



PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

15-40127

August 24, 2012

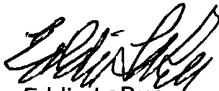
Yates Petroleum Corporation
105 S. 4th
Artesia, NM 88211-1395

RE: Nancy ALH Federal Com #1H
750' FSL & 330' FEL
Sec. 24, T21S, R31E
Eddy County, New Mexico

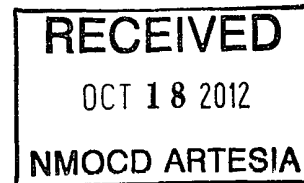
Dear Sir,

The attached is the Deviation Survey for the above captioned well.

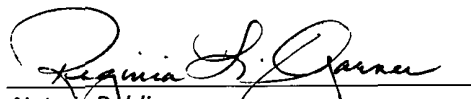
Very truly yours,

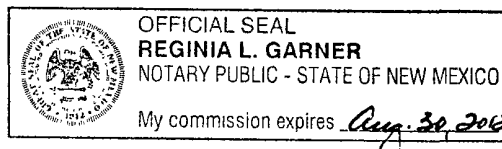

Eddie LaRue
Operations Manager

State of New Mexico }
County of Eddy }



The foregoing was acknowledged before me this 24th day of August, 2012.


Notary Public

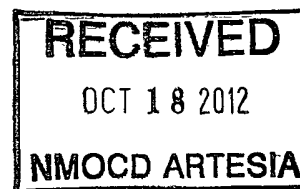
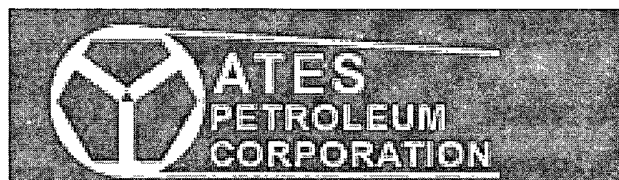


Nancy ALH Federal Com #1H

Date	Depth	Dev	Dir	TVD	Horiz Disp
7/27/2012	200	0.60			
7/27/2012	394	0.70			
7/27/2012	590	0.40			
7/28/2012	800	1.10			
7/30/2012	936	0.88	230.19	935.00	
7/30/2012	997	0.44	223.86	997.00	
7/30/2012	1060	0.44	331.53	1060.00	-5.00
7/30/2012	1155	0.62	21.89	1155.00	-4.24
7/30/2012	1251	0.70	9.06	1251.00	3.20
7/31/2012	1441	0.35	201.54	1441.00	-2.99
7/31/2012	1536	0.26	152.67	1536.00	-3.45
7/31/2012	1726	0.26	111.01	1726.00	-3.60
7/31/2012	1916	0.09	195.65	1916.00	-4.00
7/31/2012	1631	0.09	346.12	1631.00	-3.58
7/31/2012	2011	0.44	49.84	2011.00	3.90
7/31/2012	2107	0.44	44.65	2106.94	-3.42
7/31/2012	2202	0.59	53.18	2201.93	-2.95
7/31/2012	2392	0.88	72.16	2391.92	2.31
7/31/2012	2488	0.70	25.49	2487.91	-1.73
8/1/2012	2583	0.62	356.84	2582.90	
8/1/2012	2678	0.26	18.81	2667.90	
8/1/2012	2774	0.09	201.98	2773.90	
8/1/2012	2868	0.44	91.32	2867.90	0.11
8/1/2012	2963	0.62	103.54	2962.89	
8/1/2012	3059	0.44	74.09	3058.89	-0.18
8/1/2012	3154	0.53	332.58	3153.89	0.29
8/1/2012	3249	0.88	318.61	3248.88	1.29
8/2/2012	3344	0.44	319.05	3343.00	2.17
8/2/2012	3440	0.62	307.71	3439.87	2.82
8/2/2012	3534	0.44	296.81	3533.87	3.35
8/2/2012	3630	1.14	329.42	3629.86	4.40
8/3/2012	3725	2.90	344.89	3724.00	7.62
8/3/2012	3820	5.28	354.50	3819.55	14.35
8/3/2012	3916	7.56	357.52	3914.94	25.08
8/4/2012	4011	9.32	357.30	4009.00	39.02
8/4/2012	4106	10.73	357.50	4102.45	55.54
8/4/2012	4202	11.43	356.89	4196.66	73.98
8/4/2012	4297	11.26	357.38	4289.81	92.65
8/8/2012	4387	11.08	357.28	4378.10	
8/8/2012	4482	12.05	358.07	4471.17	
8/8/2012	4577	12.49	354.47	4564.00	
8/8/2012	4672	12.31	354.03	4656.79	
8/8/2012	4768	12.13	354.90	4750.61	

Date	Depth	Dev	Dir	TVD	Horiz Disp
8/8/2012	4862	11.26	353.24	4842.66	
8/8/2012	4957	11.96	352.36	4935.72	
8/9/2012	5147	11.17	355.17	5121.99	
8/9/2012	5242	10.29	355.96	5215.33	
8/9/2012	5337	11.17	354.47	5308.66	
8/9/2012	5432	11.96	352.36	5401.74	
8/9/2012	5528	11.26	356.93	5495.77	
8/9/2012	5623	11.08	356.05	5588.97	
8/9/2012	5718	10.02	357.93	5682.37	
8/9/2012	5813	10.82	356.75	5775.80	
8/9/2012	5908	11.61	356.14	5868.98	
8/9/2012	6004	10.73	354.55	5963.17	
8/9/2012	6099	10.38	353.15	6056.56	
8/10/2012	6194	10.99	352.97	6149.91	
8/10/2012	6290	10.99	350.42	6244.15	
8/10/2012	6358	10.55	354.10	6310.95	
8/10/2012	6451	9.76	357.02	6402.00	511.00
8/10/2012	6546	10.46	355.96	6496.00	528.00
8/10/2012	6639	11.17	356.40	6587.00	545.00
8/11/2012	6762	11.96	355.08	6707.88	570.35
8/11/2012	6793	12.40	355.43	6738.00	576.00
8/11/2012	6825	15.30	356.22	6796.00	5.84
8/11/2012	6865	18.99	356.80	6798.00	593.00
8/11/2012	6887	22.77	356.76	6827.00	604.00
8/11/2012	6918	26.73	355.87	6856.00	617.00
8/11/2012	6949	30.86	354.99	6883.00	632.00
8/11/2012	6980	35.26	355.26	6909.00	649.00
8/11/2012	7012	39.66	355.17	6934.00	669.00
8/12/2012	7043	44.05	355.43	6957.00	689.00
8/12/2012	7074	47.57	355.96	6979.00	712.00
8/12/2012	7104	50.91	356.05	6999.00	734.00
8/12/2012	7136	54.52	356.58	7018.00	760.00
8/12/2012	7167	58.04	355.55	7035.00	785.00
8/12/2012	7198	61.03	355.29	7052.00	812.00
8/12/2012	7229	62.87	355.10	7065.00	839.00
8/12/2012	7260	64.72	355.23	7079.00	867.00
8/12/2012	7292	66.39	355.32	7092.00	897.00
8/12/2012	7323	68.24	355.65	7104.00	925.00
8/13/2012	7354	70.35	355.64	7115.00	954.00
8/13/2012	7386	71.93	355.52	7126.00	985.00
8/13/2012	7417	73.78	355.54	7135.00	1014.00
8/13/2012	7447	75.71	355.70	7142.00	1043.00
8/13/2012	7478	78.26	355.60	7150.00	1073.00
8/13/2012	7509	81.87	355.32	7155.00	110.00
8/14/2012	7540	86.79	355.21	7158.00	1135.00

Date	Depth	Dev	Dir	TVD	Horiz Disp
8/15/2012	7596	90.66	355.30	7159.00	1191.00
8/15/2012	7658	90.57	356.16	7158.00	1252.00
8/15/2012	7751	91.01	355.36	7157.57	1345.81
8/15/2012	7845	90.92	355.78	7155.99	1439.80
8/16/2012	7938	90.48	356.40	7154.85	1532.78
8/16/2012	8032	91.01	356.18	7153.00	1626.00
8/16/2012	8126	91.71	355.64	7151.40	1720.72
8/16/2012	8219	91.45	356.12	7148.83	1813.68
8/16/2012	8313	91.28	357.00	9146.59	1907.62
8/17/2012	8407	92.07	355.97	7143.85	2001.55
8/17/2012	8500	92.07	357.30	7140.49	2094.46
8/17/2012	8594	91.28	355.93	7137.74	2188.39
8/17/2012	8687	91.36	355.30	7135.60	2281.36
8/17/2012	8780	91.36	354.84	7133.39	2374.34
8/18/2012	8874	90.75	353.19	7131.66	2468.30
8/18/2012	8969	90.40	353.89	7130.70	2563.25
8/18/2012	9065	90.66	353.07	7129.84	2657.20
8/18/2012	9157	90.40	353.40	7128.97	2751.15
8/18/2012	9250	90.57	353.21	7128.18	2844.89
8/18/2012	9344	91.01	352.62	7126.88	2938.01
8/18/2012	9437	90.57	353.51	7125.60	3030.93
8/18/2012	9531	91.36	353.40	7124.02	3124.88
8/19/2012	9624	91.01	354.08	7122.09	3217.83
8/19/2012	9717	90.57	354.66	7120.81	3310.81
8/19/2012	9811	90.66	354.17	7119.80	3404.79
8/19/2012	9904	91.54	353.43	7118.02	3497.75
8/19/2012	9998	91.28	354.73	7115.70	3591.70
8/19/2012	10091	91.10	353.48	7113.77	3684.66
8/20/2012	10185	91.89	353.59	7111.32	3778.59
8/20/2012	10279	91.63	353.59	7108.43	3872.51
8/20/2012	10372	91.19	353.93	7106.14	3965.45
8/20/2012	10466	91.36	355.21	7104.05	4059.42
8/20/2012	10541	90.92	355.60	7102.56	4134.40



Yates Petroleum Corp.

Eddy County (NAD 83)
Nancy "ALH" Federal Com
#1H
OH

Design: OH

PathfinderX & Y Report

21 August, 2012

PATHFINDER[®]
A Schlumberger Company



Pathfinder
PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM:5000.1 Single User Db

Project	Eddy County (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	Nancy "ALH" Federal Com		
Site Position:		Northing:	531,215.149 usft
From:	Map	Easting:	729,275.937 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32.458900
		Longitude:	-103.724007
		Grid Convergence:	0.33 °

Well	#1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32.458900
		Longitude:	-103.724007
		Ground Level:	3,634.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	4/18/2012	7.56
			Dip Angle
			60.38
			Field Strength
			48,695

Design	OH		
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
			355.19



Pathfinder PathfinderX & Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey Program	Date	8/21/2012			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
200 0	800.0	Gyro (OH)	CTG-SR-SS	Continuous gyro - surface ref. s/s	
878 0	10,591 0	MWD #1 (OH)	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0 0	0 00	0 00	0.0	-3,652.0	0 0	0.0	0.0	0.00	531,215.15	729,275.94
200.0	0.17	186.12	200.0	-3,452.0	-0.3	0.0	-0.3	0.08	531,214.85	729,275.91
400.0	0.22	173.23	400.0	-3,252.0	-1.0	0.0	-1.0	0.03	531,214.18	729,275.92
600 0	0.44	159.22	600 0	-3,052.0	-2.1	0.3	-2.1	0.12	531,213.08	729,276.24
800.0	0.89	233.63	800 0	-2,852.0	-3.7	-0.7	-3.6	0.44	531,211.44	729,275.26
878.0	1.10	244.67	878 0	-2,774.0	-4.4	-1.8	-4.2	0.36	531,210.76	729,274.09
936.0	0.88	230.19	936 0	-2,716.0	-4.9	-2.7	-4.7	0.57	531,210.24	729,273.25
997.0	0.44	223.86	997 0	-2,655.0	-5.4	-3.2	-5.1	0.73	531,209.77	729,272.73
1,060.0	0.44	331.53	1,060 0	-2,592.0	-5.3	-3.5	-5.0	1.13	531,209.81	729,272.44
1,155 0	0.62	21.89	1,155 0	-2,497.0	-4.5	-3.5	-4.2	0.50	531,210.60	729,272.46
1,251 0	0.70	9.06	1,250.9	-2,401.1	-3.5	-3.2	-3.2	0.17	531,211.66	729,272.75
1,346 0	0.09	123.93	1,345.9	-2,306.1	-3.0	-3.0	-2.7	0.78	531,212.20	729,272.90
1,441 0	0.35	201.54	1,440.9	-2,211.1	-3.3	-3.1	-3.0	0.36	531,211.88	729,272.86
1,536.0	0.26	152.67	1,535.9	-2,116.1	-3.7	-3.1	-3.5	0.28	531,211.42	729,272.85
1,631 0	0.09	346.12	1,630.9	-2,021.1	-3.8	-3.0	-3.6	0.37	531,211.30	729,272.93
1,726.0	0.26	111.01	1,725.9	-1,926.1	-3.8	-2.8	-3.6	0.34	531,211.30	729,273.11
1,821.0	0.18	140.10	1,820.9	-1,831.1	-4.0	-2.5	-3.8	0.14	531,211.11	729,273.41
1,916.0	0.09	195.65	1,915.9	-1,736.1	-4.2	-2.5	-4.0	0.16	531,210.92	729,273.49
2,011 0	0.44	49.84	2,010.9	-1,641.1	-4.1	-2.2	-3.9	0.54	531,211.08	729,273.74
2,107.0	0.44	44.65	2,106.9	-1,545.1	-3.6	-1.7	-3.4	0.04	531,211.58	729,274.28
2,202.0	0.53	53.18	2,201.9	-1,450.1	-3.0	-1.0	-2.9	0.12	531,212.11	729,274.89



Pathfinder

PathfinderX & Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,297.0	0.79	74.62	2,296.9	-1,355.1	-2.6	-0.1	-2.6	0.37	531,212.54	729,275.88	
2,392.0	0.88	72.16	2,391.9	-1,260.1	-2.2	1.3	-2.3	0.10	531,212.94	729,277.20	
2,488.0	0.70	25.49	2,487.9	-1,164.1	-1.5	2.2	-1.6	0.67	531,213.70	729,278.16	
2,583.0	0.62	356.84	2,582.9	-1,069.1	-0.4	2.4	-0.6	0.35	531,214.73	729,278.38	
2,678.0	0.26	18.81	2,677.9	-974.1	0.3	2.5	0.1	0.41	531,215.45	729,278.42	
2,774.0	0.09	201.98	2,773.9	-878.1	0.4	2.5	0.2	0.36	531,215.59	729,278.46	
2,868.0	0.44	91.32	2,867.9	-784.1	0.4	2.9	0.1	0.51	531,215.51	729,278.79	
2,963.0	0.62	103.54	2,962.9	-689.1	0.2	3.7	-0.1	0.22	531,215.38	729,279.66	
3,059.0	0.44	74.09	3,058.9	-593.1	0.2	4.6	-0.2	0.33	531,215.36	729,280.52	
3,154.0	0.53	332.58	3,153.9	-498.1	0.7	4.7	0.3	0.79	531,215.85	729,280.67	
3,249.0	0.88	318.61	3,248.9	-403.1	1.6	4.0	1.3	0.41	531,216.79	729,279.98	
3,344.0	0.44	319.05	3,343.9	-308.1	2.5	3.3	2.2	0.46	531,217.61	729,279.26	
3,440.0	0.62	307.71	3,439.9	-212.1	3.1	2.7	2.8	0.22	531,218.21	729,278.61	
3,534.0	0.44	296.81	3,533.9	-118.1	3.5	1.9	3.4	0.22	531,218.68	729,277.88	
3,630.0	1.14	329.42	3,629.9	-22.1	4.5	1.1	4.4	0.84	531,219.67	729,277.07	
3,725.0	2.90	344.89	3,724.8	72.8	7.7	0.0	7.6	1.92	531,222.80	729,275.96	
3,820.0	5.28	354.50	3,819.5	167.5	14.3	-1.0	14.4	2.60	531,229.48	729,274.92	
3,916.0	7.56	357.52	3,914.9	262.9	25.0	-1.7	25.1	2.40	531,240.18	729,274.22	
4,011.0	9.32	357.30	4,008.9	356.9	39.0	-2.4	39.0	1.85	531,254.11	729,273.59	
4,106.0	10.73	357.50	4,102.5	450.5	55.5	-3.1	55.5	1.48	531,270.63	729,272.84	
4,202.0	11.43	356.89	4,196.7	544.7	73.9	-4.0	74.0	0.74	531,289.06	729,271.93	
4,297.0	11.26	357.38	4,289.8	637.8	92.6	-4.9	92.7	0.21	531,307.72	729,271.00	
4,387.0	11.08	357.28	4,378.1	726.1	110.0	-5.8	110.1	0.20	531,325.14	729,270.18	
4,482.0	12.05	358.07	4,471.2	819.2	129.0	-6.5	129.1	1.03	531,344.17	729,269.42	
4,577.0	12.49	354.47	4,564.0	912.0	149.2	-7.8	149.3	0.93	531,364.30	729,268.09	
4,672.0	12.31	354.03	4,656.8	1,004.8	169.5	-9.9	169.7	0.21	531,384.60	729,266.05	
4,768.0	12.13	354.90	4,750.6	1,098.6	189.7	-11.8	190.0	0.27	531,404.83	729,264.09	



Pathfinder

PathfinderX & Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
4,862.0	11.26	353.24	4,842.7	1,190.7	208.6	-13.8	209.1	0.99	531,423.78	729,262.13	
4,957.0	11.96	352.36	4,935.7	1,283.7	227.6	-16.2	228.2	0.76	531,442.74	729,259.73	
5,052.0	11.17	355.78	5,028.8	1,376.8	246.5	-18.2	247.2	1.10	531,461.68	729,257.75	
5,147.0	11.17	355.17	5,122.0	1,470.0	264.9	-19.6	265.6	0.12	531,480.02	729,256.29	
5,242.0	10.29	355.96	5,215.3	1,563.3	282.5	-21.0	283.3	0.94	531,497.66	729,254.92	
5,337.0	11.17	354.47	5,308.7	1,656.7	300.1	-22.5	301.0	0.97	531,515.28	729,253.44	
5,432.0	11.96	352.36	5,401.7	1,749.7	319.0	-24.7	320.0	0.94	531,534.19	729,251.24	
5,528.0	11.26	356.93	5,495.8	1,843.8	338.3	-26.5	339.3	1.20	531,553.41	729,249.42	
5,623.0	11.08	356.05	5,589.0	1,937.0	356.6	-27.6	357.7	0.26	531,571.78	729,248.29	
5,718.0	10.02	357.98	5,682.4	2,030.4	374.0	-28.6	375.1	1.18	531,589.15	729,247.37	
5,813.0	10.82	356.75	5,775.8	2,123.8	391.2	-29.4	392.2	0.87	531,606.31	729,246.57	
5,908.0	11.61	356.14	5,869.0	2,217.0	409.6	-30.5	410.7	0.84	531,624.75	729,245.42	
6,004.0	10.73	354.55	5,963.2	2,311.2	428.1	-32.0	429.3	0.97	531,643.29	729,243.93	
6,099.0	10.38	353.15	6,056.6	2,404.6	445.4	-33.9	446.7	0.46	531,660.59	729,242.06	
6,194.0	10.99	352.97	6,149.9	2,497.9	462.9	-36.0	464.3	0.64	531,678.07	729,239.94	
6,290.0	10.99	350.42	6,244.2	2,592.2	481.0	-38.6	482.6	0.51	531,696.18	729,237.29	
6,358.0	10.55	354.20	6,311.0	2,659.0	493.6	-40.4	495.3	1.22	531,708.76	729,235.58	
6,451.0	9.76	357.02	6,402.5	2,750.5	510.0	-41.6	511.6	1.00	531,725.10	729,234.31	
6,546.0	10.46	355.96	6,496.0	2,844.0	526.6	-42.6	528.3	0.76	531,741.75	729,233.29	
6,639.0	11.17	356.40	6,587.4	2,935.4	544.0	-43.8	545.8	0.77	531,759.16	729,232.13	
6,732.0	11.70	355.43	6,678.5	3,026.5	562.4	-45.1	564.2	0.61	531,777.55	729,230.81	
6,762.0	11.96	355.08	6,707.9	3,055.9	568.5	-45.6	570.4	0.90	531,783.68	729,230.30	
6,793.0	12.40	355.43	6,738.2	3,086.2	575.0	-46.2	576.9	1.44	531,790.20	729,229.76	
6,825.0	15.30	356.22	6,769.3	3,117.3	582.7	-46.7	584.6	9.08	531,797.84	729,229.21	
6,856.0	18.99	356.84	6,798.9	3,146.9	591.8	-47.3	593.7	11.92	531,806.96	729,228.66	
6,887.0	22.77	356.75	6,827.8	3,175.8	602.8	-47.9	604.7	12.19	531,817.99	729,228.04	
6,918.0	26.73	355.87	6,856.0	3,204.0	615.8	-48.7	617.7	12.83	531,830.93	729,227.20	



Pathfinder PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
6,949.0	30.86	354.99	6,883.1	3,231.1	630.7	-49.9	632.6	13.39	531,845.81	729,226.00	
6,980.0	35.26	355.26	6,909.1	3,257.1	647.5	-51.4	649.5	14.20	531,862.66	729,224.57	
7,012.0	39.66	355.17	6,934.5	3,282.5	666.9	-53.0	669.0	13.75	531,882.05	729,222.95	
7,043.0	44.05	355.43	6,957.6	3,305.6	687.5	-54.7	689.7	14.17	531,902.66	729,221.25	
7,074.0	47.57	355.96	6,979.2	3,327.2	709.7	-56.3	711.9	11.42	531,924.82	729,219.59	
7,104.0	50.91	356.05	6,998.8	3,346.8	732.3	-57.9	734.6	11.14	531,947.49	729,218.01	
7,136.0	54.52	356.58	7,018.2	3,366.2	757.7	-59.6	760.1	11.36	531,972.89	729,216.37	
7,167.0	58.04	355.55	7,035.4	3,383.4	783.5	-61.3	785.8	11.69	531,998.61	729,214.60	
7,198.0	61.03	355.29	7,051.1	3,399.1	810.1	-63.5	812.6	9.67	532,025.24	729,212.46	
7,229.0	62.87	355.11	7,065.7	3,413.7	837.4	-65.8	839.9	5.96	532,052.50	729,210.17	
7,260.0	64.72	355.23	7,079.4	3,427.4	865.1	-68.1	867.7	5.98	532,080.22	729,207.83	
7,292.0	66.39	355.32	7,092.6	3,440.6	894.1	-70.5	896.9	5.23	532,109.25	729,205.43	
7,323.0	68.24	355.65	7,104.5	3,452.5	922.6	-72.8	925.5	6.05	532,137.76	729,203.18	
7,354.0	70.35	355.64	7,115.5	3,463.5	951.5	-75.0	954.5	6.81	532,166.67	729,200.98	
7,386.0	71.93	355.52	7,125.9	3,473.9	981.7	-77.3	984.7	4.95	532,196.86	729,198.65	
7,417.0	73.78	355.54	7,135.0	3,483.0	1,011.2	-79.6	1,014.4	5.97	532,226.39	729,196.34	
7,447.0	75.71	355.70	7,142.9	3,490.9	1,040.1	-81.8	1,043.3	6.45	532,255.25	729,194.13	
7,478.0	78.26	355.60	7,149.9	3,497.9	1,070.2	-84.1	1,073.5	8.23	532,285.36	729,191.84	
7,509.0	81.87	355.32	7,155.2	3,503.2	1,100.7	-86.5	1,104.0	11.68	532,315.80	729,189.42	
7,540.0	86.79	355.21	7,158.3	3,506.3	1,131.4	-89.1	1,134.9	15.87	532,346.53	729,186.87	
7,596.0	90.66	355.30	7,159.5	3,507.5	1,187.2	-93.7	1,190.8	6.91	532,402.32	729,182.24	
LP: 7596.0 MD; 7159.5 TVD; 1187.2 N; -93.7 E											
7,658.0	90.57	356.16	7,158.9	3,506.9	1,249.0	-98.3	1,252.8	1.39	532,464.14	729,177.63	
7,751.0	91.01	355.36	7,157.6	3,505.6	1,341.7	-105.2	1,345.8	0.98	532,556.88	729,170.75	
7,845.0	90.92	355.78	7,156.0	3,504.0	1,435.4	-112.4	1,439.8	0.46	532,650.58	729,163.49	
7,938.0	90.48	356.40	7,154.9	3,502.9	1,528.2	-118.8	1,532.8	0.82	532,743.36	729,157.15	
8,032.0	91.01	356.18	7,153.6	3,501.6	1,622.0	-124.9	1,626.8	0.61	532,837.15	729,151.07	



Pathfinder

PathfinderX & Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
8,126.0	91.71	355.64	7,151.4	3,499.4	1,715.7	-131.6	1,720.7	0.94	532,930.89	729,144.37	
8,219.0	91.45	356.12	7,148.8	3,496.8	1,808.5	-138.2	1,813.7	0.59	533,023.61	729,137.69	
8,313.0	91.28	357.00	7,146.6	3,494.6	1,902.3	-143.9	1,907.6	0.95	533,117.41	729,132.05	
8,407.0	92.07	355.97	7,143.8	3,491.8	1,996.0	-149.6	2,001.6	1.38	533,211.19	729,126.29	
8,500.0	92.07	357.30	7,140.5	3,488.5	2,088.8	-155.1	2,094.5	1.43	533,303.97	729,120.83	
8,594.0	91.28	355.93	7,137.7	3,485.7	2,182.6	-160.7	2,188.4	1.68	533,397.76	729,115.29	
8,687.0	91.36	355.30	7,135.6	3,483.6	2,275.3	-167.8	2,281.4	0.68	533,490.47	729,108.18	
8,780.0	91.36	354.84	7,133.4	3,481.4	2,367.9	-175.7	2,374.3	0.49	533,583.10	729,100.19	
8,874.0	90.75	353.19	7,131.7	3,479.7	2,461.4	-185.5	2,468.3	1.87	533,676.56	729,090.39	
8,969.0	90.40	353.89	7,130.7	3,478.7	2,555.8	-196.2	2,563.3	0.82	533,770.96	729,079.70	
9,063.0	90.66	353.07	7,129.8	3,477.8	2,649.2	-206.9	2,657.2	0.92	533,864.34	729,069.03	
9,157.0	90.40	353.40	7,129.0	3,477.0	2,742.5	-218.0	2,751.2	0.45	533,957.68	729,057.96	
9,250.0	90.57	353.21	7,128.2	3,476.2	2,834.9	-228.8	2,844.1	0.27	534,050.05	729,047.11	
9,344.0	91.01	352.61	7,126.9	3,474.9	2,928.2	-240.4	2,938.0	0.79	534,143.32	729,035.51	
9,437.0	90.57	353.51	7,125.6	3,473.6	3,020.5	-251.7	3,030.9	1.08	534,235.63	729,024.28	
9,531.0	91.36	353.40	7,124.0	3,472.0	3,113.9	-262.4	3,124.9	0.85	534,329.00	729,013.56	
9,624.0	91.01	354.08	7,122.1	3,470.1	3,206.3	-272.5	3,217.8	0.82	534,421.42	729,003.43	
9,717.0	90.57	354.66	7,120.8	3,468.8	3,298.8	-281.6	3,310.8	0.78	534,513.97	728,994.30	
9,811.0	90.66	354.17	7,119.8	3,467.8	3,392.4	-290.8	3,404.8	0.53	534,607.51	728,985.15	
9,904.0	91.54	353.43	7,118.0	3,466.0	3,484.8	-300.8	3,497.8	1.24	534,699.95	728,975.11	
9,998.0	91.28	354.73	7,115.7	3,463.7	3,578.3	-310.5	3,591.7	1.41	534,793.42	728,965.42	
10,091.0	91.10	353.48	7,113.8	3,461.8	3,670.8	-320.1	3,684.7	1.36	534,885.91	728,955.87	
10,185.0	91.89	353.59	7,111.3	3,459.3	3,764.1	-330.6	3,778.6	0.85	534,979.28	728,945.29	
10,279.0	91.63	353.59	7,108.4	3,456.4	3,857.5	-341.1	3,872.5	0.28	535,072.64	728,934.80	
10,372.0	91.19	353.93	7,106.1	3,454.1	3,949.9	-351.2	3,965.5	0.60	535,165.07	728,924.70	
10,466.0	91.36	355.21	7,104.1	3,452.1	4,043.5	-360.1	4,059.4	1.37	535,258.62	728,915.80	
10,541.0	90.92	355.60	7,102.6	3,450.6	4,118.2	-366.1	4,134.4	0.78	535,333.36	728,909.80	



Pathfinder
PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Site:	Nancy "ALH" Federal Com	MD Reference:	KB = 18' @ 3652.0usft (Silver Oak 10)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
10,591.0	90.92	355.60	7,101.8	3,449.8	4,168.1	-370.0	4,184.4	0.00	535,383.21	728,905.96
PROJECTED BHL - 10591.0 'MD, 7101.8 'TVD, 4168.1 'N, -370.0 'E - FWL:643, FNL:362, FEL:675										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,596.0	7,159.5	1,187.2	-93.7	LP - 7596.0 'MD, 7159.5 'TVD, 1187.2 'N, -93.7 'E
10,591.0	7,101.8	4,168.1	-370.0	PROJECTED BHL - 10591.0 'MD, 7101.8 'TVD, 4168.1 'N, -370.0 'E
10,591.0	7,101.8	4,168.1	-370.0	FWL:643, FNL:362, FEL:675

Checked By: _____	Approved By: _____	Date: _____
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PROJECT DETAILS: Eddy County (NAD 83)
Geodetic 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



Azimuths to Grid North
True North: -0.33°
Magnetic North: 7.23°

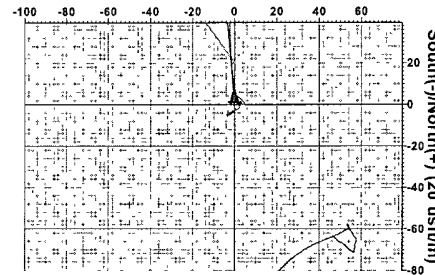
Magnetic Field
Strength: 48694.8snT
Dip Angle: 60.38°
Date: 4/18/2012
Model: IGRF200510

PATHFINDER®
A Schlumberger Company

Project: Eddy County (NAD 83)
Site: Nancy "ALH" Federal Com
Well: #1H
Wellbore: OH
Plan: Plan #3 (#1H/OH)

EOW

West(-)/East(+) (20 usft/in)



WELL DETAILS #1H

Ground Elevation 3634.0
RKB Elevation KB = 18' @ 3652.0usft (Silver Oak 10)
Rig Name Silver Oak 10

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	531215.149	729275.937	32.458900	-103.724007	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

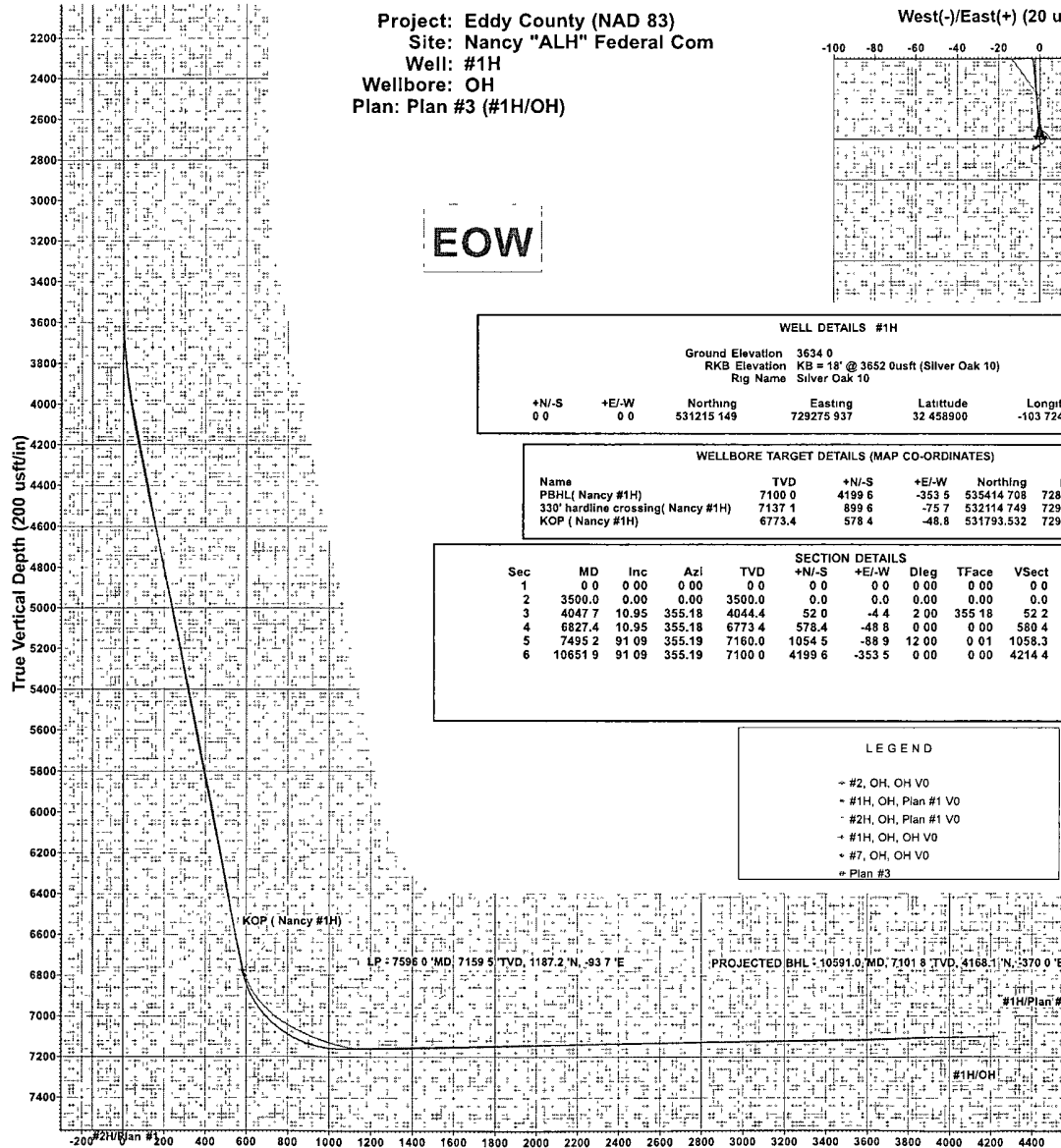
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL (Nancy #1H)	7100.0	4199.6	-353.5	535414.708	728922.422	Point
330' hardline crossing (Nancy #1H)	7137.1	899.6	-75.7	532114.749	729200.209	Point
KOP (Nancy #1H)	6773.4	578.4	-48.8	531793.532	729227.152	Point

SECTION DETAILS

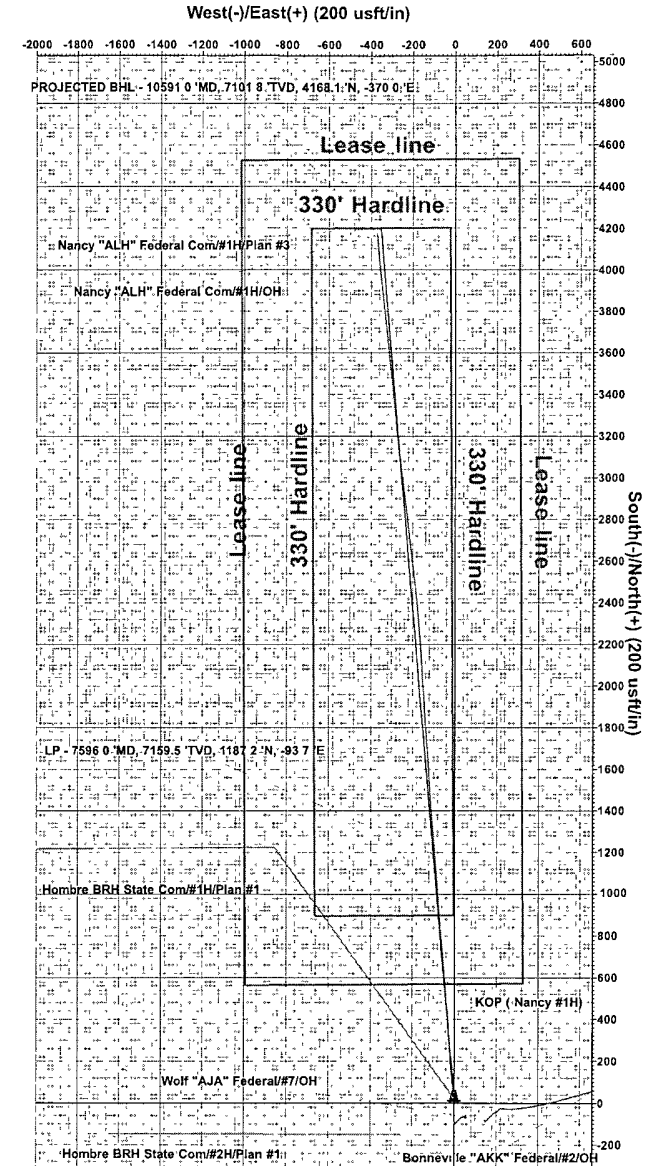
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3500.0	0.00	0.00	3500.0	0.0	0.0	0.00	0.00	0.0	
3	4047.7	10.95	355.18	4044.4	52.0	-4.4	2.00	355.18	52.2	
4	6827.4	10.95	355.18	6773.4	578.4	-48.8	0.00	0.00	580.4	
5	7495.2	91.09	355.19	7160.0	1054.5	-88.9	12.00	0.01	1058.3	
6	10651.9	91.09	355.19	7100.0	4199.6	-353.5	0.00	0.00	4214.4	PBHL (Nancy #1H)

LEGEND

- ~ #2, OH, OH V0
- ~ #1H, OH, Plan #1 V0
- ~ #2H, OH, Plan #1 V0
- ~ #1H, OH, OH V0
- ~ #7, OH, OH V0
- ~ Plan #3



Vertical Section at 355.19° (200 usft/in)



Plan Plan #3 (#1H/OH)

Created By Sam Biffle Date: 11 19, August 21 2012
Checked _____ Date: _____

Notes: Pathfinder Data
Eddy County 2012
Pathfinder Data
Pathfinder Data
Pathfinder Data