	
9322.00	89.900	249.700	8947.24	534.53	-253.14	-520.91	714345.57	738736.45	33°01'46.225"N	103°46'07.775"W	1.25	
9354.00	90.700	251.200	8947.07	565.25	-263.84	-551.06	714315.42	738725.74	33°01'46.121"N	103°46'08.130"W	5.31	
9386.00	91.400	250.500	8946.49	596.03	-274.34	-581.28	714285.19	738715.24	33°01'46.018"N	103°46'08.486"W	3.09	
9418.00	91.300	250.400	8945.73	626.74	-285.05	-611.43	714255.05	738704.54	33°01'45.914"N	103°46'08.841"W	0.44	
9450.00	91.100	250.800	8945.06	657.47	-295.67	-641.61	714224.87	738693.91	33°01'45.811"N	103°46'09.196"W	1.40	
9482.00	90.600	250.500	8944.59	688.22	-306.27	-671.80	714194.69	738683.31	33°01'45.707"N	103°46'09.551"W	1.82	
9513.00	90.200	250.400	8944.37	717.97	-316.65	-701.01	714165.48	738672.94	33°01'45.606"N	103°46'09.895"W	1.33	
9545.00	91.500	249.700	8943.90	748.63	-327.56	-731.08	714135.40	738662.02	33°01'45.500"N	103°46'10.249"W	4.61	
9577.00	91.800	249.800	8942.98	779.22	-338.64	-761.09	714105.39	738650.95	33°01'45.392"N	103°46'10.602"W	0.99	
9609.00	91.200	249.400	8942.14	809.79	-349.79	-791.08	714075.41	738639.80	33°01'45.283"N	103°46'10.955"W	2.25	
9641.00	90.400	251.200	8941.69	840.48	-360.57	-821.20	714045.29	738629.02	33°01'45.178"N	103°46'11.309"W	6.15	
9673.00	89.800	251.200	8941.64	871.31	-370.88	-851.49	714015.00	738618.71	33°01'45.078"N	103°46'11.666"W	1.87	
9705.00	89.200	251.200	8941.92	902.15	-381.20	-881.78	713984.71	738608.39	33°01'44.977"N	103°46'12.022"W	1.87	
9737.00	90.000	253.200	8942.14	933.12	-390.98	-912.25	713954.25	738598.61	33°01'44.882"N	103°46'12.381"W	6.73	
9769.00	89.500	253.400	8942.28	964.25	-400.17	-942.90	713923.60	738589.42	33°01'44.793"N	103°46'12.741"W	1.68	
9800.00	90.300	254.700	8942.33	994.49	-408.69	-972.70	713893.80	738580.90	33°01'44.710"N	103°46'13.092"W	4.92	
9832.00	90.100	254.700	8942.22	1025.79	-417.13	-1003.57	713862.93	738572.46	33°01'44.628"N	103°46'13.455"W	0.62	
9864.00	91.200	256.400	8941.86	1057.18	-425.12	-1034.55	713831.95	738564.47	33°01'44.551"N	103°46'13.819"W	6.33	



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Yates Petroleum Corporation	Slot	No.1H SHL
Area	Chaves County, NM	Well	No.1H
Field	(Vespa) Sec 9, T15S, R31E	Wellbore	No. 1H AWP
Facility	Vespa BME Fed No.1H		

WELLPATH DATA (151 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9896.00	91.600	258.300	8941.08	1088.74	-432.12	-1065.77	713800.74	738557.47	33°01'44.483"N	103°46'14.186"W	6.07	
9928.00	92.300	259.000	8939.99	1120.41	-438.42	-1097.12	713769.39	738551.18	33°01'44.422"N	103°46'14.555"W	3.09	
9960.00	93.300	261.500	8938.42	1152.16	-443.83	-1128.62	713737.89	738545.76	33°01'44.371"N	103°46'14.925"W	8.41	
9992.00	91.100	263.000	8937.20	1184.04	-448.14	-1160.30	713706.21	738541.45	33°01'44.330"N	103°46'15.298"W	8.32	
10024.00	89.000	264.600	8937.17	1215.99	-451.60	-1192.11	713674.40	738538.00	33°01'44.297"N	103°46'15.671"W	8.25	
10055.00	89.200	267.800	8937.65	1246.98	-453.65	-1223.03	713643.48	738535.94	33°01'44.278"N	103°46'16.035"W	10.34	
10086.00	90.000	270.500	8937.87	1277.95	-454.11	-1254.03	713612.49	738535.48	33°01'44.275"N	103°46'16.399"W	9.08	
10118.00	90.800	273.700	8937.65	1309.81	-452.94	-1286.00	713580.52	738536.66	33°01'44.289"N	103°46'16.774"W	10.31	
10150.00	91.000	274.100	8937.15	1341.55	-450.76	-1317.92	713548.60	738538.83	33°01'44.312"N	103°46'17.149"W	1.40	
10182.00	89.500	274.400	8937.01	1373.27	-448.39	-1349.83	713516.69	738541.20	33°01'44.337"N	103°46'17.524"W	4.78	
10214.00	89.000	275.700	8937.42	1404.93	-445.58	-1381.70	713484.82	738544.02	33°01'44.367"N	103°46'17.898"W	4.35	
10245.00	88.800	275.300	8938.02	1435.56	-442.60	-1412.56	713453.97	738546.99	33°01'44.398"N	103°46'18.260"W	1.44	
10277.00	88.800	275.700	8938.69	1467.18	-439.54	-1444.40	713422.13	738550.06	33°01'44.430"N	103°46'18.634"W	1.25	
10309.00	88.800	275.200	8939.36	1498.80	-436.50	-1476.25	713390.28	738553.09	33°01'44.461"N	103°46'19.008"W	1.56	
10340.00	88.300	275.400	8940.14	1529.45	-433.64	-1507.11	713359.42	738555.96	33°01'44.491"N	103°46'19.370"W	1.74	
10372.00	88.100	275.900	8941.15	1561.04	-430.49	-1538.94	713327.60	738559.11	33°01'44.524"N	103°46'19.744"W	1.68	
10403.00	89.000	274.700	8941.93	1591.69	-427.63	-1569.79	713296.74	738561.97	33°01'44.554"N	103°46'20.106"W	4.84	
10435.00	89.200	274.300	8942.44	1623.39	-425.12	-1601.69	713264.85	738564.48	33°01'44.581"N	103°46'20.480"W	1.40	
10467.00	88.700	273.300	8943.02	1655.14	-422.99	-1633.61	713232.92	738566.60	33°01'44.603"N	103°46'20.855"W	3.49	
10499.00	88.600	273.900	8943.78	1686.90	-420.99	-1665.54	713201.00	738568.61	33°01'44.625"N	103°46'21.230"W	1.90	
10530.00	90.700	272.900	8943.97	1717.69	-419.15	-1696.48	713170.06	738570.44	33°01'44.645"N	103°46'21.593"W	7.50	
10562.00	92.700	272.400	8943.02	1749.50	-417.67	-1728.43	713138.11	738571.92	33°01'44.661"N	103°46'21.968"W	6.44	
10595.00	93.100	272.700	8941.35	1782.29	-416.20	-1761.36	713105.19	738573.39	33°01'44.677"N	103°46'22.355"W	1.51	
10627.00	92.900	272.600	8939.67	1814.07	-414.73	-1793.28	713073.27	738574.87	33°01'44.694"N	103°46'22.730"W	0.70	
10659.00	92.700	272.600	8938.11	1845.86	-413.28	-1825.21	713041.34	738576.32	33°01'44.710"N	103°46'23.105"W	0.62	
10691.00	92.600	272.500	8936.63	1877.66	-411.85	-1857.14	713009.41	738577.74	33°01'44.725"N	103°46'23.480"W	0.44	
10723.00	92.400	272.300	8935.23	1909.48	-410.51	-1889.09	712977.47	738579.08	33°01'44.740"N	103°46'23.855"W	0.88	
10787.00	92.000	272.500	8932.78	1973.12	-407.84	-1952.98	712913.57	738581.76	33°01'44.770"N	103°46'24.605"W	0.70	
10851.00	91.400	272.300	8930.88	2036.77	-405.16	-2016.90	712849.66	738584.43	33°01'44.800"N	103°46'25.356"W	0.99	
10914.00	91.400	272.400	8929.34	2099.45	-402.58	-2079.83	712786.74	738587.02	33°01'44.829"N	103°46'26.095"W	0.16	
10978.00	91.200	272.400	8927.89	2163.12	-399.90	-2143.75	712722.81	738589.70	33°01'44.859"N	103°46'26.845"W	0.31	
11041.00	90.400	272.000	8927.01	2225.83	-397.48	-2206.70	712659.87	738592.11	33°01'44.886"N	103°46'27.585"W	1.42	
11105.00	91.300	271.300	8926.06	2289.58	-395.63	-2270.67	712595.91	738593.96	33°01'44.908"N	103°46'28.336"W	1.78	
11168.00	91.200	271.200	8924.68	2352.37	-394.26	-2333.64	712532.94	738595.33	33°01'44.925"N	103°46'29.075"W	0.22	
11231.00	91.500	271.900	8923.20	2415.13	-392.56	-2396.59	712469.99	738597.03	33°01'44.945"N	103°46'29.815"W	1.21	
11295.00	91.900	272.200	8921.30	2478.82	-390.27	-2460.53	712406.06	738599.32	33°01'44.971"N	103°46'30.565"W	0.78	
11390.00	92.200	272.200	8917.90	2573.33	-386.62	-2555.39	712311.20	738602.97	33°01'45.012"N	103°46'31.679"W	0.32	
11485.00	93.000	272.700	8913.59	2667.75	-382.57	-2650.21	712216.39	738607.02	33°01'45.057"N	103°46'32.793"W	0.99	
11580.00	91.600	273.700	8909.78	2762.07	-377.27	-2744.98	712121.62	738612.32	33°01'45.114"N	103°46'33.905"W	1.81	
11675.00	91.100	273.900	8907.54	2856.32	-370.97	-2839.75	712026.86	738618.62	33°01'45.182"N	103°46'35.018"W	0.57	
11770.00	91.700	273.100	8905.22	2950.62	-365.18	-2934.54	711932.08	738624.41	33°01'45.244"N	103°46'36.131"W	1.05	
11866.00	91.600	273.100	8902.46	3045.99	-359.99	-3030.36	711836.26	738629.60	33°01'45.300"N	103°46'37.256"W	0.10	
11961.00	91.900	273.100	8899.56	3140.36	-354.85	-3125.18	711741.45	738634.74	33°01'45.356"N	103°46'38.370"W	0.32	
12056.00	91.700	272.400	8896.57	3234.78	-350.30	-3220.02	711646.61	738639.29	33°01'45.406"N	103°46'39.483"W	0.77	
12151.00	91.600	272.700	8893.84	3329.25	-346.07	-3314.88	711551.75	738643.52	33°01'45.453"N	103°46'40.597"W	0.33	



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Yates Petroleum Corporation	Slot	No.1H SHL
Area	Chaves County, NM	Well	No.1H
Field	(Vespa) Sec 9, T15S, R31E	Wellbore	No. 1H AWB
Facility	Vespa BME Fed No.1H		

WELLPATH DATA (151 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12246.00	91.400	272.500	8891.35	3423.72	-341.76	-3409.75	711456.89	738647.82	33°01'45.500"N	103°46'41.711"W	0.30	
12341.00	92.600	273.400	8888.03	3518.10	-336.88	-3504.57	711362.08	738652.71	33°01'45.554"N	103°46'42.824"W	1.58	
12436.00	93.100	273.300	8883.31	3612.35	-331.33	-3599.29	711267.37	738658.25	33°01'45.613"N	103°46'43.937"W	0.54	
12532.00	93.300	273.800	8877.95	3707.52	-325.40	-3694.95	711171.70	738664.19	33°01'45.677"N	103°46'45.060"W	0.56	
12627.00	91.500	273.000	8873.97	3801.79	-319.77	-3789.70	711076.97	738669.82	33°01'45.738"N	103°46'46.172"W	2.07	
12722.00	91.100	273.200	8871.82	3896.17	-314.63	-3884.54	710982.13	738674.95	33°01'45.794"N	103°46'47.286"W	0.47	
12817.00	92.000	274.200	8869.25	3990.43	-308.51	-3979.30	710887.38	738681.08	33°01'45.859"N	103°46'48.399"W	1.42	
12912.00	92.200	274.200	8865.77	4084.56	-301.55	-4073.98	710792.70	738688.03	33°01'45.933"N	103°46'49.510"W	0.21	
13008.00	91.400	274.200	8862.75	4179.70	-294.53	-4169.68	710697.01	738695.06	33°01'46.007"N	103°46'50.634"W	0.83	
13103.00	92.400	272.600	8859.60	4274.00	-288.89	-4264.45	710602.24	738700.69	33°01'46.068"N	103°46'51.747"W	1.99	
13198.00	91.900	272.700	8856.04	4368.42	-284.51	-4359.28	710507.41	738705.08	33°01'46.116"N	103°46'52.860"W	0.54	
13293.00	91.800	272.800	8852.97	4462.85	-279.95	-4454.12	710412.58	738709.63	33°01'46.166"N	103°46'53.974"W	0.15	
13388.00	91.900	272.500	8849.90	4557.29	-275.56	-4548.97	710317.74	738714.02	33°01'46.215"N	103°46'55.088"W	0.33	
13483.00	91.600	272.200	8847.00	4651.79	-271.67	-4643.85	710222.87	738717.92	33°01'46.258"N	103°46'56.202"W	0.45	
13541.00	91.100	272.000	8845.64	4709.51	-269.54	-4701.79	710164.92	738720.04	33°01'46.282"N	103°46'56.882"W	0.93	
13591.00	91.100	272.000	8844.68	4759.29	-267.80	-4751.75	710114.97	738721.79	33°01'46.302"N	103°46'57.469"W	0.00	Proj to Bit

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
Vespa BME Fed No.1H PBHL		8850.00	-272.36	-4753.01	710113.71	738717.22	33°01'46.257"N	103°46'57.484"W	point

WELLPATH COMPOSITION					Ref Wellbore: No. 1H AWP	Ref Wellpath: No. 1H AWP
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment	Wellbore
0.00	8320.00	Generic gyro - northseeking (Standard)			Gyro	No. 1H AWP
8320.00	13591.00	NaviTrak (Standard)			MWD	No. 1H AWP