X. Bit record

ConocoPhillips Canada

Bit Summary

COPRC MIRROR LAKE P-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
200/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470		Appraisal	HORIZONTAL	289.35	5.20

Bits

BHA No.	Bit Run	Size (mm)	Make	Model	SN	IADC Codes	TFA (incl Noz) (mm²)	Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Drilled (m)	Drill Time (hr)	BHA ROP (m/hr)	WOB Max (daN)	WOB Min (daN)	Max RPM (rpm)	Min RPM (rpm)	Bit Dull
1	1	311.0	Smith	mi616	JD3509	___	1,283	14.3/14.3/14.3/14.3/14.3/14.3/14.3/14.3	18.00	450.00	432.00	29.00	14.9	10,000	3,000	120	69	1-1-NO-G-X--WT-HP
2	2	311.0	Reed	m4685	b159531	___	982	19.1/19.1/19.1/12.7	450.00	602.00	152.00	21.00	7.2	11,000	9,000	120	120	-------
3	3	222.0	ulterra	u513	17071	___	677	11.1/11.1/11.1/11.1/11.1/11.1/11.1/11.1	602.00	1,921.00	1,319.00	62.25	21.2	8,000	6,000	208	191	-------
4	4	222.0	Smith	FHi18B	RA3595	___	942	20.0/20.0/20.0	1,921.00	2,152.00	231.00	37.50	6.2	20,000	16,000	171	141	2-3-WT-G-1-1-NO-TD
5	5	156.0	Smith	MS1613UBPXX	JH8401	___	581	11.1/11.1/11.1/11.1/11.1/11.1/11.1	2,152.00	3,142.00	990.00	41.75	23.7	10,000	8,000	215	215	-------
6	5 RR	156.0	Smith	MS1613UBPXX	JH8401	___	581	11.1/11.1/11.1/11.1/11.1/11.1/11.1	3,142.00	3,152.00	10.00	0.50	20.0	8,000	8,000	80	80	1-1-NO-G-1-1-NO-TD

XI. Directional Summary

ConocoPhillips Canada

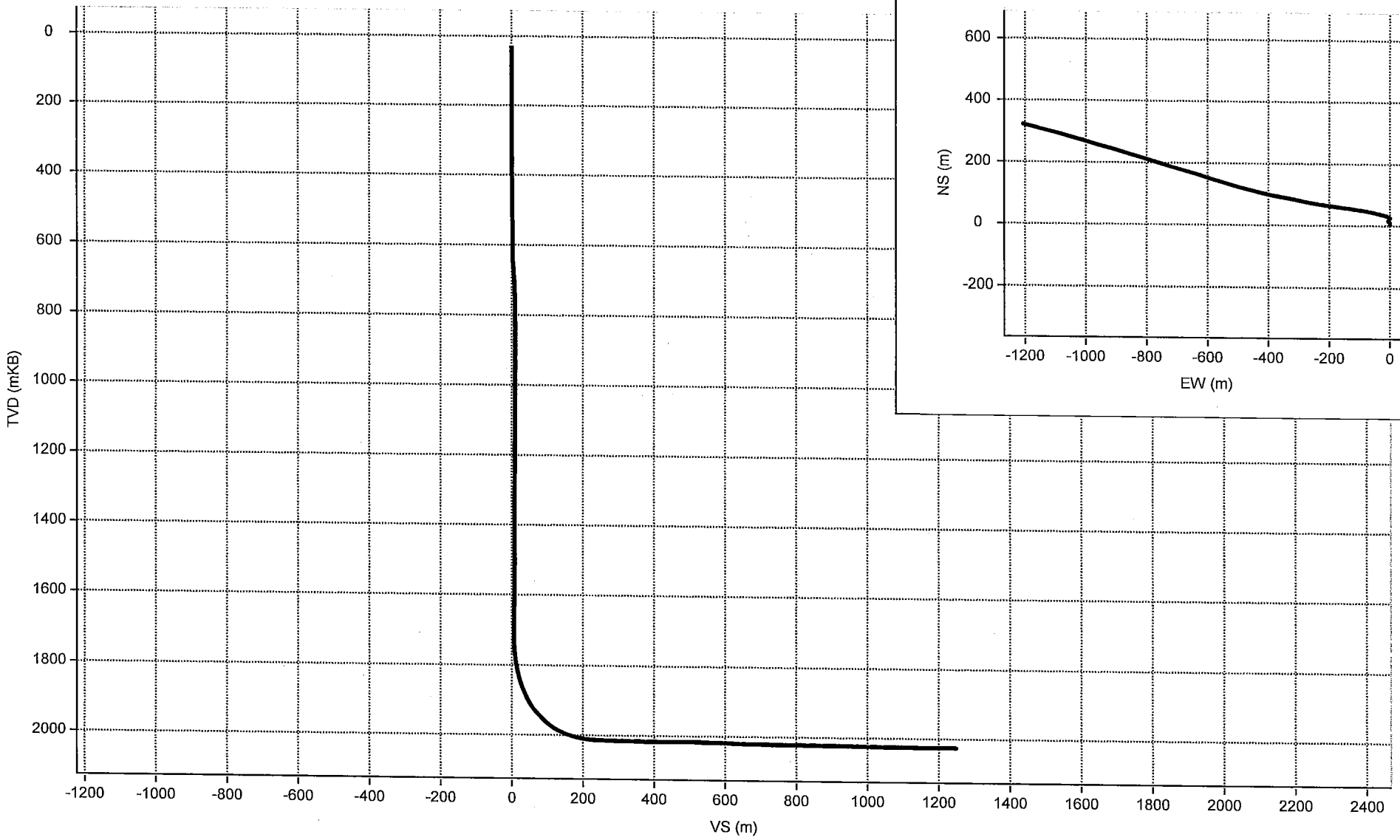
Directional Plot

COPRC MIRROR LAKE P-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
200/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470		Appraisal	HORIZONTAL	289.35	5.20

Kick Off Date	Kick Off Method	Kick Off Depth (mKB)	Kick Off Depth (mKB)	MD Tie In (mKB)	TVDTie In (mKB)	Azimuth Tie...	Inclination...	NSTie In (m)	EWTie In (m)	VS Tie In (m)

Vertical Section



Plan

ConocoPhillips
Canada

Directional Survey
Mirror Lake P-20 65-00 126-45

/ UWI	Surface Legal Location	District	Field Name	License No.
/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470

Program	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Appraisal	HORIZONTAL	289.35	5.20

Wellbore Name	Parent Wellbore	Wellbore API/UWI	Job
Original Hole			DRILLING ORIGINAL, 1/24/2014 00:00

Kick Off Date	Kick Off Method	Kick Off Depth (mKB)	Vertical Section Direction (°)

Date	Description	As Ran	Proposed?
1/29/2014	Directional Survey from Tour Sheet Import	No	No

MD Tie In (mKB)	TVDTie In (mKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (m)	EWTie In (m)

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
1/29/2014	28.00	0.50	0.00	28.00	0.12	0.03	0.12	0.00	0.54	WIRELINE	
1/29/2014	56.00	0.60	0.00	56.00	0.39	0.10	0.39	0.00	0.11	WIRELINE	
1/29/2014	56.00	0.60	0.00	56.00	0.39	0.10	0.39	0.00	0.11	WIRELINE	
1/29/2014	84.98	0.40	0.00	84.98	0.64	0.17	0.64	0.00	0.21	WIRELINE	
1/29/2014	131.00	0.30	0.00	131.00	0.92	0.24	0.92	0.00	0.07	WIRELINE	
1/29/2014	151.00	0.30	0.00	151.00	1.03	0.27	1.03	0.00	0.00	WIRELINE	
1/29/2014	188.00	0.20	0.00	188.00	1.19	0.31	1.19	0.00	0.08	WIRELINE	
1/30/2014	281.00	0.20	0.00	281.00	1.52	0.39	1.52	0.00	0.00	WIRELINE	
1/30/2014	300.00	0.20	0.00	300.00	1.58	0.41	1.58	0.00	0.00	WIRELINE	
1/31/2014	328.00	0.90	0.00	327.99	1.85	0.48	1.85	0.00	0.75	WIRELINE	
1/31/2014	355.00	1.30	0.00	354.99	2.37	0.61	2.37	0.00	0.44	WIRELINE	
1/31/2014	357.00	1.30	0.00	356.99	2.41	0.62	2.41	0.00	0.00	WIRELINE	
1/31/2014	388.00	1.60	0.00	387.98	3.20	0.82	3.20	0.00	0.29	WIRELINE	
1/31/2014	412.00	2.00	0.00	411.97	3.95	1.02	3.95	0.00	0.50	WIRELINE	
1/31/2014	450.00	2.30	0.00	449.94	5.38	1.38	5.38	0.00	0.24	WIRELINE	
2014	467.00	0.40	0.00	466.93	5.78	1.49	5.78	0.00	3.35	WIRELINE	
2/2/2014	487.00	1.30	0.00	486.93	6.08	1.56	6.08	0.00	1.35	WIRELINE	
2/2/2014	514.00	1.50	0.00	513.92	6.74	1.73	6.74	0.00	0.22	WIRELINE	
2/2/2014	544.00	1.90	0.00	543.91	7.63	1.96	7.63	0.00	0.40	WIRELINE	
2/2/2014	600.00	1.40	0.00	599.89	9.24	2.38	9.24	0.00	0.27	WIRELINE	
2/7/2014	608.40	1.60	7.20	608.28	9.46	2.42	9.46	0.01	0.98	DIRECTIONA	PathFinder
2/7/2014	645.63	0.60	311.20	645.51	10.10	2.66	10.10	-0.07	1.09	DIRECTIONA	PathFinder
2/7/2014	683.60	9.00	318.00	683.31	12.64	5.34	12.44	-2.21	6.64	DIRECTIONA	PathFinder
2/7/2014	721.66	0.90	317.90	721.20	15.52	8.09	14.88	-4.40	6.38	DIRECTIONA	PathFinder
2/7/2014	759.75	0.90	254.40	759.28	15.80	8.59	15.02	-4.89	0.75	DIRECTIONA	PathFinder
2/7/2014	797.80	0.70	282.20	797.33	15.94	9.08	14.99	-5.41	0.34	DIRECTIONA	PathFinder
2/7/2014	835.87	0.40	326.90	835.40	16.19	9.42	15.15	-5.71	0.40	DIRECTIONA	PathFinder
2/7/2014	873.90	0.40	355.60	873.43	16.45	9.56	15.40	-5.79	0.16	DIRECTIONA	PathFinder
2/7/2014	912.00	0.80	20.40	911.52	16.78	9.58	15.78	-5.71	0.37	DIRECTIONA	PathFinder
2/7/2014	988.00	0.70	19.50	987.52	17.55	9.49	16.71	-5.37	0.04	DIRECTIONA	PathFinder
2/8/2014	1,045.00	1.50	14.84	1,044.51	18.47	9.46	17.76	-5.06	0.42	DIRECTIONA	PathFinder
2/8/2014	1,083.00	1.28	27.45	1,082.50	19.21	9.37	18.62	-4.74	0.30	DIRECTIONA	PathFinder
2014	1,121.00	1.59	29.26	1,120.48	19.92	9.15	19.46	-4.28	0.25	DIRECTIONA	PathFinder
2/8/2014	1,197.00	0.90	31.80	1,196.47	21.17	8.71	20.88	-3.45	0.27	DIRECTIONA	PathFinder
2/8/2014	1,235.00	0.70	28.10	1,234.46	21.58	8.57	21.34	-3.19	0.16	DIRECTIONA	PathFinder

ConocoPhillips Canada

Directional Survey
Mirror Lake P-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
200/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	289.35	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
2/8/2014	1,273.00	1.10	150.40	1,272.46	21.43	8.26	21.23	-2.90	1.25	DIRECTIONA	PathFinder
2/8/2014	1,311.00	1.00	101.40	1,310.45	20.98	7.68	20.85	-2.39	0.69	DIRECTIONA	PathFinder
2/8/2014	1,349.50	1.20	349.90	1,348.95	21.28	7.51	21.18	-2.13	1.42	DIRECTIONA	PathFinder
2/8/2014	1,387.50	1.40	15.40	1,386.94	22.11	7.68	22.02	-2.08	0.48	DIRECTIONA	PathFinder
2/8/2014	1,425.50	0.40	0.10	1,424.94	22.68	7.71	22.60	-1.96	0.80	DIRECTIONA	PathFinder
2/8/2014	1,463.50	0.62	1.66	1,462.93	23.02	7.79	22.93	-1.95	0.17	DIRECTIONA	PathFinder
2/8/2014	1,501.50	0.88	5.67	1,500.93	23.51	7.88	23.43	-1.92	0.21	DIRECTIONA	PathFinder
2/9/2014	1,539.50	0.90	135.50	1,538.93	23.57	7.67	23.51	-1.68	1.27	DIRECTIONA	PathFinder
2/9/2014	1,577.50	0.70	120.30	1,576.92	23.21	7.19	23.18	-1.27	0.23	DIRECTIONA	PathFinder
2/9/2014	1,654.00	1.00	54.80	1,653.42	23.33	6.31	23.33	-0.32	0.37	DIRECTIONA	PathFinder
2/9/2014	1,692.00	1.20	31.40	1,691.41	23.86	5.99	23.86	0.16	0.38	DIRECTIONA	PathFinder
2/9/2014	1,711.00	1.80	359.80	1,710.40	24.33	6.01	24.33	0.26	1.58	DIRECTIONA	PathFinder
2/9/2014	1,720.00	1.90	10.60	1,719.40	24.62	6.06	24.61	0.29	1.21	DIRECTIONA	PathFinder
2/9/2014	1,730.00	1.60	353.80	1,729.40	24.92	6.12	24.92	0.30	1.77	DIRECTIONA	PathFinder
2/9/2014	1,739.00	2.30	320.90	1,738.39	25.18	6.31	25.18	0.18	4.31	DIRECTIONA	PathFinder
2/9/2014	1,749.00	3.71	313.14	1,748.38	25.56	6.76	25.56	-0.19	4.39	DIRECTIONA	PathFinder
2/9/2014	1,758.00	5.10	309.20	1,757.35	26.02	7.38	26.01	-0.71	4.74	DIRECTIONA	PathFinder
2/9/2014	1,767.50	6.10	306.60	1,766.80	26.62	8.23	26.58	-1.44	3.26	DIRECTIONA	PathFinder
2/9/2014	1,786.00	8.48	304.86	1,785.15	28.14	10.43	27.94	-3.35	3.88	DIRECTIONA	PathFinder
2/9/2014	1,796.50	9.90	302.26	1,795.52	29.26	12.02	28.87	-4.75	4.23	DIRECTIONA	PathFinder
2/9/2014	1,805.50	10.78	296.84	1,804.37	30.29	13.58	29.66	-6.15	4.37	DIRECTIONA	PathFinder
2/9/2014	1,815.00	11.62	293.18	1,813.69	31.43	15.40	30.44	-7.83	3.47	DIRECTIONA	PathFinder
2/9/2014	1,824.50	12.90	289.66	1,822.97	32.65	17.40	31.17	-9.70	4.68	DIRECTIONA	PathFinder
2/10/2014	1,834.00	14.58	285.16	1,832.20	33.98	19.65	31.84	-11.86	6.28	DIRECTIONA	PathFinder
2/10/2014	1,843.50	16.22	285.66	1,841.36	35.51	22.18	32.51	-14.29	5.20	DIRECTIONA	PathFinder
2/10/2014	1,853.00	18.12	286.88	1,850.44	37.38	24.98	33.30	-16.98	6.11	DIRECTIONA	PathFinder
2/10/2014	1,862.50	20.00	286.20	1,859.42	39.58	28.08	34.18	-19.95	5.98	DIRECTIONA	PathFinder
2/10/2014	1,873.00	21.61	284.46	1,869.23	42.32	31.81	35.17	-23.55	4.93	DIRECTIONA	PathFinder
2/10/2014	1,881.50	23.70	283.00	1,877.08	44.79	35.08	35.94	-26.73	7.64	DIRECTIONA	PathFinder
2/10/2014	1,891.50	25.50	284.70	1,886.17	48.08	39.24	36.94	-30.77	5.80	DIRECTIONA	PathFinder

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Directional Survey
Mirror Lake P-20 65-00 126-45

UWI	Surface Legal Location	District	Field Name	License No.
J/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	289.35	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
2/10/2014	1,901.00	27.00	282.34	1,894.69	51.51	43.44	37.92	-34.86	5.77	DIRECTIONA	PathFinder
2/11/2014	1,910.50	28.80	283.40	1,903.08	55.23	47.89	38.91	-39.19	5.90	DIRECTIONA	PathFinder
2/11/2014	1,920.00	30.90	281.10	1,911.32	59.26	52.61	39.91	-43.81	7.55	DIRECTIONA	PathFinder
2/11/2014	1,929.50	34.60	284.40	1,919.31	63.78	57.74	41.05	-48.82	12.97	DIRECTIONA	PathFinder
2/11/2014	1,939.00	37.70	282.90	1,926.98	68.85	63.34	42.37	-54.26	10.18	DIRECTIONA	PathFinder
2/11/2014	1,948.50	40.30	282.34	1,934.36	74.29	69.32	43.68	-60.10	8.29	DIRECTIONA	PathFinder
2/11/2014	1,958.00	42.51	282.34	1,941.49	80.09	75.59	45.02	-66.24	6.98	DIRECTIONA	PathFinder
2/11/2014	1,967.50	44.32	279.87	1,948.39	86.13	82.11	46.27	-72.64	7.84	DIRECTIONA	PathFinder
2/12/2014	1,977.00	46.31	280.45	1,955.07	92.41	88.84	47.47	-79.29	6.42	DIRECTIONA	PathFinder
2/12/2014	1,986.50	48.39	279.96	1,961.51	98.98	95.80	48.70	-86.17	6.67	DIRECTIONA	PathFinder
2/12/2014	1,996.00	50.69	277.67	1,967.67	105.77	102.99	49.81	-93.31	9.11	DIRECTIONA	PathFinder
2/12/2014	2,015.00	57.30	277.60	1,978.83	120.28	118.22	51.85	-108.53	10.44	DIRECTIONA	PathFinder
2/2014	2,024.50	60.60	278.50	1,983.73	128.07	126.30	52.99	-116.59	10.70	DIRECTIONA	PathFinder
2/12/2014	2,034.00	64.20	278.50	1,988.13	136.18	134.67	54.23	-124.92	11.37	DIRECTIONA	PathFinder
2/12/2014	2,043.50	66.00	277.50	1,992.13	144.50	143.22	55.43	-133.45	6.37	DIRECTIONA	PathFinder
2/12/2014	2,053.00	67.70	277.00	1,995.87	152.95	151.88	56.53	-142.11	5.56	DIRECTIONA	PathFinder
2/12/2014	2,062.50	70.22	276.74	1,999.28	161.53	160.66	57.59	-150.92	7.99	DIRECTIONA	PathFinder
2/12/2014	2,072.00	72.78	276.88	2,002.29	170.28	169.57	58.66	-159.86	8.10	DIRECTIONA	PathFinder
2/12/2014	2,081.50	75.30	278.37	2,004.91	179.21	178.63	59.88	-168.91	9.15	DIRECTIONA	PathFinder
2/13/2014	2,091.00	77.91	276.74	2,007.11	188.26	187.80	61.09	-178.07	9.64	DIRECTIONA	PathFinder
2/13/2014	2,100.50	79.72	277.98	2,008.95	197.40	197.04	62.28	-187.32	6.89	DIRECTIONA	PathFinder
2/13/2014	2,110.00	81.80	277.50	2,010.47	206.62	206.34	63.55	-196.61	6.74	DIRECTIONA	PathFinder
2/13/2014	2,119.50	84.20	277.36	2,011.63	215.90	215.69	64.77	-205.96	7.59	DIRECTIONA	PathFinder
2/13/2014	2,131.00	85.90	277.90	2,012.62	227.20	227.05	66.29	-217.31	4.65	DIRECTIONA	PathFinder
2/13/2014	2,152.00	89.00	277.90	2,013.56	247.93	247.87	69.17	-238.09	4.43	DIRECTIONA	PathFinder
2/16/2014	2,171.00	88.00	279.90	2,014.06	266.78	266.76	72.11	-256.85	3.53	DIRECTIONA	PathFinder
2/16/2014	2,190.00	88.00	280.50	2,014.72	285.69	285.68	75.47	-275.54	0.95	DIRECTIONA	PathFinder
2014	2,209.00	88.50	281.10	2,015.30	304.62	304.62	79.03	-294.19	1.23	DIRECTIONA	PathFinder
2/16/2014	2,228.00	89.20	281.20	2,015.68	323.58	323.58	82.70	-312.83	1.12	DIRECTIONA	PathFinder
2/16/2014	2,247.00	89.30	281.50	2,015.93	342.54	342.54	86.44	-331.46	0.50	DIRECTIONA	PathFinder

ConocoPhillips Canada

Directional Survey

Mirror Lake P-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
200/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	289.35	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
2/16/2014	2,266.00	88.20	276.50	2,016.34	361.45	361.43	89.41	-350.21	8.08	DIRECTIONA	PathFinder
2/16/2014	2,285.00	89.30	281.00	2,016.76	380.35	380.31	92.30	-368.98	7.31	DIRECTIONA	PathFinder
2/16/2014	2,304.00	89.80	281.90	2,016.91	399.33	399.27	96.07	-387.60	1.63	DIRECTIONA	PathFinder
2/16/2014	2,323.00	90.00	281.90	2,016.94	418.32	418.25	99.99	-406.20	0.32	DIRECTIONA	PathFinder
2/17/2014	2,342.50	90.40	283.80	2,016.87	437.82	437.73	104.33	-425.21	2.99	DIRECTIONA	PathFinder
2/17/2014	2,342.50	90.40	283.80	2,016.87	437.82	437.73	104.33	-425.21	2.99	DIRECTIONA	PathFinder
2/17/2014	2,361.50	90.70	284.40	2,016.69	456.82	456.73	108.96	-443.63	1.06	DIRECTIONA	PathFinder
2/17/2014	2,380.50	90.60	283.40	2,016.48	475.82	475.73	113.52	-462.08	1.59	DIRECTIONA	PathFinder
2/17/2014	2,399.50	89.40	283.60	2,016.48	494.81	494.72	117.96	-480.55	1.92	DIRECTIONA	PathFinder
2/17/2014	2,418.50	89.88	284.94	2,016.59	513.81	513.72	122.64	-498.96	2.25	DIRECTIONA	PathFinder
2/17/2014	2,437.50	89.60	285.90	2,016.68	532.81	532.72	127.69	-517.28	1.58	DIRECTIONA	PathFinder
2/17/2014	2,514.00	87.80	286.80	2,018.42	609.22	609.17	149.22	-590.66	0.79	DIRECTIONA	PathFinder
2/17/2014	2,552.00	88.10	287.00	2,019.78	647.15	647.12	160.26	-627.00	0.28	DIRECTIONA	PathFinder
2/17/2014	2,571.00	88.30	287.10	2,020.37	666.12	666.10	165.83	-645.15	0.35	DIRECTIONA	PathFinder
2/17/2014	2,589.50	89.10	285.40	2,020.79	684.61	684.59	171.00	-662.91	3.05	DIRECTIONA	PathFinder
2/17/2014	2,609.00	89.70	285.60	2,021.00	704.11	704.09	176.21	-681.70	0.97	DIRECTIONA	PathFinder
2/17/2014	2,628.00	89.80	287.00	2,021.08	723.10	723.08	181.54	-699.93	2.22	DIRECTIONA	PathFinder
2/17/2014	2,703.50	89.60	286.70	2,021.47	798.54	798.54	203.43	-772.19	0.14	DIRECTIONA	PathFinder
2/17/2014	2,722.50	89.00	287.30	2,021.71	817.52	817.52	208.98	-790.36	1.34	DIRECTIONA	PathFinder
2/17/2014	2,741.50	88.90	284.90	2,022.06	836.51	836.51	214.25	-808.61	3.79	DIRECTIONA	PathFinder
2/17/2014	2,760.50	89.10	285.60	2,022.39	855.51	855.51	219.25	-826.94	1.15	DIRECTIONA	PathFinder
2/17/2014	2,779.50	89.30	286.40	2,022.65	874.50	874.50	224.49	-845.20	1.30	DIRECTIONA	PathFinder
2/17/2014	2,798.50	89.40	286.30	2,022.87	893.50	893.50	229.83	-863.43	0.22	DIRECTIONA	PathFinder
2/18/2014	2,818.00	89.70	286.60	2,023.02	912.99	912.99	235.36	-882.13	0.65	DIRECTIONA	PathFinder
2/18/2014	2,818.00	89.70	286.60	2,023.02	912.99	912.99	235.36	-882.13	0.65	DIRECTIONA	PathFinder
2/18/2014	2,837.00	89.90	286.60	2,023.09	931.98	931.98	240.78	-900.34	0.32	DIRECTIONA	PathFinder
2/18/2014	2,856.00	89.90	284.70	2,023.12	950.98	950.98	245.91	-918.64	3.00	DIRECTIONA	PathFinder
2/18/2014	2,875.00	88.80	283.80	2,023.34	969.98	969.98	250.58	-937.05	2.24	DIRECTIONA	PathFinder
2/18/2014	2,894.00	89.00	285.50	2,023.70	988.97	988.97	255.39	-955.43	2.70	DIRECTIONA	PathFinder
2/18/2014	2,913.00	89.10	286.00	2,024.02	1,007.97	1,007.97	260.55	-973.71	0.81	DIRECTIONA	PathFinder

ConocoPhillips Canada

Directional Survey
Mirror Lake P-20 65-00 126-45

/ UWI	Surface Legal Location	District	Field Name	License No.
)/D-020/L094P1699	P-20 65-00 126-45	NEW VENTURES	Mirror Lake	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	289.35	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
2/18/2014	2,932.00	89.10	285.60	2,024.31	1,026.96	1,026.96	265.72	-991.99	0.63	DIRECTIO NA	PathFinder
2/18/2014	2,951.00	89.40	285.80	2,024.56	1,045.96	1,045.96	270.86	-1,010.28	0.57	DIRECTIO NA	PathFinder
2/18/2014	3,008.00	89.70	284.50	2,025.01	1,102.96	1,102.96	285.76	-1,065.30	0.70	DIRECTIO NA	PathFinder
2/18/2014	3,027.00	89.90	285.10	2,025.08	1,121.96	1,121.95	290.61	-1,083.67	1.00	DIRECTIO NA	PathFinder
2/18/2014	3,046.00	89.70	284.30	2,025.14	1,140.96	1,140.95	295.43	-1,102.04	1.30	DIRECTIO NA	PathFinder
2/18/2014	3,065.00	89.80	283.80	2,025.23	1,159.95	1,159.95	300.04	-1,120.48	0.81	DIRECTIO NA	PathFinder
2/18/2014	3,065.00	89.90	284.90	2,025.23	1,159.95	1,159.95	300.04	-1,120.48	0.81	DIRECTIO NA	PathFinder
2/18/2014	3,103.00	89.90	283.70	2,025.29	1,197.95	1,197.95	309.43	-1,157.30	0.95	DIRECTIO NA	PathFinder
2/20/2014	3,153.00	89.90	283.90	2,025.38	1,247.94	1,247.94	321.36	-1,205.85	0.12	DIRECTIO NA	PathFinder