

INCLINATION REPORT	
FIELD NAME	LEASE NAME 30-025-38828 Shoofly State #1
OPERATOR Chesapeake Operating Inc.	
ADDRESS 2010 Rankin Highway, Midland, TX 79701	
LOCATION (Section, Block, and Survey) P. 4-16s-37e, 554/s & 554/e	County Lea

RECORD OF INCLINATION

Measured Depth (feet)	Course Length (Hundreds of feet)	Angle of Inclination (Degrees)	Displacement per 100 feet (Sine of Angle x 100)	Course Displacement (Feet)	Accumulative Displacement (Feet)
430	430	0.75	1.31	5.63	5.63
1,214	784	0.75	1.31	10.26	15.89
2,186	972	0.50	0.87	8.18	24.37
2,938	752	0.25	0.44	3.28	27.65
3,749	811	0.75	1.31	10.62	38.27
4,313	564	0.50	0.87	4.92	43.19
5,017	704	0.50	0.87	6.14	49.34
5,516	499	0.25	0.44	2.18	51.51
6,021	505	0.50	0.87	4.41	55.92
6,521	500	0.50	0.87	4.36	60.28
7,023	502	0.50	0.87	4.38	64.66
7,871	848	0.25	0.44	3.70	68.36
8,593	722	0.75	1.31	9.45	77.81
8,997	404	1.00	1.75	7.05	84.86
9,670	673	0.50	0.87	5.87	90.74
10,400	730	0.50	0.87	6.37	97.11
10,900	500	1.00	1.75	8.73	105.83

Accumulative total displacement of well bore at total depth of
Inclination measurements were made in

☐ Tubing

10,900 feet = 105.83 feet

☐ Casing

☐ Open Hole

☒ Drill Pipe

Inclination Data Certification I declare that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge.  7/24/08 Signature of Authorized Representative _____ Date _____ Mark Cochran CFO Name of Person and Title _____ Latshaw Drilling Company, LLC Name of Company _____ Telephone: 918-355-4380	Inclination Data Certification I declare that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. Signature of Authorized Representative _____ Date _____ Name of Person and Title _____ Operator _____ Telephone: _____
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Directional Survey**Chesapeake Operating, Inc.****Well ID: 615689****Well Name: Shoofly 9 State 1**

Field: Northern Lea

Sect: 9 Town: 16S Rng: 37E County: Lea State: NM

Survey	Measured				Coordinates			Vertical	Dog Leg
Type	Depth	Inclination	Azimuth	TVD	N-S	E-W	Closure	Section	Severity
Wellbore:	Original Well Bore	Plane of Vertical Section:			0.0				
** Tieln	0.0	0.00	0.0	0.0	N 0.0	E 0.0		0.0	
INC	230.0	0.75	0.0	230.0	N 1.5	E 0.0	1.5	1.5	0.326
INC	440.0	0.75	0.0	440.0	N 4.3	E 0.0	4.3	4.3	0.000
INC	686.0	0.50	0.0	686.0	N 6.9	E 0.0	6.9	6.9	0.102
INC	936.0	0.75	0.0	935.9	N 9.7	E 0.0	9.7	9.7	0.100
INC	1,214.0	0.75	0.0	1,213.9	N 13.3	E 0.0	13.3	13.3	0.000
INC	1,556.0	0.25	0.0	1,555.9	N 16.3	E 0.0	16.3	16.3	0.146
INC	1,827.0	1.00	0.0	1,826.9	N 19.2	E 0.0	19.2	19.2	0.277
INC	2,183.0	0.50	0.0	2,182.9	N 23.9	E 0.0	23.9	23.9	0.140
INC	2,436.0	0.50	0.0	2,435.8	N 26.1	E 0.0	26.1	26.1	0.000
INC	2,687.0	0.25	0.0	2,686.8	N 27.8	E 0.0	27.8	27.8	0.100
INC	2,938.0	0.25	0.0	2,937.8	N 28.8	E 0.0	28.8	28.8	0.000
INC	3,188.0	1.25	0.0	3,187.8	N 32.1	E 0.0	32.1	32.1	0.400
INC	3,405.0	1.25	0.0	3,404.8	N 36.9	E 0.0	36.9	36.9	0.000
INC	3,596.0	0.75	0.0	3,595.7	N 40.2	E 0.0	40.2	40.2	0.262
INC	3,749.0	0.75	0.0	3,748.7	N 42.2	E 0.0	42.2	42.2	0.000
INC	3,968.0	0.50	0.0	3,967.7	N 44.6	E 0.0	44.6	44.6	0.114
INC	4,313.0	0.50	0.0	4,312.7	N 47.6	E 0.0	47.6	47.6	0.000
INC	5,014.0	0.50	0.0	5,013.7	N 53.7	E 0.0	53.7	53.7	0.000
INC	5,516.0	0.25	0.0	5,515.7	N 57.0	E 0.0	57.0	57.0	0.050
INC	6,018.0	0.50	0.0	6,017.6	N 60.3	E 0.0	60.3	60.3	0.050
INC	6,521.0	0.50	0.0	6,520.6	N 64.7	E 0.0	64.7	64.7	0.000
INC	7,021.0	0.50	0.0	7,020.6	N 69.0	E 0.0	69.0	69.0	0.000
INC	7,523.0	0.50	0.0	7,522.6	N 73.4	E 0.0	73.4	73.4	0.000
INC	7,870.0	0.25	0.0	7,869.6	N 75.7	E 0.0	75.7	75.7	0.072
INC	8,271.0	0.75	0.0	8,270.6	N 79.2	E 0.0	79.2	79.2	0.125
INC	8,593.0	0.75	0.0	8,592.5	N 83.4	E 0.0	83.4	83.4	0.000
INC	8,997.0	1.00	0.0	8,996.5	N 89.6	E 0.0	89.6	89.6	0.062
MMS	9,315.0	0.50	288.7	9,314.5	N 92.8	W 1.3	92.8	92.8	0.303
INC	9,670.0	1.00	0.0	9,669.4	N 96.4	W 2.8	96.4	96.4	0.272
INC	10,021.0	0.75	0.0	10,020.4	N 101.7	W 2.8	101.8	101.7	0.071
INC	10,400.0	0.50	0.0	10,399.4	N 105.9	W 2.8	105.9	105.9	0.066
INC	10,900.0	1.00	0.0	10,899.3	N 112.4	W 2.8	112.5	112.4	0.100
INC	11,400.0	1.75	0.0	11,399.2	N 124.4	W 2.8	124.5	124.4	0.150
INC	11,780.0	1.50	0.0	11,779.0	N 135.2	W 2.8	135.2	135.2	0.066

Calculations use Minimum Curvature Method.

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Directional Services

Job Number: 0811175051133

Company: Chesapeake Operating, Inc.

Lease/Well: Shoofly 9 State, Well #1

Location: Lea County, NM

Rig Name: Latshaw #6

RKB: ☐

G.L. or M.S.L.: ☐

State/Country: New Mexico/USA

Declination: 7.26°

Grid: East To Grid

File name: F:\SURVEY\2008SU~1\CHESAP~1\SHOOFLY1.SVY

Date/Time: 27-May-08 / 09:39

Curve Name: Surface - 9315' M.D. (Gyroscopic)

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
~~Surface~~ MD to 9,315' MD is, to the best of
our knowledge a true and accurate account of
the well bore.

Dana Jutte 5/27/08
Multi-Shot Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	.50	318.37	200.00	.65	-.58	.65	.87	318.37	.25
400.00	.50	47.15	399.99	1.90	-.52	1.90	1.97	344.69	.35
600.00	.50	111.93	599.99	2.17	.93	2.17	2.36	23.23	.27
800.00	.25	96.71	799.98	1.79	2.17	1.79	2.81	50.53	.13
1000.00	.25	20.49	999.98	2.15	2.76	2.15	3.50	52.11	.15
1200.00	.25	.27	1199.98	2.99	2.91	2.99	4.18	44.24	.04
1400.00	.25	269.05	1399.98	3.42	2.48	3.42	4.22	35.93	.18
1600.00	.50	309.82	1599.97	3.97	1.37	3.97	4.20	19.06	.18
1800.00	.75	351.60	1799.96	5.83	.51	5.83	5.85	5.01	.25
2000.00	.25	2.38	1999.95	7.56	.34	7.56	7.56	2.56	.25
2200.00	.75	324.16	2199.95	9.05	-.41	9.05	9.06	357.41	.29

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2400.00	.50	325.94	2399.93	10.84	-1.67	10.84	10.97	351.26	.13
2600.00	.50	318.61	2599.93	12.22	-2.73	12.22	12.52	347.40	.03
2800.00	.25	9.39	2799.92	13.30	-3.24	13.30	13.69	346.32	.20
3000.00	.50	33.17	2999.92	14.46	-2.69	14.46	14.71	349.47	.14
3200.00	1.25	25.95	3199.89	17.15	-1.26	17.15	17.20	355.81	.38
3400.00	1.00	25.73	3399.85	20.69	.46	20.69	20.69	1.26	.13
3600.00	1.00	28.51	3599.82	23.79	2.05	23.79	23.88	4.92	.02
3800.00	.50	57.28	3799.81	25.80	3.61	25.80	26.05	7.97	.31
4000.00	1.00	117.06	3999.79	25.48	5.90	25.48	26.15	13.04	.43
4200.00	.50	123.84	4199.77	24.20	8.18	24.20	25.54	18.68	.25
4400.00	.50	63.62	4399.77	24.10	9.69	24.10	25.97	21.90	.25
4600.00	.25	259.85	4599.77	24.41	10.04	24.41	26.39	22.36	.37
4800.00	.25	230.08	4799.76	24.05	9.28	24.05	25.78	21.09	.06
5000.00	.25	176.31	4999.76	23.34	8.97	23.34	25.00	21.02	.11
5200.00	.75	264.54	5199.76	22.78	7.69	22.78	24.04	18.67	.39
5400.00	.50	251.76	5399.74	22.38	5.56	22.38	23.06	13.96	.14
5600.00	.75	301.99	5599.73	22.80	3.62	22.80	23.09	9.03	.29
5800.00	.25	12.22	5799.73	23.92	2.61	23.92	24.06	6.22	.35
6000.00	.25	326.45	5999.72	24.71	2.46	24.71	24.83	5.68	.10
6200.00	.25	21.68	6199.72	25.48	2.38	25.48	25.59	5.33	.12
6400.00	.25	94.91	6399.72	25.85	2.97	25.85	26.02	6.56	.15
6600.00	.25	102.28	6599.72	25.72	3.83	25.72	26.00	8.48	.02
6800.00	.25	32.51	6799.72	25.99	4.50	25.99	26.38	9.81	.14
7000.00	.25	115.74	6999.72	26.17	5.12	26.17	26.67	11.08	.17
7200.00	.25	113.96	7199.71	25.80	5.91	25.80	26.47	12.91	.00
7400.00	.25	32.19	7399.71	26.00	6.55	26.00	26.81	14.13	.16
7600.00	.25	107.42	7599.71	26.23	7.19	26.23	27.20	15.34	.15
7800.00	.25	150.65	7799.71	25.72	7.82	25.72	26.89	16.92	.09
8000.00	.25	147.88	7999.71	24.97	8.27	24.97	26.31	18.32	.01
8200.00	.00	.00	8199.71	24.60	8.50	24.60	26.03	19.06	.12
8400.00	.25	220.34	8399.71	24.27	8.22	24.27	25.63	18.71	.12
8600.00	.25	271.31	8599.71	23.95	7.50	23.95	25.10	17.39	.11

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
8800.00	.50	292.04	8799.70	24.29	6.26	24.29	25.08	14.45	.14
9000.00	.50	250.77	8999.69	24.33	4.62	24.33	24.76	10.76	.18
9200.00	.50	303.50	9199.69	24.52	3.07	24.52	24.71	7.14	.22
Last Survey Depth Recorded									
9315.00	.50	288.69	9314.68	24.96	2.18	24.96	25.05	4.99	.11