APPENDIX B

Mineral Resources

Supplemental information collected on mineral resource values and distances from the four preliminary corridor alternatives.

Gross Value of Significant Mineral Occurrences within WAAPS Study Area

In the continued analysis of the WAAPS project, it is critical to assign resource values relative to the identified corridors. As of mid-July 2009 four corridors had been identified:

- Route 1 extends southwesterly from the Dalton Highway near Bettles to Nome.
- Route 2a extends westerly from the Dalton just north of the Yukon River to Nome.
- Route 2b extends westerly from the Elliott Highway near Manley Hot Springs to Nome.
- Route 3 extends west-southwesterly from Nenana to Poorman, thence west-northwesterly to Nome.

Out of more than 460 mineral deposits identified in the Inventory Report, thirty-seven (37) were initially identified as the most significant (Hawley and Vant, 2009). Donlin Creek, although outside of the WAAPS study area, has been added as a 38th site for the corridor planning study due to its significance in consideration of potential road links from the corridor. The significant sites were divided into two groups termed Estimated and Modeled (Table B1) based on the amount of data available. Estimated resources correspond in a general way to traditional Measured, Indicated, and Inferred Resources (or Proven, Probable, and Possible) where there are at least some data on size, shape, grade, and physical characteristics. Modeled resources lack most of those parameters but are identifiable as a geologic type. A very few prospects, including Arctic (#2, Table B1) and Livengood lode (#10), have been explored in sufficient detail to have Measured Resources, as used by the Canadian Institute of Mining, Metallurgy, and Petroleum (2004). The most rigorous class, Measured, is the part of a Mineral Resource "for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient . . . to support production planning and evaluation of the economic viability of the deposit." A considerable number have resources of Inferred class in the hierarchy Inferred, Indicated, and Measured where Inferred Resources are those "for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity." Because this is a broad regional study based largely on early-stage data, approximate gross values are given only where data corresponds to Inferred (or better) class. Mineral resources as used here are not necessarily comparable with Resources that would qualify for Canadian National Instrument 43-101 appraisal.

In addition there are more prospects with even lesser qualifications—the Modeled class. They have good geologic characteristics and perhaps a few drill holes that allow them to be compared with similar deposits and a qualitative resource developed.

A geological modeling scheme developed by the U.S. Geological Survey has been used to determine possible resource values for mineral occurrences in the WAAPS study that do not qualify for definition even as Inferred Resources. The geologic modeling system is outlined in USGS Bulletins 1693 and 1994 (respectively Cox and Singer, eds, 1987 and Bliss, ed, 1992).

To estimate tonnage in examples studied, the median value in an appropriate model is used. For example, the Round Top (# 19) deposit in the Illinois Creek area is classed as a Porphyry Copper Deposit (Table B2). In the USGS system, a Porphyry Copper is classed as type 17 (Cox and Singer, p. 76-81, 1987). The median size determined from hundreds of porphyry copper deposits studied is 154 million short tons (converted from Metric Tonnes) and has been assigned to the Round Top deposit as a modeled estimate of resource quantity.

In several cases, the geologic models assigned in this study have a direct parallel in the USGS system. The correlation of some other models is based on geologic similarity. As an example in the Inventory Report of the WAAPS study, disseminated bulk gold deposits were generally classed as Porphyry Gold (PoAu). Alaskan examples would be Donlin Creek or Livengood. The most geologically similar deposits in the USGS model fall into their model 26a, Sediment-hosted Au as represented by the well-known Nevada mines at Carlin, Jerrett Canyon, and Pinson (Mosier and others in Bliss, p. 26-28, 1992). The median (in short ton units) is 7.27 million tons and this value has been used in this report for deposits deemed similar, as Christmas Mountain. Models used here and by USGS that correlate almost exactly are Kuroko type Massive Sulfides (as Arctic-VMS-K) or Kipushi type (CRD-KP) Carbonate Replacement Deposits (Bornite and Omar).

Some of the deposit types used in the WAAPS study have no direct USGS counterpart. There seems to be no direct link between Porphyry Uranium (PoU) used here and a geologically similar USGS unit even though there is a world-wide class of intrusive related uranium deposits (including Rossing, Africa). A deposit type with similar geology is used, as the median tons (103 million short tons) in the PoMo (Porphyry Molybdenum) USGS class 21b, for the tons in PoU, as at Boston Ridge (#7, Table B1).

Grade assumptions used with modeled tonnage are based to some extent on analytical values given in description of individual deposits found in the literature. Others are conservative guesses.

In some cases deposits could fall into one of two groups with quite different sizes. For example, based on its mineralogy, Tofty Ridge could be classed either as a Carbonatite or as a Th-REE vein deposit. The median for a Carbonatite, a porphyry type deposit, is 66 million tons while the median class for Th-REE veins is only about 193,000 tons. The Tofty area is of considerable

size, and other vein deposits are known in the area. One carbonatite sill has been traced for more than 10km, and a buried Carbonatite porphyry could underlay the vein deposits.

The potentially large Illinois Creek area must be looked at regionally. Deposits in relatively close juxtaposition as Round Top, Illinois Creek, Honker, three McLeod molybdenum occurrences, Waterpump Creek, and several unnamed deposits suggest that this is a mineral district that could be developed although perhaps from deposits not currently known.

The gross values from either reported industry studies or modeled studies are both given in Table B1. Some assumptions on the models chosen and median values are given in Table B2.

REFERENCES:

Bliss, J. D., ed., 1992, Developments in Mineral Deposits Modeling: U.S. Geol. Survey Bulletin 2004

CIM (Canadian Inst of Mining), 2004, CIM Definition Standards: On Mineral Resources and Mineral Reserves): Report by CIM Standing Committee, adopted November 14, 2004.

Cox, Dennis P., and Singer, D.A., eds, 1986, Mineral Deposit Models: U.S. Geol. Survey Bulletin 1693

Hawley, C. C. and Vant, M. K. 2009, Report on Minerals, Western Alaska Access Planning Study, Inventory Report

Charles C. Hawley, December 8, 2009

Table 2: Estimated and Modeled Gross Mineral Values for Significant Sites within and near the WAAPS Study Area

Map Number	Site Name	Number in Resource Table	Minerals	Location	Model	Total Estimated Gross Value in Dollars	Total Modeled Gross Value			Straight line Distance Between Mineral Site and Preliminary Corridor Alternative (Miles)			
							Tons	Grade	Value in Dollars	Route 1	Route 2a	Route 2b	Route 3
1	Bornite	3	Cu (Ag, Zn, Co, Ge)	Ambler	CRD-KP	$4,116,500,000				46.33	>100	>100	>100
2	Arctic	7	Cu, Zn, Pb (Au, Ag)	Ambler	VMS-K	$10,080,600,000				47.12	>100	>100	>100
3	Sunshine Creek	10	Zn, Cu, Pb (Ag, Au)	Ambler	VMS-K	$886,100,000				51.74	>100	>100	>100
4	Smucker	13	Zn, Cu, Pb, Ag (Au)	Ambler	VMS-K	$3,747,500,000				62.77	>100	>100	>100
5	BT	17	Zn, Cu, Pb (Ag, Au)	Ambler	VMS-K	$751,000,000				39.63	>100	>100	>100
6	Sun	21	Zn, Cu, Pb (Ag, Au)	Ambler	VMS-K	$4,659,000,000				30.82	>100	>100	>100
7	Boston Ridge	28	U, Th, REE	Alatna Basin	PoU		103,000,000	.01% U308	$1,030,000,000	19.13	80.47	80.47	>100
8	Hogatza (pl)	32	Au (U, REE)	Alatna Basin	PlAuL	$116,000,000				22.75	76.56	76.56	>100
9	Livengood Creek (pl)	72	Au (Sn, W)	Livengood	PlAuVL	$463,900,000				N/A	N/A	N/A	N/A
10	Livengood Lode	77	Au (Ag?)	Livengood	PoAu	$12,524,000,000				N/A	N/A	N/A	N/A
11	Ring Hill	86	Au (Sn?)	Yukon River	PoAu?		7,270,000	.015opt	$101,200,000	98.64	4.12	4.12	48.11
12	Tofty Ridge	123	REE, U, Th	Hot Springs Dist.	ThRe/ Pocb		193,000		See Note 2	>100	15.34	3.49	13.88
13	Sheri	141	U	Yukon River	PoU		103,000,000	.01% U308	$1,030,000,000	87.38	7.02	7.02	76.19
14	Frost	182	Cu? (Co?)	W. Brooks Range	CRD-KP				Not modeled	>100	>100	>100	>100
15	Omar	183	Cu (Zn, Co)	W. Brooks Range	CRD-KP	$36,000,000				>100	>100	>100	>100
16	Christmas Mtn	207	Au (Sb)	Norton Sound	PoAu		7,270,000	0.015opt	$101,200,000	52.64	10.46	10.46	1.84
17	Independence	229	Ag (Pb, Zn)	NE Seward Pn	CRD		1,980,000	See Note 5	$404,700,000	30.91	51.88	51.88	51.88
18	Boulder Creek	233	U	SE Seward Pen	SsU	$50,000,000				12.43	8.92	8.92	8.92
19	Round Top	251	Cu (Ag, Mo?)	Illinois Creek Dist	PoCuMo		154,000,000	0.54% Cu	$3,824,900,000	>100	47.56	47.56	1.59
20	Honker	254	Au	Illinois Creek Dist	Polymet Vns	$232,000,000				>100	49.05	49.05	2.78
21	Waterpump Creek	255	Ag (Pb, Zn)	Illinois Creek Dist	CRD	$81,700,000				>100	53.02	53.02	0.59
22	Illinois Creek	256	Au (Cu, Ag)	Illinois Creek Dist	CRD	$308,000,000				>100	54.41	54.41	1.49
23	Big Hurrah	266	Au (W?)	Nome Area	Met Vn	$92,700,000				N/A	N/A	N/A	N/A
24	Bluff (lode)	286	Au (W)	Nome Area	Met Vn	$209,000,000				23.61	20.18	20.18	20.18
25	Rock Creek (lode)	311	Au (W?)	Nome Area	Met Vn	$784,200,000				N/A	N/A	N/A	N/A
26	Nome District	331	Au (W?)	Nome	PlAu L	$1,010,400,000				N/A	N/A	N/A	N/A
27	Nome Offshore	332	Au	Nome	Pl Au VL	$463,500,000				N/A	N/A	N/A	N/A
28	Lost River	344-354	Sn, F (W, Be, Ag)	NW Seward Pen	PoSn		30,000,000	0.3% Sn	$1,080,000,000	>100	>100	>100	>100
29	Kougarok	357	Sn, Nb	NC Seward Pen	PoSn		2,940,000	0.48% Sn	$169,300,000	68.21	71.68	71.68	71.68
30	McLeod	367-369	Mo	Illinois Creek	PoMo		103,000,000	0.015% Mo	$339,900,000	>100	>100	>100	59.63
31	Wyoming	388	Sb	Reef Ridge	Sb Simp				Not modeled	>100	84.83	84.83	26.97
32	Wonder-Gemini	390-392	Sn (Ag)	Reef Ridge	Polymet Sn		2,132,000	0.59% Sn	$150,900,000	>100	91.37	91.37	26.13
33	Reef Ridge District	396-402	Zn (Pb)	Reef Ridge	CRD	$180,000,000				>100	>100	>100	29.49
34	Cirque	413	Cu (Ag)	Innoko	Polymet Vns	$64,000,000				>100	>100	>100	88.61
35	Innoko Uplands	461	Au	Innoko	PoAu		7,027,000	0.015opt	$97,800,000	>100	>100	>100	69.21
36	Nixon Fork	404-405	Au (Cu)	Medfra	Au Skarn	$92,700,000				>100	>100	>100	37.79
37	Chicken Mountain	439	Au (Ag)	Flat	Po Au	$653,100,000				>100	>100	>100	>100

Notes

1. Primary minerals are listed first; secondary minerals are included in parentheses.
2. Estimated Gross Value calculated from industry-reported data on volume and grade.
3. Modeled Gross Value calculated from geologically-modeled volumes and grades.
4. Current values for common metals derived from a 3-month average ending July 15, 2009:
   - Au = $927.70/oz
   - Ag = $13.79/oz
   - Cu = $2.2997/lb
   - Zn = $0.6985/lb
   - Pb = $0.7462/lb
5. Current values for less common metals from metalprices.com on July 15, 2009:
   - Mo = $11.00/lb
   - Sb = $2.50/lb
   - Sn = $6.00/lb
   - U as U308 = $50.00/lb
6. Current unit values for Th, Nb, and REE not yet determined.
7. At Independence, the median value for Pb, Ag, and Zn was calculated to produce an average value per ton of $204.40 for all three metals.
8. N/A = site accessible via existing highway system

Minerals Key

Ag - Silver	F - Fluorine	REE - Rare Earth Elements	W - Tungsten
Au - Gold	Ge - Germanium	Sb - Antimony	Zn - Zinc
Be - Beryllium	Mo - Molybdenum	Sn - Tin	(pl) = placer deposit
Co - Cobalt	Nb - Niobium	Th - Thorium	(lode) = lode deposit
Cu - Copper	Pb - Lead	U - Uranium	opt = ounces per ton

Table B2: Background Information for Modeled Resource Volumes & Values

Map Number	Site Name	Number in Resource Table	Geologic Model	USGS Code	Model Name	Remarks / Model Assumptions
1	Bornite	3	CRD-KP	32c	kipushi Cui-Pb-Zn	Median tons not given
2	Arctic	7	VMS-K	28a	Kuroko Massive Sulfide	1.6 million median tons; 20 million 10% tons
3	Sunshine Creek	10	VMS-K	28a	Kuroko Massive Sulfide	1.6 million median tons; 20 million 10% tons
4	Smucker	13	VMS-K	28a	Kuroko Massive Sulfide	1.6 million median tons; 20 million 10% tons
5	BT	17	VMS-K	28a	Kuroko Massive Sulfide	1.6 million median tons; 20 million 10% tons
6	Sun	21	VMS-K	28a	Kuroko Massive Sulfide	1.6 million median tons; 20 million 10% tons
7	Boston Ridge	28	PoU	No equv	Porphyry Uranium	Median tons from low-F PoMo
8	Hogatza	32	PlAuL	39a	Placer Au-PGE	Greater than 500,000 oz
9	Livengood Creek	72	PlAuVL	39a	Placer Au-PGE	Greater than 1,000,000 oz.
10	Livengood Lode	77	PoAu	26a	Porphyry Gold	Nearest equivalent model is sediment hosted Au
11	Ring Hill	86	PoAu?	26a	Porphyry Gold	
12	Tofty Ridge	123	PoCb	10 or 11d	Carbonatite or Th-REE veins	Median for carbonatite is 66 million tons; median for veins is about 193,000 tons
13	Sheri	141	PoU	No equv	Porphyry Uranium	Median tons from low-F PoMo
14	Frost	182	CRD-KP	32c	kipushi Cui-Pb-Zn	Median tons not given
15	Omar	183	CRD-KP	32c	kipushi Cui-Pb-Zn	Median tons not given
16	Christmas Mtn	207	PoAu	PoAu	Porphyry Gold	Nearest is 26a
17	Independence	229	CRD	19a	Polymetallic Replacement	Median tons 0.98 million
18	Boulder Creek	233	SsU	30c	Sandstone Uranium	Median tons not given
19	Round Top	251	PoCu	17	Porphyry Copper	Median tons 154 million; median Cu grade is 0.54 %
20	Honker	254	Polymet Vns	22c	Polymetallic veins	
21	Waterpump	255	CRD	19a	Polymetallic Replacement	
22	Illinois Creek	256	CRD	19a	Polymetallic Replacement	
23	Big Hurrah	266	Met Vn	36a	Low-S Au-Qtz veins	Median tons 330,000; 10% is 1 million tons
24	Bluff Lode	286	Met Vn	36a	Low-S Au-Qtz veins	Max tons near 25 million
25	Rock Creek Lode	311	Met Vn	36a	Low-S Au-Qtz veins	
26	Nome District	331	PlAuVL	39a	Placer Au-PGE	
27	Nome Offshore	332	PlAuL	39a	Placer Au-PGE	
28	Lost River	344-354	PoSn	20a	Porphyry Sn	Complex with Sn veins (15b) and greisen (15c)
29	Kougarok	357	PoSn	20a	Porphyry Sn	Complex with Sn veins (15b) and greisen (15c)
30	McLeod	367-369	PoMo	21b	Low F Porphyry Mo	Median tons 103 million
31	Wyoming	388	Sb Simpl	27d	Simple stibnite veins	Median tons about 2000
32	Wonder-Gemini	390-392	Polymet Sn	20b	Polymetallic Sn veins	Median not given; locally High Ag, Au
33	Reef Ridge District	396-402	CRD	19a or 32b	Carbonate Replacement	Possibly like Missouri Pb-Zn (32b) or intrusion related Polymetallic replacemernt
34	Cirque	413	Polymet Vns	22c?	Polymetallic veins	Cu-rich
35	Innoko Uplands	461	PoAu	26a	Porphyry gold	Nearest equivalent is sediment hosted gold
36	Nixon Fork	404-405	Skarn	18b	Skarn, copper	Median is aboout 610,000 tons. Gold variety
37	Chicken Mountain	439	PoAu	26a	Porphyry gold	Bulk deposit in igneous host
38	Donlin Creek	449	PoAu	26a	Porphyry Gold	

Total Estimated Gross Value of Significant Mineral Resources within 100 Miles of Preliminary Corridor Alternatives

Route 1		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Boulder Cr. U	$50,000,000	12.43
Boston Ridge	$1,030,000,000	19.13
Hogatza; Hog River; Bear Creek	$115,962,500	22.75
Bluff (lode)	$208,732,500	23.61
Sun: Picnic Ck	$4,658,614,590	30.82
Independence	$405,000,000	30.91
BT (Jerry CK)	$750,971,940	39.63
Bornite	$4,116,463,000	46.33
Arctic	$10,080,594,614	47.12
Sunshine Ck	$886,128,000	51.74
Christmas Mtn.	$101,000,000	52.64
Smucker	$3,747,425,880	62.77
Kougarok	$169,000,000	68.21
Sheri; Big Creek	$1,030,000,000	87.38
Ring Hill-Monday Creek	$101,000,000	98.64
TOTAL	**$27,450,893,024**	**694.11**
15 sites w/in 100 mi.	Ratio Value/Dist =	$39,548,332
Route 1	→$39,548,332/mile of acess road built	
Average distance of 46.27 miles to significant sites within 100 miles		

Route 2a		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Ring Hill-Monday Creek	$101,000,000	4.12
Sheri; Big Creek	$1,030,000,000	7.02
Boulder Cr. U	$50,000,000	8.92
Christmas Mtn.	$101,000,000	10.46
Tofty Ridge	$0	15.34
Bluff (lode)	$208,732,500	20.18
Round Top	$3,830,000,000	47.56
Honker	$231,925,000	49.05
Independence	$405,000,000	51.88
Waterpump Cr.	$81,732,192	53.02
Illinois Creek	$307,770,000	54.41
Kougarok	$169,000,000	71.68
Hogatza; Hog River; Bear Creek	$115,962,500	76.56
Boston Ridge	$1,030,000,000	80.47
Wyoming Lode	$0	84.83
Gemini	$151,000,000	91.37
TOTAL	**$7,813,122,192**	**726.87**
16 sites w/in 100 mi.	Ratio Value/Dist =	$10,748,995
Route 2a	→$10,748,995/mile of acess road built	
Average distance of 45.43 miles to significant sites within 100 miles		

Route 2b		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Tofty Ridge	$0	3.49
Ring Hill-Monday Creek	$101,000,000	4.12
Sheri; Big Creek	$1,030,000,000	7.02
Boulder Cr. U	$50,000,000	8.92
Christmas Mtn.	$101,000,000	10.46
Bluff (lode)	$208,732,500	20.18
Round Top	$3,830,000,000	47.56
Honker	$231,925,000	49.05
Independence	$405,000,000	51.88
Waterpump Cr.	$81,732,192	53.02
Illinois Creek	$307,770,000	54.41
Kougarok	$169,000,000	71.68
Hogatza; Hog River; Bear Creek	$115,962,500	76.56
Boston Ridge	$1,030,000,000	80.47
Wyoming Lode	$0	84.83
Gemini	$151,000,000	91.37
TOTAL	**$7,813,122,192**	**715.02**
16 sites w/in 100 mi.	Ratio Value/Dist =	$10,927,138
Route 2b	→$10,927,138/mile of acess road built	
Average distance of 44.69 miles to significant sites within 100 miles		

Route 3		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Waterpump Cr.	$81,732,192	0.59
Illinois Creek	$307,770,000	1.49
Round Top	$3,830,000,000	1.59
Christmas Mtn.	$101,000,000	1.84
Honker	$231,925,000	2.78
Boulder Cr. U	$50,000,000	8.92
Tofty Ridge	$0	13.88
Bluff (lode)	$208,732,500	20.18
Gemini	$151,000,000	26.13
Wyoming Lode	$0	26.97
Reef Ridge	$179,793,900	29.49
Nixon Fork	$95,182,020	37.79
Ring Hill-Monday Creek	$101,000,000	48.11
Independence	$405,000,000	51.88
McLeod East	$339,900,000	59.63
Innoko Uplands (Ester Creek)	$97,784,219	69.21
Kougarok	$169,000,000	71.68
Sheri; Big Creek	$1,030,000,000	76.19
Cirque	$63,861,280	88.61
TOTAL	**$7,443,681,111**	**636.96**
19 sites w/in 100 mi.	Ratio Value/Dist =	$11,686,261
Route 3	→$11,686,261/mile of acess road built	
Average distance of 33.52 miles to significant sites within 100 miles		

Total Estimated Gross Value of Significant Mineral Resources within 50 Miles of Preliminary Corridor Alternatives

Route 1		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Boulder Cr. U	$50,000,000	12.43
Boston Ridge	$1,030,000,000	19.13
Hogatza; Hog River; Bear Creek	$115,962,500	22.75
Bluff (lode)	$208,732,500	23.61
Sun: Picnic Ck	$4,658,614,590	30.82
Independence	$405,000,000	30.91
BT (Jerry CK)	$750,971,940	39.63
Bornite	$4,116,463,000	46.33
Arctic	$10,080,594,614	47.12
TOTAL	**$21,416,339,144**	**272.73**
9 sites w/in 50 mi.	Ratio Value/Dist =	$78,525,792
Route 1	→$78,525,792/mile of acess road built	
Average distance of 30.30 miles to significant sites within 50 miles		

Route 2a		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Ring Hill-Monday Creek	$101,000,000	4.12
Sheri; Big Creek	$1,030,000,000	7.02
Boulder Cr. U	$50,000,000	8.92
Christmas Mtn.	$101,000,000	10.46
Tofty Ridge	$0	15.34
Bluff (lode)	$208,732,500	20.18
Round Top	$3,830,000,000	47.56
Honker	$231,925,000	49.05
TOTAL	**$5,552,657,500**	**162.65**
8 sites w/in 50 mi.	Ratio Value/Dist =	$34,138,687
Route 2a	→$34,138,687/mile of acess road built	
Average distance of 20.33 miles to significant sites within 50 miles		

Route 2b		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Tofty Ridge	$0	3.49
Ring Hill-Monday Creek	$101,000,000	4.12
Sheri; Big Creek	$1,030,000,000	7.02
Boulder Cr. U	$50,000,000	8.92
Christmas Mtn.	$101,000,000	10.46
Bluff (lode)	$208,732,500	20.18
Round Top	$3,830,000,000	47.56
Honker	$231,925,000	49.05
TOTAL	**$5,552,657,500**	**150.8**
8 sites w/in 50 mi.	Ratio Value/Dist =	$36,821,336
Route 2b	→$36,821,336/mile of acess road built	
Average distance of 18.85 miles to significant sites within 50 miles		

Route 3		
Significant Site	**Total Estimated Gross Value**	**Straight Line Distance**
Waterpump Cr.	$81,732,192	0.59
Illinois Creek	$307,770,000	1.49
Round Top	$3,830,000,000	1.59
Christmas Mtn.	$101,000,000	1.84
Honker	$231,925,000	2.78
Boulder Cr. U	$50,000,000	8.92
Tofty Ridge	$0	13.88
Bluff (lode)	$208,732,500	20.18
Gemini	$151,000,000	26.13
Wyoming Lode	$0	26.97
Reef Ridge	$179,793,900	29.49
Nixon Fork	$95,182,020	37.79
Ring Hill-Monday Creek	$101,000,000	48.11
TOTAL	**$5,338,135,612**	**219.76**
13 sites w/in 50 mi.	Ratio Value/Dist =	$24,290,752
Route 3	→$24,290,752/mile of acess road built	
Average distance of 16.90 miles to significant sites within 50 miles		