

HOBBS OCD

MAY 08 2018

RECEIVED



Weatherford

Evaluation, Drilling & Intervention

10000 West County Rd. 116

P.O. Box 61028

Midland, TX USA 79711

Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
333 W. Sheridan Ave
Oklahoma City, OK, 73102

Date: August 18, 2017

Attention: Garrett Glaze

Re: Devon Energy
Well: Blue Krait 23 Fed 6H
Lea County, New Mexico

30-025-43239

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc., a Weatherford company. Other information required by your office is as follows:

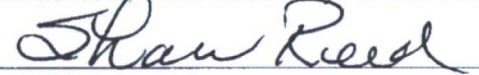
Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Michael Lord MWD Supervisor	6H	1,441' MD 14,108' MD	07/23/2017 08/06/2017	Measurement While Drilling

A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jonathan Leger
MWD Ops Coordinator

On this, the 23rd day of August, 20 17, before me a notary public, the undersigned officer, personally appeared Jonathan Leger, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public



HOBBS OCD
MAY 08 2018
RECEIVED



5D Survey Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Blue Krait 23 Fed 3H, 4H, 6H*
Well Name: *Blue Krait 23 Fed 6H*
Survey: *Definitive survey*

16 August 2017





Blue Krait 23 Fed 6H

Field Name: Lea Co, NM Nad 83 NMEZ	Map Units: US ft	Company Name: Devon Energy
	Vertical Reference Datum (VRD): Mean Sea Level	
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)	
Comment:		
Site: Blue Krait 23 Fed 3H, 4H, 6H	Units: US ft	North Reference: Grid
	Convergence Angle: 0.42	
	Elevation above MSL: 3562.20 US ft	
Comment:		
Slot: Blue Krait 23 Fed 6H	Slot TVD Reference: Ground Elevation	
	Elevation above MSL: 3562.40 US ft	
	Comment:	
Well: Blue Krait 23 Fed 6H	Type: Main well	UWI:
	File Number:	Comment:
	Closure Distance: 4886.76 US ft	Closure Azimuth: 2.91°
	Vertical Section: Position of Origin (Relative to Slot centre)	
	+N/-S: 0.00 US ft	+E/-W: -0.00 US ft Az: 359.57°

Drill floor: Survey Name: Definitive Survey			
Rig Height (Drill Floor): 23.50 US ft	Elevation above MSL: 3585.90 US ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Definitive Survey			
Date: 10/May/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:

Magnetic Model:				
Model Name: bggm2017	Date: 07/Aug/2017	Field Strength: 47984.7 nT	Declination: 6.99°	Dip: 60.02°

Tie Point:					
MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: 0.00 US ft	North Offset: 0.00 US ft	East Offset: -0.00 US ft

Survey Tool Ranges:			
Name	Start MD(USFt)	End MD(USFt)	Source Survey
EMS	0.00	1325.00	Spudder Surveys
MWD	1325.00	5110.00	MWD 1
MWD	5110.00	8790.00	MWD 2
MWD	8790.00	9708.00	MWD 3

SD Survey Report

Survey Tool Ranges:

Name	Start MD(usft)	End MD(usft)	Source Survey
MWD	9708.00	14170.00	MWD 4

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	H. Offset (US ft)	L. Offset (US ft)	DLS (% 100US ft)	Northing (US ft)	Easting (US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	436096.75	787753.82	
115.00	0.10	74.00	115.00	0.03	0.03	0.10	0.09	436096.78	787753.92	
210.00	0.20	81.00	210.00	0.07	0.08	0.34	0.11	436096.83	787754.16	
303.00	0.30	44.00	303.00	0.27	0.28	0.67	0.20	436097.03	787754.49	
397.00	0.30	17.00	397.00	0.68	0.69	0.91	0.15	436097.44	787754.73	
492.00	0.40	119.00	492.00	0.76	0.77	1.28	0.58	436097.52	787755.10	
586.00	0.40	67.00	585.99	0.72	0.74	1.86	0.37	436097.49	787755.68	
680.00	0.20	181.00	679.99	0.68	0.70	2.16	0.55	436097.45	787755.98	
776.00	0.30	184.00	775.99	0.27	0.28	2.14	0.11	436097.03	787755.96	
870.00	0.20	165.00	869.99	-0.14	-0.12	2.17	0.14	436096.63	787755.99	
964.00	0.10	137.00	963.99	-0.36	-0.34	2.27	0.13	436096.41	787756.09	
1058.00	0.50	164.00	1057.99	-0.81	-0.80	2.44	0.44	436095.95	787756.26	
1153.00	0.40	123.00	1152.99	-1.40	-1.37	2.83	0.35	436095.38	787756.65	
1247.00	0.70	173.00	1246.98	-2.15	-2.12	3.17	0.57	436094.63	787756.99	
1325.00	0.40	116.00	1324.98	-2.74	-2.72	3.48	0.75	436094.03	787757.30	Last Spudder Survey
1441.00	0.35	151.24	1440.98	-3.23	-3.20	4.01	0.20	436093.55	787757.83	First WFT MWD Svy
1532.00	0.16	55.73	1531.98	-3.41	-3.38	4.25	0.44	436093.37	787758.07	
1625.00	0.50	187.25	1624.98	-3.74	-3.70	4.31	0.66	436093.05	787758.13	
1719.00	0.90	164.33	1718.97	-4.86	-4.82	4.45	0.51	436091.93	787758.27	
1814.00	0.85	181.04	1813.96	-6.28	-6.25	4.64	0.27	436090.50	787758.46	
1909.00	0.66	181.70	1908.95	-7.53	-7.50	4.61	0.20	436089.25	787758.43	
2003.00	0.69	170.71	2002.94	-8.63	-8.60	4.69	0.14	436088.15	787758.51	
2098.00	0.38	166.59	2097.94	-9.50	-9.47	4.85	0.33	436087.28	787758.67	
2194.00	0.21	183.34	2193.94	-9.99	-9.95	4.92	0.20	436086.80	787758.74	
2289.00	0.90	195.89	2288.93	-10.88	-10.84	4.70	0.73	436085.91	787758.52	
2477.00	0.97	207.72	2476.91	-13.70	-13.67	3.56	0.11	436083.08	787757.38	
2572.00	0.70	203.47	2571.90	-14.94	-14.92	2.95	0.29	436081.83	787756.77	
2668.00	0.91	202.04	2667.89	-16.18	-16.16	2.43	0.22	436080.59	787756.25	
2763.00	0.84	197.93	2762.88	-17.54	-17.52	1.94	0.10	436079.23	787755.76	
2857.00	0.47	191.29	2856.87	-18.57	-18.56	1.65	0.40	436078.19	787755.47	
2951.00	0.73	192.02	2950.87	-19.53	-19.52	1.45	0.28	436077.23	787755.27	
3046.00	0.60	195.81	3045.86	-20.60	-20.59	1.19	0.14	436076.16	787755.01	
3141.00	1.17	161.49	3140.85	-22.00	-21.99	1.36	0.79	436074.76	787755.18	
3235.00	1.19	158.55	3234.83	-23.82	-23.81	2.02	0.07	436072.94	787755.84	
3330.00	1.42	149.71	3329.80	-25.76	-25.74	2.97	0.32	436071.01	787756.79	
3425.00	1.19	145.68	3424.78	-27.60	-27.57	4.12	0.26	436069.18	787757.94	
3519.00	1.28	144.76	3518.76	-29.28	-29.24	5.28	0.10	436067.51	787759.10	
3613.00	1.19	123.96	3612.74	-30.69	-30.64	6.70	0.48	436066.11	787760.52	
3707.00	1.38	131.75	3706.71	-32.00	-31.94	8.35	0.27	436064.81	787762.17	
3802.00	1.46	136.96	3801.68	-33.66	-33.59	10.03	0.16	436063.16	787763.85	
3896.00	1.64	139.14	3895.65	-35.57	-35.48	11.73	0.20	436061.27	787765.55	
3990.00	1.44	146.37	3989.61	-37.58	-37.48	13.26	0.30	436059.27	787767.08	
4084.00	1.50	137.95	4083.58	-39.49	-39.38	14.74	0.24	436057.37	787768.56	
4179.00	1.30	155.18	4178.56	-41.40	-41.28	16.02	0.49	436055.47	787769.84	
4274.00	0.98	156.09	4273.54	-43.12	-43.00	16.81	0.34	436053.75	787770.63	
4369.00	1.26	151.40	4368.52	-44.79	-44.66	17.64	0.31	436052.09	787771.46	
4463.00	0.82	168.69	4462.50	-46.36	-46.22	18.26	0.57	436050.53	787772.08	
4558.00	0.99	147.07	4557.49	-47.72	-47.58	18.84	0.40	436049.17	787772.66	
4653.00	1.75	136.74	4652.46	-49.48	-49.33	20.28	0.84	436047.42	787774.10	
4747.00	1.66	129.37	4746.42	-51.40	-51.23	22.32	0.25	436045.52	787776.14	
4841.00	1.85	125.04	4840.38	-53.15	-52.97	24.61	0.25	436043.78	787778.43	

SD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	DLS (° 100US ft)	Northing (US ft)	Easting (US ft)	Comment
4935.00	2.38	122.18	4934.31	-55.08	-54.88	27.51	0.57	436041.87	787781.33	
5029.00	3.02	118.54	5028.21	-57.34	-57.10	31.33	0.70	436039.65	787785.15	
5110.00	2.72	121.54	5109.11	-59.39	-59.13	34.85	0.41	436037.62	787788.67	
5217.00	2.60	119.30	5215.99	-61.93	-61.64	39.13	0.15	436035.11	787792.95	
5312.00	3.11	107.57	5310.87	-63.80	-63.48	43.46	0.81	436033.27	787797.28	
5405.00	3.82	96.97	5403.71	-64.98	-64.61	48.94	1.03	436032.14	787802.76	
5500.00	3.89	95.35	5498.49	-65.71	-65.30	55.29	0.14	436031.45	787809.11	
5595.00	3.81	95.16	5593.28	-66.34	-65.88	61.64	0.09	436030.87	787815.46	
5689.00	3.63	96.85	5687.08	-67.02	-66.52	67.71	0.22	436030.23	787821.53	
5784.00	3.39	95.40	5781.90	-67.69	-67.14	73.49	0.27	436029.61	787827.31	
5879.00	4.19	90.34	5876.69	-68.02	-67.43	79.76	0.91	436029.32	787833.58	
5974.00	4.46	90.64	5971.42	-68.14	-67.49	86.92	0.29	436029.26	787840.74	
6068.00	4.89	88.19	6065.11	-68.11	-67.40	94.58	0.50	436029.35	787848.40	
6163.00	5.13	93.19	6159.75	-68.28	-67.51	102.87	0.52	436029.24	787856.69	
6257.00	5.15	97.35	6253.37	-69.12	-68.28	111.25	0.40	436028.47	787865.07	
6352.00	4.57	93.76	6348.03	-69.97	-69.08	119.26	0.69	436027.67	787873.08	
6447.00	4.31	103.42	6442.74	-71.10	-70.15	126.50	0.83	436026.60	787880.32	
6542.00	4.10	106.79	6537.49	-72.96	-71.96	133.23	0.34	436024.79	787887.05	
6636.00	4.03	105.51	6631.25	-74.86	-73.82	139.63	0.12	436022.93	787893.45	
6731.00	4.00	105.01	6726.02	-76.66	-75.57	146.04	0.05	436021.18	787899.86	
6825.00	4.09	107.54	6819.78	-78.57	-77.43	152.41	0.21	436019.32	787906.23	
6920.00	4.03	107.76	6914.54	-80.66	-79.47	158.82	0.07	436017.28	787912.64	
7015.00	3.76	105.85	7009.32	-82.57	-81.34	164.99	0.32	436015.41	787918.81	
7110.00	3.32	105.67	7104.14	-84.21	-82.93	170.64	0.46	436013.82	787924.46	
7205.00	3.07	113.39	7199.00	-86.00	-84.68	175.62	0.52	436012.07	787929.44	
7300.00	2.84	114.25	7293.87	-88.01	-86.66	180.10	0.25	436010.09	787933.92	
7394.00	2.24	116.33	7387.78	-89.81	-88.43	183.87	0.65	436008.32	787937.69	
7489.00	1.92	98.47	7482.72	-90.89	-89.49	187.11	0.76	436007.26	787940.93	
7584.00	2.21	93.45	7577.65	-91.26	-89.83	190.51	0.36	436006.92	787944.33	
7678.00	3.03	87.01	7671.55	-91.27	-89.81	194.80	0.93	436006.94	787948.62	
7772.00	3.12	97.39	7765.42	-91.51	-90.01	199.82	0.60	436006.74	787953.64	
7866.00	3.67	107.21	7859.26	-92.77	-91.23	205.23	0.85	436005.52	787959.05	
7961.00	2.93	106.12	7954.10	-94.38	-92.80	210.47	0.78	436003.95	787964.29	
8055.00	2.63	110.53	8047.99	-95.84	-94.23	214.80	0.39	436002.52	787968.62	
8150.00	2.39	117.40	8142.90	-97.54	-95.90	218.60	0.40	436000.85	787972.42	
8245.00	2.30	120.01	8237.82	-99.43	-97.77	222.00	0.15	435998.98	787975.82	
8340.00	2.00	115.01	8332.75	-101.11	-99.42	225.16	0.37	435997.33	787978.98	
8434.00	1.98	112.65	8426.69	-102.45	-100.74	228.14	0.09	435996.01	787981.96	
8529.00	1.89	112.20	8521.64	-103.70	-101.97	231.11	0.10	435994.78	787984.93	
8623.00	1.82	115.16	8615.59	-104.94	-103.19	233.89	0.13	435993.56	787987.71	
8718.00	1.78	120.06	8710.54	-106.34	-104.57	236.54	0.17	435992.18	787990.36	
8790.00	1.72	121.63	8782.51	-107.48	-105.69	238.42	0.11	435991.06	787992.24	
8856.00	1.91	105.90	8848.48	-108.32	-106.51	240.33	0.80	435990.24	787994.15	
8904.00	5.32	28.14	8896.39	-106.58	-104.77	242.15	10.95	435991.98	787995.97	
8951.00	11.01	11.78	8942.90	-100.28	-98.45	244.09	12.96	435998.30	787997.91	
8999.00	15.66	7.84	8989.60	-89.38	-87.54	245.91	9.87	436009.21	787999.73	
9046.00	20.72	5.13	9034.23	-74.82	-72.96	247.52	10.91	436023.79	788001.34	
9093.00	24.71	5.01	9077.58	-56.76	-54.89	249.12	8.49	436041.86	788002.94	
9140.00	30.58	4.67	9119.20	-35.05	-33.17	250.96	12.49	436063.58	788004.78	
9188.00	34.97	4.17	9159.55	-9.17	-7.27	252.95	9.16	436089.48	788006.77	
9235.00	39.94	1.87	9196.85	19.35	21.26	254.42	10.98	436118.01	788008.24	
9282.00	44.31	2.55	9231.70	50.84	52.76	255.65	9.35	436149.51	788009.47	
9329.00	50.15	3.04	9263.60	85.27	87.20	257.34	12.45	436183.95	788011.16	
9377.00	53.28	2.38	9293.33	122.88	124.83	259.11	6.61	436221.58	788012.93	
9424.00	55.56	2.12	9320.68	161.07	163.03	260.61	4.87	436259.78	788014.43	
9471.00	58.32	1.40	9346.32	200.42	202.39	261.82	6.01	436299.14	788015.64	
9518.00	62.04	2.51	9369.68	241.16	243.14	263.22	8.18	436339.89	788017.04	
9566.00	67.02	3.90	9390.32	284.39	286.39	265.65	10.70	436383.14	788019.47	
9613.00	71.43	4.03	9406.99	328.19	330.22	268.69	9.39	436426.97	788022.51	

3D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
9661.00	74.85	2.45	9420.91	374.03	376.07	271.28	7.79	436472.82	788025.10	
9708.00	80.37	1.44	9430.99	419.87	421.93	272.83	11.93	436518.68	788026.65	
9727.00	80.65	1.77	9434.12	438.60	440.67	273.36	2.26	436537.42	788027.18	
9775.00	81.00	1.48	9441.77	485.96	488.03	274.70	0.94	436584.78	788028.52	
9822.00	82.35	1.84	9448.58	532.43	534.52	276.05	2.97	436631.27	788029.87	
9869.00	85.52	1.79	9453.54	579.13	581.23	277.53	6.75	436677.98	788031.35	
9917.00	89.58	1.28	9455.60	627.04	629.15	278.81	8.52	436725.90	788032.63	
9964.00	90.00	1.20	9455.77	674.02	676.14	279.83	0.91	436772.89	788033.65	
10058.00	89.93	1.44	9455.83	767.98	770.12	281.99	0.27	436866.87	788035.81	
10153.00	91.40	2.60	9454.72	862.88	865.05	285.34	1.97	436961.80	788039.16	
10247.00	91.89	1.30	9452.02	956.76	958.95	288.54	1.48	437055.70	788042.36	
10342.00	92.10	359.83	9448.72	1051.69	1053.89	289.48	1.56	437150.64	788043.30	
10436.00	92.45	359.89	9444.99	1145.61	1147.81	289.25	0.38	437244.56	788043.07	
10531.00	90.84	359.44	9442.26	1240.57	1242.77	288.69	1.76	437339.52	788042.51	
10626.00	91.26	359.57	9440.52	1335.55	1337.75	287.87	0.46	437434.50	788041.69	
10720.00	91.05	358.53	9438.62	1429.53	1431.72	286.31	1.13	437528.47	788040.13	
10815.00	90.70	358.44	9437.17	1524.50	1526.67	283.80	0.38	437623.42	788037.62	
10909.00	90.63	358.90	9436.08	1618.48	1620.64	281.62	0.49	437717.39	788035.44	
11004.00	91.12	359.02	9434.63	1713.46	1715.61	279.89	0.53	437812.36	788033.71	
11099.00	91.12	358.65	9432.77	1808.44	1810.57	277.96	0.39	437907.32	788031.78	
11193.00	91.82	358.33	9430.36	1902.39	1904.51	275.49	0.82	438001.26	788029.31	
11288.00	92.10	358.41	9427.11	1997.31	1999.42	272.79	0.31	438096.17	788026.61	
11383.00	90.70	358.28	9424.79	2092.26	2094.35	270.04	1.48	438191.10	788023.86	
11478.00	90.14	357.64	9424.10	2187.22	2189.28	266.66	0.90	438286.03	788020.48	
11572.00	90.98	357.75	9423.18	2281.16	2283.20	262.88	0.90	438379.95	788016.70	
11667.00	91.82	358.60	9420.86	2376.11	2378.12	259.86	1.26	438474.87	788013.68	
11761.00	90.00	358.25	9419.36	2470.07	2472.07	257.27	1.97	438568.82	788011.09	
11856.00	90.42	359.00	9419.02	2565.06	2567.04	254.99	0.90	438663.79	788008.81	
11951.00	90.14	358.62	9418.55	2660.05	2662.02	253.02	0.50	438758.77	788006.84	
12046.00	90.14	358.26	9418.32	2755.03	2756.98	250.43	0.38	438853.73	788004.25	
12141.00	90.42	357.93	9417.85	2849.99	2851.93	247.28	0.46	438948.68	788001.10	
12235.00	90.35	359.34	9417.22	2943.98	2945.90	245.04	1.50	439042.65	787998.86	
12330.00	90.14	358.86	9416.82	3038.97	3040.89	243.55	0.55	439137.64	787997.37	
12425.00	89.72	358.32	9416.93	3133.96	3135.86	241.21	0.72	439232.61	787995.03	
12519.00	90.21	358.89	9416.99	3227.94	3229.83	238.92	0.80	439326.58	787992.74	
12614.00	90.77	359.51	9416.18	3322.94	3324.81	237.59	0.88	439421.56	787991.41	
12708.00	90.63	359.56	9415.03	3416.93	3418.80	236.83	0.16	439515.55	787990.65	
12803.00	90.49	0.16	9414.10	3511.92	3513.80	236.60	0.65	439610.55	787990.42	
12897.00	90.35	0.55	9413.41	3605.91	3607.80	237.18	0.44	439704.55	787991.00	
12992.00	90.77	359.80	9412.48	3700.90	3702.79	237.47	0.90	439799.54	787991.29	
13087.00	92.03	359.93	9410.16	3795.87	3797.76	237.25	1.33	439894.51	787991.07	
13182.00	91.61	0.03	9407.15	3890.82	3892.71	237.21	0.45	439989.46	787991.03	
13276.00	92.03	0.34	9404.16	3984.77	3986.66	237.52	0.56	440083.41	787991.34	
13371.00	90.77	1.20	9401.84	4079.72	4081.62	238.79	1.61	440178.37	787992.61	
13465.00	90.91	1.11	9400.46	4173.67	4175.59	240.69	0.18	440272.34	787994.51	
13560.00	90.00	1.09	9399.71	4268.63	4270.57	242.51	0.96	440367.32	787996.33	
13654.00	88.60	0.58	9400.85	4362.60	4364.55	243.88	1.59	440461.30	787997.70	
13749.00	88.39	0.40	9403.35	4457.55	4459.52	244.69	0.29	440556.27	787998.51	
13843.00	89.09	1.17	9405.42	4551.51	4553.48	245.98	1.11	440650.23	787999.80	
13937.00	88.88	359.65	9407.08	4645.48	4647.46	246.65	1.63	440744.21	788000.47	
14032.00	90.35	0.90	9407.72	4740.47	4742.46	247.11	2.03	440839.21	788000.93	
14108.00	89.72	0.32	9407.67	4816.45	4818.45	247.92	1.13	440915.20	788001.74	Last WFT MWD Survey
14170.00	89.72	0.32	9407.98	4878.45	4880.45	248.27	0.00	440977.20	788002.09	Proj to TD