

PLEASE KEEP CONFIDENTIAL

30-015-38060

Murchison Oil & Gas(Compass 2003)

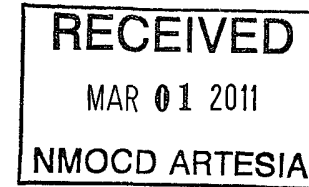
Eddy County

Carbon Valley '25' Fed Com

#7H

OH

Survey: MWD #1



Pathfinder X & Y Survey Report

10 January, 2011

PATHFINDER
A Schlumberger Company

Pathfinder
Pathfinder X & Y Survey Report



Company: Murchison Oil & Gas(Compass 2003)
Project: Eddy County
Site: Carbon Valley '25' Fed Com
Well: #7H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #7H
TVD Reference: WELL @ 3539.00usft (Original Well Elev)
MD Reference: WELL @ 3539.00usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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

Site		Carbon Valley '25' Fed Com					
Site Position:		Northing:	688,624.502	usft	Latitude:	32° 53' 34.798 N	
From:	Map	Easting:	574,796.208	usft	Longitude:	104° 13' 27.581 W	
Position Uncertainty:	0.00	usft	Slot Radius:	13-3/16	"	Grid Convergence:	0.06 °

Well		#7H				
Well Position	+N/-S	0.00 usft	Northing:	690,393.100 usft	Latitude:	32° 53' 52.445 N
	+E/-W	0.00 usft	Easting:	528,843.100 usft	Longitude:	104° 22' 26.548 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,520.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	03/11/10	8.14	60.72	49,088

Design	OH				
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	92.22	

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Survey Program		Date	01/10/11		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	5,800.00	GYRO (OH)	CB-GYRO-MS	Camera based gyro multishot	
5,809.00	10,672.00	MWD #1 (OH)	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,800.00	1.78	85.18	5,799.84	-2,260.84	0.82	7.49	7.45	0.00	690,393.92	528,850.59
5,809.00	1.85	88.23	5,808.83	-2,269.83	0.84	7.77	7.73	1.33	690,393.94	528,850.87
5,841.00	2.64	83.69	5,840.81	-2,301.81	0.94	9.02	8.98	2.53	690,394.04	528,852.12
5,873.00	4.92	84.29	5,872.74	-2,333.74	1.15	11.12	11.06	7.13	690,394.25	528,854.22
5,904.00	8.44	87.65	5,903.52	-2,364.52	1.38	14.71	14.65	11.42	690,394.48	528,857.81
5,936.00	11.96	89.59	5,935.01	-2,396.01	1.50	20.38	20.30	11.05	690,394.60	528,863.48
5,968.00	15.53	92.08	5,966.09	-2,427.09	1.37	27.98	27.90	11.31	690,394.47	528,871.08
5,999.00	19.08	92.57	5,995.68	-2,456.68	0.99	37.19	37.12	11.46	690,394.09	528,880.29
6,031.00	22.69	92.68	6,025.57	-2,486.57	0.47	48.58	48.53	11.28	690,393.57	528,891.68
6,063.00	26.20	91.42	6,054.70	-2,515.70	0.00	61.81	61.77	11.09	690,393.10	528,904.91
6,094.00	29.72	90.79	6,082.08	-2,543.08	-0.27	76.34	76.30	11.39	690,392.83	528,919.44
6,126.00	33.06	91.84	6,109.39	-2,570.39	-0.66	93.00	92.96	10.58	690,392.44	528,936.10
6,158.00	36.49	92.69	6,135.67	-2,596.67	-1.39	111.24	111.21	10.83	690,391.71	528,954.34
6,190.00	40.36	93.05	6,160.74	-2,621.74	-2.39	131.10	131.09	12.11	690,390.71	528,974.20
6,221.00	44.76	93.33	6,183.57	-2,644.57	-3.56	152.03	152.05	14.21	690,389.54	528,995.13
6,253.00	50.21	93.70	6,205.18	-2,666.18	-5.01	175.56	175.62	17.05	690,388.09	529,018.66
6,285.00	55.40	93.10	6,224.52	-2,685.52	-6.51	201.00	201.10	16.29	690,386.59	529,044.10
6,317.00	59.71	90.29	6,241.69	-2,702.69	-7.29	227.98	228.09	15.37	690,385.81	529,071.08
6,348.00	63.66	87.39	6,256.39	-2,717.39	-6.73	255.26	255.32	15.17	690,386.37	529,098.36
6,380.00	67.27	86.88	6,269.68	-2,730.68	-5.27	284.32	284.32	11.37	690,387.83	529,127.42
6,412.00	70.61	88.39	6,281.17	-2,742.17	-4.04	314.16	314.08	11.33	690,389.06	529,157.26

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MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
6,444.00	74.57	91.57	6,290.75	-2,751.75	-4.04	344.68	344.58	15.59	690,389.06	529,187.78
6,476.00	76.77	93.79	6,298.67	-2,759.67	-5.50	375.65	375.58	9.61	690,387.60	529,218.75
6,507.00	78.96	95.36	6,305.19	-2,766.19	-7.91	405.85	405.86	8.63	690,385.19	529,248.95
6,539.00	81.69	95.32	6,310.56	-2,771.56	-10.85	437.26	437.35	8.53	690,382.25	529,280.36
6,571.00	85.47	94.55	6,314.14	-2,775.14	-13.58	468.93	469.11	12.05	690,379.52	529,312.03
6,592.00	86.47	93.22	6,315.62	-2,776.62	-15.00	489.83	490.05	7.91	690,378.10	529,332.93
6,624.00	88.10	92.19	6,317.13	-2,778.13	-16.51	521.76	522.01	6.02	690,376.59	529,364.86
6,656.00	88.82	91.74	6,317.99	-2,778.99	-17.61	553.73	554.00	2.65	690,375.49	529,396.83
6,688.00	89.38	91.67	6,318.50	-2,779.50	-18.56	585.71	585.99	1.76	690,374.54	529,428.81
6,719.00	89.61	92.08	6,318.77	-2,779.77	-19.57	616.69	616.99	1.52	690,373.53	529,459.79
6,751.00	90.28	92.40	6,318.80	-2,779.80	-20.83	648.67	648.99	2.32	690,372.27	529,491.77
6,783.00	89.38	93.07	6,318.89	-2,779.89	-22.35	680.63	680.99	3.51	690,370.75	529,523.73
6,815.00	89.44	92.98	6,319.22	-2,780.22	-24.04	712.59	712.98	0.34	690,369.06	529,555.69
6,847.00	89.05	92.97	6,319.65	-2,780.65	-25.70	744.54	744.98	1.22	690,367.40	529,587.64
6,879.00	88.43	92.65	6,320.35	-2,781.35	-27.27	776.49	776.97	2.18	690,365.83	529,619.59
6,910.00	87.31	91.95	6,321.50	-2,782.50	-28.51	807.45	807.94	4.26	690,364.59	529,650.55
6,941.00	87.14	91.33	6,323.00	-2,784.00	-29.40	838.40	838.91	2.07	690,363.70	529,681.50
6,973.00	87.26	91.35	6,324.57	-2,785.57	-30.15	870.35	870.86	0.38	690,362.95	529,713.45
7,005.00	87.71	91.48	6,325.97	-2,786.97	-30.94	902.31	902.83	1.46	690,362.16	529,745.41
7,036.00	88.21	91.28	6,327.07	-2,788.07	-31.68	933.28	933.81	1.74	690,361.42	529,776.38
7,068.00	88.82	91.13	6,327.90	-2,788.90	-32.36	965.26	965.79	1.96	690,360.74	529,808.36
7,100.00	87.31	91.48	6,328.98	-2,789.98	-33.08	997.23	997.77	4.84	690,360.02	529,840.33
7,132.00	87.09	91.06	6,330.55	-2,791.55	-33.79	1,029.19	1,029.73	1.48	690,359.31	529,872.29
7,164.00	87.59	90.97	6,332.03	-2,793.03	-34.36	1,061.15	1,061.68	1.59	690,358.74	529,904.25
7,196.00	88.04	90.54	6,333.25	-2,794.25	-34.78	1,093.12	1,093.65	1.94	690,358.32	529,936.22
7,227.00	88.15	90.92	6,334.28	-2,795.28	-35.17	1,124.10	1,124.62	1.28	690,357.93	529,967.20
7,259.00	88.32	91.21	6,335.27	-2,796.27	-35.77	1,156.08	1,156.60	1.05	690,357.33	529,999.18

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7,291.00	88.77	91.00	6,336.08	-2,797.08	-36.39	1,188.07	1,188.58	1.55	690,356.71	530,031.17
7,323.00	89.10	90.87	6,336.67	-2,797.67	-36.91	1,220.06	1,220.57	1.11	690,356.19	530,063.16
7,355.00	89.94	90.77	6,336.94	-2,797.94	-37.37	1,252.05	1,252.56	2.64	690,355.73	530,095.15
7,386.00	90.62	90.53	6,336.79	-2,797.79	-37.72	1,283.05	1,283.55	2.33	690,355.38	530,126.15
7,418.00	90.39	91.15	6,336.51	-2,797.51	-38.19	1,315.04	1,315.54	2.07	690,354.91	530,158.14
7,449.00	90.62	91.00	6,336.24	-2,797.24	-38.77	1,346.04	1,346.53	0.89	690,354.33	530,189.14
7,481.00	91.06	91.14	6,335.77	-2,796.77	-39.37	1,378.03	1,378.52	1.44	690,353.73	530,221.13
7,512.00	90.45	91.42	6,335.36	-2,796.36	-40.06	1,409.02	1,409.51	2.17	690,353.04	530,252.12
7,544.00	90.28	91.60	6,335.15	-2,796.15	-40.90	1,441.01	1,441.51	0.77	690,352.20	530,284.11
7,576.00	91.01	91.46	6,334.79	-2,795.79	-41.76	1,472.99	1,473.50	2.32	690,351.34	530,316.09
7,607.00	90.28	92.39	6,334.45	-2,795.45	-42.80	1,503.97	1,504.50	3.81	690,350.30	530,347.07
7,639.00	90.45	92.47	6,334.24	-2,795.24	-44.15	1,535.94	1,536.50	0.59	690,348.95	530,379.04
7,671.00	90.73	93.13	6,333.91	-2,794.91	-45.72	1,567.90	1,568.50	2.24	690,347.38	530,411.00
7,702.00	90.17	93.55	6,333.67	-2,794.67	-47.52	1,598.85	1,599.49	2.26	690,345.58	530,441.95
7,734.00	89.61	93.50	6,333.73	-2,794.73	-49.49	1,630.79	1,631.48	1.76	690,343.61	530,473.89
7,766.00	90.06	93.64	6,333.82	-2,794.82	-51.48	1,662.73	1,663.47	1.47	690,341.62	530,505.83
7,797.00	89.16	93.48	6,334.03	-2,795.03	-53.41	1,693.67	1,694.46	2.95	690,339.69	530,536.77
7,829.00	89.33	93.51	6,334.45	-2,795.45	-55.36	1,725.60	1,726.45	0.54	690,337.74	530,568.70
7,860.00	89.94	93.61	6,334.65	-2,795.65	-57.28	1,756.54	1,757.44	1.99	690,335.82	530,599.64
7,892.00	89.22	93.14	6,334.89	-2,795.89	-59.17	1,788.49	1,789.44	2.69	690,333.93	530,631.59
7,924.00	89.33	92.93	6,335.29	-2,796.29	-60.86	1,820.44	1,821.43	0.74	690,332.24	530,663.54
7,955.00	89.94	93.13	6,335.49	-2,796.49	-62.50	1,851.39	1,852.43	2.07	690,330.60	530,694.49
7,986.00	91.01	93.35	6,335.23	-2,796.23	-64.25	1,882.34	1,883.42	3.52	690,328.85	530,725.44
8,018.00	90.62	93.57	6,334.78	-2,795.78	-66.18	1,914.28	1,915.41	1.40	690,326.92	530,757.38
8,050.00	90.28	93.12	6,334.53	-2,795.53	-68.05	1,946.23	1,947.40	1.76	690,325.05	530,789.33
8,082.00	89.05	93.44	6,334.71	-2,795.71	-69.88	1,978.17	1,979.39	3.97	690,323.22	530,821.27
8,113.00	88.60	93.41	6,335.35	-2,796.35	-71.73	2,009.11	2,010.38	1.45	690,321.37	530,852.21

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8,145.00	88.49	92.55	6,336.16	-2,797.16	-73.40	2,041.06	2,042.37	2.71	690,319.70	530,884.16
8,177.00	88.71	92.15	6,336.94	-2,797.94	-74.71	2,073.02	2,074.36	1.43	690,318.39	530,916.12
8,209.00	88.99	92.25	6,337.58	-2,798.58	-75.94	2,104.99	2,106.35	0.93	690,317.16	530,948.09
8,240.00	89.44	92.16	6,338.01	-2,799.01	-77.13	2,135.96	2,137.35	1.48	690,315.97	530,979.06
8,272.00	88.54	91.99	6,338.57	-2,799.57	-78.29	2,167.94	2,169.34	2.86	690,314.81	531,011.04
8,304.00	87.99	91.94	6,339.54	-2,800.54	-79.38	2,199.90	2,201.33	1.73	690,313.72	531,043.00
8,335.00	88.21	91.65	6,340.57	-2,801.57	-80.35	2,230.87	2,232.31	1.17	690,312.75	531,073.97
8,367.00	88.55	91.40	6,341.47	-2,802.47	-81.20	2,262.85	2,264.29	1.32	690,311.90	531,105.95
8,399.00	88.99	91.31	6,342.16	-2,803.16	-81.96	2,294.83	2,296.28	1.40	690,311.14	531,137.93
8,431.00	89.50	90.87	6,342.58	-2,803.58	-82.57	2,326.82	2,328.27	2.10	690,310.53	531,169.92
8,463.00	89.78	90.50	6,342.78	-2,803.78	-82.95	2,358.82	2,360.26	1.45	690,310.15	531,201.92
8,494.00	88.99	90.61	6,343.12	-2,804.12	-83.25	2,389.82	2,391.25	2.57	690,309.85	531,232.92
8,526.00	89.10	90.87	6,343.65	-2,804.65	-83.67	2,421.81	2,423.23	0.88	690,309.43	531,264.91
8,558.00	89.38	90.61	6,344.08	-2,805.08	-84.08	2,453.80	2,455.22	1.19	690,309.02	531,296.90
8,590.00	89.89	90.77	6,344.28	-2,805.28	-84.46	2,485.80	2,487.21	1.67	690,308.64	531,328.90
8,621.00	90.39	90.79	6,344.20	-2,805.20	-84.89	2,516.80	2,518.20	1.61	690,308.21	531,359.90
8,652.00	90.56	91.32	6,343.95	-2,804.95	-85.46	2,547.79	2,549.19	1.80	690,307.64	531,390.89
8,684.00	90.00	91.63	6,343.79	-2,804.79	-86.28	2,579.78	2,581.19	2.00	690,306.82	531,422.88
8,715.00	90.39	91.16	6,343.68	-2,804.68	-87.04	2,610.77	2,612.18	1.97	690,306.06	531,453.87
8,746.00	89.50	91.83	6,343.71	-2,804.71	-87.84	2,641.76	2,643.18	3.59	690,305.26	531,484.86
8,777.00	89.33	92.13	6,344.03	-2,805.03	-88.92	2,672.74	2,674.18	1.11	690,304.18	531,515.84
8,809.00	88.88	92.32	6,344.53	-2,805.53	-90.16	2,704.71	2,706.17	1.53	690,302.94	531,547.81
8,841.00	88.94	92.47	6,345.14	-2,806.14	-91.49	2,736.68	2,738.17	0.50	690,301.61	531,579.78
8,872.00	88.49	92.90	6,345.83	-2,806.83	-92.95	2,767.63	2,769.16	2.01	690,300.15	531,610.73
8,904.00	88.71	93.22	6,346.62	-2,807.62	-94.65	2,799.58	2,801.14	1.21	690,298.45	531,642.68
8,936.00	89.22	93.14	6,347.19	-2,808.19	-96.43	2,831.52	2,833.13	1.61	690,296.67	531,674.62
8,968.00	89.78	93.32	6,347.47	-2,808.47	-98.23	2,863.47	2,865.13	1.84	690,294.87	531,706.57

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Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,999.00	90.34	92.88	6,347.44	-2,808.44	-99.91	2,894.43	2,896.12	2.30	690,293.19	531,737.53
9,031.00	90.28	93.57	6,347.27	-2,808.27	-101.71	2,926.38	2,928.12	2.16	690,291.39	531,769.48
9,063.00	90.78	93.50	6,346.97	-2,807.97	-103.68	2,958.31	2,960.11	1.58	690,289.42	531,801.41
9,095.00	90.11	93.53	6,346.72	-2,807.72	-105.64	2,990.25	2,992.10	2.10	690,287.46	531,833.35
9,126.00	90.22	93.80	6,346.63	-2,807.63	-107.62	3,021.19	3,023.09	0.94	690,285.48	531,864.29
9,158.00	90.17	93.91	6,346.53	-2,807.53	-109.78	3,053.12	3,055.08	0.38	690,283.32	531,896.22
9,190.00	90.62	93.44	6,346.30	-2,807.30	-111.83	3,085.05	3,087.07	2.03	690,281.27	531,928.15
9,221.00	90.06	94.09	6,346.12	-2,807.12	-113.86	3,115.98	3,118.05	2.77	690,279.24	531,959.08
9,253.00	90.00	94.90	6,346.10	-2,807.10	-116.37	3,147.88	3,150.03	2.54	690,276.73	531,990.98
9,285.00	90.34	94.54	6,346.01	-2,807.01	-119.00	3,179.77	3,182.00	1.55	690,274.10	532,022.87
9,316.00	88.99	93.42	6,346.19	-2,807.19	-121.16	3,210.70	3,212.98	5.66	690,271.94	532,053.80
9,348.00	88.10	92.31	6,347.00	-2,808.00	-122.75	3,242.65	3,244.97	4.45	690,270.35	532,085.75
9,379.00	88.55	92.11	6,347.91	-2,808.91	-123.95	3,273.61	3,275.95	1.59	690,269.15	532,116.71
9,411.00	88.94	92.34	6,348.61	-2,809.61	-125.19	3,305.58	3,307.95	1.41	690,267.91	532,148.68
9,442.00	89.61	92.43	6,349.00	-2,810.00	-126.48	3,336.55	3,338.94	2.18	690,266.62	532,179.65
9,474.00	88.88	91.73	6,349.42	-2,810.42	-127.64	3,368.52	3,370.94	3.16	690,265.46	532,211.62
9,506.00	89.22	91.72	6,349.95	-2,810.95	-128.61	3,400.51	3,402.93	1.06	690,264.49	532,243.61
9,538.00	88.27	92.00	6,350.66	-2,811.66	-129.64	3,432.48	3,434.93	3.09	690,263.46	532,275.58
9,569.00	88.04	91.92	6,351.65	-2,812.65	-130.70	3,463.45	3,465.91	0.79	690,262.40	532,306.55
9,601.00	88.71	91.81	6,352.56	-2,813.56	-131.74	3,495.42	3,497.90	2.12	690,261.36	532,338.52
9,633.00	89.10	91.68	6,353.17	-2,814.17	-132.72	3,527.40	3,529.89	1.28	690,260.38	532,370.50
9,665.00	88.15	91.38	6,353.94	-2,814.94	-133.57	3,559.37	3,561.88	3.11	690,259.53	532,402.47
9,696.00	87.93	90.86	6,355.00	-2,816.00	-134.18	3,590.35	3,592.85	1.82	690,258.92	532,433.45
9,728.00	88.54	90.69	6,355.99	-2,816.99	-134.61	3,622.33	3,624.83	1.98	690,258.49	532,465.43
9,760.00	88.94	90.69	6,356.69	-2,817.69	-135.00	3,654.32	3,656.81	1.25	690,258.10	532,497.42
9,791.00	89.44	90.51	6,357.13	-2,818.13	-135.32	3,685.32	3,687.79	1.71	690,257.78	532,528.42
9,823.00	89.05	91.20	6,357.55	-2,818.55	-135.80	3,717.31	3,719.78	2.48	690,257.30	532,560.41

Pathfinder
Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company: Murchison Oil & Gas(Compass 2003)
Project: Eddy County
Site: Carbon Valley '25' Fed Com
Well: #7H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #7H
TVD Reference: WELL @ 3539.00usft (Original Well Elev)
MD Reference: WELL @ 3539.00usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,855.00	88.94	91.41	6,358.11	-2,819.11	-136.53	3,749.30	3,751.77	0.74	690,256.57	532,592.40
9,887.00	89.33	91.52	6,358.59	-2,819.59	-137.35	3,781.28	3,783.76	1.27	690,255.75	532,624.38
9,919.00	89.94	91.82	6,358.80	-2,819.80	-138.28	3,813.27	3,815.76	2.12	690,254.82	532,656.37
9,950.00	90.00	91.97	6,358.81	-2,819.81	-139.30	3,844.25	3,846.76	0.52	690,253.80	532,687.35
9,982.00	90.50	92.25	6,358.67	-2,819.67	-140.48	3,876.23	3,878.76	1.79	690,252.62	532,719.33
10,014.00	89.83	92.27	6,358.58	-2,819.58	-141.74	3,908.20	3,910.76	2.09	690,251.36	532,751.30
10,046.00	89.72	92.12	6,358.71	-2,819.71	-142.97	3,940.18	3,942.76	0.58	690,250.13	532,783.28
10,078.00	89.61	92.18	6,358.89	-2,819.89	-144.17	3,972.16	3,974.76	0.39	690,248.93	532,815.26
10,109.00	90.11	92.00	6,358.97	-2,819.97	-145.30	4,003.14	4,005.76	1.71	690,247.80	532,846.24
10,141.00	89.44	92.27	6,359.10	-2,820.10	-146.49	4,035.11	4,037.76	2.26	690,246.61	532,878.21
10,172.00	89.50	92.39	6,359.38	-2,820.38	-147.75	4,066.09	4,068.76	0.43	690,245.35	532,909.19
10,204.00	89.22	92.79	6,359.74	-2,820.74	-149.20	4,098.05	4,100.76	1.53	690,243.90	532,941.15
10,236.00	89.10	92.99	6,360.21	-2,821.21	-150.81	4,130.01	4,132.75	0.73	690,242.29	532,973.11
10,267.00	89.61	93.37	6,360.56	-2,821.56	-152.53	4,160.96	4,163.74	2.05	690,240.57	533,004.06
10,299.00	90.11	93.99	6,360.64	-2,821.64	-154.58	4,192.89	4,195.73	2.49	690,238.52	533,035.99
10,330.00	90.34	93.73	6,360.51	-2,821.51	-156.67	4,223.82	4,226.72	1.12	690,236.43	533,066.92
10,362.00	90.56	93.55	6,360.26	-2,821.26	-158.70	4,255.76	4,258.71	0.89	690,234.40	533,098.86
10,394.00	91.01	92.98	6,359.83	-2,820.83	-160.53	4,287.70	4,290.70	2.27	690,232.57	533,130.80
10,426.00	91.79	92.88	6,359.04	-2,820.04	-162.16	4,319.65	4,322.69	2.46	690,230.94	533,162.75
10,457.00	92.24	93.14	6,357.95	-2,818.95	-163.79	4,350.59	4,353.67	1.68	690,229.31	533,193.69
10,489.00	92.80	92.96	6,356.55	-2,817.55	-165.49	4,382.51	4,385.63	1.84	690,227.61	533,225.61
10,520.00	93.47	92.91	6,354.85	-2,815.85	-167.07	4,413.42	4,416.58	2.17	690,226.03	533,256.52
10,552.00	93.81	92.56	6,352.82	-2,813.82	-168.60	4,445.32	4,448.52	1.52	690,224.50	533,288.42
10,583.00	94.03	92.37	6,350.70	-2,811.70	-169.93	4,476.22	4,479.44	0.94	690,223.17	533,319.32
10,615.00	94.15	92.20	6,348.42	-2,809.42	-171.20	4,508.11	4,511.36	0.65	690,221.90	533,351.21
10,672.00	94.15	92.20	6,344.29	-2,805.29	-173.38	4,564.92	4,568.21	0.00	690,219.72	533,408.02

BHL-10672.00°MD,94.15°INC,92.20°AZI, 6344.29°TVD, 4568.21°VS, -173.38°N, 4564.92°E - PBHLCV25#7)

Pathfinder
Pathfinder X & Y Survey Report



Company: Murchison Oil & Gas(Compass 2003)
Project: Eddy County
Site: Carbon Valley '25' Fed Com
Well: #7H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #7H
TVD Reference: WELL @ 3539.00usft (Original Well Elev)
MD Reference: WELL @ 3539.00usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

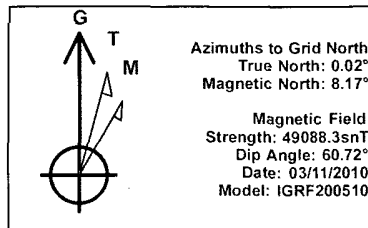
Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,672.00	6,344.29	-173.38	4,564.92	BHL-10672.00°MD,94.15°INC,92.20°AZI, 6344.29°TVD, 4568.21°VS, -173.38°N,

Checked By: _____ Approved By: _____ Date: _____

Murchison Oil & Gas

Project: Eddy County
Site: Carbon Valley '25' Fed Com
Well: #7H
Wellbore: OH
Plan: Plan #2 (#7H/OH)



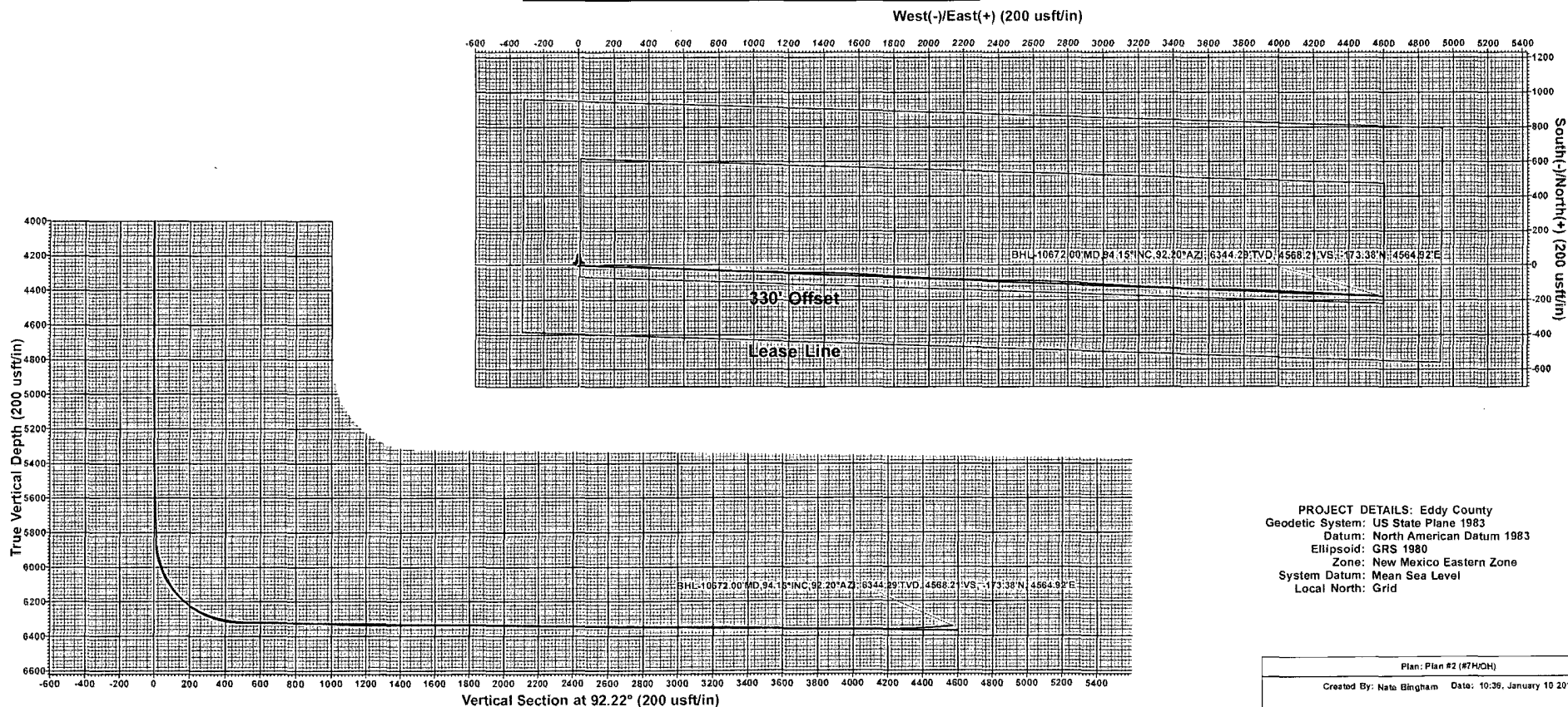
PATHFINDER®

A Schlumberger Company

WELL DETAILS: #7H						
Ground Elevation: 3520.00						
RKB Elevation: WELL @ 3539.00ust (Original Well Elev)						
Rig Name: Original Well Elev						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	690393.100	528843.100	32° 53' 52.445 N	104° 22' 26.548 W	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	5855.00	1.00	85.10	5855.81	0.06	8.13	0.00	0.00	8.08	
2	5856.98	89.30	92.26	6320.05	-16.04	480.27	12.00	7.17	480.54	
3	5857.83	89.30	92.26	6370.40	-178.53	4597.61	0.00	0.00	4601.08	PBHLCV25#7)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHLCV25#7	6328.45	-178.90	4597.60	690214.200	533440.700	Point



PROJECT DETAILS: Eddy County
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 #2 (#7H/OH)

Created By: Nate Blingham Date: 10:36, January 10 2011



VIA CERTIFIED MAIL

February 25, 2011

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

**RE: CARBON VALLEY 25 FEDERAL COM #7H
API # 30-015-38060
EDDY COUNTY, NM**

Ladies and Gentlemen:

Enclosed please find the following:

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

We hereby request that the enclosed logs and directional survey be kept confidential until 5/19/11 (90 days from the completion date of 2/18/11). 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

