

K-SHELL - CROWN MIN. SOUTH 78 (10) A.

S.C.R.L. / C.N.R.L.

REPORT ON GEODETIC SURVEY

CROWN MIN. SOUTH

Group #32

1978/1979



GEOLOGICAL BRANCH
ASSESSMENT REPORT

00 395

OPEN FILE

REPORT ON GEODETIC SURVEY

WORK DONE FROM JUNE 27, 1978 TO JANUARY 31, 1979

CROWN MTN. SOUTH

KOOTENAY LAND DISTRICT

B.C. COAL LICENCES 305, 306, 307, 309, 311, 313

GROUP #32

HELD BY SHELL CANADA RESOURCES LIMITED

OPERATED BY CROWS NEST RESOURCES LIMITED

NTS 82G/10 & 15

LAT. $49^{\circ} 45'$ N; LONG. $114^{\circ} 44'$ W

BY

SHELL CANADA RESOURCES LIMITED - SURVEYING DEPARTMENT
GENERAL SURVEY CONTRACTOR

NORTHWEST SURVEY CORPORATION (YUKON) LIMITED
SUBCONTRACTOR ON PHOTOGRAMMETRIC MAPPING

1979-04-26

T A B L E O F C O N T E N T

LAND MAP AND TENURE STANDING SCALE 1:50 000

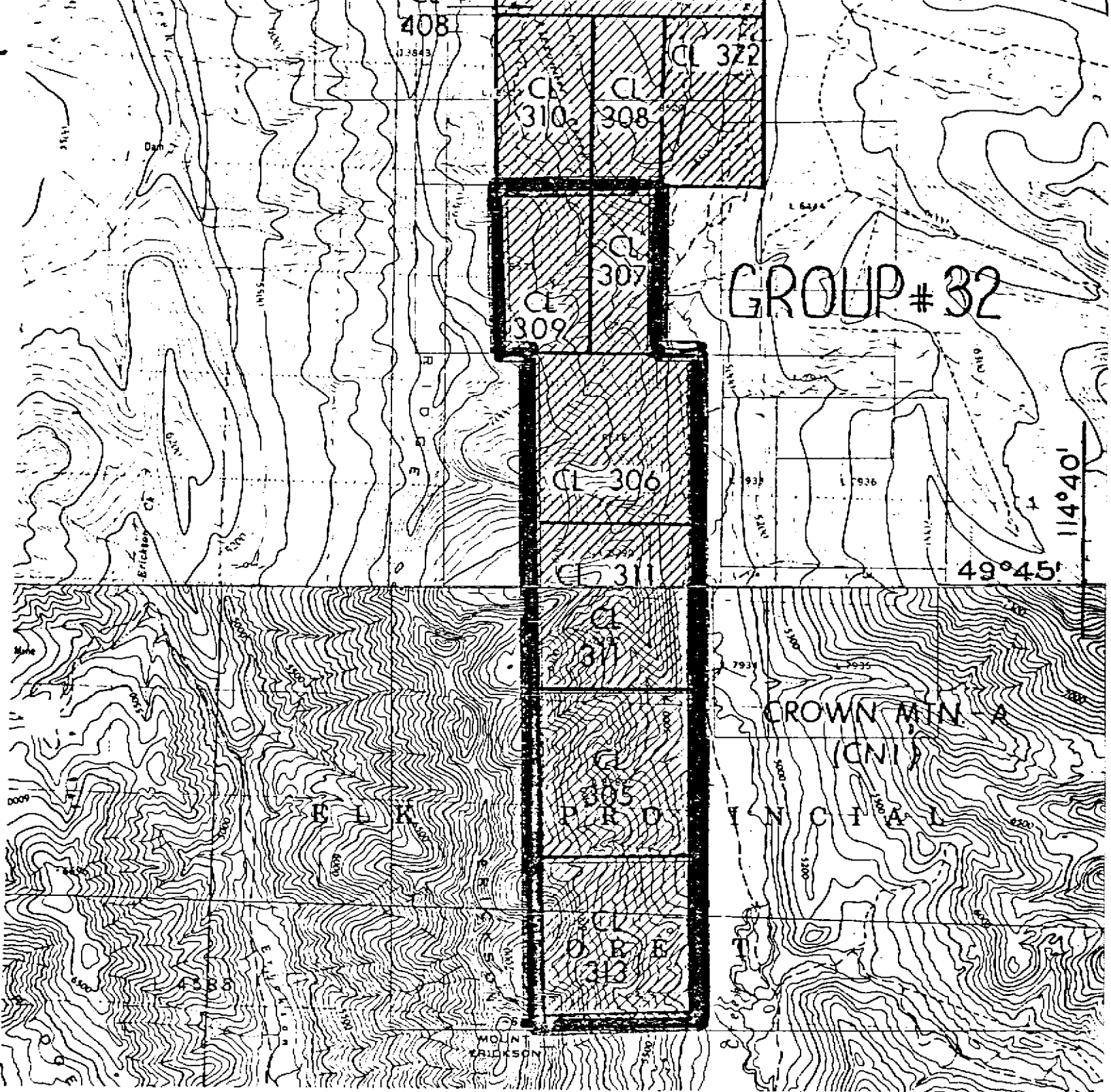
REPORTS ON GEODETIC SURVEY

SURVEY CONTROL FOR CROWS NEST RESOURCES LIMITED
FERNIE - SPARWOOD, B.C.

PHOTOGRAMMETRIC MAPPING PROJECT (1978)
FERNIE - SPARWOOD AREA, S.E. B.C.

TITLE PAGE, TABLE OF CONTENTS, COST ALLOCATIONS AND REFERENCE ONLY

APPLICATION TO EXTEND TERM OF LICENCE (COST STATEMENT)
B.C. COAL LICENCES 305, 306, 307, 309, 311, 313
GROUP #32



B.C. COAL LICENSES NUMBERS	LEGAL DESCRIPTION	ISSUANCE YEAR	AREA		GROUP # 32
			Ha	Ac	
305	L 8289	1975	259	640	Block: Crown Mountain Project: Crown Mountain B.C. Land District: Kootenay Licencee: Shell Canada Resources Ltd. Operator: Crows Nest Resources Ltd. Anniversary Date: January 31
306	L 8618	1975	259	640	
307	W1/2 L 8519	1975	130	320	
309	E1/2 L 8521	1975	130	320	
311	L 8290	1975	259	640	
31	UNSURVEYED	1975	259	640	
313					
TOTAL	GROUP # 32		1,296	3,200	

	\$	\$/Ha	\$/Ac	
Work Credit at February 1, 1978	42,944	33.14	13.16	NTS: 82 G/10 & 15 MAP SCALE: 1:50,000
1978 - 1979 work requirement	16,000	12.35	5.00	
1978 - 1979 work done	12,144	9.37	3.80	
Work Credit February 1, 1979	39,088	30.16	12.22	
1979 - 1980 Rental Paid				

REPORTS ON GEODETIC SURVEY

WORK DONE FROM JUNE 27, 1978 TO JANUARY 31, 1979

SURVEY CONTROL FOR CROWS NEST RESOURCES LIMITED

FERNIE - SPARWOOD, BRITISH COLUMBIA

PHOTOGRAMMETRIC MAPPING PROJECT (1978)

FERNIE - SPARWOOD AREA - S.E. BRITISH COLUMBIA

COVERING ALL COAL LAND IN S.E. BRITISH COLUMBIA

HELD BY SHELL CANADA RESOURCES LIMITED

OPERATED BY CROWS NEST RESOURCES LIMITED

MORRISSEY FREEHOLD

B.C. COAL LICENCES

264 TO 313 INCL., 365 TO 373 INCL., 408, 412 TO 414 INCL.

490 TO 495 INCL., 588 TO 601, 1299 - 1302 INCL., 4080 TO 4089 INCL., 4090, 4092

KOOTENAY LAND DISTRICT, B.C.

NTS 82G AND 82J

LAT. $49^{\circ} 05'$; TO $50^{\circ} 10'$ N, LONG. $114^{\circ} 30'$ TO $115^{\circ} 10'$ W

BY

SHELL CANADA RESOURCES LIMITED - SURVEYING DEPARTMENT
GENERAL SURVEY CONTRACTOR

NORTHWEST SURVEY CORPORATION (YUKON) LIMITED
SUBCONTRACTOR ON PHOTOGRAMMETRIC MAPPING

1979-04-26

T A B L E O F C O N T E N T

SURVEY CONTROL FOR CROWS NEST RESOURCES LIMITED
FERNIE - SPARWOOD AREA, B.C.; SCRL 1979

PHOTOGRAMMETRIC MAPPING PROJECT (1978)
FERNIE - SPARWOOD AREA, S.E. B.C.; SCRL 1979
INCLUDING ATTACHMENTS

SCHEDULE A
SCRL ON BEHALF OF CNRL
REQUEST FOR PROPOSALS FOR AERIAL PHOTOGRAPHY, AEROTRIANGULATION
AND TOPOGRAPHIC MAPPING IN THE CROWSNEST PASS - FERNIE AREAS
OF BRITISH COLUMBIA
INCLUDING ATTACHMENTS
FIVE 1:50 000 MAPS OUTLINING AREAS OF CONCERN

SCHEDULE B
GENERAL SPECIFICATION FOR AERIAL PHOTOGRAPHY

SOUTHEASTERN B.C.
INDEX MAP
AERIAL PHOTOGRAPHS, GROUND CONTROL SURVEY, PHOTOGRAMMETRIC MAPS
SCALE 1:100 000

COST STATEMENT
AND ALLOCATIONS TO PROJECTS AND GROUPS OF LICENCES

CROWS NEST RESOURCES LIMITED - EXPLORATION
SHELL CANADA RESOURCES LIMITED - SURVEYING

GROUND CONTROL SURVEY AND PHOTOGRAMMETRIC MAPPING
SOUTHEASTERN BRITISH COLUMBIA

DISTRIBUTION OF AFE Z4670: UNDIVIDED COSTS
TO PROJECTS AND GROUPS OF LICENCES
ON THE BASIS OF HOLDING ACREAGES

<u>*HOLDINGS/PROJECTS</u>	<u>AFE</u>	<u>ACREAGE</u>	<u>%</u>	<u>\$ COSTS</u>
NORTH BLOCK=GROUP "NA"	4853A	7,840	8.0	29,440
CENTRAL BLOCK NORTH	4851J	10,264	10.5	38,640
HORESESHOE RIDGE	4851E	6,532	6.7	24,656
LINE CREEK J.V.	4851D	1,854	1.9	6,992
(Central Block Total)		(18,650)	(19.4)	(71,392)
(Group "CA")		(6,088)	(6.2)	(22,816)
(Group "CB")		(8,082)	(8.6)	(31,648)
(Group "CS")		(4,480)	(4.6)	(16,928)
CROWN MOUNTAIN TOTAL	4851Z	6,317	6.5	23,920
(Group #31)		(3,117)	(3.2)	(11,776)
(Group #32)		(3,200)	(3.3)	(12,144)
CORBIN=GROUP #6	4851Q	1,760	1.8	6,629
(Coal Mountain)		(640)	(0.7)	(2,578)
(Tent Mountain)		(1,120)	(1.1)	(4,051)
MORRISSEY FREEHOLD	4851U	43,200	44.1	162,288
LODGEPOLE=GROUP #104	4851S	3,345	3.4	12,512
LILLYBURT	4851R	6,122	6.3	23,184
HARVEY CREEK TOTAL	4851T	7,307	7.5	27,600
(Group #105 Renewal)		2,992	(3.1)	11,408
(Remainder)		4,315	(4.4)	16,192
CABIN CREEK=Group #106	4851V	3,200	3.3	12,144
<u>TOTAL</u>	<u>Z4670</u>	<u>97,741</u>	<u>100.0</u>	<u>368,000</u>

= 39,556ha

\$3.77/acre

*All B.C. Coal Licences except Morrissey Freehold

\$9.30/ha

1979-01-31

F. Martonhegyi
Exploration

D. Poulson
Surveying

H. Hofer
Finance Analyst

J. J. Crabb
Manager - Exploration

REFERENCE

THESE REPORTS COVER IN ONE UNIT ALL B.C. COAL LICENCES IN SOUTH-
EASTERN BRITISH COLUMBIA

HELD BY SHELL CANADA RESOURCES LIMITED
OPERATED BY CROWS NEST RESOURCES LIMITED

TWO SETS WERE FILED WITH

ADMINISTRATOR FOR COAL
MINISTRY OF ENERGY, MINES & PETROLEUM RESOURCES
GOVERNMENT OF BRITISH COLUMBIA
VICTORIA, B.C.

ON APRIL 30, 1979, TO WHOM FURTHER COPIES WILL BE SUPPLIED AT
REQUEST.

CROWS NEST RESOURCES LIMITED



GROUP # 32

DEPARTMENT OF MINES AND PETROLEUM RESOURCES
Coal Act (Sec. 19)

APPLICATION TO EXTEND TERM OF LICENCE

1. I, Gordon A. Schwartz agent for Shell Canada Resources Ltd
P.O. Box 100 P.O. Box 100
Calgary, Alberta T2P 2H5 Calgary, Alberta T2P 2H5
Valid FMC No. 171 929

hereby apply to the Minister to extend the term of Coal Licences No(s) 305, 306, 307, 309
311, 313
for a further period of one year.

2. I have performed, or caused to be performed, during the period February 1, 1978 to
January 30, 1979, work to the value of at least \$ 12,144
on the location of coal licences as follows:

CATEGORY OF WORK

	Licence No(s)	Apperimental Cost
Geological mapping - - - -		NIL
Surveys: Geophysical - - - -		NIL
Geochemical - - - -		NIL
Other Geodetic - - - -	<u>305, 307, 306, 309, 311, 313</u>	<u>\$ 12,144</u>
Road construction - - - -		NIL
Surface work - - - -		NIL
Underground work - - - -		NIL
Drilling - - - -		NIL
Logging, sampling, and testing - - - -		NIL
Reclamation - - - -		NIL
Other work (specify) - - - -		NIL

3. I wish to apply \$ 12,144 of this value of work on Coal Licence(s)* 305, 306, 307
309, 311, 313

N.A. 4. I wish to pay cash in lieu of work in the amount of \$ _____ on Coal Licence(s)
No(s) _____

N.A. 5. I wish to apply \$ _____ of this value of work to claim a refund of cash in lieu of work in
the amount of \$ _____ which was paid to extend the term of Coal Licence(s) No(s) _____
from _____
to _____, 19 ____ Mining Receipt No. _____
for prior payment of cash in lieu of work is attached for adjustment.

6. The work performed on the location(s) is detailed in the attached report entitled _____
Geodetic ground control survey and photogrammetric mapping-crown MCA area,
Kootenay Land District B.C. - in preparation and will be submitted in 90 days.

1979-01-31
(Date)

G.A. Schwartz
(Signature and position)
LANDMAN

*Applications in group format may be filed to approximate even on a maximum of 30 licences.

(FORM TO BE SUBMITTED IN DUPLICATE)

FOR DEPARTMENTAL USE ONLY

Value of work reported \$ _____ Value of work applied on licences \$ _____
Value of work approved \$ _____ Value of credit remaining \$ _____

Work performed: Yes No

The program of operations detailed hereunder was carried out during the period from February 1, 1978 to January 30, 1979. Total cost are \$ 12,144, an average of \$ 3.80 per acre, or \$9.31 per hectare.

GEOLOGICAL MAPPING Yes No Cost \$ NIL
Area (Acres) _____ Date _____ Time _____

Reconnaissance _____

Detail: Surface _____

Underground _____

Other (specify) _____

GEOPHYSICAL OR GEOCHEMICAL SURVEYS Yes No Cost \$ NIL

Method _____ Line miles _____

OTHER SURVEYS Yes No Cost \$ 17,144

Grid _____ Topographic, Geographic, Ground control survey and photogrammetric mapping.

ROAD CONSTRUCTION Yes No Cost \$ NIL

Length: On Licenses _____ Acres (off Licenses) _____

SURFACE WORK Yes No Cost \$ NIL

Trenching _____ License Number(s) _____

Scam tracing _____

Crosscutting _____

Other _____

UNDERGROUND WORK Yes No Cost \$ NIL

Test adits: Number _____ Average length _____ Total footage _____

Other workings: Area _____ Total footage _____

DRILLING Yes No Cost \$ NIL

Core: Diamond Wireline _____ Date _____ Number of Shales _____ Total Footage _____

Rotary: Conventional _____

Reverse circulation _____

Other _____

Contractor _____ Where core stored _____

LOGGING, SAMPLING, AND TESTING (Check) Yes No Cost \$ NIL

Lithology: Drill samples Core samples Bulk samples

Logs: Gamma-Neutron Density Other

Testing: Prox. analysis FSI Weathering

Carbonization Petrographic Mineralogy Other

OTHER WORK (specify details) _____ NONE _____ Cost \$ NIL

REPORTS:

Reclamation work (Permit No. _____) Detail of work* _____ N.A. _____

_____ Cost \$ NIL

OPERATIONS:

Work was supervised by Frank M. Mrozinski Position Staff Geologist

Is this person a registered or licensed Professional Engineer in British Columbia? Yes No

NOTE: Where the licensee intends to perform, during the extended term of his license, work not set out in the plan of operations filed under section 15 (2) (c), a supplemental plan of operations is to be attached.

* A separate work report is required in separate report per detailed report instructions.

VALUATION OF WORK: COST STATEMENT
(Sec. 27, B.C. Reg. 436/75)

ON PROPERTY COSTS: For period from February 1, 1978 to January 30, 1979

N.A. 1. OPERATOR'S FEES, SALARIES, AND WAGES:

	Average Number of Employees	Average Rate	Average Number of Days	Amount
Professional and technical	_____	_____	_____	_____
Machine operators and support	_____	_____	_____	_____
Miners	_____	_____	_____	_____
Other	_____	_____	_____	_____
Total operator's costs				\$ <u>NIL</u>

2. CONTRACTORS AND CONSULTANTS:

Name	Service	Contract Amount
SCRL Survey Department	Geodetic Ground Control Survey	\$ <u>12,144</u>
(including subcontractor: Northwest Survey)	Photogrammetric Mapping	_____
_____	_____	_____
_____	_____	_____
Total contractor and consultant costs		\$ <u>12,144</u>

3. EQUIPMENT AND INSTRUMENTS USED: Owned _____ Rented _____

Type	Rented From	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Total equipment and instrument rentals		\$ <u>NIL</u>

4. FIELD CAMP COSTS:

	Amount	
Food	_____	
Accommodation	_____	
Fuel	_____	
Other	_____	
Total field camp costs		\$ <u>NIL</u>

5. SAMPLING, ANALYSIS, AND TESTING:

Service	Performed by	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Totals, samplings, analysis, and testing		\$ <u>NIL</u>

6. SUPPLIES AND MATERIALS COSTS:

	Amount	
Process supplies	_____	
Operating and maintenance supplies	_____	
Office and technical supplies	_____	
Other supplies and materials	_____	
Total, supplies and materials		\$ <u>NIL</u>

7. TRANSPORTATION COSTS (Ground transportation details):

Vehicle	Owner	Rental Rate	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Air support details:

Aircraft Type	Owner	Owner
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total transportation costs \$ NIL

N.A. 8. RECLAMATION WORK:

_____ \$ NIL

N.A. 9. TRAVEL EXPENDITURES (operator's costs only):

Number of Personnel	Number of Trips	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total travel expenditures \$ NIL
Total costs \$ 12,144

(Secs. 28 and 29, B.C. Reg. 436/75)

N.A. OFF-PROPERTY COSTS: Period from _____ to _____, 19____

- (a) Logistics and field support _____ \$ _____
- (b) Technical and feasibility studies _____
- (c) Preparation of reports _____
- (d) Supplies and services _____
- (e) Mobilization and demobilization of equipment _____
- (f) Travelling expenses _____
(Items)

Supporting Cost Statements Attached _____ Total \$ NIL
Amount

Total supporting costs \$ NIL

SUMMARY

On-property costs _____ \$ 12,144
Off-property costs _____ \$ NIL
Total costs \$ 12,144

Statement of costs verified by Accounting division, Finance and Administration, SCRI

1979 - 01 - 30
(Date)

Wilmot Hall
(Signature and Position)