



HOBBS OCD

April 20, 2015

JUL 31 2015

Devon Energy Production Co., L. P.
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

RECEIVED

Attn: Megan Moravec

30-025-42256

Re: Ragin Cajun 12 Federal 2H

Please find enclosed a copy of the survey from 0' to 5149.53' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4976.

Sincerely,


Keith Havelka
Operations

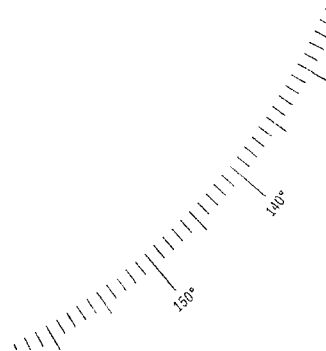
STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 20 day of April, A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas



AUG 03 2015





Company: Devon Energy
Lease/Well: Ragin Cajun 12 Federal/2H

Rig Name: Cactus 168
State/County: New Mexico/Lea
Latitude: 32.05, Longitude: -103.43
GRID North is 0.48 Degrees East of True North
VS-Azi: 2.71 Degrees



Depth Reference : RKB 23.6 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: ragin cajun 12 fed 2h.ut
Minimum Curvature Method
Report Date/Time: 4/20/2015 / 09:53

VES Survey International
Fort Worth, Texas
817-741-3610
Surveyor: Eric Warner
Ragin Cajun 12 Federal 2H / API 30-025-42256

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
83.40	0.54	61.06	83.40	0.19	0.35	0.21	0.39	61.06	0.65
176.65	0.63	64.84	176.64	0.62	1.19	0.68	1.34	62.49	0.10
269.90	0.71	68.80	269.89	1.05	2.19	1.15	2.43	64.48	0.10
363.15	0.74	66.72	363.13	1.49	3.29	1.65	3.61	65.55	0.04
456.40	0.91	70.49	456.37	1.98	4.53	2.19	4.95	66.43	0.19
549.65	0.84	81.72	549.61	2.32	5.90	2.60	6.34	68.52	0.20
642.90	0.66	61.22	642.85	2.68	7.05	3.01	7.54	69.18	0.34
736.15	0.65	59.67	736.10	3.21	7.98	3.58	8.60	68.10	0.02
829.40	0.61	52.38	829.34	3.78	8.83	4.19	9.61	66.83	0.10
922.65	0.67	42.65	922.58	4.48	9.59	4.93	10.58	64.97	0.13
1015.90	0.72	40.14	1015.83	5.32	10.33	5.80	11.62	62.75	0.06
1109.15	0.60	37.98	1109.07	6.15	11.01	6.67	12.61	60.80	0.12
1202.40	0.44	31.66	1202.32	6.84	11.50	7.38	13.38	59.24	0.19
1295.65	0.42	35.52	1295.56	7.42	11.88	7.98	14.01	58.01	0.03
1388.90	0.38	29.94	1388.81	7.97	12.24	8.54	14.61	56.92	0.06
1482.15	0.41	36.19	1482.06	8.51	12.59	9.10	15.19	55.94	0.05
1575.40	0.46	23.89	1575.31	9.12	12.93	9.72	15.83	54.82	0.11
1668.65	0.50	21.39	1668.55	9.84	13.24	10.45	16.49	53.37	0.05

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1761.90	0.46	17.99	1761.80	10.58	13.50	11.21	17.15	51.92	0.05
1855.15	0.43	19.27	1855.05	11.27	13.73	11.91	17.77	50.63	0.03
1948.40	0.41	30.56	1948.30	11.89	14.02	12.54	18.38	49.70	0.09
2041.65	0.41	43.80	2041.54	12.41	14.41	13.08	19.02	49.28	0.10
2134.90	0.45	50.81	2134.79	12.88	14.93	13.57	19.71	49.21	0.07
2228.15	0.55	72.19	2228.04	13.25	15.64	13.97	20.49	49.73	0.23
2321.40	0.64	67.77	2321.28	13.58	16.54	14.35	21.40	50.62	0.10
2414.65	0.73	77.29	2414.53	13.91	17.60	14.72	22.43	51.69	0.16
2507.90	0.82	78.07	2507.77	14.18	18.84	15.05	23.58	53.04	0.10
2601.15	0.91	84.99	2601.01	14.38	20.24	15.32	24.82	54.60	0.14
2694.40	1.04	83.62	2694.24	14.54	21.81	15.55	26.21	56.32	0.14
2787.65	1.18	87.09	2787.48	14.68	23.61	15.78	27.80	58.13	0.17
2880.90	1.30	83.27	2880.70	14.85	25.62	16.05	29.61	59.90	0.16
2974.15	1.43	88.59	2973.93	15.01	27.84	16.31	31.63	61.67	0.19
3067.40	1.57	86.06	3067.15	15.12	30.28	16.54	33.84	63.46	0.16
3160.65	1.77	85.28	3160.36	15.33	32.98	16.87	36.37	65.07	0.22
3253.90	2.02	83.01	3253.55	15.65	36.05	17.33	39.30	66.54	0.28
3347.15	2.12	86.75	3346.74	15.94	39.40	17.79	42.51	67.97	0.18
3440.40	2.32	87.40	3439.92	16.13	43.01	18.14	45.93	69.45	0.22
3533.65	2.55	85.08	3533.09	16.39	46.96	18.59	49.74	70.76	0.27
3626.90	2.60	82.10	3626.25	16.86	51.12	19.26	53.83	71.75	0.15
3720.15	2.77	80.40	3719.39	17.53	55.44	20.13	58.14	72.46	0.21
3813.40	2.89	83.31	3812.53	18.18	60.00	20.99	62.69	73.15	0.20
3906.65	3.09	88.57	3905.65	18.51	64.85	21.56	67.44	74.07	0.36
3999.90	2.97	83.49	3998.77	18.85	69.77	22.13	72.27	74.88	0.32
4093.15	3.04	85.12	4091.89	19.33	74.63	22.84	77.09	75.48	0.12
4186.40	3.43	89.21	4185.00	19.58	79.88	23.34	82.24	76.23	0.48
4279.65	3.46	88.47	4278.08	19.70	85.48	23.72	87.72	77.02	0.06
4372.90	3.69	90.22	4371.15	19.76	91.29	24.05	93.41	77.79	0.27
4466.15	3.92	92.23	4464.19	19.62	97.47	24.21	99.43	78.62	0.29
4559.40	3.97	91.43	4557.22	19.42	103.88	24.31	105.68	79.41	0.08
4652.65	4.52	95.07	4650.21	19.01	110.77	24.23	112.39	80.26	0.65
4745.90	4.25	93.84	4743.19	18.46	117.87	24.01	119.31	81.10	0.31
4839.15	4.40	94.72	4836.18	17.93	124.88	23.82	126.16	81.83	0.18
4932.40	4.91	95.04	4929.12	17.29	132.42	23.53	133.55	82.56	0.55
5025.65	5.15	92.68	5022.01	16.74	140.58	23.37	141.57	83.21	0.34
5118.90	5.33	91.83	5114.87	16.41	149.09	23.44	149.99	83.72	0.21
5149.53	5.27	92.41	5145.37	16.30	151.91	23.47	152.78	83.87	0.27



VES Survey International
Fort Worth, Texas
817-741-3610
Surveyor: Eric Warner
Ragin Cajun 12 Federal 2H / API 30-025-42256

