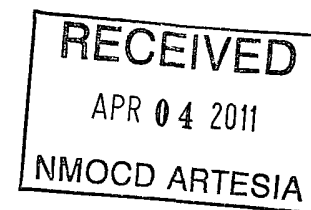


PLEASE KEEP CONFIDENTIAL



Murchison Oil & Gas

Eddy County(NAD83)

Pequeno Mike "BLU" Federal

#3H

OH

30-015-36985

Survey: MWD

Pathfinder X & Y Survey Report

19 February, 2011

PATHFINDER
A Schlumberger Company

Pathfinder
Pathfinder X & Y Survey Report



Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Site Pequeno Mike "BLU" Federal
Project:	Eddy County(NAD83)	TVD Reference:	WELL @ 3765.50usft (Original Well Elev)
Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765.50usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project		Eddy County(NAD83)	
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Pequeno Mike "BLU" Federal						
Site Position:		Northing:	710,780.584	usft	Latitude:	32° 57' 13.074 N		
From,	Map	Easting:	627,172.347	usft	Longitude:	104° 3' 12.606 W		
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"	Grid Convergence:	0 15 °

Well		#3H				
Well Position	+N/-S	0.00 usft	Northing:	710,780.584 usft	Latitude:	32° 57' 13.074 N
	+E/-W	0.00 usft	Easting:	627,172.347 usft	Longitude:	104° 3' 12.606 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,744.00 usft

Wellbore		OH			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/22/10	7.93	60.79	49,056

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	268.83

Pathfinder
Pathfinder X & Y Survey Report



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Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765 50usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey Program		Date	02/19/11		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	6,600.00	GYRO (OH)	CB-GYRO-MS	Camera based gyro multishot	
6,657.00	10,602.00	MWD (OH)			

Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
6,600.00	1.33	116.92	6,598.98	-2,833.48	1.62	67.15	-67.17	0.00	710,782.20	627,239.50	
6,657.00	1.76	206.87	6,655.96	-2,890.46	0.54	67.34	-67.34	3.87	710,781.12	627,239.69	
6,689.00	4.48	232.23	6,687.91	-2,922.41	-0.67	66.13	-66.11	9.33	710,779.92	627,238.48	
6,721.00	8.44	241.01	6,719.71	-2,954.21	-2.57	63.09	-63.03	12.72	710,778.01	627,235.44	
6,752.00	12.31	243.05	6,750.19	-2,984.69	-5.17	58.15	-58.04	12.54	710,775.41	627,230.50	
6,784.00	16.36	244.05	6,781.19	-3,015.69	-8.69	51.06	-50.87	12.68	710,771.89	627,223.40	
6,816.00	20.40	246.36	6,811.55	-3,046.05	-12.90	41.89	-41.62	12.83	710,767.68	627,214.24	
6,847.00	23.92	248.30	6,840.26	-3,074.76	-17.39	31.10	-30.74	11.60	710,763.19	627,203.45	
6,879.00	28.14	250.19	6,869.01	-3,103.51	-22.35	17.97	-17.51	13.44	710,758.23	627,190.31	
6,911.00	31.83	251.58	6,896.72	-3,131.22	-27.58	2.86	-2.29	11.73	710,753.01	627,175.20	
6,942.00	35.79	253.15	6,922.47	-3,156.97	-32.79	-13.58	14.25	13.08	710,747.79	627,158.76	
6,974.00	39.83	254.68	6,947.75	-3,182.25	-38.21	-32.43	33.20	12.96	710,742.37	627,139.92	
7,006.00	44.14	256.13	6,971.53	-3,206.03	-43.59	-53.14	54.02	13.80	710,736.99	627,119.20	
7,038.00	48.01	257.97	6,993.73	-3,228.23	-48.75	-75.60	76.58	12.78	710,731.84	627,096.75	
7,070.00	51.88	260.43	7,014.32	-3,248.82	-53.32	-99.66	100.72	13.45	710,727.26	627,072.69	
7,101.00	54.52	261.82	7,032.89	-3,267.39	-57.14	-124.18	125.32	9.24	710,723.44	627,048.17	
7,133.00	57.68	262.79	7,050.73	-3,285.23	-60.69	-150.50	151.70	10.19	710,719.89	627,021.85	
7,165.00	60.23	262.57	7,067.23	-3,301.73	-64.19	-177.69	178.96	7.99	710,716.40	626,994.66	
7,197.00	62.78	261.54	7,082.50	-3,317.00	-68.08	-205.54	206.88	8.46	710,712.51	626,966.81	
7,228.00	65.86	260.47	7,095.93	-3,330.43	-72.45	-233.13	234.56	10.41	710,708.13	626,939.22	
7,260.00	68.68	260.26	7,108.29	-3,342.79	-77.39	-262.22	263.75	8.83	710,703.19	626,910.12	

Pathfinder
Pathfinder X & Y Survey Report



Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Site Pequeno Mike "BLU" Federal
Project:	Eddy County(NAD83)	TVD Reference:	WELL @ 3765 50usft (Original Well Elev)
Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765 50usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
7,291.00	72.81	259.91	7,118.51	-3,353.01	-82.43	-291.04	292.67	13.37	710,698.16	626,881.30	
7,323.00	76.15	260.45	7,127.08	-3,361.58	-87.69	-321.42	323.15	10.56	710,692.90	626,850.93	
7,355.00	77.47	260.94	7,134.38	-3,368.88	-92.72	-352.17	353.99	4.39	710,687.86	626,820.18	
7,386.00	77.56	260.79	7,141.08	-3,375.58	-97.53	-382.05	383.96	0.55	710,683.06	626,790.30	
7,418.00	77.38	261.03	7,148.02	-3,382.52	-102.46	-412.90	414.90	0.92	710,678.12	626,759.45	
7,450.00	77.03	260.69	7,155.11	-3,389.61	-107.42	-443.70	445.81	1.51	710,673.16	626,728.64	
7,482.00	77.21	261.05	7,162.24	-3,396.74	-112.37	-474.50	476.70	1.23	710,668.21	626,697.84	
7,514.00	76.77	263.18	7,169.45	-3,403.95	-116.65	-505.39	507.66	6.63	710,663.94	626,666.96	
7,546.00	76.15	264.78	7,176.94	-3,411.44	-119.91	-536.32	538.66	5.23	710,660.67	626,636.02	
7,577.00	76.33	265.64	7,184.31	-3,418.81	-122.42	-566.33	568.71	2.76	710,658.16	626,606.02	
7,590.00	76.36	266.11	7,187.38	-3,421.88	-123.33	-578.93	581.33	3.50	710,657.25	626,593.42	
Ref #1 -7590.00'MD,76.36°INC,266.11°AZI,7187.38'TVD											
7,609.00	76.41	266.79	7,191.85	-3,426.35	-124.48	-597.36	599.78	3.50	710,656.11	626,574.99	
7,641.00	76.06	269.11	7,199.47	-3,433.97	-125.59	-628.42	630.85	7.13	710,654.99	626,543.93	
7,672.00	75.62	270.89	7,207.05	-3,441.55	-125.59	-658.47	660.90	5.75	710,654.99	626,513.87	
7,704.00	76.41	270.65	7,214.79	-3,449.29	-125.17	-689.52	691.93	2.57	710,655.41	626,482.82	
7,735.00	80.11	271.38	7,221.09	-3,455.59	-124.63	-719.86	722.26	12.16	710,655.95	626,452.48	
7,767.00	84.59	271.87	7,225.35	-3,459.85	-123.73	-751.56	753.93	14.08	710,656.85	626,420.79	
7,799.00	88.81	271.96	7,227.19	-3,461.69	-122.67	-783.48	785.82	13.19	710,657.92	626,388.87	
7,829.00	89.61	272.20	7,227.61	-3,462.11	-121.58	-813.46	815.77	2.78	710,659.01	626,358.89	
7,861.00	89.44	272.31	7,227.87	-3,462.37	-120.32	-845.43	847.71	0.63	710,660.27	626,326.92	
7,893.00	89.10	272.67	7,228.28	-3,462.78	-118.93	-877.40	879.64	1.55	710,661.66	626,294.95	
7,925.00	88.32	272.12	7,229.00	-3,463.50	-117.59	-909.36	911.57	2.98	710,662.99	626,262.99	
7,956.00	87.54	271.56	7,230.12	-3,464.62	-116.60	-940.33	942.51	3.10	710,663.99	626,232.02	
7,988.00	87.53	271.95	7,231.50	-3,466.00	-115.62	-972.28	974.44	1.22	710,664.97	626,200.07	
8,020.00	87.14	271.08	7,232.98	-3,467.48	-114.77	-1,004.23	1,006.37	2.98	710,665.81	626,168.11	
8,053.00	86.75	270.77	7,234.74	-3,469.24	-114.24	-1,037.18	1,039.30	1.51	710,666.34	626,135.16	

Pathfinder
Pathfinder X & Y Survey Report

PATHFINDER
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Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Site Pequeno Mike "BLU" Federal
Project:	Eddy County(NAD83)	TVD Reference:	WELL @ 3765 50usft (Original Well Elev)
Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765 50usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,084.00	87.03	269.40	7,236.42	-3,470.92	-114.19	-1,068.14	1,070.25	4.50	710,666.39	626,104.21
8,115.00	87.65	268.29	7,237.86	-3,472.36	-114.82	-1,099.10	1,101.21	4.10	710,665.77	626,073.25
8,147.00	88.94	267.85	7,238.82	-3,473.32	-115.90	-1,131.06	1,133.19	4.26	710,664.69	626,041.28
8,179.00	89.66	268.01	7,239.21	-3,473.71	-117.05	-1,163.04	1,165.19	2.30	710,663.53	626,009.31
8,211.00	90.45	268.22	7,239.18	-3,473.68	-118.10	-1,195.02	1,197.18	2.55	710,662.48	625,977.32
8,242.00	91.06	268.39	7,238.77	-3,473.27	-119.02	-1,226.01	1,228.18	2.04	710,661.56	625,946.34
8,274.00	90.95	268.53	7,238.21	-3,472.71	-119.88	-1,257.99	1,260.17	0.56	710,660.70	625,914.36
8,306.00	90.84	268.97	7,237.71	-3,472.21	-120.58	-1,289.98	1,292.17	1.42	710,660.00	625,882.37
8,338.00	91.12	269.87	7,237.16	-3,471.66	-120.90	-1,321.97	1,324.16	2.95	710,659.68	625,850.38
8,369.00	90.95	270.58	7,236.60	-3,471.10	-120.78	-1,352.97	1,355.15	2.35	710,659.80	625,819.38
8,401.00	90.90	271.40	7,236.08	-3,470.58	-120.23	-1,384.96	1,387.12	2.57	710,660.36	625,787.39
8,433.00	89.55	270.52	7,235.96	-3,470.46	-119.69	-1,416.95	1,419.10	5.04	710,660.89	625,755.40
8,465.00	89.27	270.36	7,236.29	-3,470.79	-119.45	-1,448.95	1,451.08	1.01	710,661.14	625,723.40
8,497.00	89.72	270.73	7,236.57	-3,471.07	-119.14	-1,480.94	1,483.07	1.82	710,661.44	625,691.40
8,528.00	90.06	271.60	7,236.63	-3,471.13	-118.51	-1,511.94	1,514.04	3.01	710,662.07	625,660.41
8,560.00	89.72	270.92	7,236.69	-3,471.19	-117.81	-1,543.93	1,546.01	2.38	710,662.78	625,628.42
8,592.00	90.34	270.25	7,236.67	-3,471.17	-117.48	-1,575.93	1,578.00	2.85	710,663.10	625,596.42
8,624.00	91.01	269.92	7,236.30	-3,470.80	-117.43	-1,607.93	1,609.99	2.33	710,663.15	625,564.42
8,656.00	92.18	269.44	7,235.40	-3,469.90	-117.61	-1,639.91	1,641.97	3.95	710,662.97	625,532.43
8,687.00	92.80	269.14	7,234.06	-3,468.56	-118.00	-1,670.88	1,672.94	2.22	710,662.59	625,501.47
8,719.00	93.14	269.24	7,232.40	-3,466.90	-118.45	-1,702.83	1,704.90	1.11	710,662.14	625,469.51
8,751.00	93.59	269.71	7,230.52	-3,465.02	-118.74	-1,734.78	1,736.84	2.03	710,661.84	625,437.57
8,782.00	93.30	268.88	7,228.66	-3,463.16	-119.12	-1,765.72	1,767.78	2.83	710,661.46	625,406.63
8,812.00	94.20	268.89	7,226.70	-3,461.20	-119.70	-1,795.65	1,797.72	3.00	710,660.88	625,376.70
8,876.00	95.37	269.19	7,221.36	-3,455.86	-120.77	-1,859.42	1,861.49	1.89	710,659.81	625,312.93
8,908.00	96.01	269.37	7,218.19	-3,452.69	-121.17	-1,891.25	1,893.33	2.08	710,659.41	625,281.09
8,939.00	96.68	269.30	7,214.76	-3,449.26	-121.53	-1,922.06	1,924.14	2.17	710,659.05	625,250.28

Pathfinder
Pathfinder X & Y Survey Report



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Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765.50usft (Original Well Elev)
Well:	#3H	North Reference:	Grd
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
8,971.00	95.26	269.37	7,211.43	-3,445.93	-121.90	-1,953.89	1,955.97	4.44	710,658.68	625,218.46	
9,003.00	93.75	269.78	7,208.92	-3,443.42	-122.14	-1,985.79	1,987.87	4.89	710,658.45	625,186.56	
9,035.00	93.52	270.55	7,206.89	-3,441.39	-122.04	-2,017.72	2,019.79	2.51	710,658.54	625,154.63	
9,067.00	94.36	270.32	7,204.69	-3,439.19	-121.80	-2,049.64	2,051.70	2.72	710,658.78	625,122.70	
9,098.00	95.09	269.91	7,202.14	-3,436.64	-121.74	-2,080.54	2,082.59	2.70	710,658.84	625,091.81	
9,130.00	94.71	270.15	7,199.40	-3,433.90	-121.72	-2,112.42	2,114.47	1.40	710,658.86	625,059.93	
9,162.00	93.30	270.34	7,197.17	-3,431.67	-121.59	-2,144.34	2,146.38	4.45	710,659.00	625,028.01	
9,194.00	93.13	270.36	7,195.37	-3,429.87	-121.39	-2,176.29	2,178.32	0.53	710,659.19	624,996.06	
9,226.00	93.52	270.28	7,193.52	-3,428.02	-121.21	-2,208.24	2,210.25	1.24	710,659.37	624,964.11	
9,257.00	94.09	270.73	7,191.46	-3,425.96	-120.94	-2,239.17	2,241.17	2.34	710,659.64	624,933.18	
9,289.00	93.92	270.51	7,189.23	-3,423.73	-120.60	-2,271.09	2,273.08	0.87	710,659.99	624,901.26	
9,321.00	94.54	270.69	7,186.86	-3,421.36	-120.26	-2,303.00	2,304.97	2.02	710,660.32	624,869.35	
9,353.00	94.94	270.54	7,184.22	-3,418.72	-119.92	-2,334.89	2,336.85	1.33	710,660.67	624,837.46	
9,385.00	95.05	270.67	7,181.43	-3,415.93	-119.58	-2,366.76	2,368.71	0.53	710,661.00	624,805.58	
9,416.00	94.70	270.00	7,178.80	-3,413.30	-119.40	-2,397.65	2,399.59	2.43	710,661.18	624,774.70	
9,448.00	93.48	270.09	7,176.52	-3,411.02	-119.38	-2,429.57	2,431.50	3.82	710,661.21	624,742.78	
9,480.00	91.90	269.96	7,175.02	-3,409.52	-119.36	-2,461.53	2,463.46	4.95	710,661.22	624,710.82	
9,512.00	90.67	270.02	7,174.30	-3,408.80	-119.37	-2,493.52	2,495.44	3.85	710,661.22	624,678.82	
9,543.00	89.66	269.79	7,174.21	-3,408.71	-119.42	-2,524.52	2,526.43	3.34	710,661.16	624,647.82	
9,574.00	88.43	269.69	7,174.73	-3,409.23	-119.56	-2,555.52	2,557.43	3.98	710,661.02	624,616.83	
9,596.00	87.93	269.46	7,175.42	-3,409.92	-119.72	-2,577.51	2,579.41	2.50	710,660.86	624,594.84	
9,628.00	87.49	269.18	7,176.70	-3,411.20	-120.10	-2,609.48	2,611.39	1.63	710,660.48	624,562.87	
9,659.00	87.76	269.52	7,177.99	-3,412.49	-120.45	-2,640.45	2,642.36	1.40	710,660.13	624,531.90	
9,691.00	88.02	269.69	7,179.17	-3,413.67	-120.67	-2,672.43	2,674.33	0.97	710,659.91	624,499.92	
9,723.00	87.14	268.39	7,180.52	-3,415.02	-121.21	-2,704.39	2,706.30	4.90	710,659.37	624,467.95	
9,754.00	86.88	268.84	7,182.13	-3,416.63	-121.96	-2,735.34	2,737.26	1.67	710,658.63	624,437.01	
9,786.00	86.88	268.72	7,183.88	-3,418.38	-122.64	-2,767.29	2,769.21	0.37	710,657.95	624,405.06	

Pathfinder
Pathfinder X & Y Survey Report



Company: Murchison Oil & Gas			Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:					Site Pequeno Mike "BLU" Federal		
Project: Eddy County(NAD83)								WELL @ 3765.50usft (Original Well Elev)		
Site: Pequeno Mike "BLU" Federal								WELL @ 3765 50usft (Original Well Elev)		
Well: #3H								Grid		
Wellbore: OH								Minimum Curvature		
Design: OH						EDM 5000.1 Single User Db				
Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,818.00	87.14	268.88	7,185.54	-3,420.04	-123.31	-2,799.24	2,801.17	0.95	710,657.28	624,373.11
9,850.00	87.23	268.68	7,187.12	-3,421.62	-123.99	-2,831.19	2,833.13	0.68	710,656.60	624,341.16
9,882.00	87.32	268.57	7,188.64	-3,423.14	-124.76	-2,863.14	2,865.09	0.44	710,655.83	624,309.20
9,913.00	87.49	268.73	7,190.04	-3,424.54	-125.49	-2,894.10	2,896.06	0.75	710,655.10	624,278.24
9,945.00	87.49	268.67	7,191.44	-3,425.94	-126.21	-2,926.07	2,928.03	0.19	710,654.37	624,246.28
9,977.00	87.67	268.81	7,192.79	-3,427.29	-126.91	-2,958.03	2,960.00	0.71	710,653.67	624,214.32
10,008.00	88.20	269.21	7,193.91	-3,428.41	-127.45	-2,989.00	2,990.98	2.14	710,653.14	624,183.34
10,040.00	88.46	269.12	7,194.84	-3,429.34	-127.91	-3,020.99	3,022.97	0.86	710,652.67	624,151.36
10,072.00	88.64	269.45	7,195.65	-3,430.15	-128.31	-3,052.97	3,054.96	1.17	710,652.27	624,119.37
10,103.00	88.64	269.50	7,196.39	-3,430.89	-128.60	-3,083.96	3,085.95	0.16	710,651.99	624,088.38
10,135.00	88.29	269.37	7,197.25	-3,431.75	-128.91	-3,115.95	3,117.93	1.17	710,651.67	624,056.40
10,167.00	88.72	269.79	7,198.08	-3,432.58	-129.15	-3,147.94	3,149.92	1.88	710,651.44	624,024.41
10,199.00	88.64	269.50	7,198.82	-3,433.32	-129.35	-3,179.93	3,181.91	0.94	710,651.24	623,992.42
10,231.00	88.11	269.21	7,199.73	-3,434.23	-129.71	-3,211.91	3,213.89	1.89	710,650.88	623,960.43
10,262.00	88.20	269.35	7,200.72	-3,435.22	-130.10	-3,242.90	3,244.88	0.54	710,650.49	623,929.45
10,294.00	88.46	269.34	7,201.66	-3,436.16	-130.46	-3,274.88	3,276.86	0.81	710,650.12	623,897.47
10,326.00	88.72	269.47	7,202.44	-3,436.94	-130.79	-3,306.87	3,308.85	0.91	710,649.79	623,865.48
10,357.00	88.81	269.51	7,203.11	-3,437.61	-131.07	-3,337.86	3,339.84	0.32	710,649.51	623,834.49
10,389.00	88.64	269.50	7,203.82	-3,438.32	-131.35	-3,369.85	3,371.83	0.53	710,649.24	623,802.50
10,421.00	88.29	269.16	7,204.68	-3,439.18	-131.72	-3,401.84	3,403.82	1.52	710,648.86	623,770.51
10,453.00	87.41	268.71	7,205.88	-3,440.38	-132.31	-3,433.81	3,435.80	3.09	710,648.27	623,738.54
10,485.00	87.14	269.02	7,207.40	-3,441.90	-132.95	-3,465.77	3,467.76	1.28	710,647.64	623,706.58
10,517.00	87.14	268.68	7,209.00	-3,443.50	-133.59	-3,497.72	3,499.72	1.06	710,647.00	623,674.63
10,537.00	87.05	269.15	7,210.01	-3,444.51	-133.97	-3,517.69	3,519.69	2.39	710,646.62	623,654.66
10,602.00	87.05	269.15	7,213.36	-3,447.86	-134.93	-3,582.60	3,584.61	0.00	710,645.65	623,589.75
BHL-10602.00°MD,87.05°INC,269.15°AZI, 7213.36°TVD, 3584.61°VS, -134.93°N, -3582.60°E										

Pathfinder
Pathfinder X & Y Survey Report

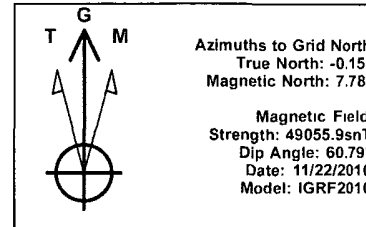


Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Site Pequeno Mike "BLU" Federal
Project:	Eddy County(NAD83)	TVD Reference:	WELL @ 3765.50usft (Original Well Elev)
Site:	Pequeno Mike "BLU" Federal	MD Reference:	WELL @ 3765.50usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
		+N/-S (usft)	+E/-W (usft)	Comment
7,590.00	7,187.38	-123.33	-578.93	Ref #1 -7590.00'MD,76.36°INC,266.11°AZI,7187.38'TVD
10,602.00	7,213.36	-134.93	-3,582.60	BHL-10602 00'MD,87.05°INC,269 15°AZI, 7213.36'TVD, 3584.61'VS, -134 93'N

Checked By: _____	Approved By: _____	Date: _____
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Murchison Oil & Gas



PATHFINDER

A Schlumberger Company

Project: Eddy County(NAD83)
Site: Pequeno Mike "BLU" Federal
Well: #3H
Wellbore: OH
Plan: Plan #3 Top of WC @ 7200'TVD (#3H/OH)

WELL DETAILS: #3H

Ground Elevation:: 3744.00
RKB Elevation: WELL @ 3765.50usft (Original Well Elev)
Rig Name: Original Well Elev

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	710780.584	627172.347	32° 57' 13.074 N	104° 3' 12.606 W	

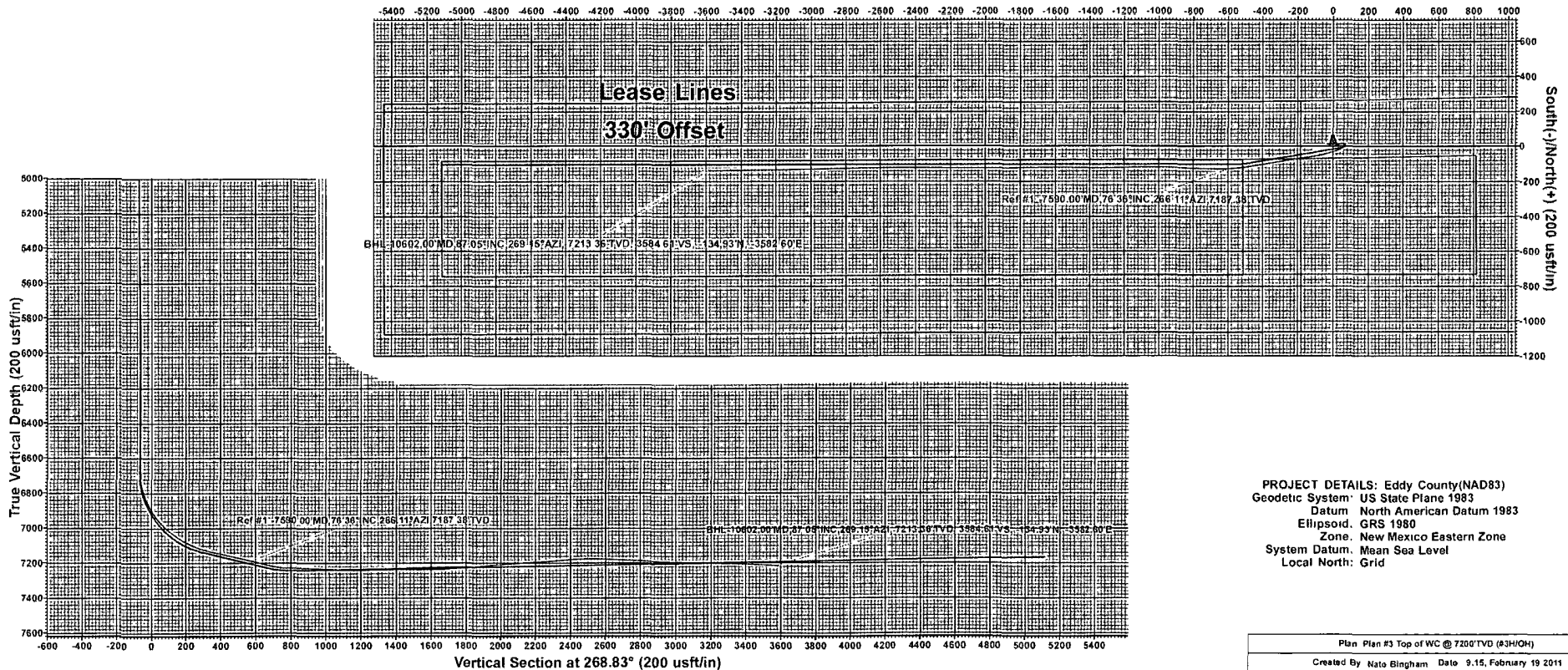
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(PM#3)	7165.09	-103.82	-5112.90	710676.764	622059.448	Point
PP#2 @7200'TVD	7200.00	-100.00	-555.00	710680.584	626617.347	Point
PP(PM#3)	7220.00	-100.00	-555.00	710680.584	626617.347	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
6661.00	1.54	114.42	6659.96	0.96	68.53	0.00	0.00	-68.53	
7307.18	76.25	260.80	7134.43	-62.86	-289.78	12.00	146.58	291.00	
7509.07	76.25	260.80	7182.40	-94.21	-483.37	0.00	0.00	485.19	
7583.13	76.30	269.95	7200.00	-100.00	-555.00	12.00	90.80	556.92	PP#2 @7200'TVD
7703.38	76.30	269.95	7228.48	-100.10	-671.83	0.00	0.00	673.73	
7825.96	91.00	269.95	7242.00	-100.21	-793.32	11.99	0.00	795.19	
12146.19	91.00	269.95	7166.60	-103.98	-5112.90	0.00	0.00	5113.95	PBHL(PM#3)

West(-)/East(+) (200 usft/in)



PROJECT DETAILS: Eddy County(NAD83)
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

Plan: Plan #3 Top of WC @ 7200'TVD (#3H/OH)

Created By: Nato Bingham Date: 9.15, February 19 2011

Checked: _____ Date: _____



Certified Article Number

7196 9008 9040 0167 6656

SENDERS RECORD

VIA CERTIFIED MAIL

March 31, 2011

State of New Mexico
Oil Conservation Division – District II
1301 W. Grand Avenue
Artesia, NM 88210

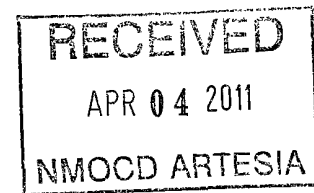
Date Compl. 3/31/2011
Confid. Ends 6/30/2011

RE: PEQUENO MIKE BLU FEDERAL #3H
API # 30-015-36985
EDDY COUNTY, NM

Ladies and Gentlemen:

Enclosed please find the following:

- 1) Form C-104 (original & 5 copies)
- 2) Amended Form C-102
- 3) Directional Survey
- 4) Inclination Survey
- 5) Deviation Report
- 6) Hi-Res Laterolog Array Micro-CFL/GR
- 7) Three Detector Litho-Density Compensated Neutron/GR
- 8) Caliper Log



We hereby request that the enclosed logs and directional survey be kept confidential until 6/30/11 (90 days from the completion date of 3/31/11). If you have any questions, please contact me at 972-931-0700 ext. 109 or ccottrell@jdmii.com.

Very truly yours,

Cindy Cottrell
Regulatory Coordinator

Enclosures