

MURCHISON OIL & GAS

County Line Tank

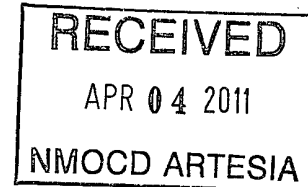
Eddy County, NM

Pequeno Mike "BLU" Federal #3H

VH - Job #32K0111085

30-015-36985

Survey: Actual



SDI Standard Survey Report

31 January, 2011

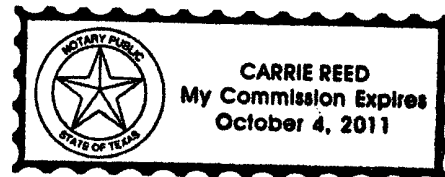
This survey is correct to the best of my knowledge and is supported by actual field data.

Robert

Notarized this date 31st of January, 2011.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.

SDI Standard Survey Report

Company:	MURCHISON OIL & GAS	Local Co-ordinate Reference:	Well Pequeno Mike "BLU" Federal #3H
Project:	County Line Tank	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Pequeno Mike "BLU" Federal #3H	North Reference:	Grid
Wellbore:	VH - Job #32K0111085	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0111085	Database:	EDM-Regulatory

Project	County Line Tank		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Eddy County, NM			
Site Position:		Northing:	710,759.00 usft	Latitude: 32° 57' 13.090 N
From:	Lat/Long	Easting:	585,836.35 usft	Longitude: 104° 3' 12.610 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence: 0.15 °

Well	Pequeno Mike "BLU" Federal #3H, Directional (Pathfinder)			
Well Position	+N/-S	0.0 usft	Northing: 710,759.00 usft	Latitude: 32° 57' 13.090 N
	+E/-W	0.0 usft	Easting: 585,836.35 usft	Longitude: 104° 3' 12.610 W
Position Uncertainty		0.0 usft	Wellhead Elevation: usft	Ground Level: 0.0 usft

Wellbore	VH - Job #32K0111085				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	1/28/2011	7.97	60.80	49,099

Design	VH - Job #32K0111085			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	268.84

Survey Program	Date	1/31/2011		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	6,750.0	Actual (VH - Job #32K0111085)	Keeper	Keeper Gyro

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
100.0	0.36	307.93	100.0	0.2	-0.2	307.93	0.3
200.0	0.59	315.61	200.0	0.8	-0.9	311.39	1.1
300.0	1.12	60.03	300.0	1.6	-0.4	347.08	1.7
400.0	1.44	65.84	400.0	2.6	1.6	31.86	3.1
500.0	1.77	72.75	499.9	3.6	4.2	49.82	5.6
600.0	1.57	71.55	599.9	4.5	7.0	57.47	8.3
700.0	1.66	68.85	699.8	5.4	9.7	60.67	11.1
800.0	1.53	66.82	799.8	6.5	12.2	62.12	13.9
900.0	1.45	67.05	899.8	7.5	14.6	62.88	16.4
1,000.0	1.57	69.20	999.7	8.5	17.1	63.61	19.1
1,100.0	1.57	70.87	1,099.7	9.4	19.7	64.41	21.8



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Wellbore:	VH - Job #32K0111085	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0111085	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.0	1.72	72.43	1,199.7	10.3	22.4	65.26	24.6
1,300.0	1.68	75.08	1,299.6	11.1	25.2	66.17	27.6
1,400.0	1.67	74.84	1,399.6	11.9	28.1	67.01	30.5
1,500.0	1.66	75.72	1,499.5	12.6	30.9	67.72	33.4
1,600.0	1.67	76.50	1,599.5	13.3	33.7	68.39	36.2
1,700.0	1.50	79.67	1,699.4	13.9	36.4	69.07	39.0
1,800.0	1.34	76.77	1,799.4	14.4	38.8	69.62	41.4
1,900.0	1.30	80.07	1,899.4	14.9	41.1	70.08	43.7
2,000.0	1.44	79.41	1,999.4	15.3	43.4	70.58	46.0
2,100.0	1.73	78.60	2,099.3	15.8	46.1	71.06	48.8
2,200.0	1.45	87.25	2,199.3	16.2	48.9	71.67	51.5
2,300.0	1.37	90.40	2,299.3	16.2	51.3	72.44	53.9
2,400.0	1.22	89.48	2,399.2	16.3	53.6	73.13	56.0
2,500.0	1.06	96.96	2,499.2	16.1	55.6	73.80	57.9
2,600.0	1.09	88.53	2,599.2	16.1	57.5	74.38	59.7
2,700.0	1.17	97.40	2,699.2	16.0	59.4	74.97	61.5
2,800.0	0.99	104.53	2,799.2	15.6	61.3	75.71	63.2
2,900.0	0.89	109.01	2,899.1	15.1	62.8	76.46	64.6
3,000.0	0.87	101.87	2,999.1	14.7	64.3	77.10	66.0
3,100.0	0.57	86.49	3,099.1	14.6	65.6	77.44	67.2
3,200.0	0.72	73.01	3,199.1	14.8	66.7	77.47	68.3
3,300.0	0.71	88.40	3,299.1	15.0	67.9	77.53	69.5
3,400.0	0.47	82.87	3,399.1	15.1	68.9	77.65	70.5
3,500.0	0.59	96.38	3,499.1	15.1	69.8	77.81	71.4
3,600.0	0.57	131.83	3,599.1	14.7	70.7	78.26	72.2
3,700.0	0.21	124.12	3,699.1	14.3	71.2	78.68	72.6
3,800.0	0.44	114.71	3,799.1	14.0	71.7	78.96	73.1
3,900.0	0.32	132.35	3,899.1	13.6	72.3	79.31	73.6
4,000.0	0.16	45.67	3,999.1	13.6	72.6	79.42	73.8
4,100.0	0.04	295.06	4,099.1	13.7	72.7	79.35	73.9
4,200.0	0.19	23.57	4,199.1	13.8	72.7	79.23	74.0
4,300.0	0.22	281.51	4,299.1	14.0	72.6	79.06	73.9
4,400.0	0.10	242.34	4,399.1	14.0	72.3	79.03	73.6
4,500.0	0.32	291.17	4,499.1	14.1	72.0	78.93	73.3
4,600.0	0.09	264.22	4,599.1	14.2	71.6	78.81	73.0
4,700.0	0.31	297.58	4,699.1	14.3	71.3	78.67	72.7
4,800.0	0.43	254.05	4,799.1	14.3	70.7	78.56	72.1
4,900.0	0.17	252.63	4,899.1	14.2	70.2	78.59	71.6
5,000.0	0.33	224.74	4,999.1	13.9	69.9	78.73	71.2
5,100.0	0.60	188.14	5,099.1	13.2	69.6	79.26	70.8
5,200.0	0.57	185.53	5,199.1	12.2	69.5	80.05	70.5
5,300.0	0.62	196.36	5,299.1	11.2	69.3	80.84	70.2
5,400.0	0.75	234.09	5,399.1	10.3	68.6	81.49	69.3
5,500.0	0.74	236.90	5,499.0	9.5	67.5	81.97	68.2



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Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Pequeno Mike "BLU" Federal #3H	North Reference:	Grid
Wellbore:	VH - Job #32K0111085	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0111085	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.0	0.75	240.87	5,599.0	8.9	66.4	82.40	67.0
5,700.0	0.68	242.91	5,699.0	8.3	65.3	82.79	65.8
5,800.0	0.72	241.72	5,799.0	7.7	64.2	83.16	64.7
5,900.0	0.40	199.53	5,899.0	7.1	63.5	83.65	63.9
6,000.0	0.45	165.82	5,999.0	6.4	63.5	84.28	63.8
6,100.0	0.41	161.52	6,099.0	5.6	63.7	84.94	64.0
6,200.0	0.50	156.99	6,199.0	4.9	64.0	85.62	64.2
6,300.0	0.61	170.57	6,299.0	4.0	64.3	86.46	64.4
6,400.0	0.43	145.86	6,399.0	3.1	64.6	87.22	64.6
6,500.0	0.86	117.05	6,499.0	2.5	65.4	87.83	65.5
6,600.0	1.33	116.92	6,599.0	1.6	67.2	88.62	67.2
6,700.0	1.68	113.15	6,698.9	0.5	69.5	89.57	69.5
6,750.0	1.75	111.80	6,748.9	-0.1	70.9	90.04	70.9



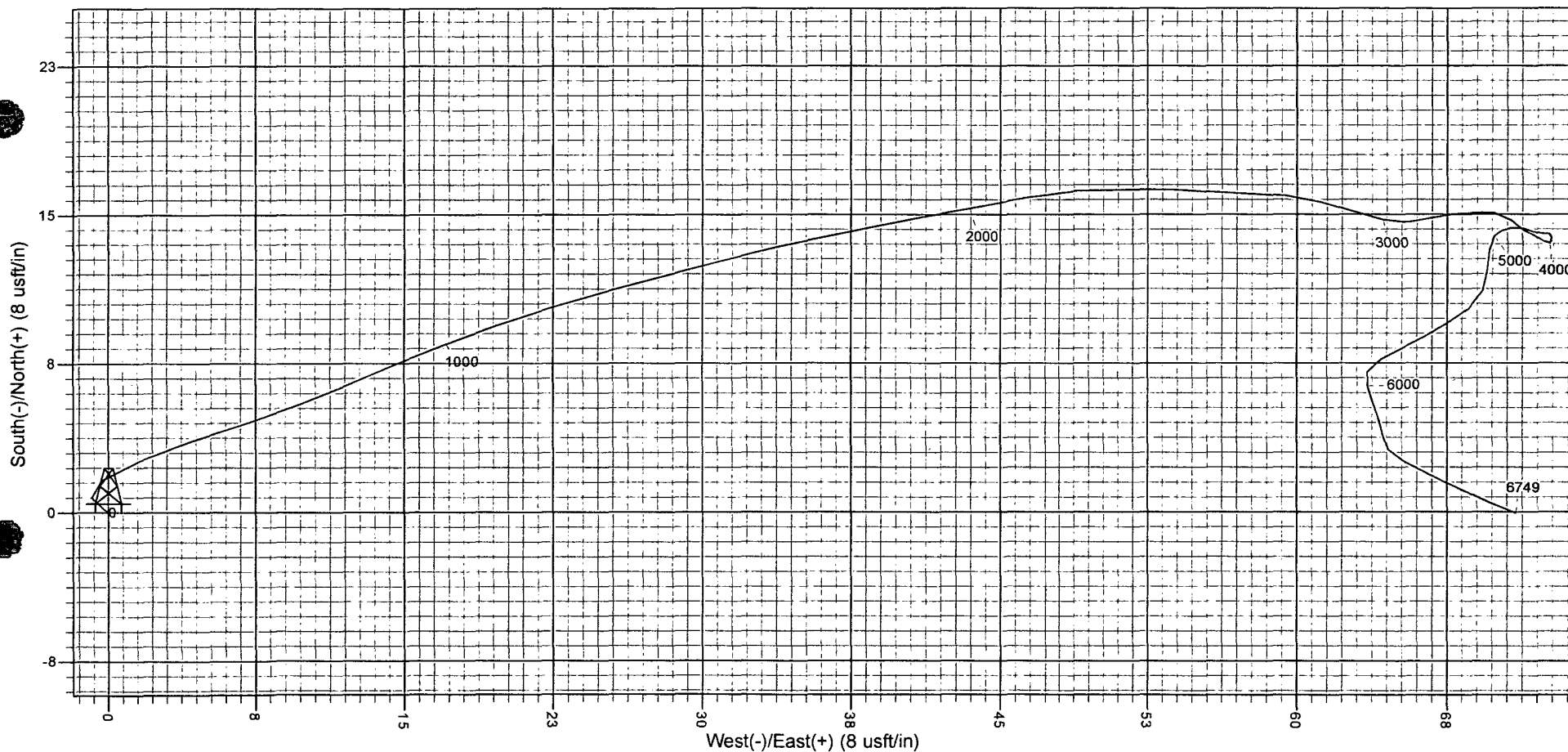
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 Eddy County, NM
 Well: Pequeno Mike "BLU" Federal #3H
 Wellbore: VH - Job #32K0111085
 Design: VH - Job #32K0111085



Azimuths to Grid North
 True North: -0.15°
 Magnetic North: 7.82°
 Magnetic Field
 Strength: 49099.2snT
 Dip Angle: 60.80°
 Date: 1/28/2011
 Model: BGGM2010

WELL DETAILS: Pequeno Mike "BLU" Federal #3H
 WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	710759.00	585836.35	32° 57' 13.090 N	104° 3' 12.610 W	



PROJECT DETAILS: County Line Tank
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
 Site Centre Latitude: 32° 57' 13.090 N
 Longitude: 104° 3' 12.610 W
 Positional Uncertainty: 0.0
 Convergence: 0.15
 Local North: Grid