REPORT ON
1996 GEOLOGICAL MAPPING PROGRAM
ON THE
WHITE BULL PROPERTY
LIARD MINING DIVISION

NTS 94L/13
Lat.: 58° 54' N. Long.: 127° 55' W.

BY

Uwe Schmidt, P.Geo.

FOR

ATNA RESOURCES LTD.

March 28, 1997

25 016

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SUMMARY

The White Bull property in the Turnagain River area of north-central British Columbia is underlain by complexly folded and faulted Cambro-Ordovician sedimentary and volcanic rocks of the Kechika and Road River Groups lying in fault contact with calcareous sedimentary rocks of the Silurian Sandpile Group.

During June ,1996, Atna Resources Ltd. carried out a detail mapping and rock sampling program over a 900 square metre area of the property which has the potential to host sedimentary exhalative (SEDEX) zinc-lead mineralization. The 1996 mapping indicates that these horizons lie within a number of thrust slices with limited down dip potential. No additional sampling of these horizons was carried out but 24 rock and chip samples were taken of geochemically anomalous, gold-bearing hot spring deposits. These deposits occur at or near a thrust fault zone which separates Silurian dolomites from the Cambro-Ordovician rocks. Exposure of the zone is limited by erosion to the north and by glacial till cover to the south.

No further work is recommended on exploring the SEDEX mineralization potential of the Cambro-Ordovician stratigraphy on the White Bull property because the favorable horizons lie within a number of thrust slices with limited down dip potential.

1. INTRODUCTION

During the period from June 17 to July 1, 1996, Atna Resources Ltd. carried out a detailed grid mapping and rock sampling program on the White Bull property in the Turnagain River area of north-central British Columbia. The 1996 program was a continuation of a previous evaluation of the property carried out by geologist Paul Kallock for Atna Resources in 1995. Work in 1996 was carried out by Paul Kallock, the writer, junior geologist Mike Tiedje and field assistants, William Kalhert and Ron Beauchamp. The writer and Paul Kallock are independent consultants working under contract to Atna Resources. All other field personnel were Atna employees. The crew mobilized to the property by helicopter and established a fly camp close to the centre of the property and explored the property on foot.

Grid mapping covered a 300 by 300 metre square area of the property which has the potential to host sedimentary exhalative (SEDEX) zinc-lead mineralization, based on a geochemically anomalous baritic horizon and disseminated pyrite mineralization. No additional sampling of these horizons was carried out but 24 rock and chip samples were taken of geochemically anomalous, gold-bearing hot spring deposits.

2. PROPERTY, LOCATION AND ACCESS

The White Bull property consists of two 12 unit mineral claims covering an area of 600 hectares. The claims were staked in 1995 by Atna Resources to cover a large vegetation and geochemical anomaly which had previously received limited exploration. The property is located in north-central B.C., approximately 145 km, south of Watson Lake, Yukon and 130 km northeast of Dease Lake B.C. The property is accessible from both locations by charter aircraft.

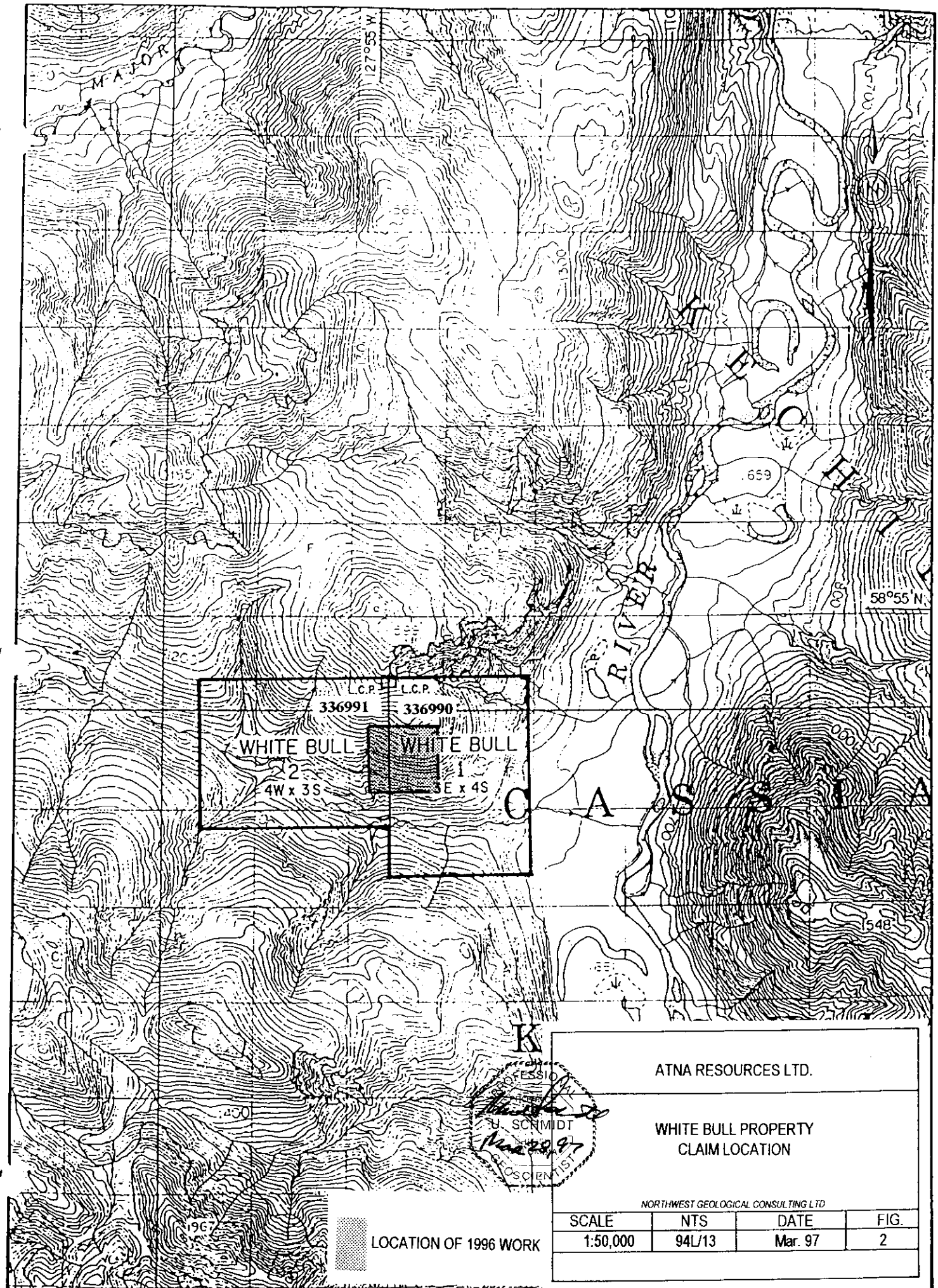
The claims are owned by Atna Resources and are located within the Liard Mining Division in NTS map area 94L/13. The coordinates of the approximate centre of the property are latitude 58° 54' N and longitude 127° 55' W.

WHITE BULL PROJECT LOCATION

Km 0 100 200 300 400 Km

Miles 0 50 100 200 300 Miles

ATNA RESOURCES LTD.			
WHITE BULL PROPERTY LOCATION			
NORTHWEST GEOLOGICAL CONSULTING LTD.			
SCALE		DATE	FIG.
1:7,000,000		Mar. 97	1



ATNA RESOURCES LTD.

WHITE BULL PROPERTY
CLAIM LOCATION

NORTHWEST GEOLOGICAL CONSULTING LTD

SCALE	NTS	DATE	FIG.
1:50,000	94L/13	Mar. 97	2

The details of the claims are as follows:

Name	Tenure Number	Units	Record Date
White Bull 1	336990	12	June 19, 1995
White Bull 2	336991	12	June 19, 1995
	Total Units	24	

3. PHYSIOGRAPHY

The property is located in rugged terrain within the Kechika Ranges of the Cassiar Mountains. The claims lie on the west side of the Turnagain River valley near its junction with Sheep Creek. Elevations in the vicinity of the claims range from 700 to 1600 metres. Work in 1996 was restricted to a barren vegetation anomaly on a steep south-facing slope within an elevation range of 930 to 1100 metres.

The claims are variably covered by young Aspen trees on southern slopes and mixed conifers in other areas. The area of interest is a large vegetation anomaly or "kill zone" with no soil or vegetation cover. Most of the grid area is covered by a thin veneer of fine, platy and needle-shaped talus fragments, cemented by sulphate mineral precipitates from a leachate produced by highly sheared pyritic rocks. This unusual set of weathering conditions has restricted bedrock exposure primarily to narrow, fault-controlled drainage channels.

4. HISTORY

The White Bull property has been previously staked and explored as a "SEDEX" exploration target by several companies. Among these were Amoco Canada Petroleum Co. in 1977, Esso Resources Ltd. in 1982 and Homestake Mining (Canada) Limited in 1989. The history of exploration to date has been limited to soil geochemical, ground geophysical and mapping programs. Results to date have outlined strong electromagnetic and weak, spotty base metal geochemical anomalies coincident with the vegetation anomalies but these were not attractive enough to previous operators to test by drilling.

The property was restaked in 1995 by Atna Resources Ltd. as the White Bull property. A reexamination of the property by mapping, prospecting and sampling was carried out by Atna in 1995. Extensions of the target stratigraphy were also explored to the southeast. Work in 1996 focussed on detail grid mapping of one the vegetation anomalies and a reexamination of the sites of anomalous gold analyses. Descriptions of the geology of the property in this report will be restricted to the grid mapping carried out in 1996. For a more detailed description of the regional and property geology the reader is referred to Kallock (1995).

5. REGIONAL GEOLOGY

The northwest corner of Kechika map area (94L) is underlain by Ancestral North America Terrane which includes Late Proterozoic to Mississippian miogeoclinal sedimentary rocks intruded by Cretaceous granitic rocks. Significant Ba-Zn-Pb mineral deposits of the sedimentary exhalative type (SEDEX) are known to the southeast, within Middle-Upper Devonian shales of the Gataga district of the Kechika trough. Deposits of barite and pyrite hosted by older lithologies in Kechika trough, suggest additional exploration potential exists in the older stratigraphy. In the vicinity of White Bull property, equivalent, fault-displaced stratigraphy occurs in a narrow, northwest-trending belt. The detailed stratigraphy in this is belt remains to be resolved. Present regional maps outline complexly folded and faulted Cambro-Ordovician sedimentary and volcanic rocks of the undivided Kechika and Road River Groups lying in contact with calcareous sedimentary rocks of the Silurian Sandpile Group.

It is this geological setting and previous exploration history of the area which attracted Atna Resources Ltd. to further explore the White Bull property.

6. PROPERTY GEOLOGY

The White Bull property is underlain primarily by calcareous sedimentary rocks of the Silurian Sandpile Group. Northwest-trending Cambro-Ordovician sedimentary and volcanic rocks of the Kechika and Road River Groups structurally overlie Silurian dolomites in a number of thrust fault slices which are exposed in a series of vegetation anomalies or "kill zones" on the

north side of Sheep creek. Previous mapping and sampling by Atna geologists in 1995 outlined a geochemically anomalous chert/barite horizon, disseminated pyrite in altered tuffs and geochemically anomalous gold in ferricrete deposits.

The 1996 program focussed on obtaining a better understanding of the stratigraphy of the western end of the 1995 grid (Plate I). A new grid was established over the western "kill zone" and mapped at a scale of 1 to 500 (Fig. 4) over a 90,000 square metre area. Grid stations could not be established over the entire area because of the steepness of the terrain. A base map for mapping was produced by an accurate compass and "Hip-Chain" survey of all drainage channels and by a high resolution altimeter survey. Survey lines were tied-in to base lines and altimeter surveys were corrected relative to several base stations.

The geology of the detail grid area can be divided into three age groups. The oldest rocks are shales, argillites, lapilli tuffs, tuffites of the undivided Cambro-Ordovician Kechika and Road River Groups (units 1-5). These structurally overly dolomite and shale of the Silurian Sandpile Group (units 6,7). The youngest rocks (unit 8) are travertine deposits and jarosite cemented breccias produced by hot springs of unknown age. These deposits occur at the south end of the grid, along the thrust fault contact which separates the Cambro-Ordovician and Silurian rocks. This fault is exposed in the southeast corner of the grid (Plate III) where it dips to the south at approximately 45°. Along the southern limits of the map area, the fault zone is poorly exposed, and has a southerly dip of 25°. The Kechika /Road River rocks now lie within a series of moderately southwest dipping thrust slices. These fault panels are further disrupted by steeply dipping to vertical faults which have northwest, north-south and northeasterly trends. Small scale folds were observed adjacent to thrust faults and are likely caused by movement long these thrust faults. Vertical faults are discontinuously exposed but can be inferred by abrupt changes in lithology and by white bull quartz veins which are associated with these faults. Thrust faults are also discontinuously exposed and can be inferred by smaller quartz veins which commonly fill brittle fractures in argillite within a metre or two of these faults. North-south trending vertical structures also occur within the underlying dolomite. Bull quartz veins occur within the dolomite along these structures.

Outcrop in the detail grid area is generally restricted to steep, intermittent, structurally-controlled drainage channels. The most common channel direction is north-northwesterly.

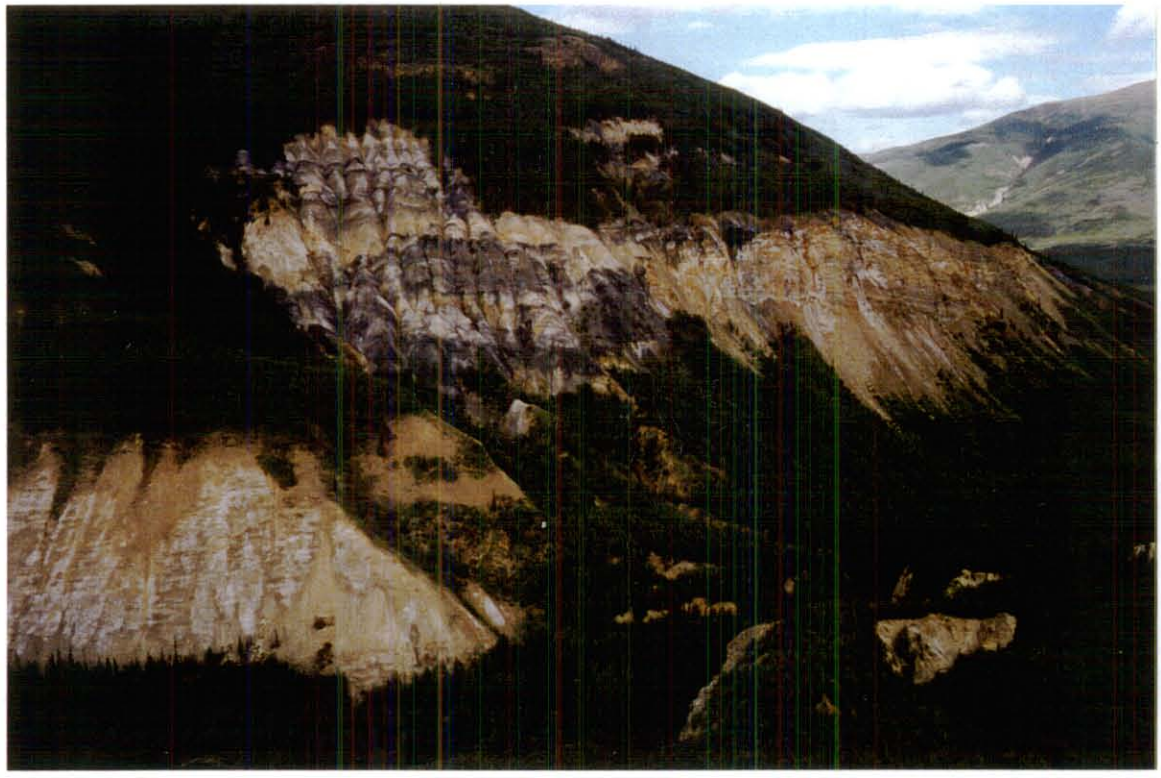


Plate I: View of White Bull property looking northeast. Detail grid mapping covered the grey and tan banded area in the centre of the photo.

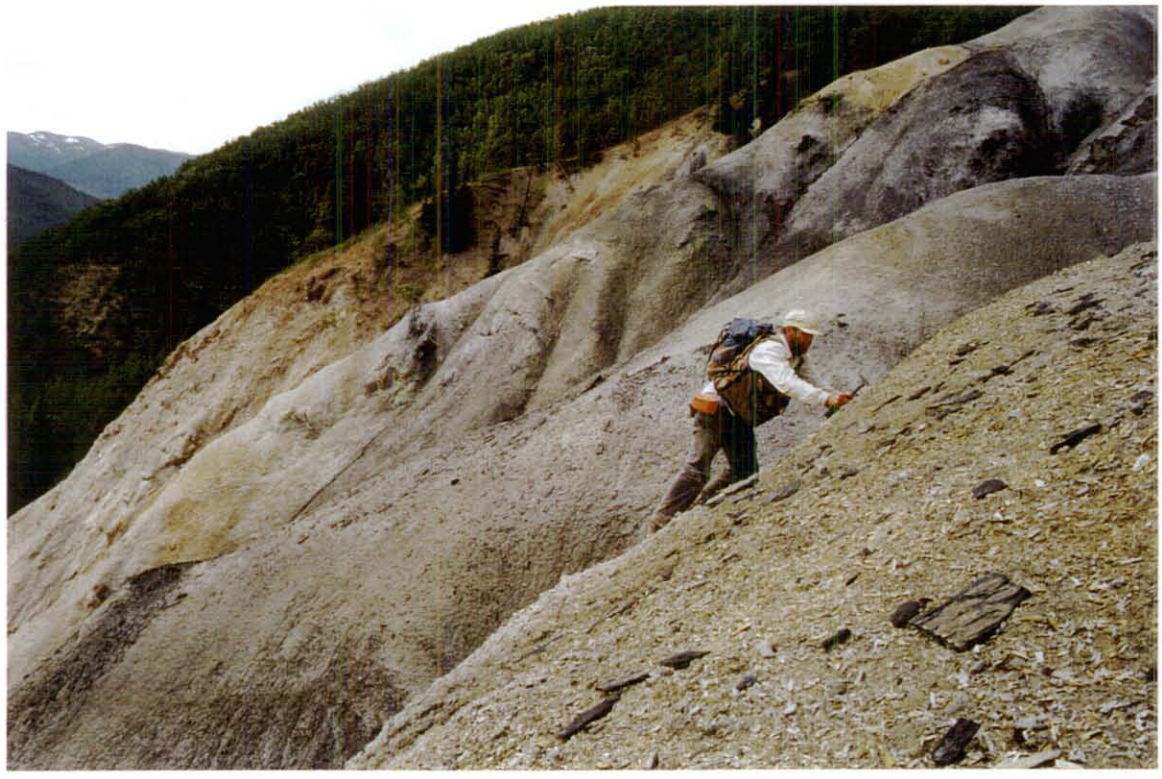


Plate II: View of detail grid area looking west, showing sulphate cemented fine talus which obscures most of the map area.

Plate III: View looking west of Cambro-Ordovician shales and argillites (Unit 1, 2) overlying Silurian dolomites (Unit 7). Dolomite beds parallel the steep south-dipping thrust fault which separates these lithologies.

Plate IV: View looking east, showing the more typical sub-horizontal to gently north dipping Silurian dolomite beds (Unit 7).

Over short distances channels turn abruptly to a north-south bearing. Lithologies strike in a northwesterly direction with numerous local exceptions. Dips are highly variable, often reversing from a northeasterly to a southwesterly dip over short distances. The structural complexity makes it difficult to trace lithologies along strike from one gully to the next, even though distances may be less than 30 metres.

Mineralization

Mineralization on the White Bull zone consists of a barite/chert horizon and disseminated to semi-massive pyrite. The barite/chert horizon has a thickness of 0.5 metres and a strike length of at least 50 metres. Sampling along this horizon in 1995 returned up to 8845 ppm Pb. The horizon is overlain by silicified black argillite and underlain by disseminated pyrite in tuffaceous horizons within a shale argillite sequence. The pyrite in the underlying rocks is associated with sericitic alteration and silicification. In some areas, the pyrite has been entirely removed by weathering. This has left siliceous, cubic boxwork structures which are resistant to weathering and can be traced in float, over a 400 metre strike length. The chert/barite horizon provides evidence of exhalative mineralization. Samples taken along this horizon in 1995 returned a wide range of lead and barium concentrations. Isolated anomalous silver concentrations were also detected. However, copper and zinc values are extremely low. This is probably caused by the acid-generating weathering of pyrite and leaching of these elements.

Disseminated, fine grained pyrite occurs in unit 3 tuff, in concentrations ranging from 15 to 20 %. Sampling of this material in 1995 returned only weakly anomalous base metal and silver values. No additional samples were taken in 1996 of this mineralization types.

Four rock samples and one soil sample taken in 1995 near a dolomite argillite contact, at the south end of the zone, returned anomalous gold analyses. Two rock samples returned 910 and 960 ppb Au and a nearby soil sample returned 760 ppb Au. This area was reexamined and sampled in detail in 1996. Results of this work, along with 1995 sample results, are presented on Fig. 4. The 1996 work indicates that anomalous gold concentrations are associated with yellow-ocre coloured hot spring deposits which have a high jarosite component. These deposits occur at or near the thrust fault zone which separates Silurian dolomites from argillite and tuffite interbedded Cambro-Ordovician rocks. The largest outcrops of these deposits occur at

the south end of line 48+00E (Plate V). This unit has a thickness of about a metre and dips gently to the south. Chip samples were taken in this area over sample intervals of 4 to 6 metres. Elsewhere, in areas of limited exposure, grab samples were taken. A total of 24 samples returned gold concentrations in the range of 3 to 760 ppb (Fig. 4 Detail). Exposure of the zone is limited by erosion to the north and by glacial till cover to the south.

Samples were analyzed by Acme Analytical Laboratories Ltd. of Vancouver, employing a standard 30 element Inductively Coupled Argon Plasma (ICP) package with gold analyzed by acid leach/AA from a 10 g sample. Certificates of analyses are appended to this report (Appendix A).

7. CONCLUSIONS

Detailed surface mapping of one of the larger "kill zones" has not changed the limits of favourable "SEDEX" horizons from previous mapping (Kallock, 1995). The 1996 mapping indicates that these horizons lie within a number of thrust slices with limited down dip potential. Mapping suggests that brittle deformation related to compressive stresses caused by a regional thrust fault is the primary style of deformation. Although previous interpretations of the structural geology have included folding, folds observed by the writer appear to be drag folds associated with thrust faults. Brittle deformation within the thrust slices has produced highly stressed lithologies which break up into small platy or needle shaped fragments when exposed to weathering. This may hinder drill testing and make core recovery in some units impossible.

Surface sampling of hot spring deposits at the south end of the grid confirmed anomalous geochemical concentrations of gold. Although gold concentrations are anomalous and are accompanied by anomalous arsenic and antimony, the volume of this material is quite low. Fragments within angular, jarosite-cemented breccias are unaltered, suggesting that they are low temperature, distal deposits. If these gold-enriched deposits are an indication of possible epithermal-style gold mineralization, then the potential lies to the south and down dip, along thrust faults, outlined by the present mapping.

Plate V: Unit 8, hot spring deposits at south end of grid.

Plate VI: Close up of Unit 8, jarosite-rich massive variety of hot spring deposits.

8. RECOMMENDATIONS

No further work is recommended on exploring the SEDEX mineralization potential of the Cambro-Ordovician stratigraphy on the White Bull property because the favorable horizons lie within a number of thrust slices with limited down dip potential.

9. BIBLIOGRAPHY AND REFERENCES

DeLancey, P.R. (1995): Summary Report on the White Bull Project, an in-house report for Atna Resources Ltd.

Everett, C.C. and Cooper, W.G. (1983): Progress Report for the 1982 White Bull Project, an in-house report for Esso Minerals Canada Ltd.

Gabrielse, H, (1962): Kechika, NTS 94L, G.S.C. Map 46-1962

Kallock, P. (1996): Geological Mapping, Rock Geochemical Survey and Regional Reconnaissance Prospecting, White Bull Claims

MacIntyre, W.G. (1991): "SEDEX Deposits" from Ore Deposits, Tectonic and Metallogeny in the Canadian Cordillera, M.E.M.P.R. Paper 1991-4

10. STATEMENT OF EXPENDITURE

I. Field Expenses

1) Labour		
U.Schmidt (Geologist) June 16-23,25,27-30, July 1,13, 1996		
15 days @$360/day	$5,400.00	
P. Kallock (Geologist) June 16-24,27-30, July 1, 1996		
14 days @$350/day	$4,900.00	
M. Tiedje (Junior Geologist) June 15-23,27-30, July 1, 1996		
14 days @$165/day	$2,310.00	
W. Kalhert (Field Assistant) June 12 23, 27-30 July 1, 1996		
17 days @ $165/day	$2,805.00	
R. Beauchamp (Field Assistant) June 21-23,27-30 July 1, 1996		
8 days @ $165/day	$1,320.00	
		$16,735.00
2) Room and Board		$1,164.98
3) Consumables and Supplies		$3,416.40
4) Camp and Equipment Rental		$3,162.00
5) Transportation		
Truck Rental		$1,359.67
Airfares		$817.93
Helicopter charter		$13,115.00
Fuel		$3,590.36
Fixed Wing Air charter		$3,136.00
6) Geochemical Analysis		
24 rocks, 30 element ICP & Au analysis		$312.00

II. OFFICE

Data compilation, Field preparation		
U. Schmidt June 4,7, 10-15, 1996		
8 days @$360/day		$2,880.00
W. Kalhert (Field Assistant) June 6,7,10,11, 1996		
4 days @ $165/day		$660.00
Data compilation, Plotting, Interpretation, Report Writing		
U. Schmidt March 11-28, 1997		
59 hours @$45/hour		$2,655.00
Maps, Plotting and Reproduction		$996.04
Drafting		$546.00
	TOTAL	**$54,546.38**

EXPENDITURE AFTER JUNE 20 ANNIVERSARY DATE

I. Field Expenses

1) Labour

U.Schmidt (Geologist) June 21-23,25,27-30, July 1,13, 1996
10 days @$360/day $3,600.00

P. Kallock (Geologist) June 21-24,27-30, July 1, 1996
9 days @$350/day $3,150.00

R. Kemp (Geologist)
6 days @$350/day $1,662.00

M. Tiedje (Junior Geologist) June 21-23,27-30, July 1, 1996
8 days @$165/day $1,320.00

W. Kalhert (Field Assistant) June 21 23, 27-30 July 1, 1996
8 days @ $165/day $1,320.00

R. Beauchamp (Field Assistant) June 21-23,27-30 July 1, 1996
8 days @ $165/day $1,320.00

$12,372.00

2) Room and Board $526.76

3) Consumables and Supplies $1,506.75

4) Camp and Equipment Rental $1,545.50

5) Transportation

Truck Rental $690.00

Airfares $817.93

Helicopter charter $8,113.00

Fuel $2,604.63

Fixed Wing Air charter $1,176.00

6) Geochemical Analysis

24 rocks, 30 element ICP & Au analysis $312.00

II. OFFICE

Data compilation, Plotting, Interpretation, Report Writing

U. Schmidt March 11-28, 1997

59 hours @$45/hour $2,655.00

Maps, Plotting and Reproduction $996.04

Drafting $546.00

Miscellaneous, Telephone, Courier, Freight $1,160.74

TOTAL **$35,022.35**

Appendix A

CERTIFICATIONS OF ANALYSIS

ACME A[illegible]TICAL LABORATORIES LTD. 852 E. HASTINGS ST. [illegible]OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60[illegible]3-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Atna Resources Ltd. PROJECT WHITE BULL File # 96-2925

1550 - 409 Granville St., Vancouver BC V6C 1T2 Submitted by: Uwe Schmidt

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
WK-WB-96-01	43	59	70	36	<.3	40	3	88	20.36	129	<5	<2	20	2071	.3	4	<2	135	1.34	.476	71	15	.24	95	.01	<3	.52	.18	3.59	<2	11
WK-WB-96-02	53	9	45	12	<.3	3	1	16	28.12	110	<5	<2	18	1830	<.2	<2	<2	147	.06	.515	55	8	.02	70	.01	<3	.10	.14	4.80	<2	7
WK-WB-96-03	52	4	39	12	<.3	<1	1	8	28.81	62	<5	<2	20	1894	<.2	<2	4	110	.04	.390	60	7	.01	48	.01	<3	.07	.17	4.95	<2	3
WK-WB-96-04	60	19	80	32	<.3	<1	<1	20	25.93	93	<5	<2	24	1348	<.2	3	<2	185	.18	.452	40	11	.02	97	.01	<3	.13	.18	4.44	<2	9
WK-WB-96-05	36	11	91	12	.3	<1	<1	9	26.88	60	<5	<2	12	1614	<.2	<2	<2	119	.03	.431	45	9	.01	76	.01	3	.07	.16	4.62	<2	10
WK-WB-96-06	18	4	139	1	.5	<1	<1	4	19.57	27	<5	<2	3	832	<.2	<2	7	111	.09	.310	13	6	.01	61	<.01	<3	.07	.13	3.42	<2	94
WK-WB-96-07	14	5	88	<1	<.3	<1	<1	9	15.64	36	<5	<2	3	671	<.2	<2	<2	95	.05	.392	10	7	.01	40	<.01	<3	.08	.11	2.75	2	17
WK-WB-96-08	15	3	83	<1	<.3	1	<1	4	14.25	41	<5	<2	4	642	<.2	<2	2	79	.03	.515	10	8	.01	38	<.01	<3	.09	.11	2.45	<2	11
WK-WB-96-09	5	1	214	3	2.1	<1	<1	9	4.53	17	<5	<2	3	134	.2	28	2	21	7.04	.039	2	3	.02	37	.01	4	.16	.03	1.07	3	257
WK-WB-96-10	7	21	87	104	.6	42	12	323	7.28	78	5	<2	<2	305	<.2	<2	<2	111	19.49	.074	3	26	.46	53	.01	<3	.35	.01	.22	<2	45
WK-WB-96-11	<1	108	60	126	<.3	72	20	509	18.19	58	6	<2	5	426	1.3	<2	<2	48	16.83	.208	11	58	.90	71	<.01	<3	.57	<.01	.03	<2	31
WK-WB-96-12	36	25	80	87	<.3	71	18	344	7.60	195	<5	<2	5	376	<.2	16	2	235	14.50	.227	17	19	1.29	50	.02	4	.70	.02	.10	<2	13
WK-WB-96-13	14	14	93	33	.5	12	2	58	7.13	121	<5	<2	9	222	<.2	8	<2	52	6.33	1.405	7	23	.10	74	.01	4	.30	.02	.68	4	26
WK-WB-96-14	27	5	92	6	<.3	1	<1	12	17.47	323	<5	<2	19	294	<.2	9	4	81	2.19	4.887	7	38	.01	67	.02	6	.25	.01	1.47	2	44
WK-WB-96-15	26	14	151	302	.4	25	1	216	17.96	513	<5	<2	25	229	.4	17	<2	62	3.02	4.859	6	48	.50	79	.04	<3	.43	.01	1.11	2	27
WK-WB-96-16	11	6	98	22	1.3	9	<1	40	4.97	159	<5	<2	2	171	<.2	<2	3	25	.29	1.009	10	12	.08	53	.01	3	.13	.02	.35	<2	144
RE WK-WB-96-16	11	6	90	21	1.0	8	<1	35	4.77	153	<5	<2	2	180	<.2	<2	<2	24	.28	.958	11	11	.07	66	.01	<3	.12	.02	.34	<2	208
WK-WB-96-17	31	11	374	189	2.2	17	<1	472	11.52	51	<5	<2	3	399	.5	3	<2	85	5.47	.186	4	15	1.71	53	.02	<3	.29	.04	2.05	2	116
WK-WB-96-18	19	9	619	181	2.4	17	1	16	4.83	55	<5	<2	4	132	.9	3	2	105	8.52	.075	2	21	.08	33	.01	9	.38	.03	.73	<2	88
WK-WB-96-19	19	8	91	54	.6	4	<1	10	8.63	183	<5	<2	5	275	.4	3	<2	239	12.48	.435	3	12	.02	49	.03	<3	.17	.04	1.23	<2	45
WK-WB-96-20	6	9	91	4	2.8	8	<1	21	4.10	8	<5	<2	<2	67	<.2	<2	<2	11	.93	.017	3	13	.02	48	.01	4	.15	.03	.44	<2	31
WK-WB-96-21	4	13	195	23	2.4	3	<1	63	5.38	40	5	<2	4	278	.2	<2	<2	41	12.84	.100	1	19	.03	47	.01	<3	.19	.02	.50	2	46
PK-WB-96-1	24	8	20	9	<.3	<1	<1	10	27.20	115	5	<2	26	348	<.2	<2	<2	186	.14	5.832	7	43	.02	92	.02	4	.28	.02	2.51	<2	8
PK-WB-96-2	10	5	97	1	1.8	10	1	23	.66	11	<5	<2	<2	17	<.2	7	<2	30	.12	.029	6	16	.02	333	<.01	4	.12	<.01	.11	<2	10
PK-WB-96-3	58	3	151	13	1.5	2	<1	13	12.17	76	<5	<2	4	213	<.2	18	<2	94	7.77	.087	2	3	.01	86	.06	<3	.06	.08	2.35	47	55
PK-WB-96-4	6	23	69	309	.4	16	2	127	6.24	167	<5	<2	3	354	1.5	6	<2	66	5.59	.205	5	21	.87	78	.01	8	.50	.02	.32	<2	49
STANDARD C2/AU-R	22	58	46	140	6.6	79	39	1249	4.24	45	19	9	35	53	20.3	18	24	76	.61	.101	40	65	.99	210	.08	29	2.06	.06	.15	13	520

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 16 1996 DATE REPORT MAILED: July 22/96 SIGNED BY. D. Toye ...D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

6.06-5

Appendix B

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Uwe Schmidt, of 656 Foresthill Place, Port Moody, B.C. do hereby declare:

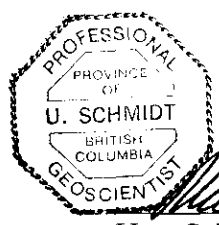
(1) I am a consulting geologist and controlling shareholder of Northwest Geological Consulting Ltd.

(2) I am a 1971 graduate of the University of British Columbia with a B.Sc. degree in Geology.

(3) I am a member of The Association of Professional Engineers and Geoscientists of British Columbia and a Fellow of the Geological Association of Canada.

(4) I have practised my profession continuously since graduation.

(5) This report is based on work carried out by me or by workers under my supervision.



March 28, 1997
Port Moody, B.C.

Uwe Schmidt, B. Sc., P. Geo.

47+50 E | 48+00 E | 48+50 E | 49+00 E | 49+50 E | 50+50 E | 50+50 E | 51+00 E

52+00 N | 51+50 N | 6,529,500 N | 51+00 N | 50+50 N | 50+00 N | 49+50 N | 49+00 N | 48+50 N

0 10 20 30 40 50 metres

LEGEND

AGE UNKNOWN

8 *Hot Spring Deposits:* yellow jarosite cemented "travertine" deposits and jarosite cemented breccia with fragments of black shale, tan phyllite or quartz

SILURIAN
Sandpile Group

7 *Dolomite* red-brown weathering, light to dark grey dolomite, silty dolostone and minor interbedded siltstone

6 *Shale* grey, fissile shale

CAMBRO-ORDOVICIAN
Kechika / Road River Groups

5 *Talc Schist* pink to brown, talc schist, stretched pebble schist

4 *Tuffite* orange weathering, pyritic tuffite, locally calcareous

3 *Tuff* tan, beige, light grey, olive-green to yellow-green tuff and tuff breccia; commonly with disseminated manganese ; locally with 15 to 20% disseminated pyrite

2 *Argillite and Tuff Interbedded* beige tuff horizons interbedded with black argillite and minor grey siltstone

1 *Argillite* black, siliceous argillite and shale

15-20% py

Symbols

- Geological Boundary: defined, inferred, assumed
- Fault: defined, inferred
- Thrust Fault: defined, inferred
- Foliation: approximate, vertical, inclined
- Bedding: inclined, vertical
- outcrop, sub-outcrop
- Limit of vegetation anomaly
- Breccia
- Cliff
- 1996 rock sample location
- 1996 chip sample location
- mineral occurrence: py pyrite, boxwork after pyrite, ba barite, ma manganese, Q quartz vein
- Jointing: vertical, inclined

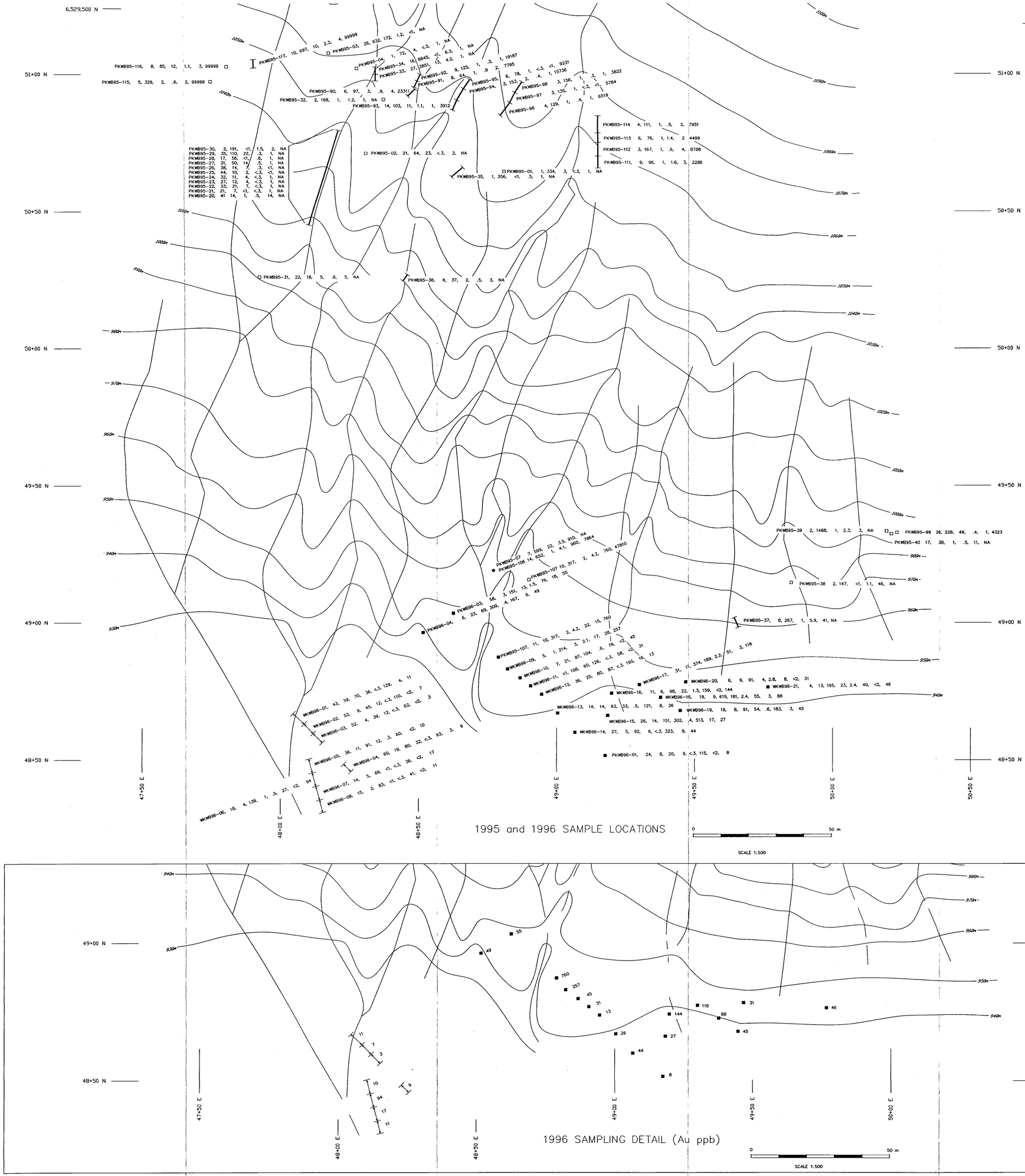
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,016

Mapped by: P.Kollock, U.Schmidt

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA U. SCHMIDT GEOSCIENTIST

ATNA RESOURCES LTD.			
White Bull Property GEOLOGY *Northwest Geological Consulting Ltd.*			
Scale	NTS	Date	Fig.
1:500	94 L/13	Mar. 97	3



LEGEND

- 1995 Rock Sample
- 1995 Soil Sample
- 1995 Chip Sample
- 1996 Rock Sample
- 1996 Chip Sample

95 SAMPLE Cu, Pb, Zn, Ag, Au, Ba
ppm ppm ppm ppm ppb ppm
NA = NOT ANALYZED

96 SAMPLE, Mo, Cu, Pb, Zn, Ag, As, Sb, Au
ppm ppm ppm ppm ppm ppm ppm ppb

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,016

PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
U. SCHMIDT

ATNA RESOURCES LTD.

Work By:	White Bull Project
U Schmidt	Geochemical Sampling
Drafted By:	
US	
Date:	NORTHWEST GEOLOGICAL CONSULTING LTD.
Mar. 97	
N.T.S.	Figure:
94L/13	4
File Name:	SCALE: As Shown
WBASSAY2	