



Insider Trading Summary

* This summary starts with each insider's opening balance as of July 1, 2010, or the effective date in which the individual became an insider. Balance includes shares held by individual directly, or indirectly, or by entities which he or she controls, unless otherwise noted.

* All data is provided to the corporation by the individual insider. The insider is responsible to provide the data to the corporation within two days following the transaction.

Name	Position	Transaction Detail							Opening Balance (shares)	Closing Balance (shares)
		Date	Trade Type	Ownership Type	Comment	Number of Shares	Price per share	Value		
Don Gray	Chairman	1-Jul-10		Direct/Indirect	Opening Balance				-	2,101,840
Don Gray	Chairman	9-Jul-10	Buy	Direct/Indirect	Private Placement	666,666	\$ 3.75	\$ 2,499,998	2,101,840	2,768,506
Don Gray	Chairman	4-Sep-13	Buy	Direct/Indirect	Grey Market	30,000	\$ 2.20	\$ 66,000	2,768,506	2,798,506
Don Gray	Chairman	13-Sep-13	Buy	Direct/Indirect	Grey Market	50,000	\$ 2.50	\$ 125,000	2,798,506	2,848,506
Don Gray	Chairman	19-Sep-13	Buy	Direct/Indirect	Grey Market	100,000	\$ 2.50	\$ 250,000	2,848,506	2,948,506
Don Gray	Chairman	8-Oct-13	Buy	Direct/Indirect	Grey Market	33,333	\$ 2.65	\$ 88,332	2,948,506	2,981,839
Don Gray	Chairman	10-Oct-13	Buy	Direct/Indirect	Grey Market	100,000	\$ 2.75	\$ 275,000	2,981,839	3,081,839
Don Gray	Chairman	20-Nov-13	Buy	Direct/Indirect	Market	100,000	\$ 2.59	\$ 258,920	3,081,839	3,181,839
Don Gray	Chairman	21-Nov-13	Buy	Direct/Indirect	Market	48,100	\$ 2.69	\$ 129,389	3,181,839	3,229,939
Don Gray	Chairman	25-Nov-13	Buy	Direct/Indirect	Market	50,000	\$ 3.00	\$ 150,000	3,229,939	3,279,939
Don Gray	Chairman	29-Nov-13	Buy	Direct/Indirect	Market	50,000	\$ 3.21	\$ 160,500	3,279,939	3,329,939
Don Gray	Chairman	16-Jun-14	Sell	Direct/Indirect	Market	200,000	\$ 5.50	\$ 1,100,000	3,329,939	3,129,939
Don Gray	Chairman	19-Aug-14	Sell	Direct/Indirect	Market	200,000	\$ 5.30	\$ 1,059,220	3,129,939	2,929,939
Don Gray	Chairman	2-Oct-14	Buy	Direct/Indirect	Market	30,000	\$ 4.35	\$ 130,500	2,929,939	2,959,939
Don Gray	Chairman	7-Oct-14	Buy	Direct/Indirect	Market	30,000	\$ 4.46	\$ 133,773	2,959,939	2,989,939
Don Gray	Chairman	5-Dec-14	Buy	Direct/Indirect	Market	26,500	\$ 2.76	\$ 73,140	2,989,939	3,016,439
Don Gray	Chairman	12-Dec-14	Buy	Direct/Indirect	Market	29,800	\$ 2.04	\$ 60,792	3,016,439	3,046,239
Don Gray	Chairman	30-Nov-15	Buy	Direct/Indirect	Bought Deal	533,334	\$ 0.75	\$ 400,001	3,046,239	3,579,573
Don Gray	Chairman	17-Dec-15	Sell	Direct/Indirect	Market	325,422	\$ 0.485	\$ 157,830	3,579,573	3,254,151
Don Gray	Chairman	17-Dec-15	Buy	Direct/Indirect	Market	325,422	\$ 0.485	\$ 157,830	3,254,151	3,579,573
Don Gray	Chairman	29-Jun-16	Buy	Direct/Indirect	Bought Deal	714,286	\$ 0.70	\$ 500,000	3,579,573	4,293,859
Don Gray	Chairman	29-Aug-16	Transfer	Indirect	Fund Transfer	939,277	\$ 0.71	\$ 666,887	4,293,859	3,354,582
Don Gray	Chairman	2-Sep-16	Sell	Indirect	Market	37,657	\$ 0.71	\$ 26,736	3,354,582	3,316,925
Don Gray	Chairman	1-Dec-16	Buy	Direct	Private Purchase	42,845	\$ 0.82	\$ 35,133	3,316,925	3,359,770
Don Gray	Chairman	2-Dec-16	Transfer	Indirect	Fund Transfer	1,012,816	\$ 0.84	\$ 850,765	3,359,770	2,346,954
Don Gray	Chairman	2-Dec-16	Buy	Indirect	Fund Transfer	1,907,046	\$ 0.84	\$ 1,601,919	2,346,954	4,254,000
Don Gray	Chairman	2-Dec-16	Buy	Direct	Fund Transfer	142,723	\$ 0.84	\$ 119,887	4,254,000	4,396,723
Don Gray	Chairman	28-Jun-17	Buy	Direct	Market	91,000	\$ 0.70	\$ 63,700	4,396,723	4,487,723
Don Gray	Chairman	11-Aug-17	Buy	Direct	Market	200,000	\$ 0.74	\$ 148,000	4,487,723	4,687,723
Don Gray	Chairman	6-Sep-17	Buy	Direct	Market	200,000	\$ 0.74	\$ 148,000	4,687,723	4,887,723
Don Gray	Chairman	7-Sep-17	Buy	Direct	Market	113,000	\$ 0.71	\$ 80,230	4,887,723	5,000,723
Don Gray	Chairman	8-Sep-17	Buy	Direct	Market	87,000	\$ 0.71	\$ 61,770	5,000,723	5,087,723
Don Gray	Chairman	27-Sep-17	Buy	Direct	Option Purchase	35,929	\$ 0.71	\$ 25,510	5,087,723	5,123,652
Don Gray	Chairman	15-Dec-17	Buy	Direct	Market	350,000	\$ 0.82	\$ 287,000	5,123,652	5,473,652
Don Gray	Chairman	12-Jan-18	Buy	Direct	Market	400,000	\$ 0.99	\$ 396,000	5,473,652	5,873,652
Don Gray	Chairman	16-May-18	Buy	Direct	Market	355,400	\$ 1.10	\$ 390,940	5,873,652	6,229,052
Don Gray	Chairman	25-May-18	Buy	Direct	Market	132,300	\$ 1.07	\$ 141,561	6,229,052	6,361,352
Don Gray	Chairman	23-Aug-18	Buy	Direct	Option Purchase	35,929	\$ 0.71	\$ 25,510	6,361,352	6,397,281
Don Gray	Chairman	23-Aug-18	Buy	Direct	Option Purchase	53,000	\$ 0.69	\$ 36,570	6,397,281	6,450,281
Ingram Gillmore	President & CEO	1-Jul-10		Direct	Opening Balance				400,000	400,000
Ingram Gillmore	President & CEO	29-Mar-11	Buy	Direct	Grey Market	25,000	\$ 3.00	\$ 75,000	400,000	425,000
Ingram Gillmore	President & CEO	13-Apr-12	Buy	Direct	Award	35,000	\$ 2.50	\$ 87,500	425,000	460,000
Ingram Gillmore	President & CEO	1-Apr-13	Buy	Direct	Award	16,000	\$ 2.50	\$ 40,000	460,000	476,000
Ingram Gillmore	President & CEO	20-Nov-13	Buy	Direct	Market	24,000	\$ 2.60	\$ 62,400	476,000	500,000
Ingram Gillmore	President & CEO	3-Oct-14	Buy	Direct	Market	45,000	\$ 4.48	\$ 201,447	500,000	545,000
Ingram Gillmore	President & CEO	19-Mar-15	Buy	Direct	Market	16,055	\$ 1.65	\$ 26,491	545,000	561,055
Ingram Gillmore	President & CEO	13-Aug-15	Buy	Direct	Market	9,000	\$ 1.33	\$ 11,970	561,055	570,055
Ingram Gillmore	President & CEO	20-Aug-15	Buy	Direct	Market	10,000	\$ 0.99	\$ 9,947	570,055	580,055
Ingram Gillmore	President & CEO	30-Nov-15	Buy	Direct	Bought Deal	180,000	\$ 0.75	\$ 135,000	580,055	760,055
Ingram Gillmore	President & CEO	9-Dec-15	Buy	Direct	Market	81,500	\$ 0.50	\$ 40,750	760,055	841,555
Ingram Gillmore	President & CEO	29-Jun-16	Buy	Direct	Bought Deal	107,143	\$ 0.70	\$ 75,000	841,555	948,698
Ingram Gillmore	President & CEO	26-Sep-16	Buy	Direct	Market	97,000	\$ 0.70	\$ 67,900	948,698	1,045,698
Ingram Gillmore	President & CEO	26-May-17	Buy	Direct	Market	22,500	\$ 0.78	\$ 17,550	1,045,698	1,068,198
Ingram Gillmore	President & CEO	29-May-17	Buy	Direct	Market	31,802	\$ 0.78	\$ 24,806	1,068,198	1,100,000
Ingram Gillmore	President & CEO	20-Jun-17	Buy	Direct	Market	91,500	\$ 0.62	\$ 56,730	1,100,000	1,191,500
Ingram Gillmore	President & CEO	24-Nov-17	Buy	Direct	Market	8,500	\$ 0.80	\$ 6,800	1,191,500	1,200,000
Ingram Gillmore	President & CEO	27-Sep-18	Buy	Direct	Option Purchase	86,752	\$ 1.17	\$ 101,500	1,200,000	1,286,752
Ingram Gillmore	President & CEO	27-Sep-18	Buy	Direct	Option Purchase	30,552	\$ 1.17	\$ 35,746	1,286,752	1,317,304
Ingram Gillmore	President & CEO	13-Nov-18	Buy	Direct	Market	53,340	\$ 0.60	\$ 31,844	1,317,304	1,370,644
Ingram Gillmore	President & CEO	8-Apr-19	Buy	Direct	Option Purchase	6,608	\$ 0.79	\$ 5,220	1,370,644	1,377,252
Ingram Gillmore	President & CEO	11-Apr-19	Sell	Direct	Market	6,608	\$ 0.76	\$ 5,022	1,377,252	1,370,644
Ray Cej	Director	2-Apr-13	Buy	Direct	Grey Market	10,000	\$ 2.50	\$ 25,000	-	10,000
Ray Cej	Director	29-Jun-16	Buy	Direct	Bought Deal	50,000	\$ 0.70	\$ 35,000	10,000	60,000
Ray Cej	Director	23-Aug-18	Buy	Direct	Option Purchase	9,029	\$ 1.18	\$ 10,654	60,000	69,029
Ray Cej	Director	23-Aug-18	Buy	Direct	Option Purchase	11,093	\$ 1.18	\$ 13,090	69,029	80,122
Ray Cej	Director	11-Apr-19	Buy	Direct	Option Purchase	1,814	\$ 0.78	\$ 1,415	80,122	81,936
Harry English	Director	5-Jun-14	Buy	Direct	Market	10,000	\$ 5.33	\$ 53,300	-	10,000
Harry English	Director	30-Nov-15	Buy	Direct	Bought Deal	33,334	\$ 0.75	\$ 25,001	10,000	43,334
Harry English	Director	23-Aug-18	Buy	Direct	Option Purchase	9,007	\$ 1.18	\$ 10,628	43,334	52,341
Harry English	Director	23-Aug-18	Buy	Direct	Option Purchase	11,067	\$ 1.18	\$ 13,059	52,341	63,408
Harry English	Director	18-Sep-18	Sell	Direct	Market	20,074	\$ 1.12	\$ 22,483	63,408	43,334
John O'Connell ⁽¹⁾	Director	27-Jul-16	Opening	Direct/Indirect	Opening Balance					13,409,526

Name	Position	Transaction Detail							Opening Balance (shares)	Closing Balance (shares)
		Date	Trade Type	Ownership Type	Comment	Number of Shares	Price per share	Value		
John O'Connell (1)	Director	3-Aug-16	Transfer	Direct/Indirect	Market	42,000	\$ 0.67	\$ 28,140	13,409,526	13,367,526
John O'Connell (1)	Director	8-Aug-16	Transfer	Direct/Indirect	Market	4,080	\$ 0.70	\$ 2,856	13,367,526	13,363,446
John O'Connell (1)	Director	12-Aug-16	Transfer	Direct/Indirect	Market	8,060	\$ 0.72	\$ 5,803	13,363,446	13,355,386
John O'Connell (1)	Director	15-Aug-16	Sell	Direct/Indirect	Market	162,000	\$ 0.72	\$ 116,640	13,355,386	13,193,386
John O'Connell (1)	Director	29-Aug-16	Sell	Direct/Indirect	Market	143,040	\$ 0.70	\$ 100,128	13,193,386	13,050,346
John O'Connell (1)	Director	22-Sep-16	Buy	Direct/Indirect	Market	34,930	\$ 0.73	\$ 25,548	13,050,346	13,085,276
John O'Connell (1)	Director	14-Nov-16	Buy	Direct/Indirect	Market	76,950	\$ 0.72	\$ 55,404	13,085,276	13,162,226
John O'Connell (1)	Director	14-Nov-16	Transfer	Direct/Indirect	Market	86,913	\$ 0.72	\$ 62,577	13,162,226	13,075,313
John O'Connell (1)	Director	16-Nov-16	Sell	Direct/Indirect	Market	10,246	\$ 0.72	\$ 7,377	13,075,313	13,065,067
John O'Connell (1)	Director	22-Nov-16	Buy	Direct/Indirect	Market	194,600	\$ 0.76	\$ 146,962	13,065,067	13,259,667
John O'Connell (1)	Director	24-Nov-16	Buy	Direct/Indirect	Market	163,295	\$ 0.80	\$ 131,306	13,259,667	13,422,962
John O'Connell (1)	Director	29-Nov-16	Buy	Direct/Indirect	Market	10,875	\$ 0.76	\$ 8,265	13,422,962	13,433,837
John O'Connell (1)	Director	2-Dec-16	Buy	Direct/Indirect	Market	58,730	\$ 0.86	\$ 50,508	13,433,837	13,492,567
John O'Connell (1)	Director	2-Dec-16	Sell	Direct/Indirect	Market	25,000	\$ 0.86	\$ 21,500	13,492,567	13,467,567
John O'Connell (1)	Director	5-Dec-16	Buy	Direct/Indirect	Market	9,628	\$ 0.84	\$ 8,088	13,467,567	13,477,195
John O'Connell (1)	Director	8-Dec-16	Buy	Direct/Indirect	Market	14,333	\$ 0.87	\$ 12,470	13,477,195	13,491,528
John O'Connell (1)	Director	8-Dec-16	Buy	Direct/Indirect	Market	18,524	\$ 0.86	\$ 15,931	13,491,528	13,510,052
John O'Connell (1)	Director	13-Dec-16	Buy	Direct/Indirect	Market	20,158	\$ 0.95	\$ 19,150	13,510,052	13,530,210
John O'Connell (1)	Director	14-Dec-16	Buy	Direct/Indirect	Market	17,908	\$ 0.90	\$ 16,117	13,530,210	13,548,118
John O'Connell (1)	Director	16-Dec-16	Buy	Direct/Indirect	Market	2,150	\$ 0.92	\$ 1,978	13,548,118	13,550,268
John O'Connell (1)	Director	16-Dec-16	Buy	Direct/Indirect	Market	40,279	\$ 0.95	\$ 38,265	13,550,268	13,590,547
John O'Connell (1)	Director	19-Dec-16	Sell	Direct/Indirect	Market	3,122	\$ 0.94	\$ 2,935	13,590,547	13,587,425
John O'Connell (1)	Director	20-Dec-16	Buy	Direct/Indirect	Market	7,740	\$ 0.95	\$ 7,353	13,587,425	13,595,165
John O'Connell (1)	Director	20-Dec-16	Sell	Direct/Indirect	Market	7,607	\$ 0.94	\$ 7,151	13,595,165	13,587,558
John O'Connell (1)	Director	3-Jan-17	Sell	Direct/Indirect	Market	11,364	\$ 1.17	\$ 13,296	13,587,558	13,576,194
John O'Connell (1)	Director	8-Mar-17	Sell	Direct/Indirect	Market	2,764	\$ 0.81	\$ 2,239	13,576,194	13,573,430
John O'Connell (1)	Director	8-Mar-17	Sell	Direct/Indirect	Market	4,259	\$ 0.81	\$ 3,450	13,573,430	13,569,171
John O'Connell (1)	Director	9-Mar-17	Sell	Direct/Indirect	Market	4,100	\$ 0.78	\$ 3,198	13,569,171	13,565,071
John O'Connell (1)	Director	13-Mar-17	Sell	Direct/Indirect	Market	4,000	\$ 0.80	\$ 3,200	13,565,071	13,561,071
John O'Connell (1)	Director	13-Mar-17	Sell	Direct/Indirect	Market	3,003	\$ 0.79	\$ 2,381	13,561,071	13,558,068
John O'Connell (1)	Director	29-Mar-17	Buy	Direct/Indirect	Market	12,107	\$ 0.88	\$ 10,654	13,558,068	13,570,175
John O'Connell (1)	Director	30-Mar-17	Buy	Direct/Indirect	Market	600	\$ 0.88	\$ 528	13,570,175	13,570,775
John O'Connell (1)	Director	5-Apr-17	Sell	Direct/Indirect	Market	4,447	\$ 0.88	\$ 3,913	13,570,775	13,566,328
John O'Connell (1)	Director	7-Apr-17	Sell	Direct/Indirect	Market	11,905	\$ 0.87	\$ 10,357	13,566,328	13,554,423
John O'Connell (1)	Director	11-Apr-17	Sell	Direct/Indirect	Market	7,436	\$ 0.92	\$ 6,841	13,554,423	13,546,987
John O'Connell (1)	Director	12-Apr-17	Sell	Direct/Indirect	Market	12,083	\$ 0.92	\$ 11,116	13,546,987	13,534,904
John O'Connell (1)	Director	9-Jun-17	Buy	Direct/Indirect	Market	12,300	\$ 0.70	\$ 8,610	13,534,904	13,547,204
John O'Connell (1)	Director	12-Jun-17	Buy	Direct/Indirect	Market	21,000	\$ 0.72	\$ 15,120	13,547,204	13,568,204
John O'Connell (1)	Director	12-Jun-17	Sell	Direct/Indirect	Market	6,335	\$ 0.72	\$ 4,549	13,568,204	13,561,869
John O'Connell (1)	Director	15-Jun-17	Sell	Direct/Indirect	Market	6,549	\$ 0.64	\$ 4,191	13,561,869	13,555,320
John O'Connell (1)	Director	27-Jun-17	Sell	Direct/Indirect	Market	4,765	\$ 0.69	\$ 3,288	13,555,320	13,550,555
John O'Connell (1)	Director	29-Jun-17	Buy	Direct/Indirect	Market	16,433	\$ 0.70	\$ 11,503	13,550,555	13,566,988
John O'Connell (1)	Director	22-Aug-17	Sell	Direct/Indirect	Market	12,575	\$ 0.68	\$ 8,551	13,566,988	13,554,413
John O'Connell (1)	Director	28-Aug-17	Sell	Direct/Indirect	Market	11,008	\$ 0.66	\$ 7,265	13,554,413	13,543,405
John O'Connell (1)	Director	30-Aug-17	Transfer	Direct/Indirect	Market	7,000	\$ 0.66	\$ 4,620	13,543,405	13,536,405
John O'Connell (1)	Director	25-Sep-17	Sell	Direct/Indirect	Market	13,322	\$ 0.82	\$ 10,924	13,536,405	13,523,083
John O'Connell (1)	Director	3-Oct-17	Transfer	Direct/Indirect	Market	20,000	\$ 0.82	\$ 16,400	13,523,083	13,503,083
John O'Connell (1)	Director	8-Nov-17	Transfer	Direct/Indirect	Market	38,000	\$ 0.89	\$ 33,820	13,503,083	13,465,083
John O'Connell (1)	Director	22-Nov-17	Sell	Direct/Indirect	Market	15,433	\$ 0.81	\$ 12,501	13,465,083	13,449,650
John O'Connell (1)	Director	23-Nov-17	Buy	Direct/Indirect	Market	4,400	\$ 0.81	\$ 3,564	13,449,650	13,454,050
John O'Connell (1)	Director	11-Dec-17	Buy	Direct/Indirect	Market	80,106	\$ 0.87	\$ 69,692	13,454,050	13,534,156
John O'Connell (1)	Director	15-Dec-17	Sell	Direct/Indirect	Market	4,510	\$ 0.78	\$ 3,518	13,534,156	13,529,646
John O'Connell (1)	Director	22-Dec-17	Transfer	Direct/Indirect	Market	11,897	\$ 0.81	\$ 9,637	13,529,646	13,517,749
John O'Connell (1)	Director	3-Jan-18	Sell	Direct/Indirect	Market	600	\$ 0.91	\$ 546	13,517,749	13,517,149
John O'Connell (1)	Director	5-Feb-18	Transfer	Direct/Indirect	Market	9,118	\$ 0.78	\$ 7,112	13,517,149	13,508,031
John O'Connell (1)	Director	27-Feb-18	Sell	Direct/Indirect	Market	140,500	\$ 0.78	\$ 109,590	13,508,031	13,367,531
John O'Connell (1)	Director	21-Mar-18	Sell	Direct/Indirect	Market	34,570	\$ 0.73	\$ 25,215	13,367,531	13,332,961
John O'Connell (1)	Director	30-Apr-18	Transfer	Direct/Indirect	Market	2,015	\$ 0.94	\$ 1,894	13,332,961	13,330,946
John O'Connell (1)	Director	14-May-18	Sell	Direct/Indirect	Market	16,159	\$ 1.09	\$ 17,613	13,330,946	13,314,787
John O'Connell (1)	Director	15-May-18	Transfer	Direct/Indirect	Market	3,557	\$ 1.13	\$ 4,019	13,314,787	13,311,230
John O'Connell (1)	Director	15-May-18	Buy	Direct/Indirect	Market	420	\$ 1.10	\$ 462	13,311,230	13,311,650
John O'Connell (1)	Director	23-May-18	Sell	Direct/Indirect	Market	5,900	\$ 1.16	\$ 6,844	13,311,650	13,305,750
John O'Connell (1)	Director	24-May-18	Buy	Direct/Indirect	Market	4,230	\$ 1.17	\$ 4,949	13,305,750	13,309,980
John O'Connell (1)	Director	31-May-18	Buy	Direct/Indirect	Market	5,400	\$ 1.12	\$ 6,048	13,309,980	13,315,380
John O'Connell (1)	Director	29-Jun-18	Sell	Direct/Indirect	Market	330,700	\$ 1.35	\$ 445,453	13,315,380	12,984,680
John O'Connell (1)	Director	4-Jul-18	Sell	Direct/Indirect	Market	25,400	\$ 1.35	\$ 34,214	12,984,680	12,959,280
John O'Connell (1)	Director	9-Jul-18	Transfer	Direct/Indirect	Market	5,600	\$ 1.35	\$ 7,543	12,959,280	12,953,680
John O'Connell (1)	Director	11-Jul-18	Transfer	Direct/Indirect	Market	3,006	\$ 1.37	\$ 4,118	12,953,680	12,950,674
John O'Connell (1)	Director	11-Jul-18	Transfer	Direct/Indirect	Market	5,000	\$ 1.37	\$ 6,850	12,950,674	12,945,674
John O'Connell (1)	Director	11-Jul-18	Transfer	Direct/Indirect	Market	4,670	\$ 1.37	\$ 6,398	12,945,674	12,941,004
John O'Connell (1)	Director	27-Jul-18	Transfer	Direct/Indirect	Market	2,087	\$ 1.36	\$ 2,838	12,941,004	12,938,917
John O'Connell (1)	Director	2-Aug-18	Transfer	Direct/Indirect	Market	6,496	\$ 1.33	\$ 8,640	12,938,917	12,932,421
John O'Connell (1)	Director	15-Aug-18	Buy	Direct/Indirect	Market	4,210	\$ 1.05	\$ 4,421	12,932,421	12,936,631
John O'Connell (1)	Director	21-Aug-18	Buy	Direct/Indirect	Market	30,500	\$ 1.14	\$ 34,770	12,936,631	12,967,131
John O'Connell (1)	Director	23-Aug-18	Buy	Direct/Indirect	Option Purchase	75,000	\$ 0.71	\$ 53,250	12,967,131	13,042,131
John O'Connell (1)	Director	23-Aug-18	Buy	Direct/Indirect	Option Purchase	50,000	\$ 0.69	\$ 34,500	13,042,131	13,092,131
John O'Connell (1)	Director	19-Sep-18	Buy	Direct/Indirect	Market	80,000	\$ 1.14	\$ 91,408	13,092,131	13,172,131
John O'Connell (1)	Director	28-Sep-18	Buy	Direct/Indirect	Market	80	\$ 1.18	\$ 94	13,172,131	13,172,211
John O'Connell (1)	Director	5-Oct-18	Buy	Direct/Indirect	Market	25,300	\$ 1.14	\$ 28,842	13,172,211	13,197,511
John O'Connell (1)	Director	10-Oct-18	Transfer	Direct/Indirect	Market	17,544	\$ 1.03	\$ 18,070	13,197,511	13,179,967
John O'Connell (1)	Director	26-Nov-18	Sell	Direct/Indirect	Market	7,411	\$ 0.58	\$ 4,298	13,179,967	13,172,556
John O'Connell (1)	Director	3-Dec-18	Sell	Direct/Indirect	Market	4,075	\$ 0.64	\$ 2,608	13,172,556	13,168,481
John O'Connell (1)	Director	12-Dec-18	Sell	Direct/Indirect	Market	4,036	\$ 0.59	\$ 2,381	13,168,481	13,164,445
John O'Connell (1)	Director	27-Dec-18	Transfer	Direct/Indirect	Market	75,500	\$ 0.49	\$ 36,995	13,164,445	13,088,945
John O'Connell (1)	Director	27-Dec-18	Transfer	Direct/Indirect	Market	11,100	\$ 0.49	\$ 5,439	13,088,945	13,077,845

Name	Position	Transaction Detail							Opening Balance (shares)	Closing Balance (shares)
		Date	Trade Type	Ownership Type	Comment	Number of Shares	Price per share	Value		
John O'Connell ⁽¹⁾	Director	27-Dec-18	Transfer	Direct/Indirect	Market	36,498	\$ 0.49	\$ 17,884	13,077,845	13,041,347
John O'Connell ⁽¹⁾	Director	17-Jan-19	Transfer	Direct/Indirect	Market	13,228	\$ 0.70	\$ 9,260	13,041,347	13,028,119
John O'Connell ⁽¹⁾	Director	4-Mar-19	Transfer	Direct/Indirect	Market	3,273	\$ 0.63	\$ 2,055	13,028,119	13,024,846
John O'Connell ⁽¹⁾	Director	10-Apr-19	Sell	Direct/Indirect	Market	125,000	\$ 0.78	\$ 97,500	13,024,846	12,899,846
John O'Connell ⁽¹⁾	Director	12-Apr-19	Sell	Direct/Indirect	Market	1,000,000	\$ 0.79	\$ 786,600	12,899,846	11,899,846
Kevin Olson ⁽²⁾	Director	27-Jul-16		Direct/Indirect	Opening Balance				-	8,438,260
Kevin Olson ⁽²⁾	Director	16-May-18	Sell	Direct/Indirect	Market	1,500,000	\$ 1.10	\$ 1,650,750	8,438,260	6,938,260
Kevin Olson ⁽²⁾	Director	24-May-18	Sell	Direct/Indirect	Market	500,000	\$ 1.22	\$ 610,000	6,938,260	6,438,260
Kevin Olson ⁽²⁾	Director	23-Aug-18	Buy	Direct/Indirect	Option Purchase	75,000	\$ 0.71	\$ 53,250	6,438,260	6,513,260
Kevin Olson ⁽²⁾	Director	23-Aug-18	Buy	Direct/Indirect	Option Purchase	50,000	\$ 0.69	\$ 34,500	6,513,260	6,563,260
David Hwang	VP Finance & CFO	13-Jun-11	Buy	Direct	Grey Market	68,200	\$ 3.15	\$ 214,830	-	68,200
David Hwang	VP Finance & CFO	23-Dec-11	Buy	Direct	Grey Market	31,800	\$ 2.50	\$ 79,500	68,200	100,000
David Hwang	VP Finance & CFO	13-Apr-12	Buy	Direct	Award	16,650	\$ 2.50	\$ 41,625	100,000	116,650
David Hwang	VP Finance & CFO	1-Apr-13	Buy	Direct	Award	15,750	\$ 2.50	\$ 39,375	116,650	132,400
David Hwang	VP Finance & CFO	20-Nov-13	Buy	Direct	Market	19,400	\$ 2.59	\$ 50,246	132,400	151,800
David Hwang	VP Finance & CFO	16-May-14	Buy	Direct	Market	7,000	\$ 5.03	\$ 35,210	151,800	158,800
David Hwang	VP Finance & CFO	10-Jun-14	Buy	Direct	Option Purchase	100,500	\$ 2.50	\$ 251,250	158,800	259,300
David Hwang	VP Finance & CFO	2-Jun-15	Buy	Direct	Market	12,000	\$ 2.12	\$ 25,440	259,300	271,300
David Hwang	VP Finance & CFO	3-Jun-15	Buy	Direct	Market	12,000	\$ 2.10	\$ 25,154	271,300	283,300
David Hwang	VP Finance & CFO	30-Nov-15	Buy	Direct	Bought Deal	400,000	\$ 0.75	\$ 300,000	283,300	683,300
David Hwang	VP Finance & CFO	29-Jun-16	Buy	Direct	Bought Deal	171,429	\$ 0.70	\$ 120,000	683,300	854,729
David Hwang	VP Finance & CFO	29-Sep-17	Buy	Direct	Option Purchase	184,000	\$ 0.71	\$ 130,640	854,729	1,038,729
David Hwang	VP Finance & CFO	7-Dec-17	Sell	Direct	Option Purchase	84,000	\$ 0.81	\$ 68,166	1,038,729	954,729
David Hwang	VP Finance & CFO	1-Oct-18	Buy	Direct	Option Purchase	62,553	\$ 1.20	\$ 75,064	954,729	1,017,282
David Hwang	VP Finance & CFO	1-Oct-18	Buy	Direct	Option Purchase	23,353	\$ 1.20	\$ 28,024	1,017,282	1,040,635
David Hwang	VP Finance & CFO	12-Apr-19	Buy	Direct	Option Purchase	5,384	\$ 0.82	\$ 4,415	1,040,635	1,046,019
Yvan Chretien	VP Land	15-Sep-10	Buy	Direct	Private Placement	15,000	\$ 3.75	\$ 56,250	-	15,000
Yvan Chretien	VP Land	23-Dec-11	Buy	Direct	Grey Market	12,000	\$ 2.50	\$ 30,000	15,000	27,000
Yvan Chretien	VP Land	13-Apr-12	Buy	Direct	Award	25,875	\$ 2.50	\$ 64,688	27,000	52,875
Yvan Chretien	VP Land	13-Apr-12	Buy	Direct	Option Purchase	100,500	\$ 2.50	\$ 251,250	52,875	153,375
Yvan Chretien	VP Land	29-Jun-16	Buy	Direct	Bought Deal	96,626	\$ 0.70	\$ 67,638	153,375	250,001
Yvan Chretien	VP Land	28-Sep-18	Buy	Direct	Option Purchase	52,737	\$ 1.17	\$ 61,702	250,001	302,738
Yvan Chretien	VP Land	5-Oct-18	Buy	Direct	Option Purchase	15,995	\$ 1.13	\$ 18,074	302,738	318,733
Yvan Chretien	VP Land	12-Apr-19	Buy	Direct	Option Purchase	5,519	\$ 0.82	\$ 4,526	318,733	324,252
Jason Kaluski	VP Operations	10-Mar-11	Buy	Direct	Private Placement	11,000	\$ 3.75	\$ 41,250	-	11,000
Jason Kaluski	VP Operations	13-Jun-11	Buy	Direct	Grey Market	10,000	\$ 3.15	\$ 31,500	11,000	21,000
Jason Kaluski	VP Operations	13-Apr-12	Buy	Direct	Award	23,400	\$ 2.50	\$ 58,500	21,000	44,400
Jason Kaluski	VP Operations	1-Apr-13	Buy	Direct	Award	11,050	\$ 2.50	\$ 27,625	44,400	55,450
Jason Kaluski	VP Operations	21-Nov-13	Buy	Direct	Market	6,800	\$ 2.61	\$ 17,748	55,450	62,250
Jason Kaluski	VP Operations	28-May-14	Buy	Direct	Option Purchase	18,000	\$ 2.50	\$ 45,000	62,250	80,250
Jason Kaluski	VP Operations	12-Sep-14	Buy	Direct	Market	5,000	\$ 5.02	\$ 25,100	80,250	85,250
Jason Kaluski	VP Operations	8-Oct-14	Buy	Direct	Market	5,000	\$ 4.29	\$ 21,450	85,250	90,250
Jason Kaluski	VP Operations	19-Aug-15	Buy	Direct	Market	2,660	\$ 1.00	\$ 2,649	90,250	92,910
Jason Kaluski	VP Operations	30-Nov-15	Buy	Direct	Bought Deal	33,000	\$ 0.75	\$ 24,750	92,910	125,910
Jason Kaluski	VP Operations	29-Jun-16	Buy	Direct	Bought Deal	42,858	\$ 0.70	\$ 30,001	125,910	168,768
Jason Kaluski	VP Operations	3-Mar-17	Buy	Direct	Market	5,215	\$ 0.92	\$ 4,798	168,768	173,983
Jason Kaluski	VP Operations	1-Jun-17	Buy	Direct	Market	6,300	\$ 0.77	\$ 4,851	173,983	180,283
Jason Kaluski	VP Operations	28-Sep-18	Buy	Direct	Option Purchase	54,488	\$ 1.17	\$ 63,751	180,283	234,771
Jason Kaluski	VP Operations	2-Oct-18	Buy	Direct	Option Purchase	19,515	\$ 1.20	\$ 23,418	234,771	254,286
Jason Kaluski	VP Operations	11-Apr-19	Buy	Direct	Option Purchase	3,800	\$ 0.79	\$ 3,002	254,286	258,086
Bryan Dozzi	VP Engineering	19-Aug-15	Buy	Direct	Market	20,000	\$ 1.00	\$ 20,000	-	20,000
Bryan Dozzi	VP Engineering	30-Nov-15	Buy	Direct	Bought Deal	66,667	\$ 0.75	\$ 50,000	20,000	86,667
Bryan Dozzi	VP Engineering	29-Jun-16	Buy	Direct	Bought Deal	42,858	\$ 0.70	\$ 30,001	86,667	129,525
Bryan Dozzi	VP Engineering	16-Dec-16	Buy	Direct	Market	45,000	\$ 0.92	\$ 41,400	129,525	174,525
Bryan Dozzi	VP Engineering	27-Sep-18	Buy	Direct	Option Purchase	32,838	\$ 1.17	\$ 38,420	174,525	207,363
Bryan Dozzi	VP Engineering	28-Sep-18	Buy	Direct	Option Purchase	20,688	\$ 1.17	\$ 24,205	207,363	228,051
Bryan Dozzi	VP Engineering	5-Oct-18	Buy	Direct	Option Purchase	17,237	\$ 1.13	\$ 19,478	228,051	245,288
Dustin Ressler	VP Exploration	9-Nov-16		Direct	Opening Balance	42,429			-	42,429
Dustin Ressler	VP Exploration	27-Sep-18	Buy	Direct	Option Purchase	27,398	\$ 1.17	\$ 32,056	42,429	69,827
Dustin Ressler	VP Exploration	2-Oct-18	Buy	Direct	Option Purchase	13,916	\$ 1.20	\$ 16,699	69,827	83,743
Dustin Ressler	VP Exploration	12-Apr-19	Buy	Direct	Option Purchase	3,074	\$ 0.82	\$ 2,521	83,743	86,817
Dustin Ressler	VP Exploration	16-Apr-19	Sell	Direct	Market	3,074	\$ 0.79	\$ 2,428	86,817	83,743

Notes

(1) This total includes 750 shares held by Solutions Investment Management Inc. which is controlled directly by Mr. O'Connell. The remaining Common Shares are held by entities affiliated with Davis-Rea Ltd., an investment firm which is controlled or directed, directly or indirectly by Mr. O'Connell.

(2) This total includes 4,934,360 Common Shares held by entities affiliated with Kyklopes Capital Management Ltd. an investment firm which is controlled or directed, directly or indirectly by Mr. Olson. The remaining Common Shares are controlled directly or indirectly by Mr. Olson.