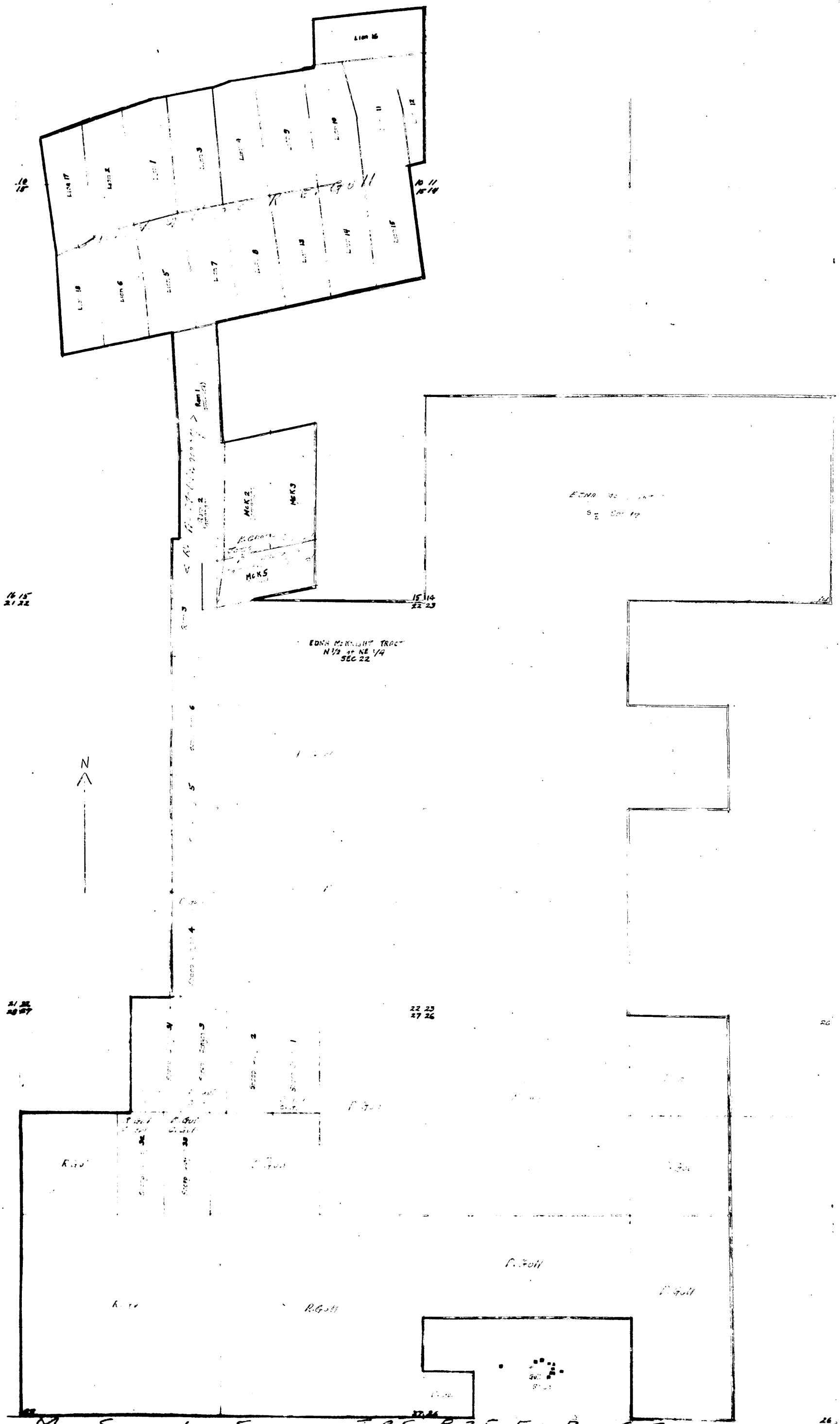
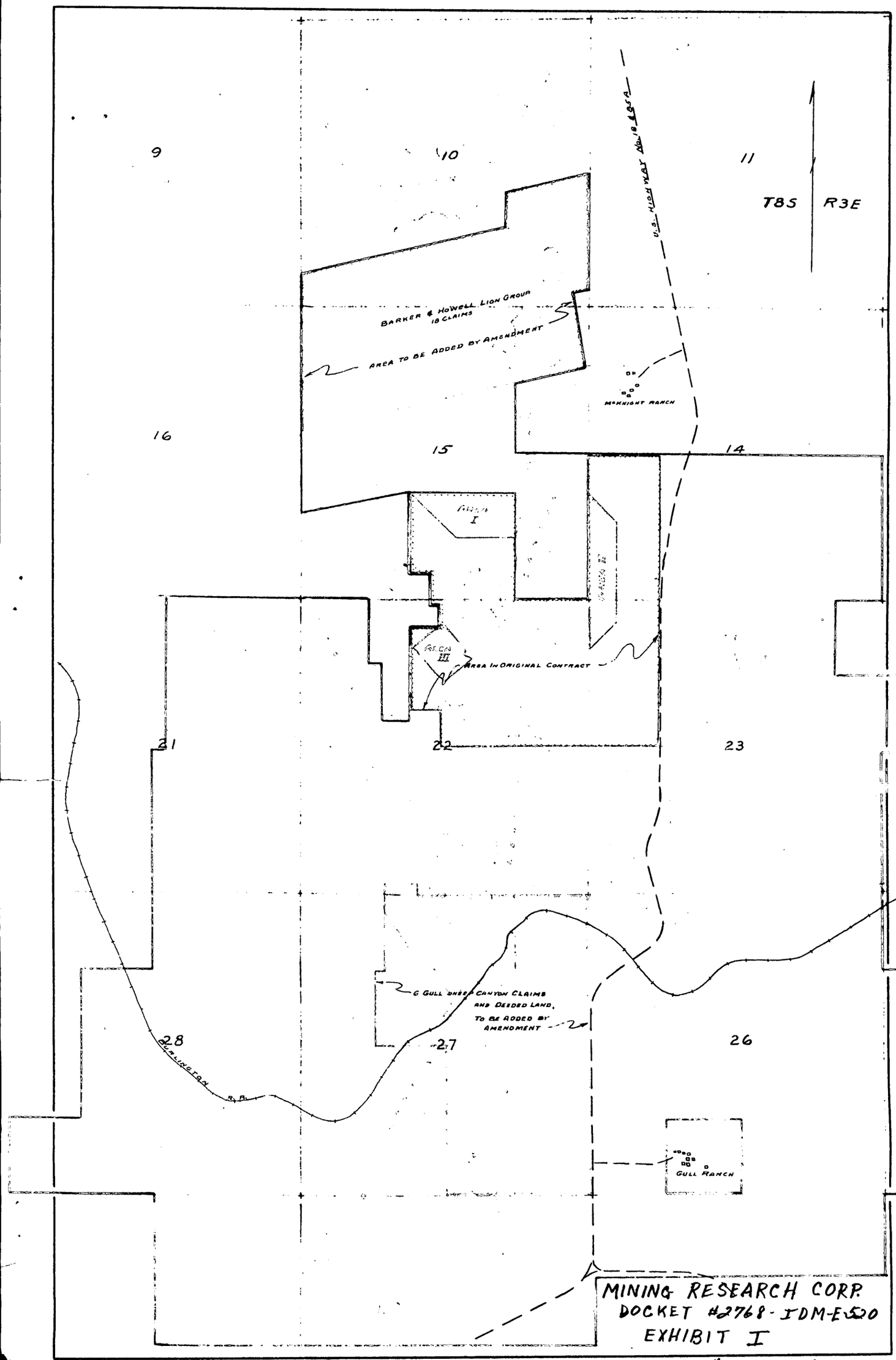


MAP SHOWING LAND SUBORDINATED, T 8 S. - R. 3 E. FALL RIVER CO., SOUTH DAKOTA.
DOCKET NO. DMEA-2768 (URANIUM), CONTRACT NO. Idm-E 520
MINING RESEARCH CORP.
SCALE

MAP SHOWING LAND SUBORDINATED, T 8 S. - R. 3 E., FALL RIVER CO., SOUTH DAKOTA,
DOCKET NO. DMEA-2768 (URANIUM), CONTRACT NO. Idm - E 520
MINING RESEARCH CORP.
SCALE



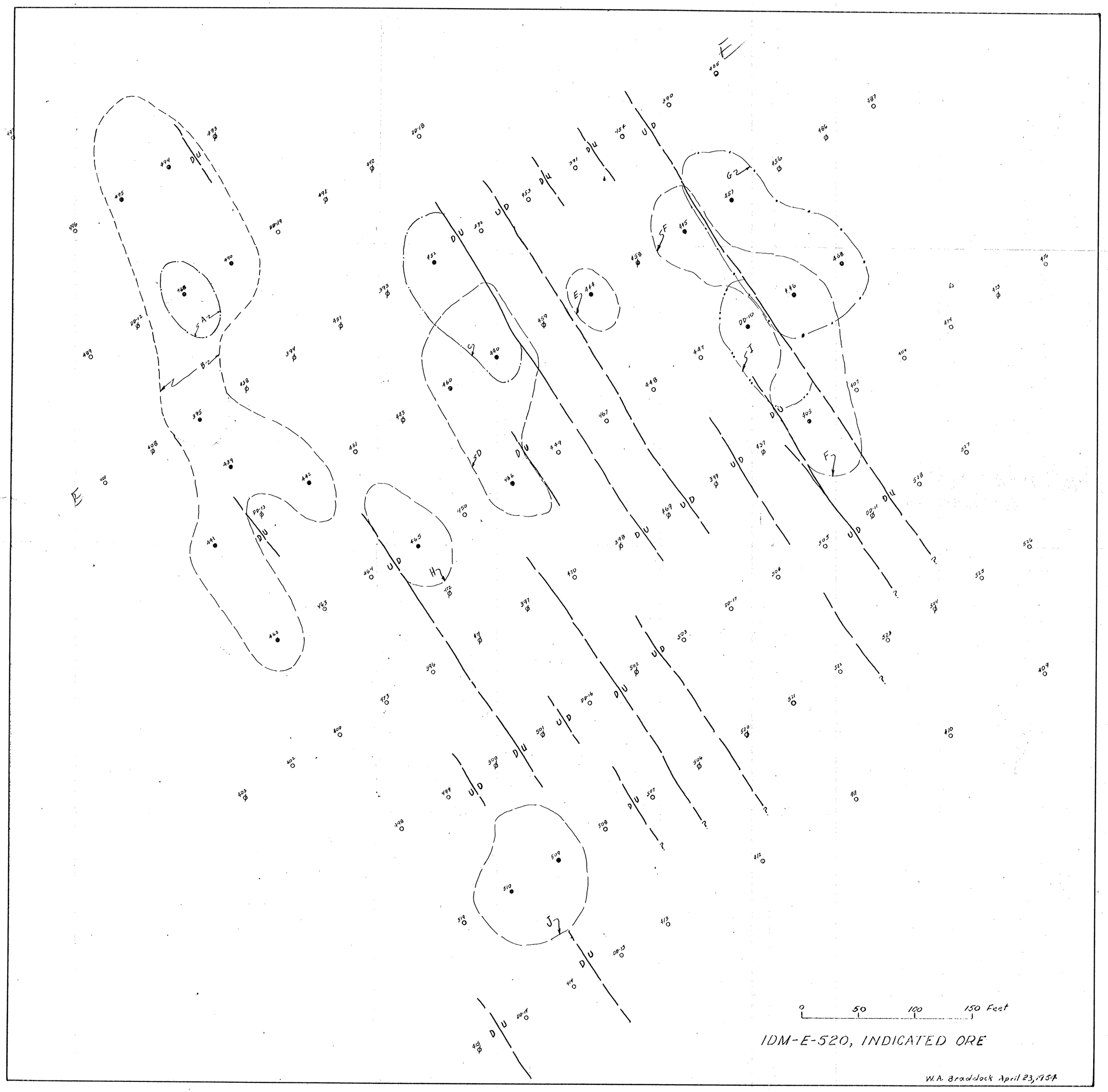
MINING RESEARCH CORP.
DOCKET #2768-IDM-E520
EXHIBIT I

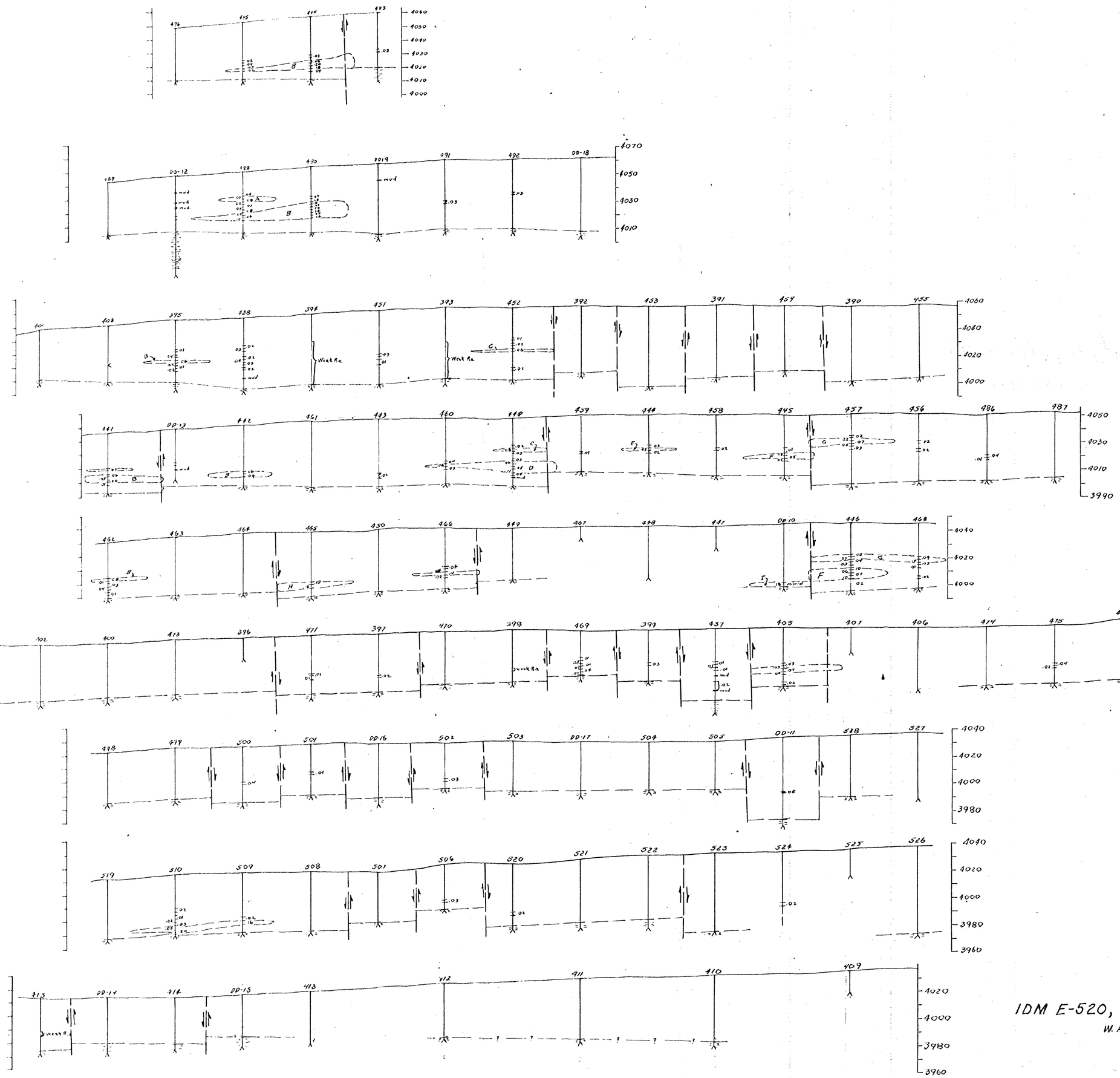
Scale 2" = 1-Mile

Needham memo 5/11/54
Operator's letter (undated)
recd. in Washington

May 21, 1954

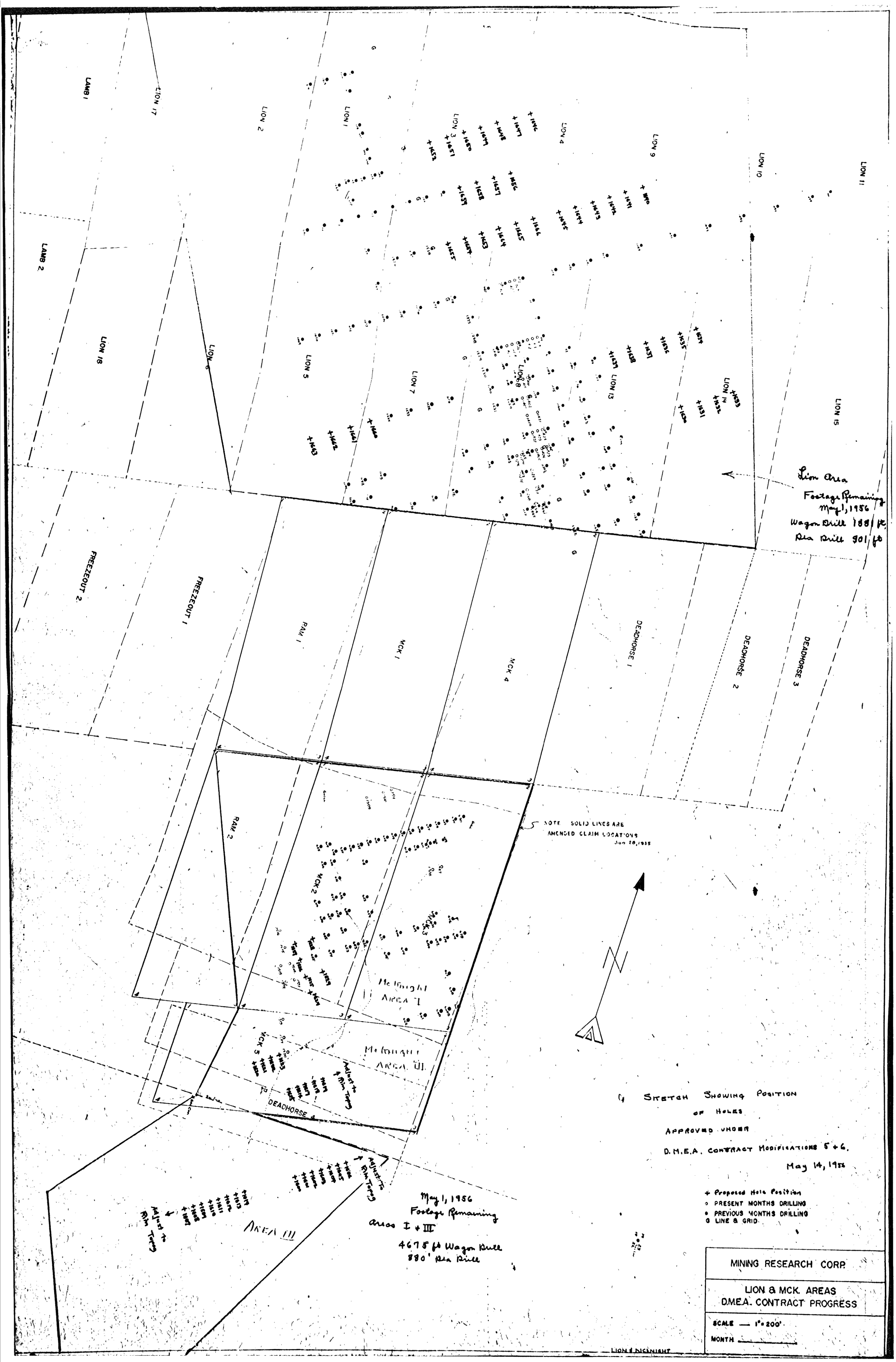
pertaining to Conn. #1

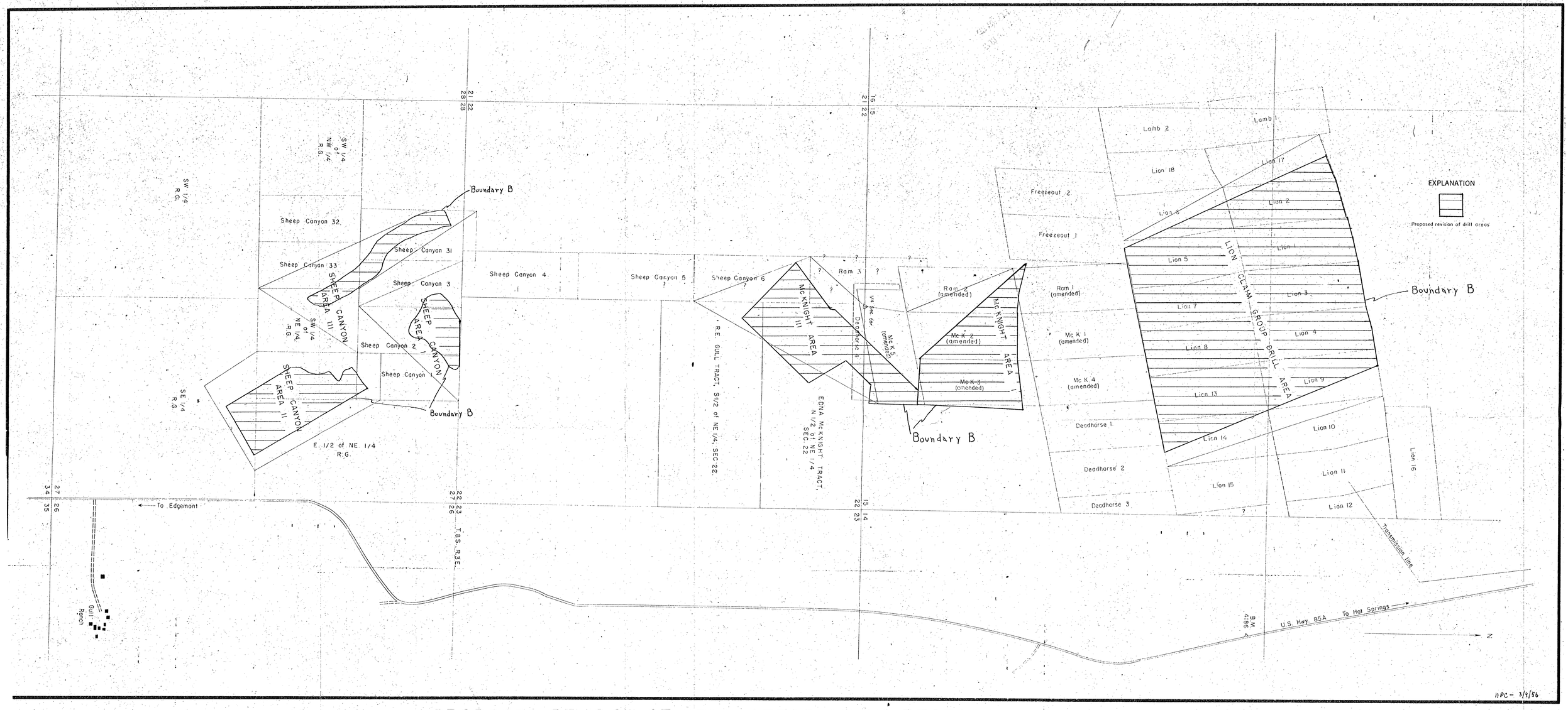

0 50 100 150 Feet
IDM-E-520, INDICATED ORE
W.A. Braddock April 23, 1954



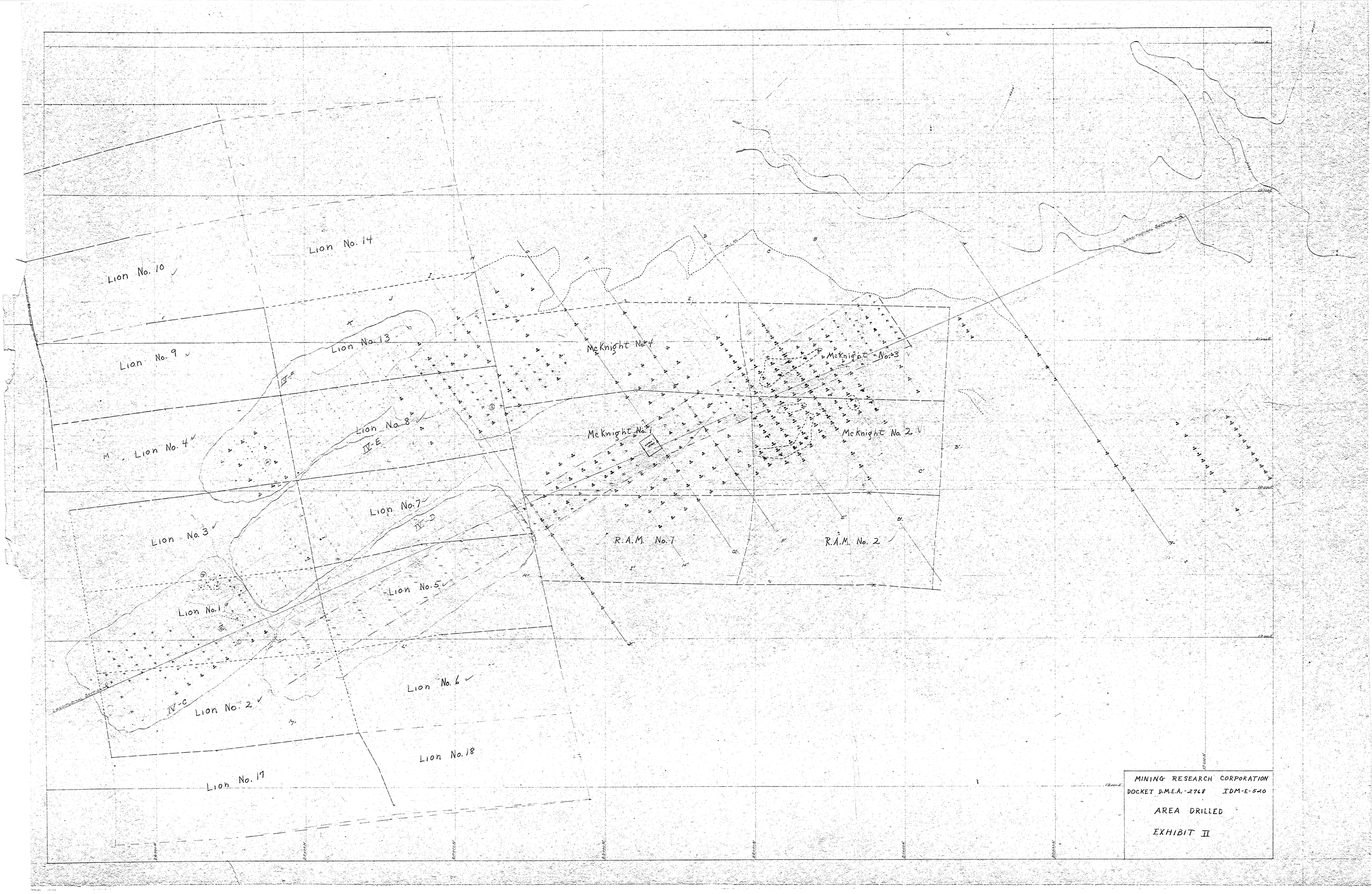
IDM E-520, CROSS SECTIONS

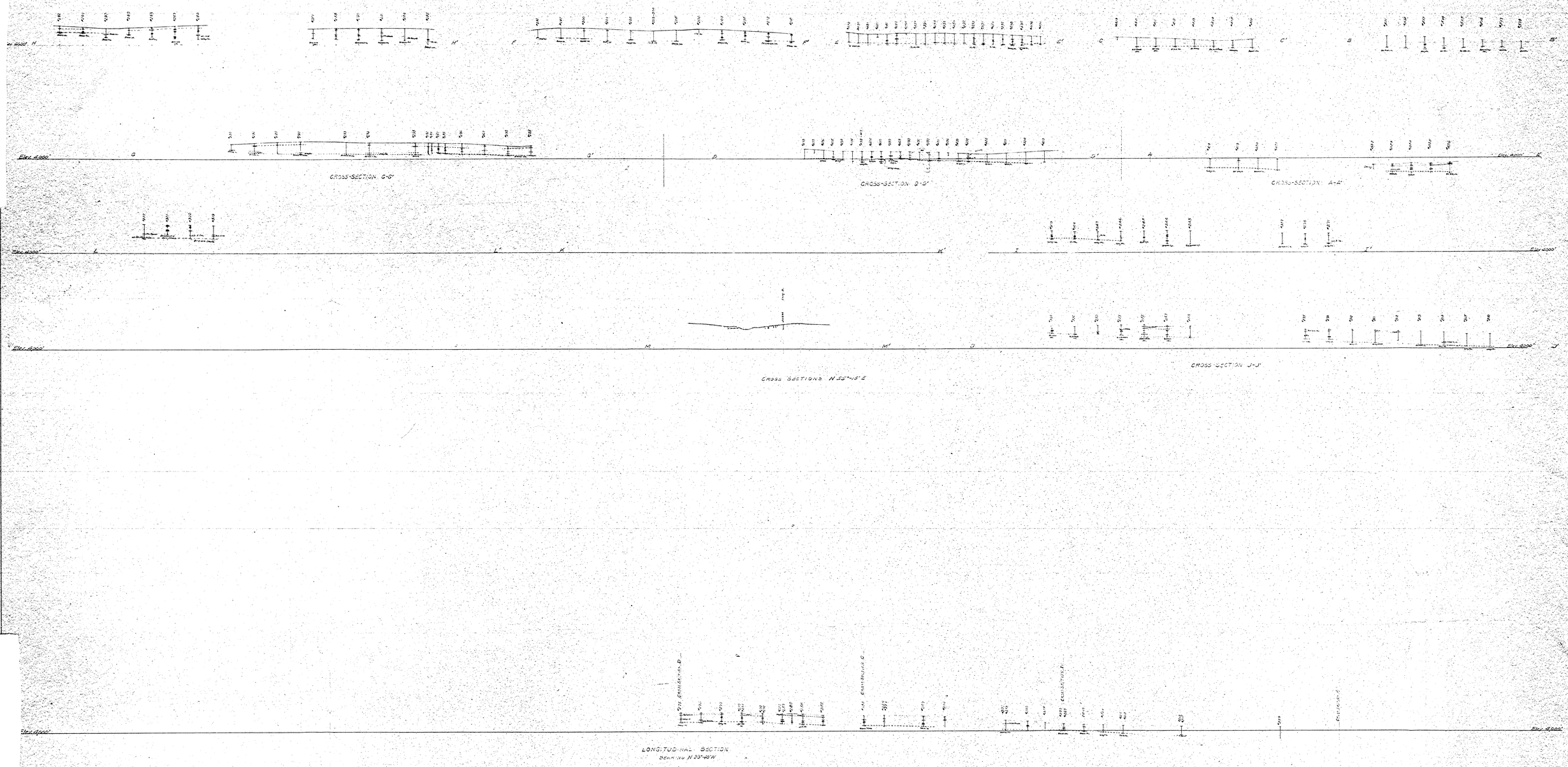
W. A. Braddock, April 23, 1954


LAMB 1
LAMB 2
LION 17
LION 18
LION 2
LION 1
LION 3
LION 4
LION 9
LION 10
LION 11
LION 5
LION 7
LION 8
LION 13
LION 14
LION 15
Lion Area
Footage Remaining
May 1, 1956
Wagon Drill 188 ft.
Rea Drill 901 ft.
FREEZEOUT 2
FREEZEOUT 1
RAM 1
MCK 1
MCK 4
DEADHORSE 1
DEADHORSE 2
DEADHORSE 3
RAM 2
MCK 2
MCK 3
MCK 5
DEADHORSE 4
NOTE SOLID LINES ARE
AMENDED CLAIM LOCATIONS
Jan 28, 1955
McKnight
AREA I
McKnight
AREA II
AREA III
Adjust to Rim Topog
May 1, 1956
Footage Remaining
Areas I + III
4675 ft Wagon Drill
880' Rea Drill
SKETCH SHOWING POSITION
OF HOLES
APPROVED UNDER
D.M.E.A. CONTRACT MODIFICATIONS 5 + 6.
May 14, 1956
+ Proposed Hole Position
o PRESENT MONTHS DRILLING
• PREVIOUS MONTHS DRILLING
G LINE & GRID
MINING RESEARCH CORP.
LION & MCK. AREAS
D.M.E.A. CONTRACT PROGRESS
SCALE — 1" = 200'
MONTH
LION & McKNIGHT



PROPOSED REVISION OF DRILL AREAS, MINING RESEARCH CORPORATION,
FALL RIVER COUNTY, SOUTH DAKOTA.


Lion No. 14
Lion No. 10
Lion No. 9
Lion No. 13
Lion No. 4
Lion No. 8
Lion No. 7
Lion No. 3
Lion No. 5
Lion No. 1
Lion No. 6
Lion No. 2
Lion No. 18
Lion No. 17
McKnight No. 4
McKnight No. 3
McKnight No. 1
McKnight No. 2
R.A.M. No. 7
R.A.M. No. 2
MINING RESEARCH CORPORATION
DOCKET D.M.E.A.-2768 IDM-E-520
AREA DRILLED
EXHIBIT II



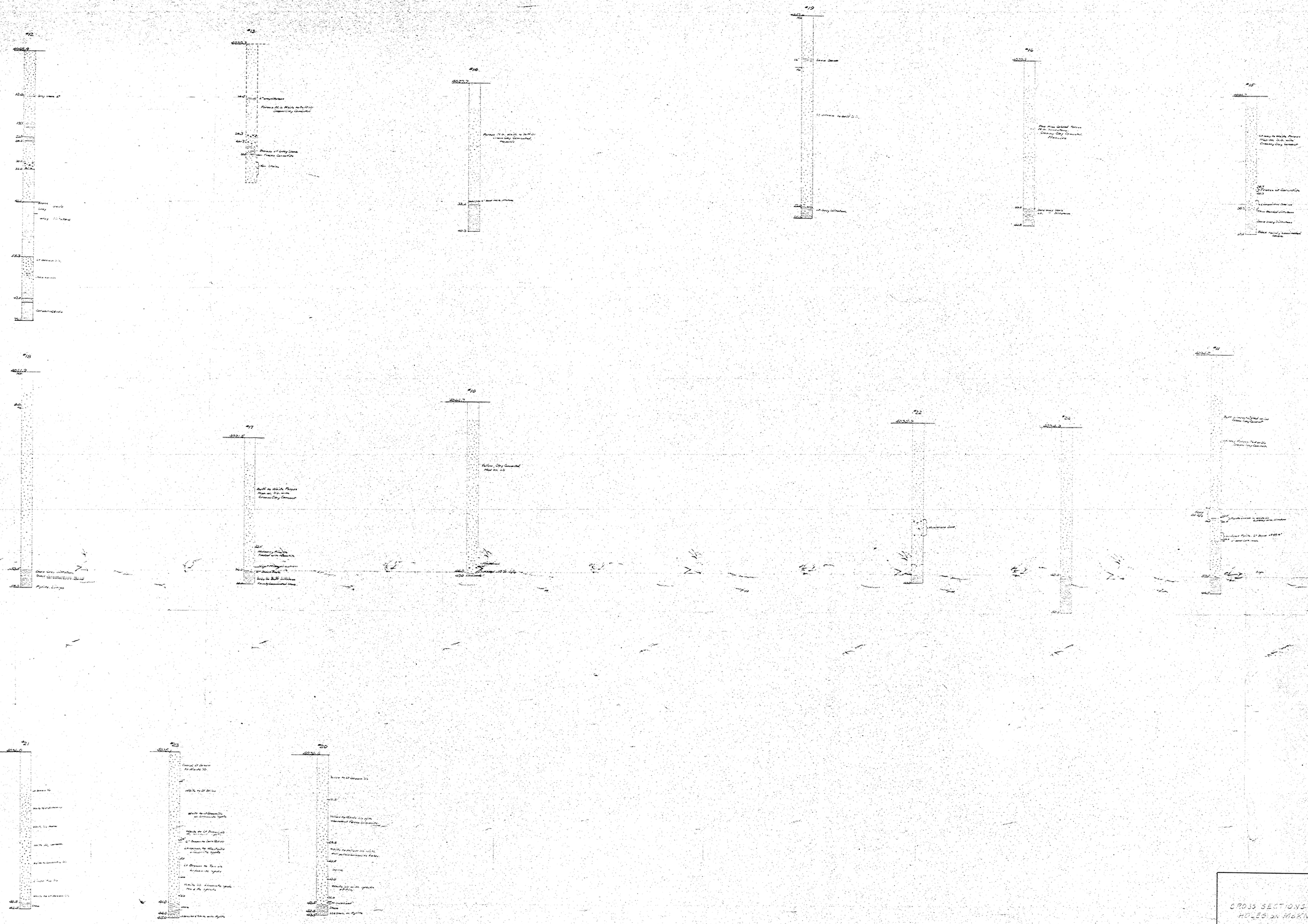
MINING RESEARCH CORP.

DOCKET D.M.E.A.-2768 10M-E-520

SECTIONS THRU DRILLED AREA

EXHIBIT III

SCALE: 1"=200'

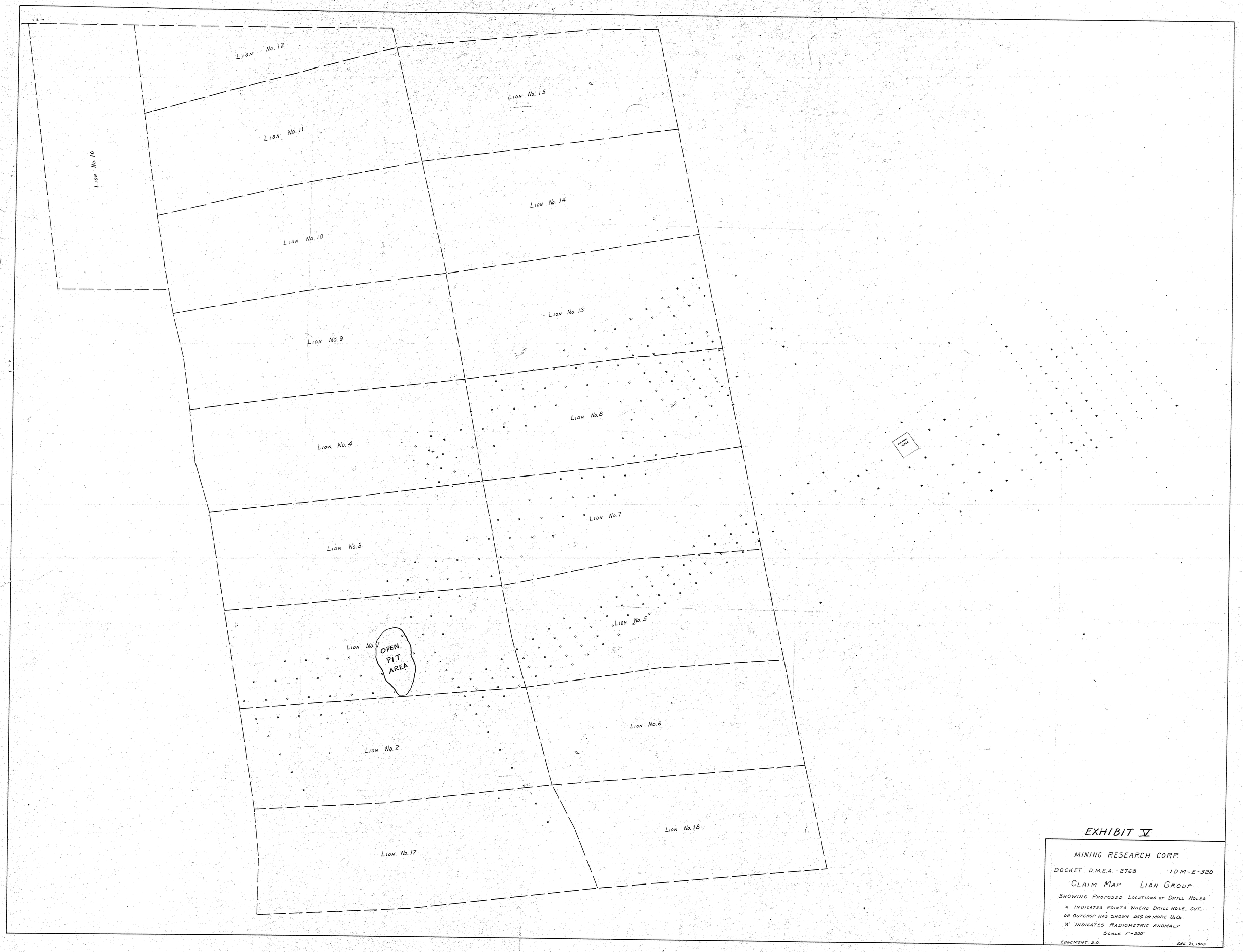


CROSS SECTIONS OF DIAMOND DRILL HOLES ON McKNIGHT CLAIMS

D.M.E.R. CONTRACT 2768, Idm E-520

EXHIBIT IV

11-1-53


LION No. 12
LION No. 15
LION No. 11
LION No. 16
LION No. 14
LION No. 10
LION No. 13
LION No. 9
LION No. 8
LION No. 4
LION No. 7
LION No. 3
LION No. 5
LION No. 1
OPEN PIT AREA
LION No. 6
LION No. 2
LION No. 18
LION No. 17
EXHIBIT V
MINING RESEARCH CORP.
DOCKET D.M.E.A.-2768
1DM-E-520
CLAIM MAP LION GROUP
SHOWING PROPOSED LOCATIONS OF DRILL HOLES
X INDICATES POINTS WHERE DRILL HOLE, CUT, OR OUTCROP HAS SHOWN .05% OR MORE U_3O_8
'A' INDICATES RADIOMETRIC ANOMALY
SCALE 1"=200'
EDGEMONT, S.D.
DEC. 21, 1953

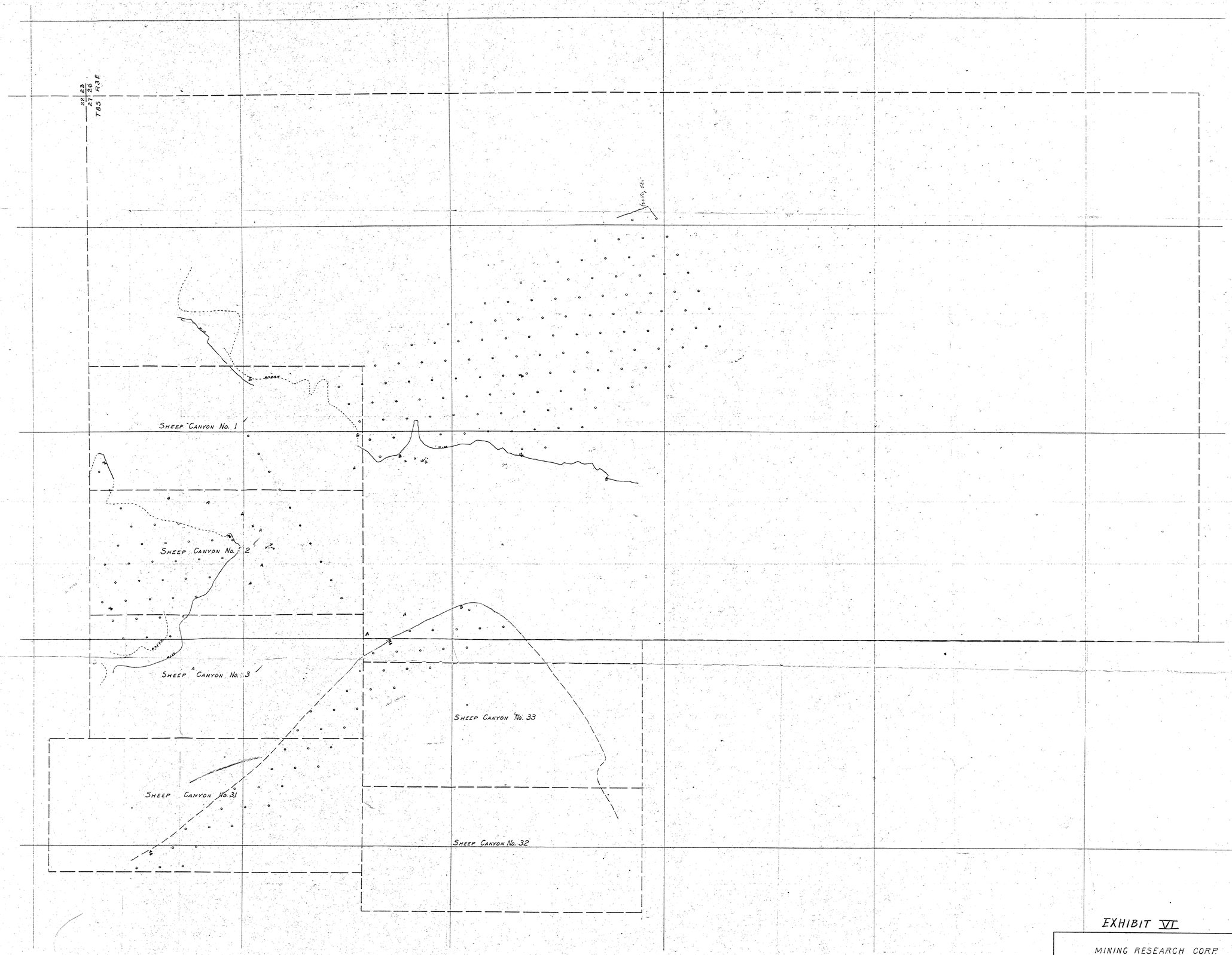


EXHIBIT VI

MINING RESEARCH CORP.

DOCKET D.M.E.A.-2768 1DM-E-520

CLAIM MAP, GULL'S-SHEEP CANYON

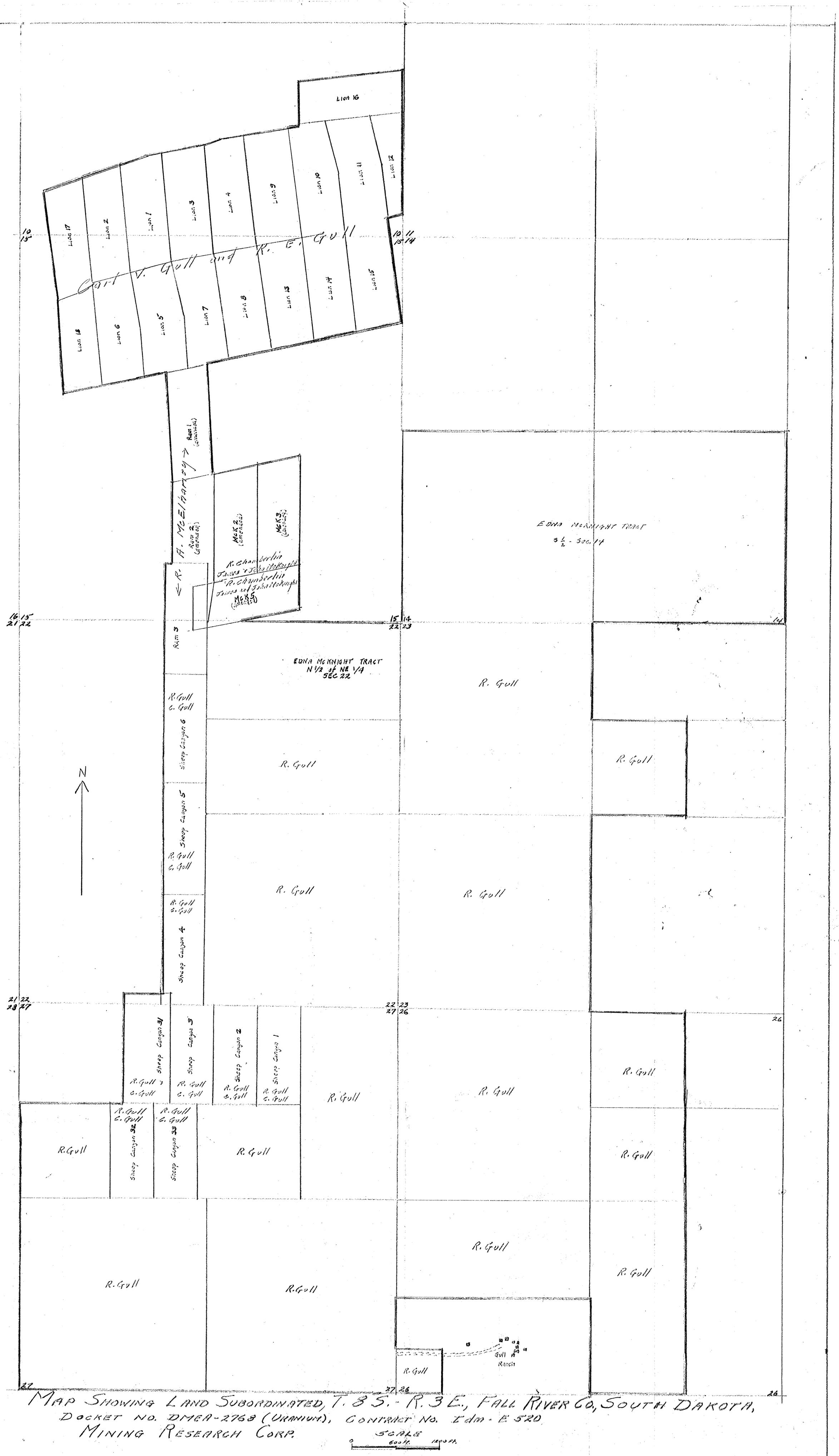
SHOWING PROPOSED LOCATION OF DRILL HOLES

× INDICATES POINTS WHERE DRILL HOLE, CUT OR OUTCROP HAS SHOWN .05% OR MORE U_3O_8

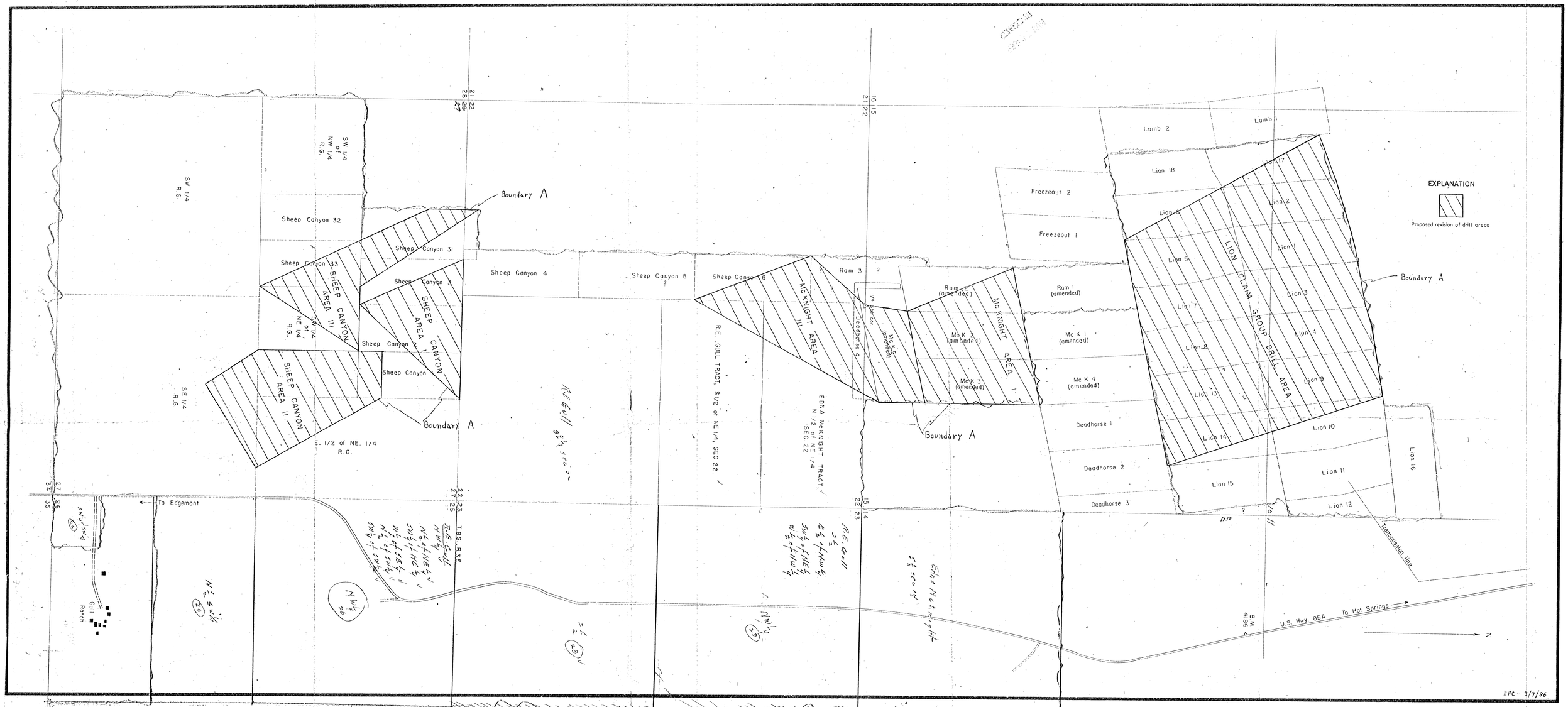
'A' INDICATES RADIOMETRIC ANOMALY

SCALE, 1"=200'

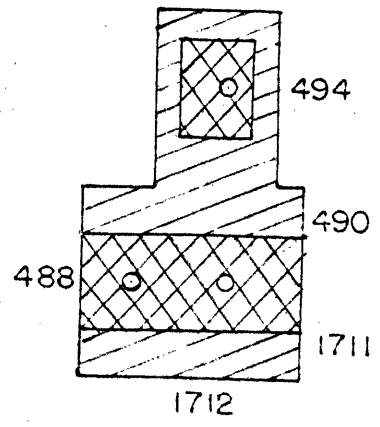
EDGEMONT S.D. DEC. 21 1953

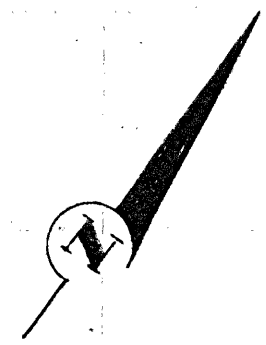


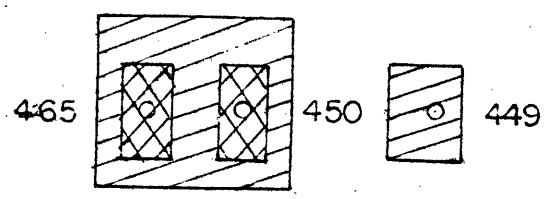
MAP SHOWING LAND SUBORDINATED, T. 8 S. - R. 3 E., FALL RIVER CO., SOUTH DAKOTA,
DOCKET NO. DMEA-2768 (URANIUM), CONTRACT NO. Edm - E 520
MINING RESEARCH CORP.

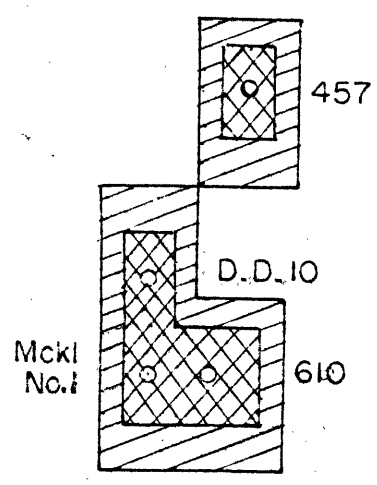


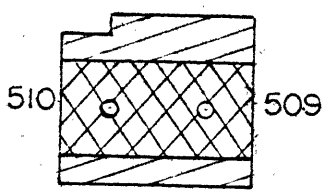
PROPOSED REVISION OF DRILL AREAS, MINING RESEARCH CORPORATION,
FALL RIVER COUNTY, SOUTH DAKOTA.







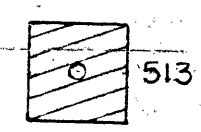




Hole No.	Depth Feet	Elevations Collar	Top of ore	Bottom of ore	Thickness feet	% U_3O_8	Aver. % U_3O_8	Indicated Ore Short tons	Inferred Ore Short tons
494	48	4056.6	4025.6	4017.6	8.0	0.12	0.12	1071	3036
488	48	4051.5	4017.5	4015.5	2.0	0.11)			
1712	44	?	23 ft.*	27*	4.0	0.11)			
490	50	4055.9	4029.9	4027.9	2.0	0.11)	— 0.13	1004	1004
1711	60	?	38 ft.*	40 ft.*	2.0	0.19)			
465	48	4039.3	4003.0	3999.0	4.0	0.12	0.12	357	929
450	46	4041.0	4009.0	4007.0	2.0	0.10	0.10	178	465
449	38	4042.0	4009.0	4007.0	2.0	0.12	0.12	-	268
457	54	4050.6	4034.6	4028.0	6.0	0.10	0.10	537	1393
D.D.10	47	4044.7	4001.0	3999.0	2.0	0.18	0.18	178	357
Mckl	170	4042.5	4024.0	4022.0	7.0	0.111)			
610	50	4042.4	4022.0	4020.0	7.0	0.111)	— 0.111	1750	2100
510	36	4020.7	3989.0	3987.0	2.0	0.20)			
509	36	4021.7	3994.0	3992.0	2.0	0.16)	— 0.18	714	537
513	62	4029.7	3992.0	3988.0	4.0	0.10	0.10	-	714
								5,789	10,803

*Depth of ore - no elevations

	Average thickness ft.	Average grade % U_3O_8	Short tons
Indicated Ore	4.19	0.126	5789
Inferred Ore	3.95	0.119	10803



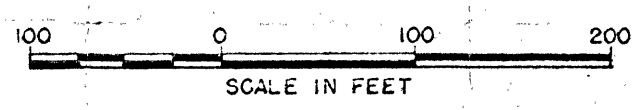
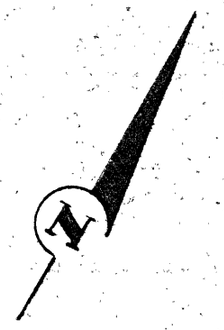
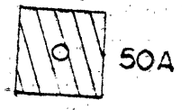


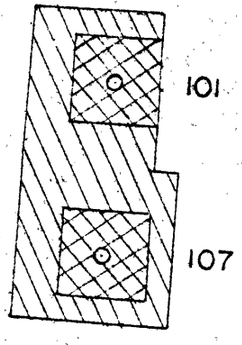
FIGURE 7 - Ore Reserves McKnight Area I, Mining Research Corporation, Fall River County, South Dakota
Docket DMEA 2768, Contract Idm-E520





Hole No.	Depth feet	Elevations Collar	Top of ore	Bottom of ore	Thickness feet	%U_3O_8	Aver. %U_3O_8	Indicated ore Short tons	Inf. ore Short tons
50A	150	3823.4	3718.4	3710.9	7.5	0.113	0.113	-	1339
101	153	3799.3	3679.3	3677.3	2.0	0.180	0.180	357	607
107	115	3800.6	3700.0	3667.5	2.5	0.218	0.218	446	1000
								803	2946

	Average thickness ft.	Average grade % U_3O_8	tons
Indicated ore	2.25	0.201	803
Inferred ore	4.00	0.170	2946



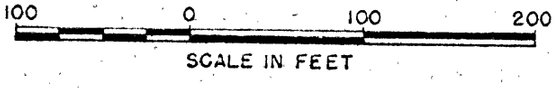


FIGURE 8 - Ore Reserves Gull-Sheep Canyon Area II, Mining Research Corporation, Fall River County, South Dakota, Docket 2768, Contract Idm-E520

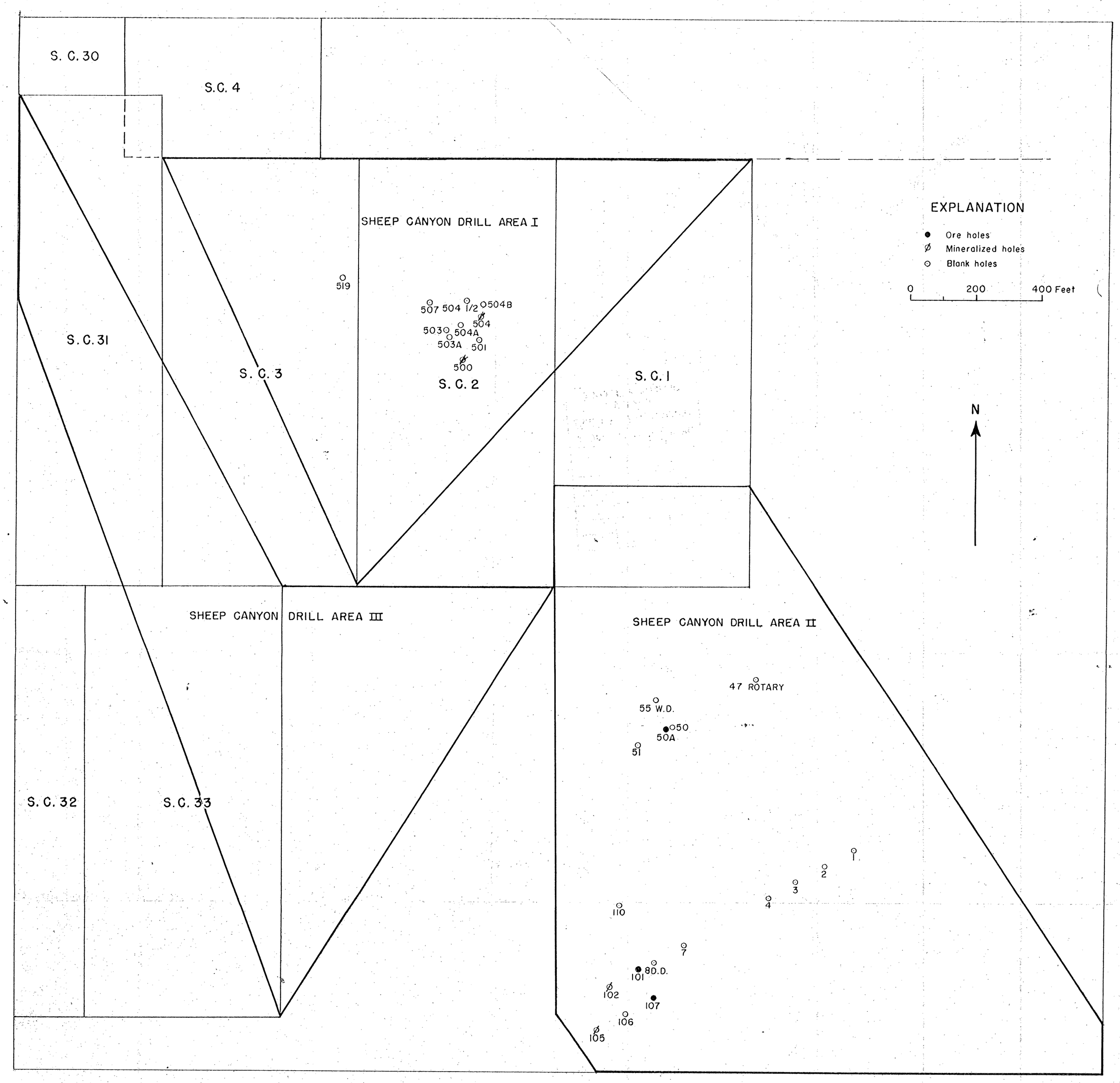


FIGURE 5 -MAP SHOWING DRILL HOLES IN GULL-SHEEP CANYON DRILL AREAS I AND II, MINING RESEARCH CORPORATION, FALL RIVER COUNTY, SOUTH DAKOTA.

5

Hole No.	Depth	Elevations Collar	Top of ore	Bottom of ore	Thickness feet	% U_3O_8	Aver. % U_3O_8	Indicated Ore Short tons	Inferred ore Short tons
1189	70	?	40 ft.	42 ft.	2.0	0.110	0.110	357	1005
1405	60	?	34 ft.	40 ft.	6.0)	0.140)			
1404	54	?	36 ft.	48 ft.	12.0)	0.15)	—0.180	2477	2457
1403	34	?	32 ft.	50 ft.	8.0)	0.200)			
1417	54	4139.1	4103.1	4097.1	6.0)	0.180)			
					4.0		—0.182	928	1634
1416	59	4139.7	4099.7	4097.1	2.0)	0.190)			
1401	58	?	32 ft.	40 ft.	8.0	0.160	0.160	1000	1798
1419	60	4134.6	4098.6	4092.6	6.0	0.110	0.110	857	1365
1423	56	4130.4	4102.4	4084.4	18.0	0.120	0.120	2250	5271
1400	54	4127.3	4098.3	4096.3	2.0	0.200	0.200	214	445
1269	56	4125.4	4095.4	4089.4	6.0)	0.120)			
1278	62	4126.6	4094.6	4076.4	18.0)	0.100)	—0.109	4235	3969
251*	-	-	-	-	4.0)	0.100)			
I4	52	4122.0	4094.0	4082.0	12.0	0.150	0.150	1928	4970
1254	58	4117.5	4089.5	4067.5	22.0	0.130	0.130	1964	3103
1115	70	4120.1	4092.1	4090.1	2.0	0.100	0.100	-	357
1118	52	4117.4	4079.4	4075.4	4.0	0.160	0.160	7140	1544
256*	-	-	-	-	2.0	0.140	0.140	-	243
250*	-	-	-	-	8.0	0.100	0.100	-	1428
304*	-	-	-	-	2.0	0.100	0.100	-	357
1110	24	- Min. 8 ft. to 16 ft.			2.0	0.100	0.100	-	357
1112	40	- Min. 18 ft. to 30 ft.			6.0	0.110	0.110	-	1071
								16,924	31,374

* Not DMEA only grade and thickness available

	Average thickness feet	Average grade % U_3O_8	
Indicated Ore	7.78	0.141	16924
Inferred Ore	6.27	0.137	31374

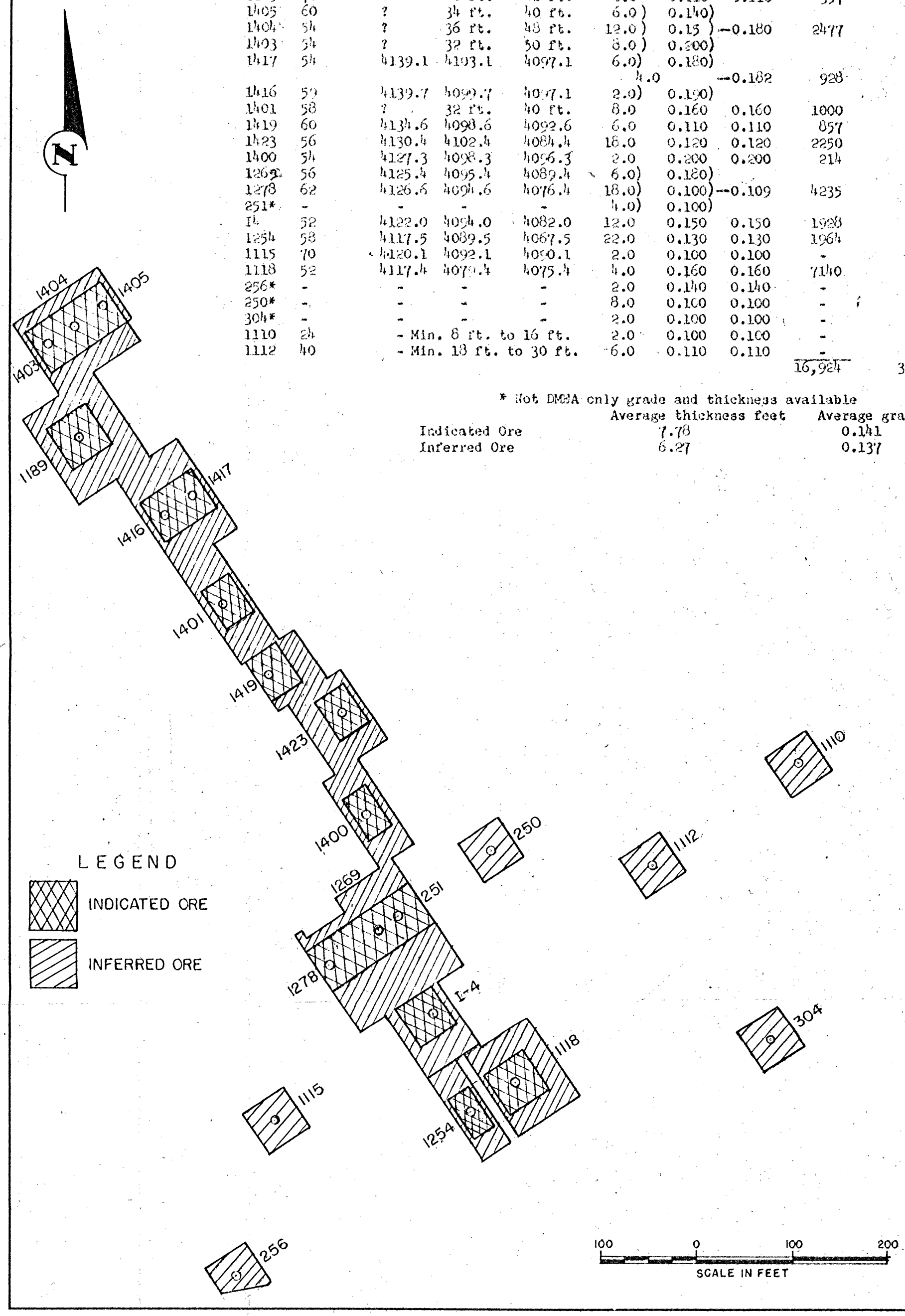


FIGURE 6 - Ore Reserves Lion Claim Group Area, Mining Research Corporation, Fall River County, South Dakota, Docket 2768, Idm-8520

CMEA 2768
CONTRACT IDMES2)

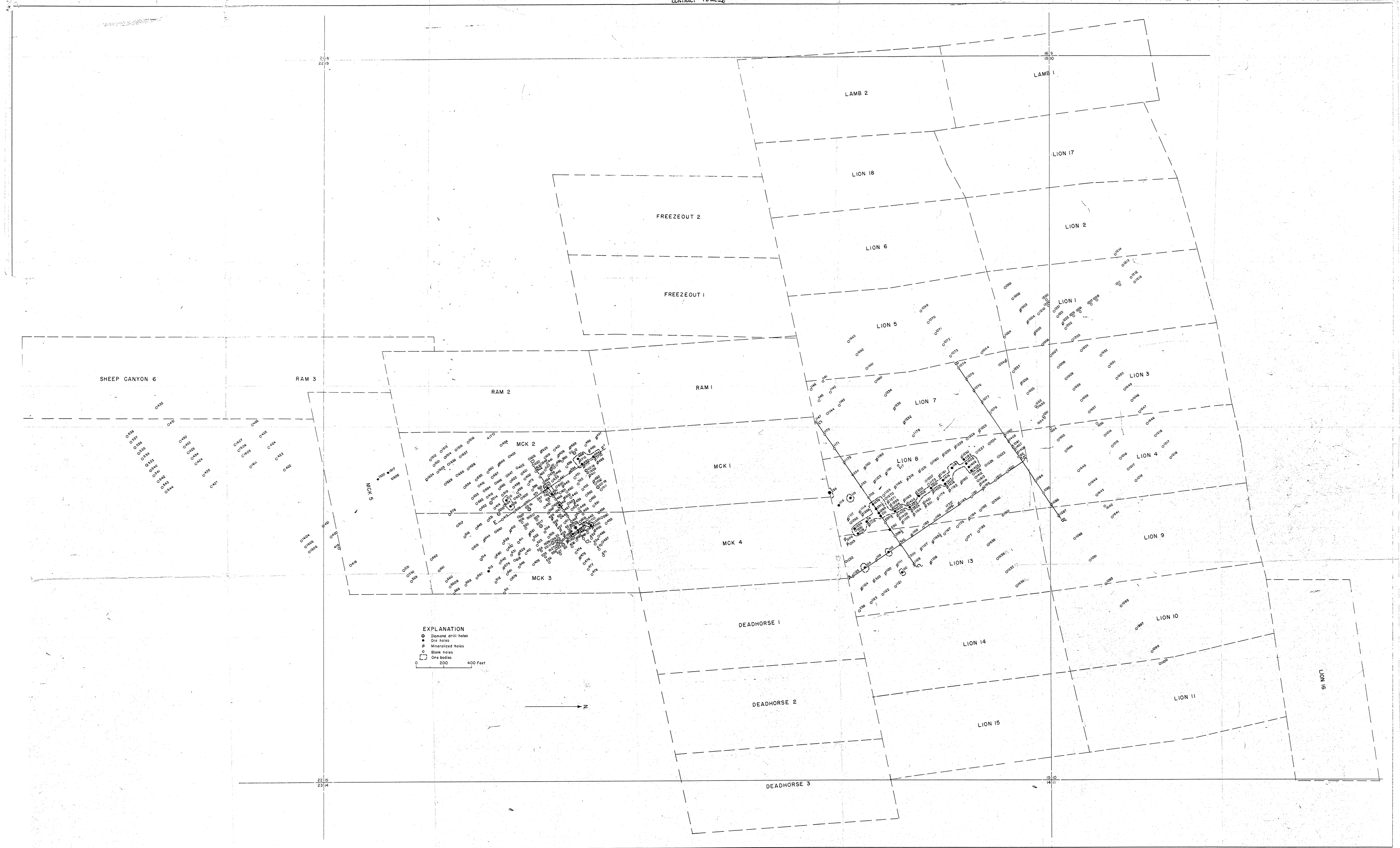


FIGURE 4 -MAP SHOWING DRILL HOLES IN LION CLAIM GROUP DRILL AREA AND McKNIGHT DRILL AREAS I AND III, MINING RESEARCH CORPORATION, FALL RIVER COUNTY, SOUTH DAKOTA.

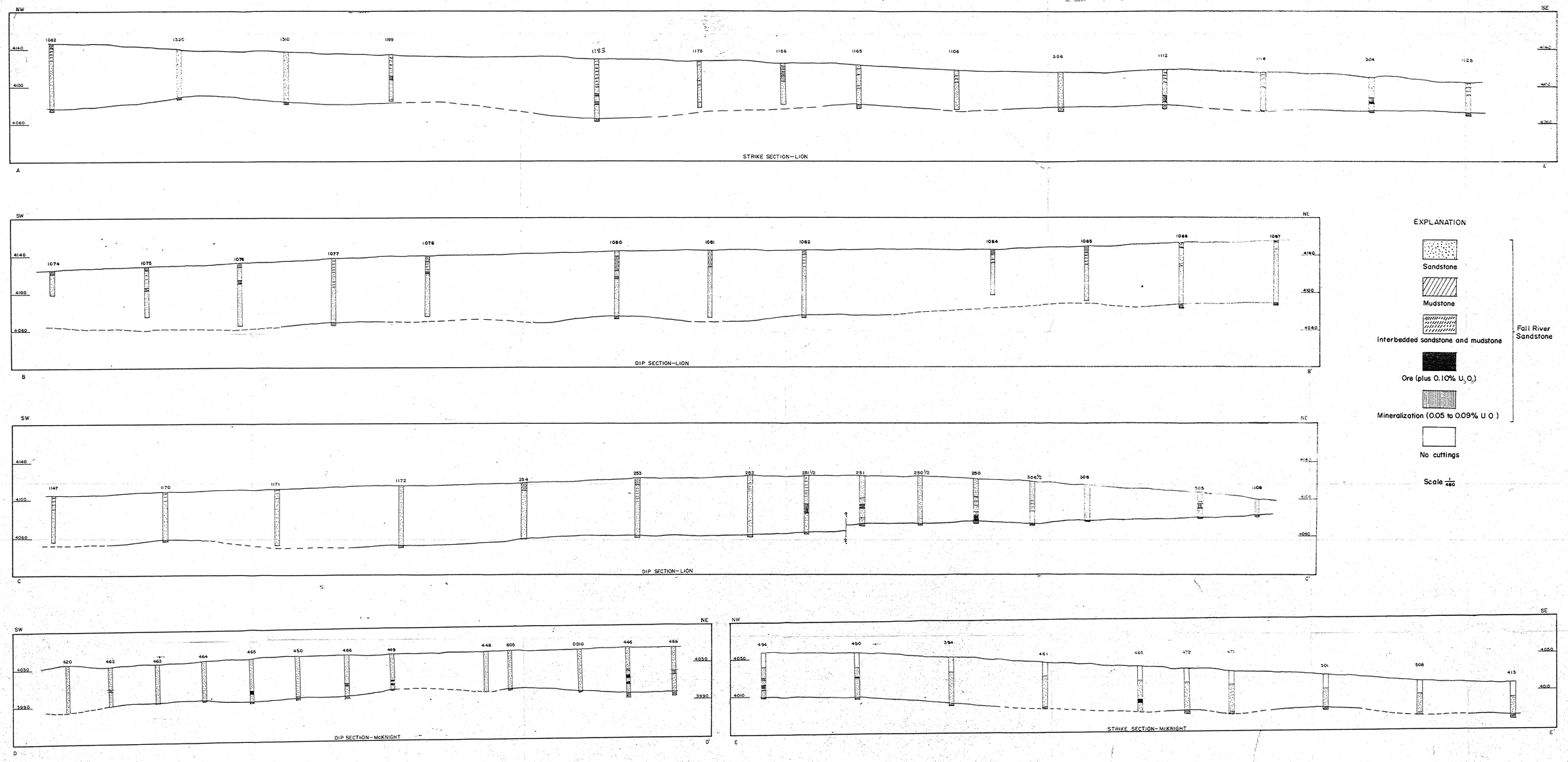
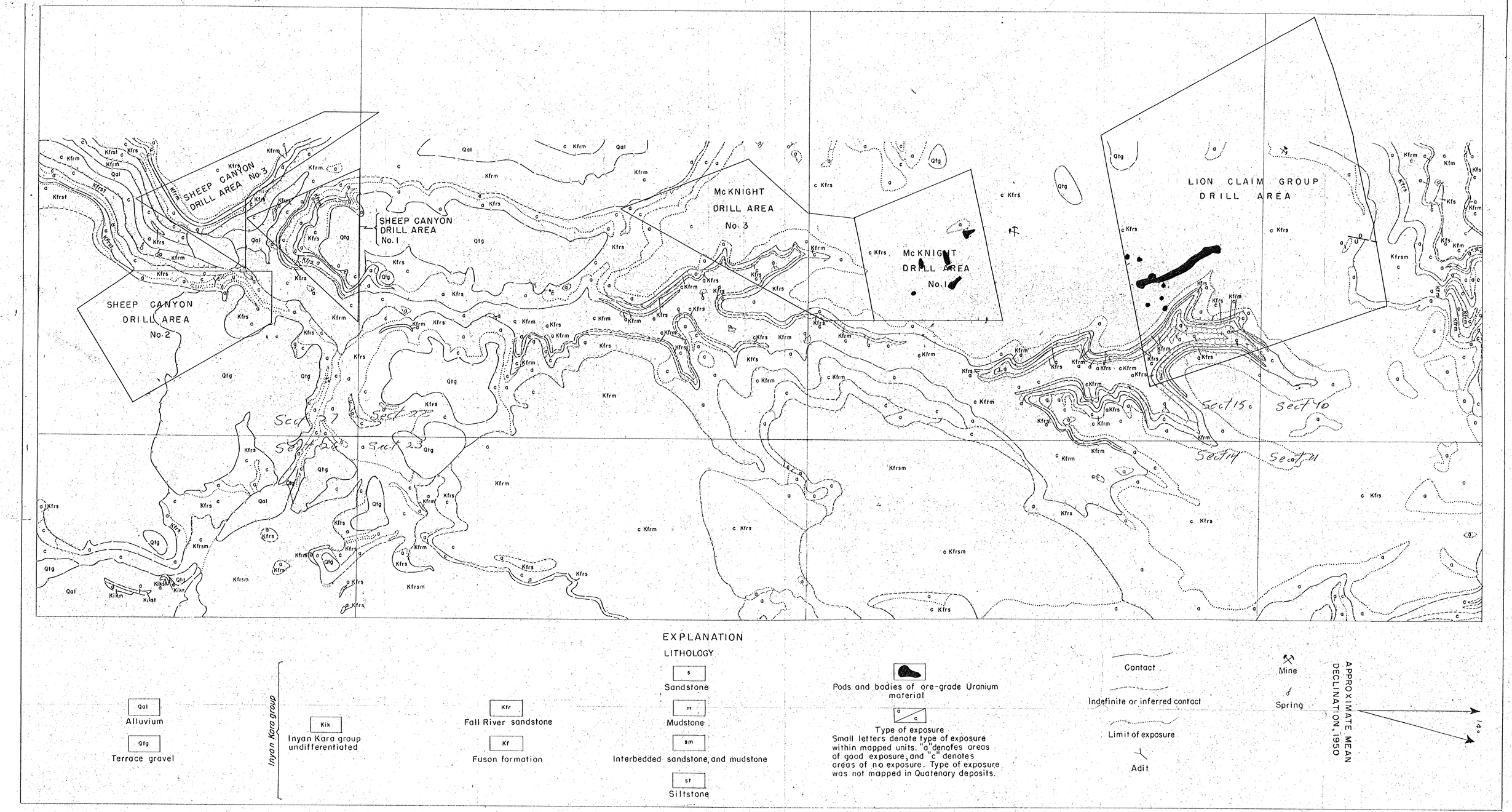


FIGURE 3
GEOLOGIC SECTIONS ALONG LINES OF DRILL HOLES
in the
LION-McKNIGHT AREA

MINING RESEARCH CORP.
FALL RIVER COUNTY, S.D.
DOCKET DMEA-2768
CONTRACT IDM-E520



Unpublished-geologic map of the Flint Hill Quadrangle by H. Bell and E.V. Post, U.S. Geological Survey

FIGURE 2- GEOLOGIC MAP OF THE CONTRACT AREA
MINING RESEARCH CORP.

FINAL F.T. REPORT

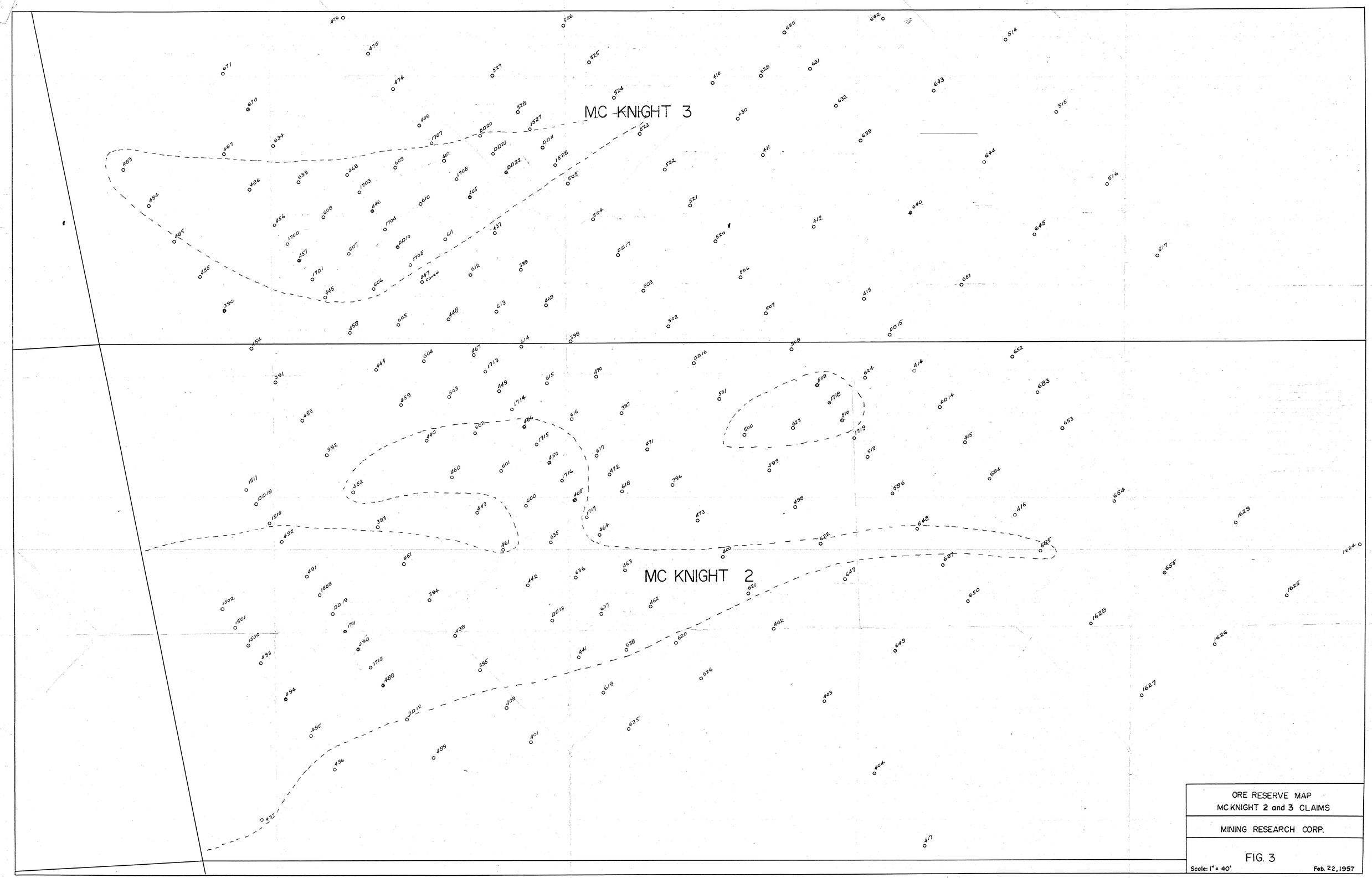
ORE RESERVE MAP
LION 8 CLAIM

MINING RESEARCH CORP.

FIG. 4

Scale: 1"=40'

Feb 22, 1957



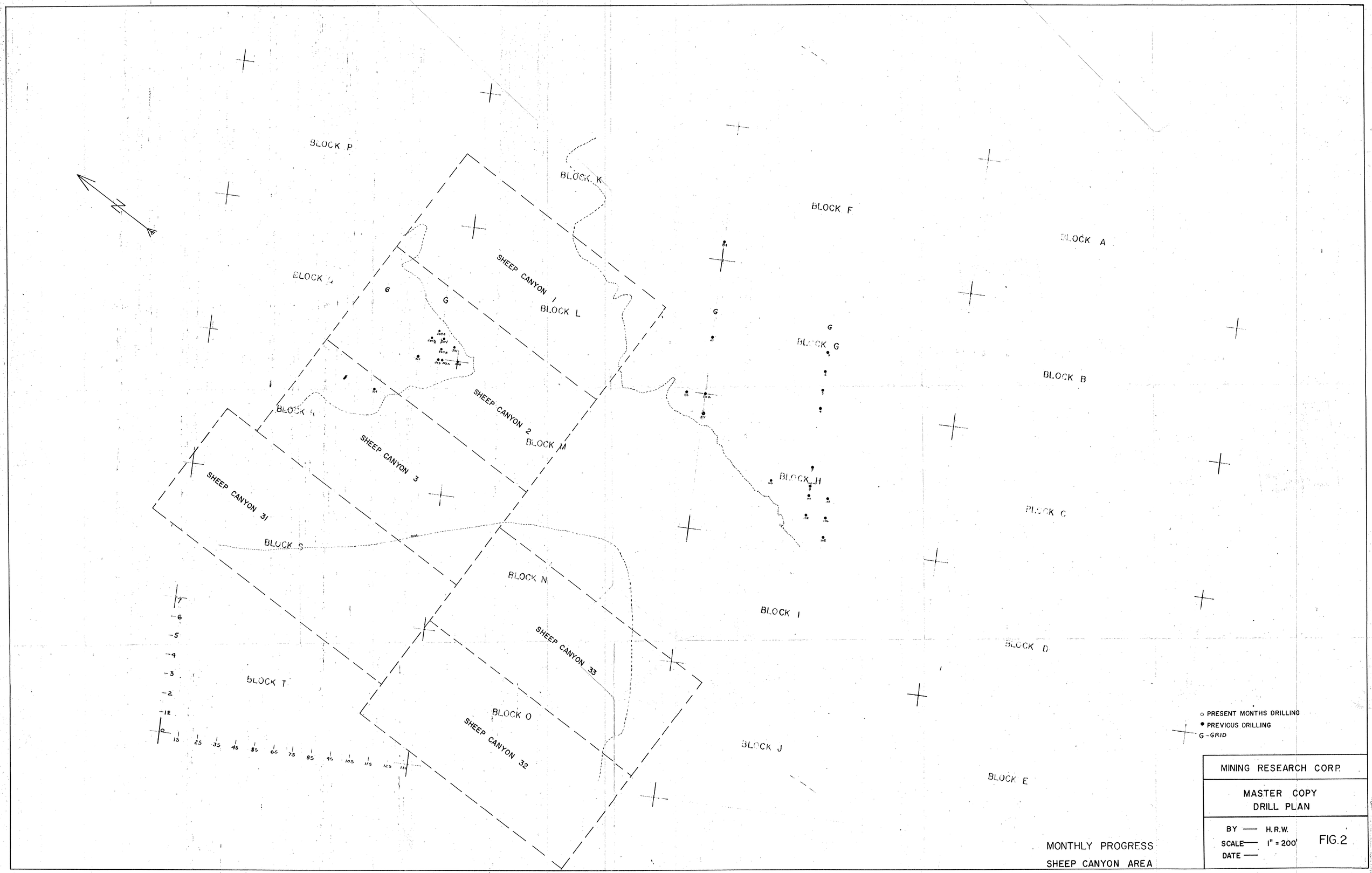
ORE RESERVE MAP
MC KNIGHT 2 and 3 CLAIMS

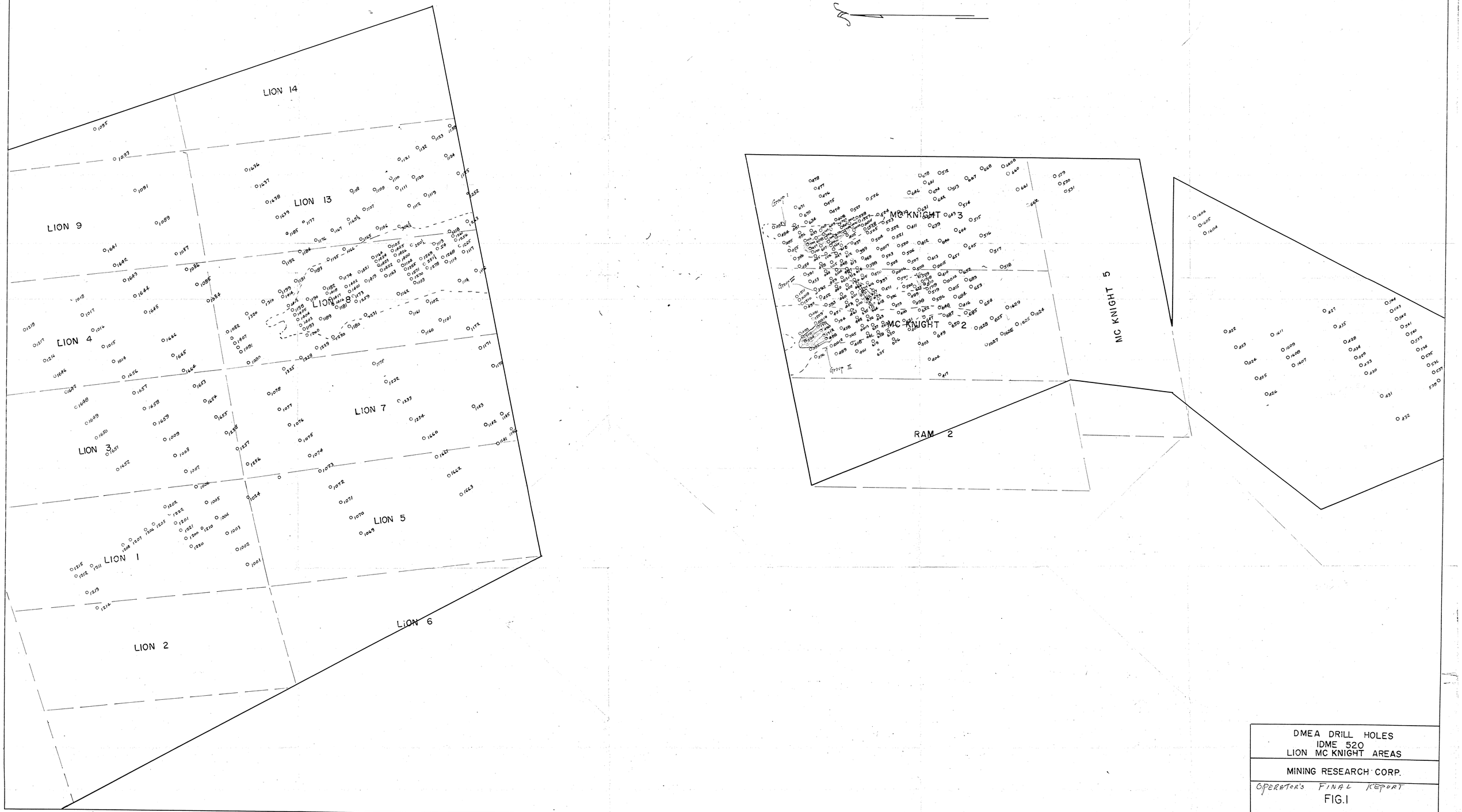
MINING RESEARCH CORP.

FIG. 3

Scale: 1" = 40'

Feb. 22, 1957


BLOCK P
BLOCK K
BLOCK F
BLOCK A
BLOCK L
SHEEP CANYON 1
BLOCK L
BLOCK G
BLOCK B
BLOCK M
SHEEP CANYON 2
SHEEP CANYON 3
SHEEP CANYON 31
BLOCK H
BLOCK C
BLOCK S
BLOCK N
BLOCK I
SHEEP CANYON 33
BLOCK D
BLOCK T
BLOCK O
SHEEP CANYON 32
BLOCK J
BLOCK E
o PRESENT MONTHS DRILLING
• PREVIOUS DRILLING
G - GRID
MINING RESEARCH CORP.
MASTER COPY
DRILL PLAN
BY — H.R.W.
SCALE — 1" = 200'
DATE —
FIG. 2
MONTHLY PROGRESS
SHEEP CANYON AREA



DMEA DRILL HOLES
IDME 520
LION MC KNIGHT AREAS

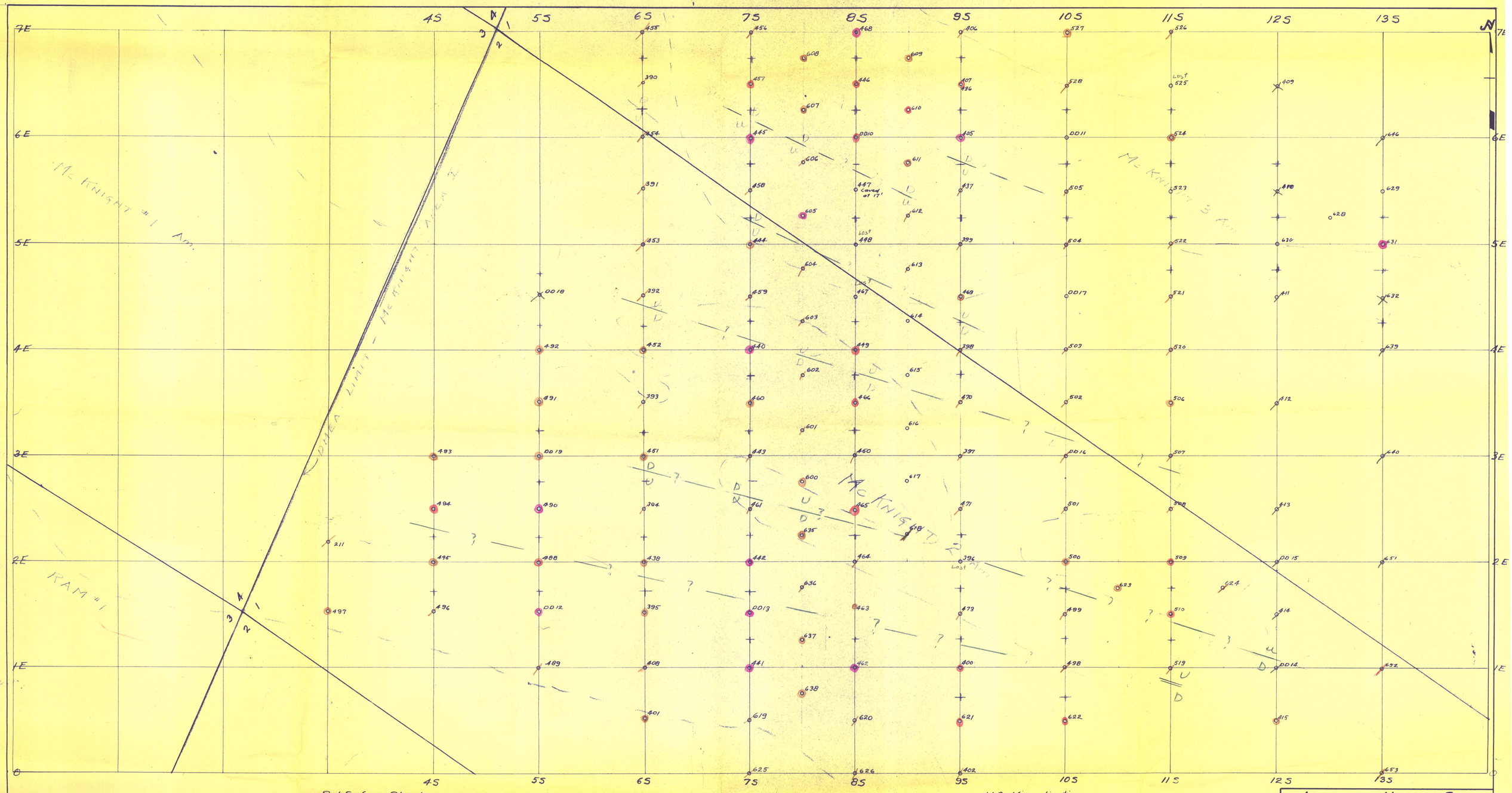
MINING RESEARCH CORP.

OPERATOR'S FINAL REPORT

FIG. I

Scale: 1" = 200'

Jan. 19, 1957



Sub-Surface Structure

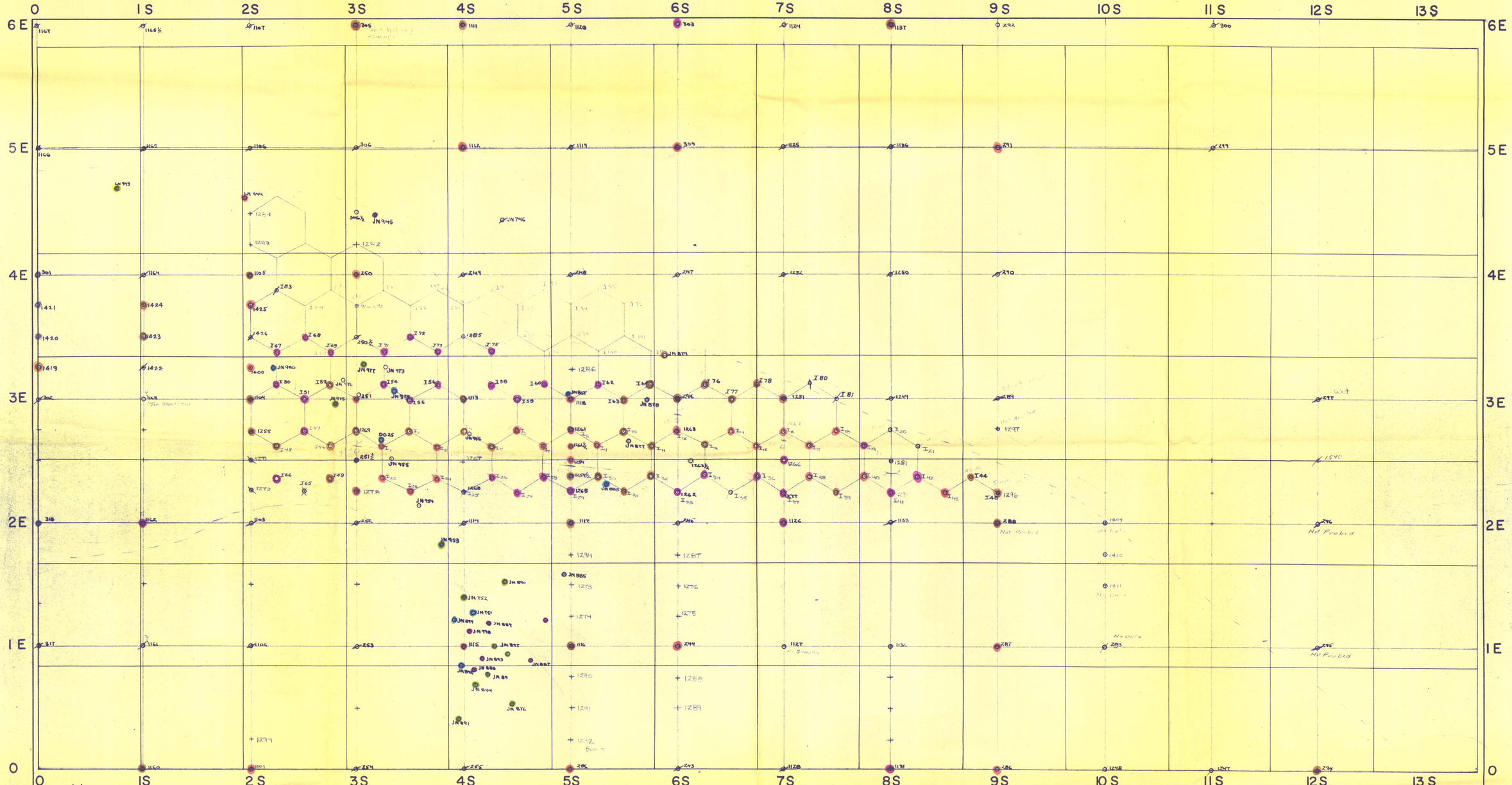
- Anticlinal Axis
- Synclinal Axis
- Sandstone - Shale Contours
- Reservoir Boundary
- Foutt
- Jointing

U_3O_8 Mineralization

- Blank
- 0.01 to 0.03 %
- 0.03 to 0.06
- 0.06 to 0.10
- 0.10 to 0.20
- 0.20 to 0.50
- Over 0.50 %

+ Proposed Drill Hole

LIVINGSTON URANIUM CORP.	
EXPLORATION DEPARTMENT	
Scale: 1"=40'	ORE RESERVE MAP AND SUB SURFACE CONTOURS
By	
Checked:	
Approved	
Date	
Revised By / Date / By / Date	BLOCK G
	File No.
Prepared For:	Drwg.



SUBSURFACE STRUCTURE

- Anticlinal Axis
- Synclinal Axis
- Sandstone Shale Contact
- Limit of Reservoir
- Fault
- Jointing

U.S.V. HOLES PROBE READINGS

- 5 Scale Probe
- 4 Scale Probe
- 3 Scale Probe
- 2 Scale Probe

U_3O_8 MINERALIZATION

- Blank
- 0.01 to 0.03 %
- 0.03 to 0.06 %
- 0.06 to 0.10 %
- 0.10 to 0.20 %
- 0.20 to 0.50 %

HORIZONTAL SCALE

0' 10' 20' 30' 40' 20' 0'

BARODYNAMICS INC.

DRILL HOLE PLAN MAP

BLOCK "A"

MINING RESEARCH PROPERTY

EDGEMONT SOUTH DAKOTA

SCALE 1" = 40' JULY 23, 1955

DRAWN BY B.M.H.