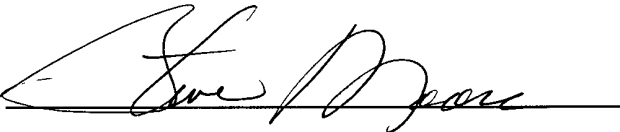


30.015: 36444

OPERATOR CHESAPEAKE OPERATING, INC.
WELL/LEASE QUEEN LAKE 20 FED. 2H
COUNTY EDDY RIG 142

STATE OF NEW MEXICO
DEVIATION REPORT

229	1.75
463	2.00
614	1.00
1,099	1.00
1,326	1.00
1,741	0.50
1,997	0.50
2,507	3.75
2,969	1.40
3,256	1.10
3,766	0.40
4,178	0.40
4,432	0.50
4,718	0.70
4,939	0.10
5,065	0.30
5,320	0.70
5,575	1.30
5,701	0.70
5,829	0.80
5,955	0.30
6,620	0.50
7,000	0.90
7,315	1.60
7,476	1.80
7,571	1.90
7,600	2.00

BY: 

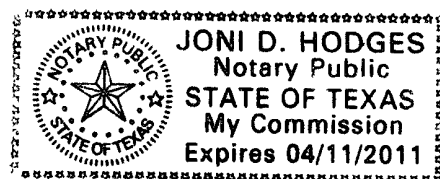
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTI Drilling Company LLC.

OCTOBER 1, 2008, by Steve


Notary Public for Midland County, Texas
My Commission Expires: 4/11/11





Guidance Services

Job Number: 0811175051808

Company: Chesapeake Operating, Inc.

Lease/Well: Queen Lake 20 Federal, Well #2H

Location: Eddy County, New Mexico

Rig Name: Patterson #142

RKB: ☐

G.L. or M.S.L.: ☐

State/Country: New Mexico/USA

Declination: 7.93°

Grid: East To Grid

File name: F:\SURVEY\2008SU~1\CHESAP~1\QUEEN2H.SVY

Date/Time: 04-Sep-08 / 08:42

Curve Name: Surface - 7550' M.D. (gyroscopic)

We hereby certify that our survey data from
Surface MD to 7,550 MD is, to the best of
our knowledge a true and accurate account of
the well bore.

Dana Outter 9/4/08
Multi-Shot Date

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 270.00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	1.25	29.44	199.98	1.90	1.07	-1.07	2.18	29.44	.62
400.00	1.75	71.74	399.92	4.76	5.04	-5.04	6.93	46.68	.59
600.00	1.25	78.06	599.85	6.16	10.08	-10.08	11.81	58.55	.26
800.00	1.25	74.38	799.80	7.20	14.31	-14.31	16.02	63.29	.04
1000.00	1.00	94.70	999.77	7.65	18.15	-18.15	19.70	67.16	.23
1200.00	1.00	112.01	1199.74	6.85	21.51	-21.51	22.58	72.34	.15
1400.00	1.25	94.32	1399.70	6.03	25.31	-25.31	26.01	76.59	.21
1600.00	.75	90.64	1599.67	5.85	28.79	-28.79	29.38	78.51	.25
1800.00	.50	49.96	1799.66	6.40	30.77	-30.77	31.43	78.25	.25
2000.00	1.25	45.85	1999.63	8.48	33.00	-33.00	34.07	75.59	.38

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	
2200.00	3.50	80.12	2199.45	11.05	40.58	-40.58	42.06	74.77	1.28
2400.00	3.25	91.44	2399.11	11.95	52.26	-52.26	53.61	77.12	.36
2600.00	3.00	102.76	2598.81	10.66	63.03	-63.03	63.93	80.41	.33
2800.00	1.75	100.10	2798.64	8.96	71.15	-71.15	71.71	82.82	.63
3000.00	1.25	100.42	2998.57	8.03	76.30	-76.30	76.72	83.99	.25
3200.00	1.00	69.74	3198.53	8.24	80.08	-80.08	80.50	84.12	.32
3400.00	1.00	79.05	3398.50	9.18	83.43	-83.43	83.94	83.72	.08
3600.00	.75	61.37	3598.48	10.14	86.29	-86.29	86.89	83.30	.18
3800.00	.75	37.69	3798.46	11.80	88.24	-88.24	89.03	82.38	.15
4000.00	.25	129.70	3998.46	12.56	89.38	-89.38	90.26	82.00	.40
4200.00	.25	233.72	4198.45	12.02	89.36	-89.36	90.17	82.34	.20
4400.00	.25	344.73	4398.45	12.18	88.90	-88.90	89.73	82.20	.21
4600.00	.25	262.75	4598.45	12.55	88.35	-88.35	89.24	81.92	.16
4800.00	.25	188.76	4798.45	12.06	87.85	-87.85	88.67	82.18	.15
5000.00	.75	191.78	4998.44	10.35	87.52	-87.52	88.13	83.25	.25
5200.00	1.00	190.80	5198.42	7.36	86.92	-86.92	87.23	85.16	.13
5400.00	1.00	192.81	5398.39	3.94	86.21	-86.21	86.30	87.38	.02
5600.00	1.00	198.83	5598.36	.59	85.26	-85.26	85.26	89.61	.05
5800.00	1.25	216.84	5798.32	-2.81	83.39	-83.39	83.43	91.93	.22
6000.00	.75	216.95	5998.29	-5.60	81.29	-81.29	81.48	93.94	.25
6200.00	.25	195.96	6198.28	-7.07	80.38	-80.38	80.69	95.03	.26
6400.00	.50	195.98	6398.28	-8.33	80.02	-80.02	80.46	95.94	.13
6600.00	.50	226.99	6598.27	-9.76	79.15	-79.15	79.75	97.03	.13
6800.00	.75	18.01	6798.26	-9.11	78.91	-78.91	79.44	96.59	.61
7000.00	.75	321.02	6998.25	-6.85	78.49	-78.49	78.79	94.99	.36
7200.00	1.25	294.03	7198.22	-4.94	75.68	-75.68	75.84	93.74	.34
7400.00	2.00	293.04	7398.14	-2.69	70.47	-70.47	70.53	92.19	.38
Last Survey Depth Recorded									
7550.00	2.25	301.28	7548.03	-.14	65.55	-65.55	65.55	90.12	.26