



Weatherford

Evaluation, Drilling & Intervention
10000 West County Rd. 116
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Tel. (432) 561-8892 Fax (432) 561-8895

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

Date: October 5, 2017

Attention: Garrett Glaze

Re: Devon Energy
Well: Blue Krait 23-14 Fed 1H
Lea County, New Mexico

HOBBS OCD
MAY 04 2018
RECEIVED

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	1H	1,447' MD	09/19/2017	Measurement
MWD Supervisor		19,240' MD	10/03/2017	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 9th day of October, 2017, 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



5D Survey Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Blue Krait 23-14 Fed 1H*
Well Name: *Blue Krait 23-14 Fed 1H*
Survey: *Definitive survey*

4 October 2017





Blue Krait 23-14 Fed 1H

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 23-14 Fed 1H	Units: US ft	North Reference: Grid	Convergence Angle: 0.42
	Elevation above MSL: 3551.30 US ft		
Comment:			
Slot: Blue Krait 23-14 Fed 1H	Slot TVD Reference: Ground Elevation		
	Elevation above MSL: 3551.30 US ft		
	Comment:		
	Well: Blue Krait 23-14 Fed 1H		
Type: Main well		UWI:	
File Number:		Comment:	
Closure Distance: 10034.8 US ft		Closure Azimuth: 357.84°	
Vertical Section: Position of Origin (Relative to Slot centre)			
+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 359.66°

Drill floor: Survey Name: Definitive Survey

Rig Height (Drill Floor): 23.50 US ft	Elevation above MSL: 3574.80 US ft	Inclination: 0.00°	Azimuth: 0.00°
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Survey Name: Definitive Survey

Date: 26/Apr/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:
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Magnetic Model:

Model Name: bggm2017	Date: 20/Sep/2017	Field Strength: 47970.4 nT	Declination: 6.99°	Dip: 60.02°
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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
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Survey Tool Ranges:

Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD	0.00	1275.00	Spudder Surveys-Corrected
MWD	1275.00	5125.00	WFT MWD 1
MWD	5125.00	8766.00	WFT MWD 2
MWD	8766.00	12715.00	WFT MWD 3

5D Survey Report

Survey Tool Ranges:

Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD	12715.00	17635.00	WFT MWD 4
MWD	17635.00	19302.00	WFT MWD 5

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)	N.Offset (US ft)	E.Offset (US ft)	DLS (% 100US ft)	Northing (US ft)	Easting (US ft)	Comment
1307.00	0.30	60.59	1306.97	-1.21	-1.19	3.38	2.19	436067.28	783820.88	Last Corrected Spudder Survey
1447.00	0.90	328.97	1446.96	-0.08	-0.07	3.13	0.68	436068.40	783820.63	First WFT MWD Svy
1538.00	0.93	340.24	1537.95	1.23	1.24	2.51	0.20	436069.71	783820.01	
1630.00	0.77	348.17	1629.94	2.54	2.55	2.13	0.22	436071.02	783819.63	
1722.00	0.49	356.73	1721.94	3.53	3.55	1.98	0.32	436072.02	783819.48	
1817.00	0.47	279.90	1816.93	4.01	4.02	1.57	0.63	436072.49	783819.07	
1912.00	0.77	270.65	1911.93	4.09	4.09	0.55	0.33	436072.56	783818.05	
2007.00	0.81	259.34	2006.92	3.98	3.98	-0.75	0.17	436072.45	783816.75	
2101.00	0.77	281.80	2100.91	3.99	3.98	-2.02	0.33	436072.45	783815.48	
2196.00	0.71	281.05	2195.90	4.25	4.23	-3.22	0.06	436072.70	783814.28	
2290.00	0.50	296.05	2289.90	4.54	4.52	-4.16	0.28	436072.99	783813.34	
2385.00	0.40	280.61	2384.89	4.79	4.76	-4.86	0.16	436073.23	783812.64	
2479.00	0.55	301.23	2478.89	5.09	5.06	-5.57	0.24	436073.53	783811.93	
2574.00	0.41	297.54	2573.89	5.49	5.45	-6.26	0.15	436073.92	783811.24	
2668.00	0.36	265.15	2667.89	5.62	5.58	-6.85	0.23	436074.05	783810.65	
2762.00	0.28	253.32	2761.88	5.53	5.49	-7.36	0.11	436073.96	783810.14	
2857.00	0.47	274.14	2856.88	5.50	5.45	-7.98	0.24	436073.92	783809.52	
2952.00	0.39	280.47	2951.88	5.59	5.54	-8.68	0.10	436074.01	783808.82	
3047.00	0.47	274.74	3046.88	5.68	5.63	-9.39	0.10	436074.10	783808.11	
3141.00	0.51	273.98	3140.87	5.75	5.69	-10.19	0.04	436074.16	783807.31	
3236.00	0.49	298.81	3235.87	5.98	5.91	-10.97	0.23	436074.38	783806.53	
3330.00	0.43	313.06	3329.87	6.42	6.35	-11.58	0.14	436074.82	783805.92	
3424.00	0.29	344.04	3423.87	6.89	6.82	-11.90	0.25	436075.29	783805.60	
3519.00	0.29	9.61	3518.86	7.36	7.29	-11.93	0.14	436075.76	783805.57	
3613.00	0.44	2.52	3612.86	7.95	7.88	-11.87	0.17	436076.35	783805.63	
3708.00	0.35	20.07	3707.86	8.59	8.52	-11.76	0.16	436076.99	783805.74	
3802.00	0.45	359.95	3801.86	9.23	9.16	-11.66	0.18	436077.63	783805.84	
3896.00	0.30	358.06	3895.86	9.84	9.77	-11.67	0.16	436078.24	783805.83	
3991.00	0.21	315.00	3990.85	10.21	10.14	-11.80	0.22	436078.61	783805.70	
4086.00	0.20	248.62	4085.85	10.28	10.21	-12.07	0.24	436078.68	783805.43	
4180.00	0.41	294.69	4179.85	10.36	10.29	-12.53	0.33	436078.76	783804.97	
4274.00	0.36	308.31	4273.85	10.69	10.61	-13.07	0.11	436079.08	783804.43	
4369.00	0.55	335.25	4368.85	11.29	11.21	-13.50	0.30	436079.68	783804.00	
4463.00	0.74	42.00	4462.84	12.15	12.07	-13.28	0.77	436080.54	783804.22	
4558.00	1.20	103.94	4557.83	12.36	12.29	-11.90	1.13	436080.76	783805.60	
4652.00	1.63	102.61	4651.80	11.81	11.76	-9.64	0.46	436080.23	783807.86	
4747.00	1.94	97.70	4746.76	11.29	11.25	-6.73	0.36	436079.72	783810.77	
4842.00	2.22	105.60	4841.69	10.56	10.54	-3.36	0.42	436079.01	783814.14	
4937.00	2.43	120.37	4936.62	9.02	9.02	0.15	0.67	436077.49	783817.65	
5031.00	1.44	122.27	5030.56	7.37	7.39	2.86	1.06	436075.86	783820.36	
5125.00	0.56	187.91	5124.55	6.28	6.30	3.80	1.40	436074.77	783821.30	
5199.00	0.56	202.73	5198.55	5.59	5.61	3.61	0.20	436074.08	783821.11	
5305.00	0.66	177.06	5304.54	4.50	4.52	3.44	0.27	436072.99	783820.94	
5400.00	0.22	172.56	5399.54	3.77	3.79	3.49	0.46	436072.26	783820.99	
5495.00	0.88	266.96	5494.53	3.56	3.57	2.79	0.97	436072.04	783820.29	
5589.00	2.20	266.11	5588.50	3.41	3.41	0.27	1.40	436071.88	783817.77	
5684.00	3.48	262.91	5683.38	2.96	2.93	-4.41	1.36	436071.40	783813.09	
5778.00	4.64	262.96	5777.14	2.18	2.12	-11.02	1.23	436070.59	783806.48	

5D 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
5874.00	5.32	260.56	5872.78	1.02	0.91	-19.26	0.74	436069.38	783798.24	
5968.00	6.16	258.57	5966.31	-0.63	-0.80	-28.50	0.92	436067.67	783789.00	
6063.00	6.18	256.31	6060.76	-2.80	-3.02	-38.47	0.26	436065.45	783779.03	
6252.00	5.39	253.51	6248.79	-7.61	-7.95	-56.87	0.44	436060.52	783760.63	
6346.00	6.25	253.39	6342.31	-10.28	-10.67	-66.00	0.91	436057.80	783751.50	
6441.00	6.76	253.38	6436.69	-13.29	-13.75	-76.32	0.54	436054.72	783741.18	
6536.00	6.56	253.09	6531.05	-16.41	-16.92	-86.86	0.21	436051.55	783730.64	
6631.00	6.57	252.54	6625.43	-19.55	-20.13	-97.24	0.07	436048.34	783720.26	
6725.00	6.69	252.07	6718.80	-22.79	-23.43	-107.58	0.14	436045.04	783709.92	
6819.00	6.64	252.31	6812.17	-26.07	-26.77	-117.97	0.06	436041.70	783699.53	
6914.00	6.24	252.31	6906.57	-29.25	-30.01	-128.12	0.42	436038.46	783689.38	
7008.00	5.96	252.43	7000.03	-32.21	-33.03	-137.64	0.30	436035.44	783679.86	
7197.00	5.82	246.93	7188.04	-38.82	-39.75	-155.81	0.31	436028.72	783661.69	
7292.00	5.98	251.33	7282.54	-42.24	-43.22	-164.93	0.50	436025.25	783652.57	
7387.00	6.08	253.11	7377.01	-45.23	-46.27	-174.43	0.22	436022.20	783643.07	
7483.00	6.84	252.04	7472.40	-48.41	-49.51	-184.73	0.80	436018.96	783632.77	
7577.00	7.85	252.76	7565.63	-51.97	-53.13	-196.19	1.08	436015.34	783621.31	
7672.00	8.20	252.31	7659.70	-55.88	-57.12	-208.84	0.37	436011.35	783608.66	
7767.00	7.79	253.66	7753.77	-59.67	-60.99	-221.47	0.47	436007.98	783596.03	
7862.00	6.85	252.56	7848.00	-63.11	-64.50	-233.06	1.00	436003.97	783584.44	
7957.00	6.28	252.98	7942.37	-66.27	-67.71	-243.43	0.60	436000.76	783574.07	
8053.00	6.01	251.07	8037.82	-69.38	-70.88	-253.21	0.35	435997.59	783564.29	
8148.00	5.42	249.50	8132.35	-72.51	-74.07	-262.11	0.64	435994.40	783555.39	
8242.00	5.15	247.99	8225.95	-75.60	-77.20	-270.18	0.32	435991.27	783547.32	
8336.00	4.70	247.35	8319.60	-78.62	-80.27	-277.65	0.48	435988.20	783539.85	
8431.00	3.23	242.85	8414.37	-81.30	-82.99	-283.62	1.58	435985.48	783533.88	
8526.00	2.80	239.87	8509.24	-83.66	-85.37	-288.01	0.48	435983.10	783529.49	
8620.00	2.59	237.12	8603.14	-85.94	-87.68	-291.78	0.26	435980.79	783525.72	
8715.00	2.51	232.99	8698.04	-88.34	-90.10	-295.24	0.21	435978.37	783522.26	
8766.00	2.55	231.03	8748.99	-89.72	-91.48	-297.02	0.19	435976.99	783520.48	
8808.00	2.24	232.78	8790.96	-90.79	-92.57	-298.40	0.76	435975.90	783519.10	
8855.00	1.82	328.24	8837.94	-90.71	-92.49	-299.52	6.42	435975.98	783517.98	
8903.00	5.77	1.55	8885.83	-87.64	-89.42	-299.86	9.09	435979.05	783517.64	
8950.00	10.70	5.16	8932.33	-80.94	-82.71	-299.40	10.54	435985.76	783518.10	
8998.00	15.64	4.71	8979.05	-70.05	-71.82	-298.47	10.29	435996.65	783519.03	
9045.00	20.77	4.57	9023.69	-55.42	-57.19	-297.28	10.92	436011.28	783520.22	
9092.00	24.94	3.30	9066.99	-37.22	-38.98	-296.05	8.93	436029.49	783521.45	
9139.00	29.87	3.19	9108.70	-15.64	-17.39	-294.83	10.49	436051.08	783522.67	
9187.00	34.05	3.58	9149.41	9.71	7.97	-293.32	8.72	436076.44	783524.18	
9234.00	38.48	2.25	9187.30	37.46	35.73	-291.92	9.57	436104.20	783525.58	
9282.00	42.69	1.49	9223.75	68.65	66.93	-290.91	8.83	436135.40	783526.59	
9329.00	48.04	0.77	9256.76	102.08	100.36	-290.26	11.43	436168.83	783527.24	
9377.00	51.69	0.74	9287.69	138.76	137.04	-289.78	7.60	436205.51	783527.72	
9424.00	56.45	0.05	9315.26	176.80	175.09	-289.53	10.20	436243.56	783527.97	
9472.00	59.73	358.85	9340.63	217.54	215.83	-289.92	7.16	436284.30	783527.58	
9519.00	64.10	357.30	9362.75	258.98	257.26	-291.33	9.74	436325.73	783526.17	
9567.00	68.60	356.06	9382.00	302.88	301.14	-293.88	9.67	436369.61	783523.62	
9614.00	75.37	356.59	9396.53	347.47	345.72	-296.74	14.44	436414.19	783520.76	
9661.00	79.67	357.07	9406.69	393.29	391.53	-299.28	9.20	436460.00	783518.22	
9692.00	83.69	357.55	9411.17	423.94	422.16	-300.72	13.06	436490.63	783516.78	
9726.00	86.99	358.89	9413.93	457.81	456.02	-301.77	10.47	436524.49	783515.73	
9821.00	87.97	359.19	9418.11	552.71	550.92	-303.36	1.08	436619.39	783514.14	
9915.00	88.67	359.44	9420.87	646.67	644.87	-304.48	0.79	436713.34	783513.02	
10009.00	90.35	358.59	9421.67	740.65	738.85	-306.10	2.00	436807.32	783511.40	
10104.00	89.65	358.38	9421.67	835.63	833.81	-308.61	0.77	436902.28	783508.89	
10199.00	89.93	358.32	9422.02	930.61	928.77	-311.34	0.30	436997.24	783506.16	
10294.00	90.42	358.10	9421.73	1025.57	1023.73	-314.31	0.57	437092.20	783503.19	
10388.00	90.84	358.24	9420.69	1119.54	1117.67	-317.31	0.47	437186.14	783500.19	
10482.00	90.21	359.28	9419.83	1213.52	1211.65	-319.35	1.29	437280.12	783498.15	

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
10577.00	90.00	358.19	9419.66	1308.51	1306.62	-321.44	1.17	437375.09	783496.06	
10669.00	90.14	358.15	9419.55	1400.47	1398.57	-324.38	0.16	437467.04	783493.12	
10760.00	89.65	359.37	9419.71	1491.46	1489.55	-326.35	1.44	437558.02	783491.15	
10850.00	89.93	359.71	9420.04	1581.46	1579.55	-327.07	0.49	437648.02	783490.43	
10941.00	90.56	359.43	9419.65	1672.46	1670.54	-327.76	0.76	437739.01	783489.74	
11034.00	90.70	1.31	9418.63	1765.44	1763.53	-327.16	2.03	437832.00	783490.34	
11126.00	90.07	1.55	9418.01	1857.40	1855.50	-324.86	0.73	437923.97	783492.64	
11218.00	88.32	1.28	9419.31	1949.34	1947.46	-322.59	1.92	438015.93	783494.91	
11312.00	87.62	0.61	9422.64	2043.26	2041.39	-321.04	1.03	438109.86	783496.46	
11404.00	87.76	0.82	9426.34	2135.17	2133.30	-319.89	0.27	438201.77	783497.61	
11496.00	87.76	0.05	9429.94	2227.09	2225.23	-319.19	0.84	438293.70	783498.31	
11589.00	87.62	0.55	9433.69	2320.00	2318.15	-318.71	0.56	438386.62	783498.79	
11682.00	87.97	0.34	9437.27	2412.93	2411.08	-317.99	0.44	438479.55	783499.51	
11773.00	88.04	358.94	9440.43	2503.87	2502.02	-318.56	1.54	438570.49	783498.94	
11865.00	89.65	358.79	9442.29	2595.84	2593.98	-320.38	1.76	438662.45	783497.12	
11957.00	89.86	358.34	9442.68	2687.82	2685.95	-322.68	0.54	438754.42	783494.82	
12052.00	90.28	357.93	9442.57	2782.79	2780.90	-325.77	0.62	438849.37	783491.73	
12147.00	90.35	357.52	9442.04	2877.73	2875.83	-329.55	0.44	438944.30	783487.95	
12242.00	90.77	357.21	9441.12	2972.65	2970.72	-333.91	0.55	439039.19	783483.59	
12337.00	91.33	358.05	9439.37	3067.57	3065.62	-337.84	1.06	439134.09	783479.66	
12432.00	90.21	359.79	9438.10	3162.55	3160.59	-339.63	2.18	439229.06	783477.87	
12526.00	90.35	359.74	9437.64	3256.55	3254.59	-340.02	0.16	439323.06	783477.48	
12620.00	90.56	359.59	9436.89	3350.55	3348.58	-340.57	0.27	439417.05	783476.93	
12715.00	91.12	359.74	9435.50	3445.54	3443.57	-341.12	0.61	439512.04	783476.38	
12811.00	91.19	0.71	9433.56	3541.51	3539.55	-340.74	1.01	439608.02	783476.76	
12905.00	90.42	1.49	9432.24	3635.47	3633.52	-338.94	1.17	439701.99	783478.56	
13000.00	90.49	1.50	9431.49	3730.42	3728.49	-336.46	0.07	439796.96	783481.04	
13093.00	89.79	0.45	9431.26	3823.39	3821.47	-334.88	1.36	439889.94	783482.62	
13188.00	89.72	359.83	9431.67	3918.39	3916.47	-334.65	0.66	439984.94	783482.85	
13283.00	91.26	0.79	9430.86	4013.37	4011.46	-334.13	1.91	440079.93	783483.37	
13378.00	92.17	1.84	9428.01	4108.29	4106.39	-331.95	1.46	440174.86	783485.55	
13472.00	90.56	1.21	9425.77	4202.21	4200.33	-329.45	1.84	440268.80	783488.05	
13567.00	90.07	0.92	9425.25	4297.18	4295.31	-327.69	0.60	440363.78	783489.81	
13662.00	90.56	0.85	9424.73	4392.16	4390.30	-326.22	0.52	440458.77	783491.28	
13757.00	88.81	0.31	9425.25	4487.14	4485.29	-325.26	1.93	440553.76	783492.24	
13851.00	88.74	1.00	9427.26	4581.10	4579.26	-324.18	0.74	440647.73	783493.32	
13946.00	90.00	0.95	9428.30	4676.07	4674.24	-322.57	1.33	440742.71	783494.93	
14041.00	90.00	359.95	9428.30	4771.06	4769.23	-321.82	1.05	440837.70	783495.68	
14135.00	90.14	359.00	9428.19	4865.06	4863.23	-322.68	1.02	440931.70	783494.82	
14230.00	90.63	357.44	9427.55	4960.02	4958.18	-325.63	1.72	441026.65	783491.87	
14324.00	90.70	355.63	9426.46	5053.87	5051.99	-331.31	1.93	441120.46	783486.19	
14419.00	91.12	355.07	9424.95	5148.59	5146.67	-339.02	0.74	441215.14	783478.48	
14514.00	90.63	356.21	9423.50	5243.34	5241.38	-346.24	1.31	441309.85	783471.26	
14609.00	90.91	357.37	9422.22	5338.21	5336.22	-351.56	1.26	441404.69	783465.94	
14703.00	91.40	358.79	9420.33	5432.16	5430.15	-354.70	1.60	441498.62	783462.80	
14798.00	91.61	0.08	9417.83	5527.12	5525.11	-355.64	1.38	441593.58	783461.86	
14892.00	90.00	0.07	9416.51	5621.11	5619.10	-355.52	1.71	441687.57	783461.98	
14986.00	87.20	357.52	9418.81	5715.05	5713.03	-357.49	4.03	441781.50	783460.01	
15081.00	89.23	357.75	9421.77	5809.94	5807.90	-361.41	2.15	441876.37	783456.09	
15175.00	90.07	359.73	9422.34	5903.92	5901.87	-363.48	2.29	441970.34	783454.02	
15270.00	89.86	1.00	9422.40	5998.91	5996.86	-362.87	1.35	442065.33	783454.63	
15364.00	90.35	1.22	9422.23	6092.88	6090.85	-361.05	0.57	442159.32	783456.45	
15459.00	90.84	1.87	9421.24	6187.82	6185.80	-358.49	0.86	442254.27	783459.01	
15554.00	90.49	1.17	9420.14	6282.77	6280.76	-355.97	0.82	442349.23	783461.53	
15648.00	91.19	1.15	9418.76	6376.72	6374.73	-354.07	0.74	442443.20	783463.43	
15743.00	91.12	0.81	9416.85	6471.68	6469.70	-352.44	0.37	442538.17	783465.06	
15838.00	91.12	0.96	9414.99	6566.64	6564.67	-350.98	0.16	442633.14	783466.52	
15932.00	91.19	1.13	9413.10	6660.59	6658.64	-349.26	0.20	442727.11	783468.24	
16026.00	91.26	0.95	9411.09	6754.54	6752.60	-347.56	0.21	442821.07	783469.94	

SD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
ID (US ft)	Inc (°)	A: (%)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	DLS (° 100US ft)	Northing (US ft)	Easting (US ft)	Comment
16121.00	91.19	0.80	9409.05	6849.50	6847.57	-346.11	0.17	442916.04	783471.39	
16216.00	90.56	0.16	9407.60	6944.48	6942.55	-345.31	0.95	443011.02	783472.19	
16311.00	90.21	359.14	9406.97	7039.47	7037.55	-345.89	1.14	443106.02	783471.61	
16405.00	90.14	358.58	9406.68	7133.46	7131.53	-347.76	0.60	443200.00	783469.74	
16500.00	91.12	359.67	9405.63	7228.45	7226.51	-349.21	1.54	443294.98	783468.29	
16595.00	91.33	359.56	9403.60	7323.43	7321.48	-349.85	0.25	443389.95	783467.65	
16689.00	91.82	0.15	9401.02	7417.39	7415.45	-350.09	0.82	443483.92	783467.41	
16783.00	91.26	359.81	9398.49	7511.36	7509.41	-350.12	0.70	443577.88	783467.38	
16878.00	91.89	0.23	9395.88	7606.32	7604.38	-350.09	0.80	443672.85	783467.41	
16973.00	90.00	359.13	9394.32	7701.30	7699.36	-350.62	2.30	443767.83	783466.88	
17067.00	89.93	359.03	9394.37	7795.30	7793.34	-352.13	0.13	443861.81	783465.37	
17162.00	89.65	358.80	9394.72	7890.29	7888.33	-353.93	0.38	443956.80	783463.57	
17257.00	90.98	359.22	9394.20	7985.28	7983.31	-355.57	1.47	444051.78	783461.93	
17351.00	92.24	359.50	9391.56	8079.24	8077.26	-356.62	1.37	444145.73	783460.88	
17446.00	91.54	359.40	9388.42	8174.18	8172.21	-357.53	0.74	444240.68	783459.97	
17540.00	91.47	359.25	9385.96	8268.15	8266.17	-358.64	0.18	444334.64	783458.86	
17635.00	91.47	359.04	9383.52	8363.11	8361.13	-360.05	0.22	444429.60	783457.45	
17728.00	91.54	358.58	9381.08	8456.07	8454.07	-361.98	0.50	444522.54	783455.52	
17823.00	90.56	358.66	9379.34	8551.04	8549.03	-364.27	1.04	444617.50	783453.23	
17917.00	89.93	358.04	9378.93	8645.01	8642.99	-366.98	0.94	444711.46	783450.52	
18011.00	89.02	358.51	9379.79	8738.98	8736.94	-369.81	1.09	444805.41	783447.69	
18106.00	90.28	358.94	9380.37	8833.96	8831.91	-371.92	1.40	444900.38	783445.58	
18200.00	90.14	359.42	9380.03	8927.96	8925.90	-373.27	0.53	444994.37	783444.23	
18295.00	89.65	359.32	9380.20	9022.96	9020.90	-374.31	0.53	445089.37	783443.19	
18390.00	89.16	358.69	9381.19	9117.95	9115.88	-375.96	0.84	445184.35	783441.54	
18485.00	89.58	0.15	9382.24	9212.94	9210.86	-376.92	1.60	445279.33	783440.58	
18579.00	89.51	0.17	9382.98	9306.93	9304.86	-376.66	0.08	445373.33	783440.84	
18673.00	90.00	359.93	9383.38	9400.93	9398.86	-376.58	0.58	445467.33	783440.92	
18767.00	91.05	359.96	9382.52	9494.92	9492.85	-376.67	1.12	445561.32	783440.83	
18862.00	90.49	358.39	9381.25	9589.90	9587.83	-378.03	1.75	445656.30	783439.47	
18956.00	92.10	359.38	9379.12	9683.87	9681.78	-379.86	2.01	445750.25	783437.64	
19051.00	91.47	0.26	9376.16	9778.82	9776.74	-380.16	1.14	445845.21	783437.34	
19146.00	91.82	0.57	9373.44	9873.77	9871.69	-379.47	0.49	445940.16	783438.03	
19240.00	90.98	0.15	9371.14	9967.74	9965.66	-378.88	1.00	446034.13	783438.62	Last WFT MWD Svy
19302.00	90.98	0.15	9370.08	10029.72	10027.65	-378.72	0.00	446096.12	783438.78	Projection to TD



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: September 20, 2017

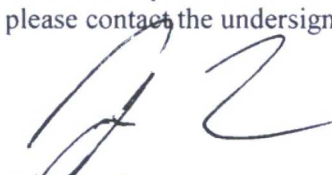
Attention: Garrett Glaze

Re: Devon Energy
Well: Blue Krait 23-14 Fed 5H
Lea County, New Mexico

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:

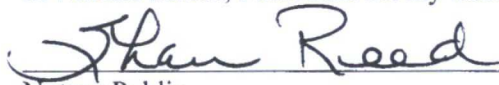
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Michael Lord MWD Supervisor	5H	1,448' MD 19,347' MD	09/01/2017 09/16/2017	Measurement While Drilling

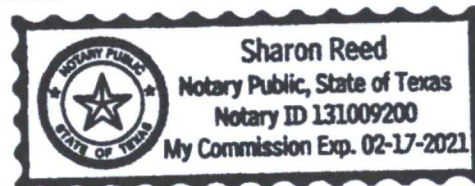
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jonathan Leger
MWD Ops Coordinator

On this, the 2nd day of October 2017, 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



5D Survey Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Blue Krait 23-14 Fed 1H*
Well Name: *Blue Krait 23-14 Fed 5H*
Survey: *Definitive survey*

17 September 2017





Blue Krait 23-14 Fed 5H

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 23-14 Fed 1H	Units: US ft	North Reference: Grid	Convergence Angle: 0.42
	Elevation above MSL: 3551.30 US ft		
	Comment:		
Slot: Blue Krait 23-14 Fed 5H	Slot TVD Reference: Ground Elevation		
	Elevation above MSL: 3551.30 US ft		
	Comment:		
Well: Blue Krait 23-14 Fed 5H	Type: Main well	UWI:	
	File Number:	Comment:	
	Closure Distance: 10090.4 US ft	Closure Azimuth: 2.75°	
	Vertical Section: Position of Origin (Relative to Slot centre)		
	+N/-S: 0.00 US ft	+E/-W: -0.00 US ft	Az: 0.00°

Drill floor: Survey Name: Definitive Survey			
Rig Height (Drill Floor): 24.00 US ft	Elevation above MSL: 3575.30 US ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Definitive Survey				
Date: 25/May/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:	
Magnetic Model:				
Model Name: bggm2017	Date: 29/Aug/2017	Field Strength: 47977.0 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
MWD	0.00	1306.00	Wildfire Surface MWD Surveys
MWD	1306.00	5193.00	MWD 1
MWD	5193.00	8812.00	MWD 2
MWD	8812.00	9186.00	MWD 3

5D Survey Report

Survey Tool Ranges:

Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	9186.00	9658.00	MWD 4
MWD	9658.00	18580.00	MWD 5
MWD	18580.00	19410.00	MWD 6

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)	N. Offset (US ft)	E. 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	436068.68	783847.50	
188.00	0.20	309.57	188.00	0.21	0.21	-0.25	0.11	436068.89	783847.25	
282.00	0.50	232.57	282.00	0.06	0.06	-0.71	0.53	436068.74	783846.79	
313.00	0.20	10.57	313.00	0.04	0.04	-0.80	2.14	436068.72	783846.70	
321.00	0.20	357.57	321.00	0.06	0.06	-0.80	0.57	436068.74	783846.70	
345.00	0.30	18.57	345.00	0.16	0.16	-0.78	0.56	436068.84	783846.72	
376.00	0.50	264.57	376.00	0.23	0.23	-0.89	2.19	436068.91	783846.61	
408.00	0.60	257.57	408.00	0.18	0.18	-1.19	0.38	436068.86	783846.31	
439.00	0.50	339.57	438.99	0.27	0.27	-1.40	2.34	436068.95	783846.10	
470.00	0.30	328.57	469.99	0.47	0.47	-1.49	0.69	436069.15	783846.01	
533.00	0.70	301.57	532.99	0.81	0.81	-1.90	0.72	436069.49	783845.60	
565.00	0.70	321.57	564.99	1.06	1.06	-2.19	0.76	436069.74	783845.31	
659.00	0.20	312.57	658.99	1.63	1.63	-2.67	0.54	436070.31	783844.83	
753.00	0.60	300.57	752.98	1.99	1.99	-3.21	0.43	436070.67	783844.29	
879.00	0.40	287.57	878.98	2.46	2.46	-4.20	0.18	436071.14	783843.30	
910.00	0.70	355.57	909.98	2.68	2.68	-4.32	2.14	436071.36	783843.18	
942.00	0.40	19.57	941.98	2.98	2.98	-4.30	1.16	436071.66	783843.20	
973.00	0.50	5.57	972.97	3.21	3.21	-4.25	0.48	436071.89	783843.25	
1005.00	0.70	54.57	1004.97	3.47	3.47	-4.07	1.66	436072.15	783843.43	
1036.00	0.30	325.57	1035.97	3.64	3.64	-3.97	2.44	436072.32	783843.53	
1068.00	0.30	337.57	1067.97	3.79	3.79	-4.04	0.20	436072.47	783843.46	
1099.00	0.10	72.57	1098.97	3.87	3.87	-4.05	1.05	436072.55	783843.45	
1131.00	0.30	95.57	1130.97	3.87	3.87	-3.94	0.66	436072.55	783843.56	
1225.00	0.20	20.57	1224.97	4.00	4.00	-3.64	0.33	436072.68	783843.86	
1288.00	0.80	29.57	1287.97	4.49	4.49	-3.38	0.96	436073.17	783844.12	
1306.00	0.30	66.57	1305.97	4.62	4.62	-3.28	3.27	436073.30	783844.22	Last Wildfire MWD Svy
1448.00	0.56	23.30	1447.96	5.40	5.40	-2.66	0.28	436074.08	783844.84	First WFT MWD Svy
1539.00	0.63	21.32	1538.96	6.28	6.28	-2.30	0.08	436074.96	783845.20	
1631.00	0.69	25.88	1630.95	7.24	7.24	-1.88	0.09	436075.92	783845.62	
1724.00	0.69	25.88	1723.95	8.25	8.25	-1.39	0.00	436076.93	783846.11	
1819.00	0.63	22.74	1818.94	9.25	9.25	-0.94	0.07	436077.93	783846.56	
1913.00	0.63	21.02	1912.93	10.21	10.21	-0.55	0.02	436078.89	783846.95	
2008.00	0.51	20.11	2007.93	11.09	11.09	-0.22	0.13	436079.77	783847.28	
2103.00	0.56	14.27	2102.93	11.94	11.94	0.04	0.08	436080.62	783847.54	
2198.00	0.45	355.84	2197.92	12.76	12.76	0.13	0.21	436081.44	783847.63	
2292.00	0.43	45.91	2291.92	13.37	13.37	0.35	0.40	436082.05	783847.85	
2386.00	0.47	80.89	2385.92	13.68	13.68	0.99	0.29	436082.36	783848.49	
2481.00	0.51	77.45	2480.91	13.83	13.83	1.79	0.05	436082.51	783849.29	
2575.00	0.36	68.01	2574.91	14.04	14.04	2.47	0.18	436082.72	783849.97	
2669.00	0.45	59.54	2668.91	14.33	14.33	3.06	0.11	436083.01	783850.56	
2764.00	0.73	79.53	2763.90	14.63	14.63	3.98	0.36	436083.31	783851.48	
2859.00	0.91	78.78	2858.89	14.89	14.89	5.31	0.19	436083.57	783852.81	
2953.00	1.19	94.08	2952.88	14.97	14.97	7.02	0.42	436083.65	783854.52	
3049.00	1.79	99.37	3048.84	14.65	14.65	9.49	0.64	436083.33	783856.99	
3143.00	2.54	106.73	3142.78	13.81	13.81	12.93	0.85	436082.49	783860.43	
3237.00	2.79	108.29	3236.67	12.49	12.49	17.10	0.28	436081.17	783864.60	
3332.00	3.16	109.03	3331.55	10.91	10.91	21.77	0.39	436079.59	783869.27	
3426.00	4.04	108.00	3425.36	9.05	9.05	27.37	0.94	436077.73	783874.87	
3520.00	4.26	107.29	3519.11	6.99	6.99	33.85	0.24	436075.67	783881.35	

5D 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
3615.00	4.58	105.35	3613.83	4.93	4.93	40.88	0.37	436073.61	783888.38	
3709.00	5.35	103.08	3707.48	2.95	2.95	48.77	0.85	436071.63	783896.27	
3898.00	4.97	103.67	3895.71	-0.98	-0.98	65.31	0.20	436067.70	783912.81	
3992.00	4.91	102.20	3989.36	-2.79	-2.79	73.19	0.15	436065.89	783920.69	
4087.00	4.62	103.23	4084.03	-4.53	-4.53	80.89	0.32	436064.15	783928.39	
4181.00	4.41	102.22	4177.74	-6.16	-6.16	88.11	0.24	436062.52	783935.61	
4276.00	4.12	100.70	4272.48	-7.57	-7.57	95.03	0.33	436061.11	783942.53	
4370.00	4.49	97.34	4366.21	-8.66	-8.66	102.00	0.48	436060.02	783949.50	
4465.00	4.77	97.85	4460.90	-9.68	-9.68	109.60	0.30	436059.00	783957.10	
4560.00	4.89	97.13	4555.57	-10.72	-10.72	117.53	0.14	436057.96	783965.03	
4654.00	4.69	96.69	4649.24	-11.66	-11.66	125.32	0.22	436057.02	783972.82	
4749.00	5.40	99.43	4743.87	-12.85	-12.85	133.59	0.79	436055.83	783981.09	
4844.00	5.83	100.24	4838.41	-14.44	-14.44	142.75	0.46	436054.24	783990.25	
4938.00	6.00	102.86	4931.91	-16.38	-16.38	152.24	0.34	436052.30	783999.74	
5032.00	5.61	102.11	5025.43	-18.44	-18.44	161.52	0.42	436050.24	784009.02	
5127.00	5.30	102.78	5120.00	-20.38	-20.38	170.34	0.33	436048.30	784017.84	
5193.00	5.15	102.59	5185.73	-21.70	-21.70	176.20	0.23	436046.98	784023.70	
5308.00	5.25	103.12	5300.25	-24.02	-24.02	186.36	0.10	436044.66	784033.86	
5403.00	5.36	101.99	5394.85	-25.93	-25.93	194.94	0.16	436042.75	784042.44	
5497.00	5.40	98.56	5488.43	-27.50	-27.50	203.60	0.34	436041.18	784051.10	
5591.00	5.69	97.81	5581.99	-28.79	-28.79	212.59	0.32	436039.89	784060.09	
5686.00	5.46	98.26	5676.54	-30.08	-30.08	221.73	0.25	436038.60	784069.23	
5781.00	5.47	96.63	5771.11	-31.26	-31.26	230.70	0.16	436037.42	784078.20	
5876.00	5.39	96.04	5865.69	-32.25	-32.25	239.64	0.10	436036.43	784087.14	
5970.00	5.59	94.12	5959.25	-33.04	-33.04	248.60	0.29	436035.64	784096.10	
6065.00	5.29	102.49	6053.83	-34.32	-34.32	257.49	0.89	436034.36	784104.99	
6159.00	4.90	102.60	6147.46	-36.13	-36.13	265.63	0.42	436032.55	784113.13	
6254.00	5.01	103.41	6242.10	-37.98	-37.98	273.63	0.14	436030.70	784121.13	
6348.00	4.79	101.21	6335.76	-39.70	-39.70	281.47	0.31	436028.98	784128.97	
6443.00	5.05	99.09	6430.41	-41.13	-41.13	289.49	0.33	436027.55	784136.99	
6538.00	4.84	96.43	6525.05	-42.24	-42.24	297.60	0.33	436026.44	784145.10	
6633.00	5.20	105.10	6619.69	-43.81	-43.81	305.74	0.88	436024.87	784153.24	
6728.00	5.43	107.22	6714.28	-46.26	-46.26	314.19	0.32	436022.42	784161.69	
6822.00	5.53	105.86	6807.85	-48.81	-48.81	322.80	0.17	436019.87	784170.30	
6916.00	5.41	105.75	6901.42	-51.25	-51.25	331.42	0.13	436017.43	784178.92	
7011.00	4.98	104.11	6996.03	-53.47	-53.47	339.73	0.48	436015.21	784187.23	
7106.00	4.80	103.64	7090.69	-55.42	-55.42	347.59	0.19	436013.26	784195.09	
7200.00	4.98	104.68	7184.35	-57.38	-57.38	355.36	0.21	436011.30	784202.86	
7295.00	4.83	103.64	7279.00	-59.37	-59.37	363.23	0.18	436009.31	784210.73	
7390.00	4.70	103.55	7373.67	-61.22	-61.22	370.90	0.14	436007.46	784218.40	
7485.00	4.76	104.89	7468.35	-63.15	-63.15	378.50	0.13	436005.53	784226.00	
7580.00	4.57	104.67	7563.03	-65.12	-65.12	385.97	0.20	436003.56	784233.47	
7674.00	4.61	106.60	7656.73	-67.15	-67.15	393.21	0.17	436001.53	784240.71	
7769.00	4.20	109.18	7751.45	-69.38	-69.38	400.15	0.48	435999.30	784247.65	
7865.00	3.74	109.90	7847.22	-71.60	-71.60	406.42	0.48	435997.08	784253.92	
7960.00	4.35	103.81	7941.98	-73.51	-73.51	412.83	0.78	435995.17	784260.33	
8055.00	4.76	103.41	8036.68	-75.29	-75.29	420.16	0.43	435993.39	784267.66	
8150.00	4.34	102.76	8131.38	-77.00	-77.00	427.50	0.45	435991.68	784275.00	
8244.00	4.36	103.96	8225.11	-78.64	-78.64	434.44	0.10	435990.04	784281.94	
8339.00	3.70	106.59	8319.88	-80.39	-80.39	440.88	0.72	435988.29	784288.38	
8433.00	4.03	107.18	8413.66	-82.23	-82.23	446.94	0.35	435986.45	784294.44	
8528.00	3.95	109.33	8508.43	-84.30	-84.30	453.22	0.18	435984.38	784300.72	
8623.00	3.80	110.14	8603.21	-86.47	-86.47	459.27	0.17	435982.21	784306.77	
8717.00	2.06	114.41	8697.09	-88.24	-88.24	463.73	1.86	435980.44	784311.23	
8812.00	1.93	116.76	8792.03	-89.67	-89.67	466.71	0.16	435979.01	784314.21	
8853.00	1.97	116.55	8833.01	-90.29	-90.29	467.96	0.10	435978.39	784315.46	
8901.00	3.62	46.68	8880.96	-89.62	-89.62	469.80	7.24	435979.06	784317.30	
8948.00	8.97	14.47	8927.67	-85.05	-85.05	471.80	13.22	435983.63	784319.30	
8996.00	14.00	359.97	8974.70	-75.61	-75.61	472.73	12.00	435993.07	784320.23	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
ID (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
9043.00	16.99	347.29	9020.00	-63.22	-63.22	471.21	9.58	436005.46	784318.71	
9091.00	18.37	344.86	9065.74	-49.08	-49.08	467.70	3.26	436019.60	784315.20	
9123.00	19.57	341.24	9096.00	-39.14	-39.14	464.66	5.25	436029.54	784312.16	
9154.00	21.28	339.88	9125.05	-28.94	-28.94	461.05	5.72	436039.74	784308.55	
9186.00	23.88	338.83	9154.59	-17.44	-17.44	456.71	8.22	436051.24	784304.21	
9216.00	26.95	338.06	9181.69	-5.47	-5.47	451.98	10.29	436063.21	784299.48	
9248.00	30.81	339.93	9209.70	8.96	8.96	446.45	12.39	436077.64	784293.95	
9279.00	35.15	344.45	9235.71	25.02	25.02	441.33	16.08	436093.70	784288.83	
9311.00	38.87	347.25	9261.26	43.70	43.70	436.65	12.76	436112.38	784284.15	
9343.00	41.68	351.72	9285.67	64.03	64.03	432.90	12.59	436132.71	784280.40	
9374.00	45.01	355.00	9308.22	85.16	85.16	430.46	12.96	436153.84	784277.96	
9406.00	49.13	357.57	9330.01	108.53	108.53	428.96	14.15	436177.21	784276.46	
9437.00	53.01	359.54	9349.49	132.63	132.63	428.36	13.46	436201.31	784275.86	
9469.00	57.20	0.96	9367.79	158.87	158.87	428.48	13.59	436227.55	784275.98	
9501.00	61.72	2.71	9384.05	186.41	186.41	429.38	14.89	436255.09	784276.88	
9532.00	66.10	4.78	9397.68	214.18	214.18	431.20	15.35	436282.86	784278.70	
9564.00	70.69	6.55	9409.46	243.78	243.78	434.15	15.24	436312.46	784281.65	
9595.00	74.57	7.83	9418.71	273.12	273.12	437.85	13.12	436341.80	784285.35	
9627.00	77.10	7.62	9426.54	303.87	303.87	442.02	7.93	436372.55	784289.52	
9658.00	79.38	6.42	9432.86	333.99	333.99	445.73	8.27	436402.67	784293.23	
9693.00	83.13	5.32	9438.18	368.39	368.39	449.26	11.16	436437.07	784296.76	
9724.00	84.95	4.53	9441.40	399.11	399.11	451.91	6.39	436467.79	784299.41	
9755.00	86.36	4.00	9443.75	429.93	429.93	454.21	4.86	436498.61	784301.71	
9787.00	86.71	3.51	9445.68	461.80	461.80	456.30	1.88	436530.48	784303.80	
9819.00	87.76	3.05	9447.22	493.71	493.71	458.13	3.58	436562.39	784305.63	
9913.00	90.77	2.80	9448.43	587.57	587.57	462.93	3.21	436656.25	784310.43	
10008.00	92.03	2.45	9446.11	682.44	682.44	467.28	1.38	436751.12	784314.78	
10103.00	91.54	3.67	9443.15	777.26	777.26	472.34	1.38	436845.94	784319.84	
10197.00	90.56	3.06	9441.43	871.08	871.08	477.86	1.23	436939.76	784325.36	
10292.00	91.82	3.42	9439.45	965.91	965.91	483.23	1.38	437034.59	784330.73	
10386.00	90.98	3.22	9437.16	1059.72	1059.72	488.67	0.92	437128.40	784336.17	
10481.00	90.07	2.90	9436.29	1154.58	1154.58	493.74	1.02	437223.26	784341.24	
10573.00	89.86	1.48	9436.34	1246.51	1246.51	497.26	1.56	437315.19	784344.76	
10664.00	88.53	0.10	9437.62	1337.49	1337.49	498.51	2.11	437406.17	784346.01	
10754.00	88.81	0.39	9439.71	1427.46	1427.46	498.90	0.45	437496.14	784346.40	
10845.00	90.14	0.45	9440.55	1518.45	1518.45	499.56	1.46	437587.13	784347.06	
10937.00	90.00	0.01	9440.43	1610.45	1610.45	499.93	0.50	437679.13	784347.43	
11029.00	89.44	0.18	9440.88	1702.45	1702.45	500.09	0.64	437771.13	784347.59	
11121.00	89.37	0.64	9441.84	1794.44	1794.44	500.74	0.51	437863.12	784348.24	
11216.00	88.88	0.29	9443.29	1889.43	1889.43	501.51	0.63	437958.11	784349.01	
11307.00	89.72	0.14	9444.40	1980.42	1980.42	501.86	0.94	438049.10	784349.36	
11400.00	87.97	359.03	9446.27	2073.39	2073.39	501.18	2.23	438142.07	784348.68	
11493.00	88.11	358.91	9449.46	2166.32	2166.32	499.51	0.20	438235.00	784347.01	
11585.00	87.48	358.60	9453.00	2258.23	2258.23	497.51	0.76	438326.91	784345.01	
11676.00	87.41	358.17	9457.05	2349.11	2349.11	494.95	0.48	438417.79	784342.45	
11769.00	88.46	358.88	9460.40	2442.01	2442.01	492.56	1.36	438510.69	784340.06	
11860.00	90.00	359.58	9461.63	2532.99	2532.99	491.34	1.86	438601.67	784338.84	
11956.00	89.86	0.25	9461.74	2628.99	2628.99	491.20	0.71	438697.67	784338.70	
12051.00	90.84	0.53	9461.16	2723.99	2723.99	491.84	1.07	438792.67	784339.34	
12146.00	91.82	0.36	9458.96	2818.96	2818.96	492.58	1.05	438887.64	784340.08	
12240.00	90.49	357.59	9457.06	2912.91	2912.91	490.90	3.27	438981.59	784338.40	
12335.00	90.21	358.37	9456.48	3007.85	3007.85	487.55	0.87	439076.53	784335.05	
12430.00	89.86	357.84	9456.42	3102.80	3102.80	484.41	0.67	439171.48	784331.91	
12524.00	92.16	0.33	9454.77	3196.76	3196.76	482.91	3.61	439265.44	784330.41	
12618.00	91.12	0.82	9452.08	3290.71	3290.71	483.85	1.22	439359.39	784331.35	
12713.00	90.42	0.54	9450.80	3385.70	3385.70	484.98	0.79	439454.38	784332.48	
12809.00	89.30	0.45	9451.04	3481.69	3481.69	485.81	1.17	439550.37	784333.31	
12903.00	88.67	0.74	9452.70	3575.67	3575.67	486.78	0.74	439644.35	784334.28	
12998.00	87.83	0.33	9455.60	3670.62	3670.62	487.67	0.98	439739.30	784335.17	

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
13092.00	87.70	0.30	9459.27	3764.55	3764.55	488.19	0.14	439833.23	784335.69	
13187.00	89.93	359.65	9461.23	3859.52	3859.52	488.14	2.44	439928.20	784335.64	
13282.00	89.44	359.91	9461.75	3954.52	3954.52	487.78	0.58	440023.20	784335.28	
13376.00	90.77	358.58	9461.58	4048.51	4048.51	486.54	2.00	440117.19	784334.04	
13470.00	91.12	358.55	9460.03	4142.47	4142.47	484.19	0.37	440211.15	784331.69	
13565.00	90.77	359.11	9458.46	4237.43	4237.43	482.25	0.70	440306.11	784329.75	
13660.00	90.14	359.09	9457.71	4332.42	4332.42	480.76	0.66	440401.10	784328.26	
13755.00	89.93	359.50	9457.65	4427.41	4427.41	479.59	0.48	440496.09	784327.09	
13849.00	91.47	0.62	9456.50	4521.40	4521.40	479.68	2.03	440590.08	784327.18	
13944.00	91.33	0.24	9454.18	4616.37	4616.37	480.40	0.43	440685.05	784327.90	
14039.00	88.39	359.09	9454.41	4711.35	4711.35	479.84	3.32	440780.03	784327.34	
14133.00	86.86	359.10	9458.31	4805.26	4805.26	478.36	1.63	440873.94	784325.86	
14228.00	88.25	0.99	9462.36	4900.17	4900.17	478.43	2.47	440968.85	784325.93	
14323.00	88.95	0.66	9464.68	4995.13	4995.13	479.80	0.81	441063.81	784327.30	
14417.00	90.98	1.86	9464.74	5089.10	5089.10	481.87	2.51	441157.78	784329.37	
14512.00	91.05	1.86	9463.06	5184.03	5184.03	484.95	0.07	441252.71	784332.45	
14607.00	90.91	1.67	9461.43	5278.97	5278.97	487.88	0.25	441347.65	784335.38	
14701.00	90.91	1.72	9459.94	5372.92	5372.92	490.66	0.05	441441.60	784338.16	
14796.00	91.26	3.29	9458.14	5467.81	5467.81	494.81	1.69	441536.49	784342.31	
14890.00	91.68	2.32	9455.73	5561.66	5561.66	499.41	1.12	441630.34	784346.91	
14985.00	91.12	1.00	9453.41	5656.59	5656.59	502.16	1.51	441725.27	784349.66	
15079.00	90.28	1.50	9452.26	5750.56	5750.56	504.21	1.04	441819.24	784351.71	
15173.00	90.77	0.37	9451.40	5844.54	5844.54	505.74	1.31	441913.22	784353.24	
15268.00	90.63	0.27	9450.24	5939.54	5939.54	506.27	0.18	442008.22	784353.77	
15362.00	91.68	0.25	9448.34	6033.51	6033.51	506.70	1.12	442102.19	784354.20	
15457.00	91.88	0.19	9445.39	6128.47	6128.47	507.06	0.22	442197.15	784354.56	
15552.00	89.72	359.88	9444.07	6223.45	6223.45	507.12	2.30	442292.13	784354.62	
15646.00	90.56	359.14	9443.84	6317.45	6317.45	506.32	1.19	442386.13	784353.82	
15741.00	90.21	359.14	9443.20	6412.43	6412.43	504.89	0.37	442481.11	784352.39	
15836.00	91.89	358.64	9441.46	6507.40	6507.40	503.05	1.85	442576.08	784350.55	
15930.00	90.91	356.82	9439.16	6601.29	6601.29	499.33	2.20	442669.97	784346.83	
16024.00	90.70	358.04	9437.84	6695.18	6695.18	495.12	1.32	442763.86	784342.62	
16119.00	91.75	358.60	9435.81	6790.12	6790.12	492.33	1.25	442858.80	784339.83	
16214.00	91.89	0.40	9432.79	6885.07	6885.07	491.50	1.90	442953.75	784339.00	
16309.00	92.17	1.04	9429.43	6980.00	6980.00	492.70	0.73	443048.68	784340.20	
16403.00	89.86	0.23	9427.76	7073.97	7073.97	493.74	2.60	443142.65	784341.24	
16498.00	88.67	359.80	9428.98	7168.96	7168.96	493.76	1.33	443237.64	784341.26	
16593.00	88.25	359.94	9431.53	7263.93	7263.93	493.55	0.47	443332.61	784341.05	
16687.00	90.14	0.65	9432.85	7357.91	7357.91	494.03	2.15	443426.59	784341.53	
16781.00	91.75	2.40	9431.30	7451.86	7451.86	496.53	2.53	443520.54	784344.03	
16876.00	91.61	3.58	9428.52	7546.69	7546.69	501.48	1.25	443615.37	784348.98	
16971.00	91.96	3.51	9425.56	7641.46	7641.46	507.35	0.38	443710.14	784354.85	
17065.00	91.12	0.46	9423.03	7735.35	7735.35	510.61	3.36	443804.03	784358.11	
17160.00	92.45	2.17	9420.07	7830.28	7830.28	512.79	2.28	443898.96	784360.29	
17255.00	91.67	0.57	9416.66	7925.19	7925.19	515.06	1.87	443993.87	784362.56	
17349.00	90.84	359.97	9414.60	8019.16	8019.16	515.50	1.09	444087.84	784363.00	
17444.00	90.49	359.66	9413.50	8114.15	8114.15	515.19	0.49	444182.83	784362.69	
17539.00	90.98	359.52	9412.28	8209.14	8209.14	514.51	0.54	444277.82	784362.01	
17633.00	91.54	359.36	9410.21	8303.12	8303.12	513.59	0.62	444371.80	784361.09	
17728.00	89.79	358.22	9409.11	8398.08	8398.08	511.59	2.20	444466.76	784359.09	
17823.00	88.60	357.81	9410.44	8493.01	8493.01	508.30	1.32	444561.69	784355.80	
17918.00	88.88	358.49	9412.53	8587.94	8587.94	505.23	0.77	444656.62	784352.73	
18012.00	89.02	358.12	9414.26	8681.88	8681.88	502.45	0.42	444750.56	784349.95	
18106.00	89.86	358.99	9415.17	8775.85	8775.85	500.08	1.29	444844.53	784347.58	
18201.00	91.26	2.99	9414.24	8870.81	8870.81	501.72	4.46	444939.49	784349.22	
18295.00	90.77	1.37	9412.58	8964.72	8964.72	505.30	1.80	445033.40	784352.80	
18390.00	90.63	1.62	9411.42	9059.68	9059.68	507.78	0.30	445128.36	784355.28	
18485.00	90.14	2.67	9410.78	9154.61	9154.61	511.33	1.22	445223.29	784358.83	
18580.00	90.56	1.68	9410.20	9249.54	9249.54	514.94	1.13	445318.22	784362.44	

SD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
HD (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
18673.00	90.98	358.05	9408.95	9342.52	9342.52	514.72	3.93	445411.20	784362.22	
18768.00	90.70	357.96	9407.56	9437.45	9437.45	511.41	0.31	445506.13	784358.91	
18862.00	90.63	358.11	9406.47	9531.39	9531.39	508.19	0.18	445600.07	784355.69	
18957.00	91.75	357.70	9404.49	9626.30	9626.30	504.72	1.26	445694.98	784352.22	
19051.00	91.68	357.91	9401.68	9720.19	9720.19	501.12	0.24	445788.87	784348.62	
19146.00	90.70	357.23	9399.71	9815.08	9815.08	497.09	1.26	445883.76	784344.59	
19241.00	90.42	357.61	9398.78	9909.98	9909.98	492.81	0.50	445978.66	784340.31	
19335.00	89.51	356.90	9398.84	10003.87	10003.87	488.31	1.23	446072.55	784335.81	
19347.00	89.72	357.21	9398.92	10015.86	10015.86	487.70	3.12	446084.54	784335.20	Last WFT MWD Svy
19410.00	89.72	357.21	9399.22	10078.78	10078.78	484.63	0.00	446147.46	784332.13	Proj to TD