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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: DRAKE HELL CANYON LIMESTONE

ALTERNATE NAMES:

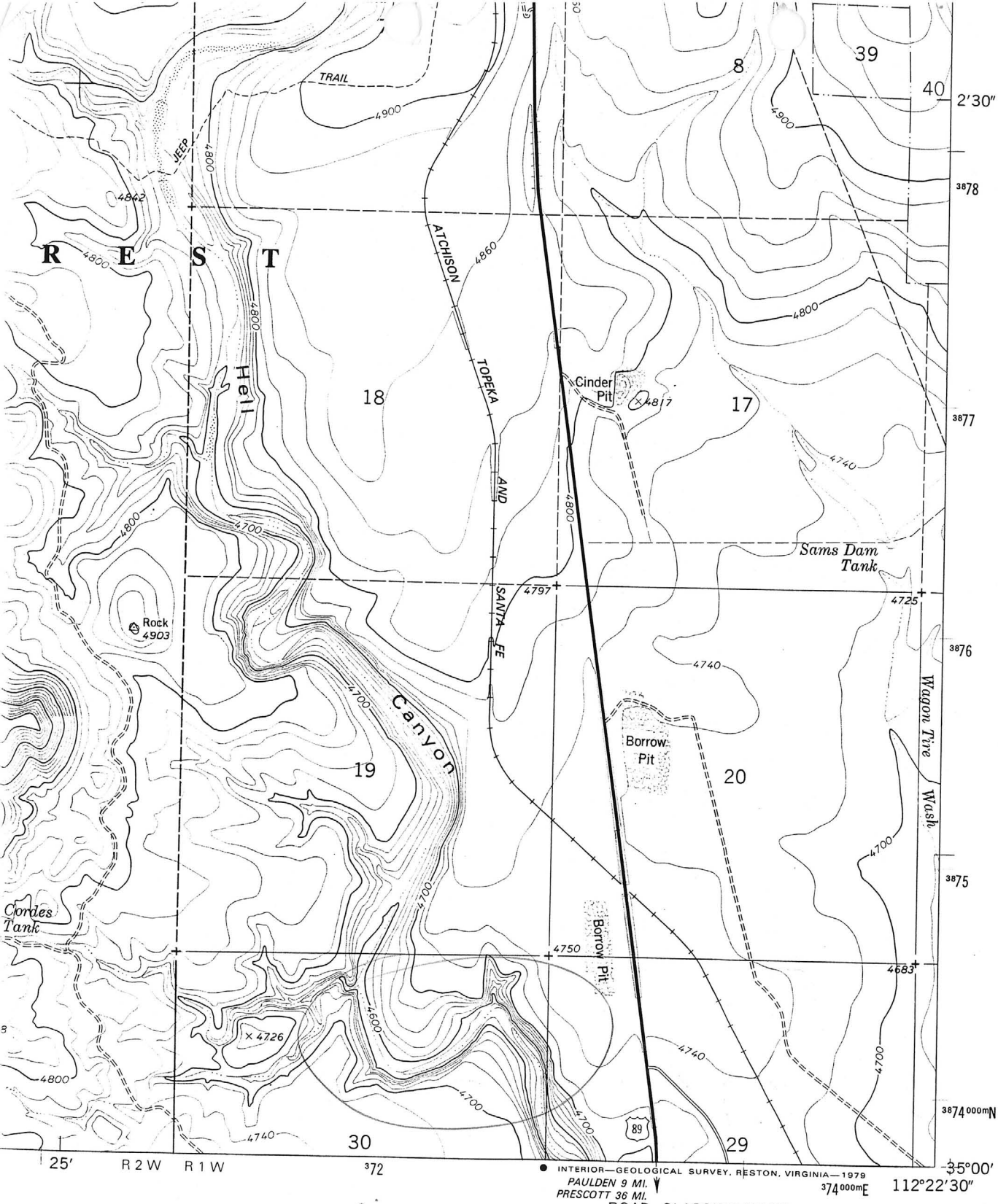
YAVAPAI COUNTY MILS NUMBER: 1378

LOCATION: TOWNSHIP 19 N RANGE 1 W SECTION 30 QUARTER NE
LATITUDE: N 35DEG 00MIN 18SEC LONGITUDE: W 112DEG 23MIN 55SEC
TOPO MAP NAME: MEATH SPRING - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
CALCIUM LIMESTONE

BIBLIOGRAPHY:
ADMMR DRAKE HELL CANYON LIMESTONE FILE



INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1979

PAULDEN 9 MI.
PRESCOTT 36 MI.

MILE

Drake Hell Canyon Limestone

ROAD CLASSIFICATION

Primary highway, hard surface

Light-duty road, hard or improved surface

Secondary highway, hard surface

Unimproved road

Interstate Route

U. S. Route

State Route

QUADRANGLE LOCATION

MEATH SPRING, ARIZ.

SW/4 ASH FORK 15' QUADRANGLE

N3500—W11222.5/7.5

X

1979

DRAKE HELL CAN LIMESTONE (NEW FILE)
YAVAPAI

AN

EXPLORATION and ORE RESERVE

EVALUATION

REPORT

on the

DRAKE LIMESTONE CLAIMS

Yavapai County, Arizona

by

Richard E. Mieritz
Mining Consultant
Phoenix, Arizona

June 20, 1979

TABLE of CONTENTS

	Page
INTRODUCTION	1
OBJECT of DRILLING PROGRAM	1
DRILLING PROGRAM	1
DRILLING PROGRESS	2
DRILLING RESULTS	2
BENEFITS of DRILLING PROJECT	3
ORE RESERVES	3
REQUIRED EXPLORATION	4
MINING METHOD	4
RECOMMENDATIONS	5

Included Exhibits:

Drill Shift Reports, Holes P-14 through P-21
Map No. 1 - Index Map - Central Arizona
Map No. 2 - General Geology, Portion of Yavapai County, Arizona
Map No. 3 - Claim Map - Drake Limestone
Map No. 4 - Planned Drill Holes
Map No. 5 - Holes Actually Drilled
Map No. 6 - Sections - 18 plus 50
Map No. 7 - Sections - 20 plus 00, 21 plus 50 and 24 plus 20
Map No. 8 - N.10°W. Sections A-A', B-B' and C-C'
Map No. 9 - N.10°W. Sections D-D', E-E' and F-F'
Map No.10 - Ore Reserve Map
Map No.11 - Proposed Drill Hole Locations

INTRODUCTION:

At the request of and authorization by Robert A. Barbero, President, Paul Lime Division of CAN-AM Corporation, Douglas, Arizona, a minimal drilling program was completed on the Drake Limestone property, 35 miles north of Prescott, Yavapai County, Arizona. (See Maps No. 1 and 2.)

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD
E. MIERITZ
Dec. 31, 19
ARIZONA, U.S.A.

The writer completed pre-drilling preparation and supervised the drilling program from May 24 through May 31, 1979.

On April 1, 1979, CAN-AM acquired the Drake Limestone property by a lease-option to buy arrangement.

Early drilling by Drake Lime Co. had basically "blocked" out approximately 800,000 tons of excellent limestone averaging 60 feet thick with a "slight" dip to the south or incline to the north. East of the loci (Pit), the bed is basically horizontal.

Subsurface geological evidence obtained from the early drilling indicated the favorable limestone bed should continue north, northeast and east of the loci of the "mineralization" - the Pit.

By logical projection of the obtained and evidenced geologic criteria, the favorable limestone bed in the above noted directions should be close to the surface with little waste rock and soil covering this favorable bed.

OBJECT of DRILLING PROGRAM:

A limited drilling program (short holes) was authorized (May 22, 1979) by CAN-AM Corp. (Mr. R. A. Barbero).

The objective of this program was to obtain evidence to prove or disprove and/or determine the following:

(1) thickness of the unconsolidated alluvium (soil and gravel) lying on top of the favorable limestone bed, if that be the case (See Maps No. 6 thru 9), and
(2) thickness and type of rock (waste) lying on top of the favorable limestone bed which would require drilling and blasting for removal in an open pit mining process, and
(3) to explore the area north and northeast of the loci of the mineralization to indicate the potential of some 10,000,000 tons of good quality limestone which could justify further exploration. This surmise was stated in the writer's "Addendum" Report on the Drake property dated Sept. 19, 1974.

DRILLING PROGRAM:

The writer designed a drilling program of eleven holes (two 100 foot holes and nine 50 foot) in a diamond type grid pattern as shown on Map No. 4. Such drilling would test an area 1200 feet east-west and

1600 feet northerly of the Pit to satisfy the requirements of the previously mentioned program objectives.

The drilling was completed by Clark-Oliver Mining and Drilling Co., Peoria, Arizona, using a 3½" down-the-hole Atlas Copco drill and a button bit. (Collaring to solid rock was done with a 4½" bit.) Drilling started on May 28 and finished May 31, 1979. Eight holes were drilled totaling 505 feet. (See Map No. 5.)

Registered Professional Engineer (Mining) RICHARD E. MIERITZ DEC. 31, 19— ARIZONA, U.S.A.

DRILLING PROGRESS:

Drilling started with hole P-14, then to P-15 and P-16. The writer's plan of systematically progressing northward away from the "known" mineralization was radically changed after having completed hole P-16 - 20.5 feet of basalt. Holes P-17, P-18 and P-19 were then drilled as indicated with no more success than hole P-16. New locations P-20 and P-21 were staked and drilled to finish the program. (See Map No. 5.)

DRILLING RESULTS:

All holes were drilled to ascertain and satisfy "objectives" (1) and (2) - Object of Drilling Program, page 1 of report.

The average thickness of alluvium was 5.9, ranging from 1.5 to 15 feet for the eight holes.

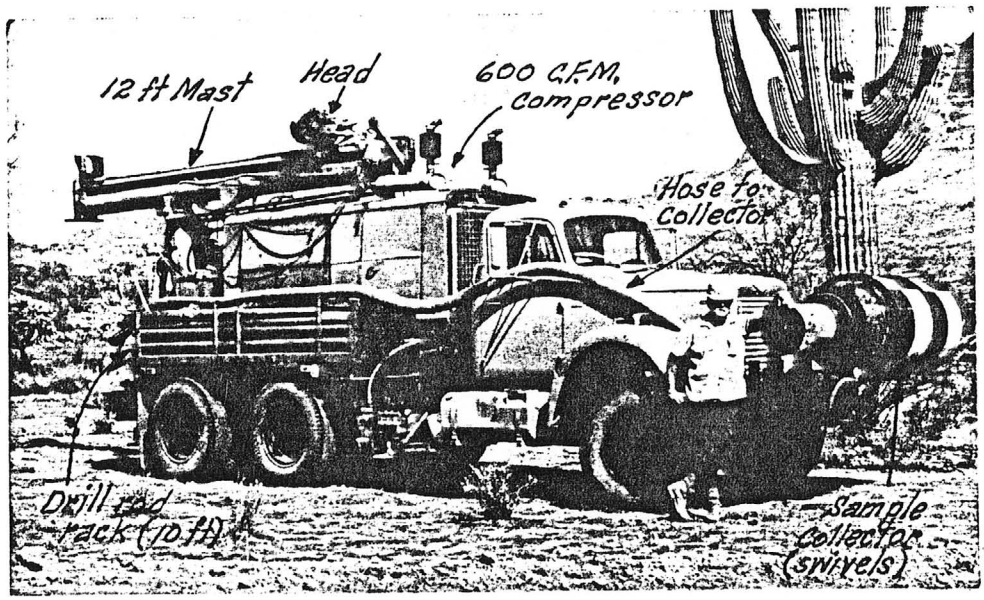
All holes but one encountered basalt underlying the alluvium (unconsolidated soil-gravel). The seven holes had measurable thicknesses of basalt and/or waste rock from 20.5 to 85 feet. Of these seven, only three penetrated the basalt and/or waste rock and encountered the underlying limestone. These holes were P-14, P-16 and P-21. Hole P-15 passed from soil-gravel into limestone immediately. Holes P-17, P-18, P-19 and P-20 did not encounter limestone.

The totally unexpected presence of 32 and 20.5 feet of basalt in holes P-14 and P-16 respectively, which were visually observed "on-the-spot" while the holes were being drilled, prompted the writer to alter the normal drilling pattern. The long step to holes P-17, P-18 and P-19 was made to determine if the basalt might be present to similar or greater depths as experienced in holes P-14 and P-16. It was.

Hole P-20 was drilled to test the area east of the loci. Similar results were obtained - no limestone encountered to 50 feet.

Hole P-21 was drilled to test the area southeast of the loci and after 3 feet of soil-gravel and 26 feet of basalt, fair to poor limestone was encountered. At 68 feet, the top of the "pink bed" (marker) was noted.

The presence and thickness of the basalt and/or the non-presence of the limestone north of holes H-10, P-15 and P-16 very definitely indicates a geologic disturbance of the limestone in this area.



PHOTOGRAPH of CLARK-OLIVER Mining Co., Inc. down-the-hole hammer drill which was used to do the drilling at the Drake Limestone property May 28 through 31, 1979. Some Notations have been made on the photograph.

SAMPLE ASSAY RESULTS
by CAN-AM LABORATORY

Sample Number	Hole Number	Sample Depth	Loss on Ignition	Available % CaO
1486	14	2 - 10 Ft.	2.91%	.56
1488	14	20 - 26 Ft.	2.92%	.83
1490	14	34 - 40 Ft.	41.15%	81.12
1491	14	40 - 48 Ft.	41.19%	82.15
1492	14	48 - 55 Ft.	40.27%	76.22
1493	15	1½ - 10 Ft.	42.51%	89.29
1494	15	10 - 13 Ft.	41.45%	80.90
1495	15	13 - 20 Ft.	41.74%	85.58
1496	15	20 - 30 Ft.	41.17%	82.28
1497	15	30 - 40 Ft.	41.01%	81.26
1498	15	40 - 50 Ft.	42.06%	86.15
1499	15	50 - 60 Ft.	42.81%	89.46
1500	15	60 - 70 Ft.	43.16%	92.91
1501	15	70 - 80 Ft.	42.75%	91.82
1502	15	80 - 90 Ft.	42.32%	88.86
1503	15	90 -100 Ft.	43.48%	95.57
1507	16	23 - 30 Ft.	40.95%	79.34
1508	16	30 - 40 Ft.	42.63%	89.92
1509	16	40 - 50 Ft.	41.68%	84.67
1510	17	8 - 15 Ft.	40.75%	5.66
1513	17	30 - 40 Ft.	7.09%	2.02
1514	18	7 - 20 Ft.	10.97%	1.60
1516	18	30 - 40 Ft.	5.53%	2.80
1517	19	15 - 20 Ft.	3.39%	8.29
1520	19	40 - 50 Ft.	1.26%	.50
1522	19	60 - 70 Ft.	2.69%	.40
1526	20	8 - 20 Ft.	1.70%	1.12
1530	21	3 - 10 Ft.	3.63%	.65
1533	21	30 - 40 Ft.	42.28%	87.82
1534	21	40 - 50 Ft.	37.17%	63.13
1535	21	50 - 60 Ft.	36.22%	39.16
1536	21	60 - 70 Ft.	37.72%	69.85

One, two or three conditions may have happened such as: (1) presence of a fault causing a "down drop" on the north side, (2) an ancient erosion surface (valley or canyon) now filled by basalt and/or (3) a change in the regional ascending slope of the limestone to a horizontal position or a descending true north dip north of holes H-10, P-15 and P-16 and now overlain by basalt.

None of the above show a surface expression to indicate what may have taken place.

The end result is that the inferred 10,000,000 tons near surface potential north of holes H-10, P-15 and P-16 is in question at this writing. If condition (3) above is the ruling factor, then holes P-17 and P-18 were not deep enough to encounter the limestone. (See Maps No. 8 and 9.)

Based on the geologic results, assay results, etc., the writer opines that the area north of the limestone loci (Pit) should be of no further interest to CAN-AM Corp. as regards a possible open pit limestone operation with minimal overburden - waste requirements, because the conditions are not conducive to such an operation.

BENEFITS of DRILLING PROJECT:

Although the bulk of the drilling produced "negative" results as regards the basalt/waste rock condition and the non-intersection of limestone near surface, the balance of the drilling program did provide information to enlarge or increase the "measured ore" position, provide a likely area for "indicated ore" and possibly suggest a different low cost mining method which would be more or less free of "waste or low grade removal problems," surface rehabilitation problems, air pollution problems, etc. - all expensive programs.

The ensuing portion of this report will expand on the above mentioned criteria in their respective sequence.

ORE RESERVES:

Prior to the present drill program, the writer's 1974 report credited this property with 800,000 measured tons and a potential (inferred) of 10,000,000 tons.

The drilling by CAN-AM has changed these figures as follows:

MEASURED ORE:	
Block (600 X 950 X 5*)	2,850,000 T.
Indicated Ore:	
Block (700 X 1300 X5*)	4,550,000 T.
Triangle ½ (350 X 600 X 5*)	525,000 T.
	5,075,000 T.

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ARIZONA, U.S.A.

Inferred Ore:

Block (400 X 1000 X 5*)	2,000,000 T.
Triangle ½ (500 X 950 X 5*)	1,180,000 T.
	3,180,000 T.

* factor - 60 feet thick divided by 12 cubic feet/ton in place

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES RICHARD E. MIERITZ DEC. 31, 19— ARIZONA, U.S.A.

Potential Recap:

MEASURED ORE	2,850,000 T.
Indicated Ore	5,075,000 T.
Inferred Ore	3,180,000 T.
	11,110,000 T. (rounded)

See "Ore Reserve" Map No. 10 for block outlines, locations and classifications.

The ore reserve changes have been brought about by the geologic and assay results of drill holes P-14, P-15, P-16 and P-21 and the writer's analysis of these results.

REQUIRED EXPLORATION:

The attempt to extend the limestone northward of the loci (Pit) was basically "nil." The writer thus caused hole P-21 to be drilled - a wildcat so to speak - to test the possible extension of the limestone to the southeast. Hole P-21 had 3 feet soil-gravel, 26 feet basalt and 41 feet poor limestone but about two feet of pinkish material (marker bed) at the bottom of the hole. That fact is significant in that the "marker bed" - immediately above the "good limestone" was encountered. (See Map No. 7.)

The above fact, coupled with the observable limestone outcropping in this area on the east wall of Hell Canyon and also on the surface east of the canyon edge, provide justification to explore and block out the limestone bed in a south and southeast direction from the loci (Pit). An "ore reserve" here would not be an "open pit" operation - underground mining would be required.

To this end, the writer recommends that nine holes be drilled and one hole - P-21 - be deepened using a diamond drill to depths averaging about 120 feet or roughly 1000 feet of hole. (See Map No. 11.) A down-the-hole hammer drill could be used with a cross type bit - not a button bit.

Early drilling exhibited that the limestone bed is very uniform in thickness, has a constant, persistent high grade quality and quantity of available CaO, has relatively low silica, has good burning characteristics and a good reactive factor. These attributes, plus the geologic evidence previously mentioned, form a strong, firm justification to complete the recommended exploration.

MINING METHOD:

Aside from the good quality of the limestone and the possible potential

of quantity, the Drake property was also considered from the accessibility angle, the market angle, the transportation of supplies and product and the labor angle. Because these attributes are basically all "plus", an alternative to "open pit" mining should be considered.

Assume that the aforementioned suggested exploration shows the limestone bed to be relatively flat dipping, to be of uniform and consistent grade and/or quality and be present in an amount approximating 10,000,000 tons, then underground mining should be investigated. The property under the above conditions is a great asset and should not be forgotten because it is not an "open pit." There are several successful large tonnage, low cost underground mining operations in the country.

Without going into too much detail at this writing, the writer envisions a room and pillar, three or four level system using drill jumbos, diesel front end loaders which load directly into diesel engined trucks for transport to the plant, both equipped with scrubbers. Basically no different than the equipment used in an open pit and no more labor than an open pit operation.

With a system such as this, there should be no underground water problems, no surface climatic precipitation problems and no "wet ore" feeding into the crusher. Controlled blasting could provide better fragmentation with same amount of powder for reduced crushing costs and little to no "selective" mining because all work would be done in the "ore zone."

Environmentally, blasting dust would not pollute the surface atmosphere, nor would the truck loading operation.

An underground operation would not be restricted due to closeness to the main highway - flying rock fragments and dust - being confined to the "room."

The property is on Forest Land, thus would be closely scrutinized by the Government. In this direction, also, an underground operation would not require surface rehabilitation and restoration of the plant vegetation.

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES RICHARD E. MIERITZ DEC. 31, 19— COLORADO, U.S.A.

RECOMMENDATIONS:

The unfortunate unforeseen and unpredictable geologic circumstance developed by the recent northward directed drilling is, of course, discouraging but may well be the denominator providing the end result, direction which should be taken. The negative results by no means suggest "releasing or giving up" the property.

The recent drilling was primarily designed to "check" the overburden condition for an "open pit" operation - how much waste? The unexpected thickness of soil-gravel, basalt and some low grade limestone is too great for an open pit - BUT - great enough for a "roof" for an underground operation to permit sole extraction of the "high quality limestone bed" at a cost equal to an "open pit" cost. The quality and quantity of the limestone bed has not necessarily been proven or dis-

proven by the recent short hole drilling and is thus still open to question and further exploration.

Therefore, towards this end, the writer recommends the expenditure of $15-20,000.- to complete the writer's suggested diamond drilling program - to test the quality and quantity of the "good" limestone bed to the southeast of the loci - (Pit) east of Hell Canyon and down dip.

The opinion expressed herein by the writer is based on the merit of the property, that is, location, its accessibility, the quality of the ore, the potential which should exist, an analysis of extractive costs and environmental considerations.

The writer has not considered plant operation costs, markets for the product, price of product, capital investment, etc. This can better be analyzed by CAN-AM Corp. The first order of importance is the deposit - its potential reserve and its quality.

Respectfully submitted

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES RICHARD E. MIERITZ DEC. 31, 19— ARIZONA U.S.A.

REGISTERED GEOLOGIST CERTIFICATE NO. 7784 RICHARD E. MIERITZ Date Signed ARIZONA U.S.A.

R. E. Mieritz
Mining Consultant
Phoenix, Arizona

June 20, 1979

CHURN DRILL SHIFT REPORT

PROPERTY Drake Limestone

HOLE NO P14 — DATE May 28 19 79

DRILL NO 1 — SHIFT Day

BIT TYPE — DRILLER Clark

CASING LOWERED - SIZE - FROM - TO — HELPER Paul

FEET — WATER - DEPTH ENCOUNTERED FEET

FEET

BIT USED 3 1/2" D.H.H. FEET

FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP

DRILLING AND ~~BAILING~~ 10:00AM - 2:10 P.M.

SETTING CASING

REMOVING CASING

EQUIPMENT REPAIR

REPAIRING ENGINE OR RIG

CEMENTING HOLE FROM TO

FISHING

REAMING HOLE FROM TO

CLEANING HOLE FROM TO

OTHER DELAYS

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4747
0	2								Soil
2	10			V.H.	1/16				Broadt Samp 1/2 ST. 1/2
10	20			V.H	1/8				Lms Dark gry Mottled.
20	26			V.H	1/8				" " "
26	34		Caving	Soft	Sticky 1/2				ch to Yel-tan Mud
34	40			M.	1/4				W/h dust. Soft 38-40
40	48			H	1/4				W/h dust.
48	55			H	1/8				Pink Calcite
	End of Hole.								

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT FEET

DEPTH OF HOLE AT END OF SHIFT FEET

SAMPLES LEFT IN TUBS

SAMPLES CANNED

SAMPLER

CHURN DRILL SHIFT REPORT

PROPERTY Drake Limestone

HOLE No P 15

DRILL No 1

BIT TYPE Button

DATE May 28 19 79

SHIFT Day

DRILLER Frank Clark

HELPER Paul Butler

CASING LOWERED - SIZE - FROM - TO

FEET

FEET

BIT USED 3 1/2" D.H.H. FEET

FEET

WATER - DEPTH ENCOUNTERED FEET

EMPLOYMENT OF TIME

7:45AM 11:00AM - 5-29-79

MOVING AND SETTING UP 3:20 PM 6:00 PM

DRILLING AND ~~[illegible]~~ ~~[illegible]~~ AM ~~[illegible]~~ PM

SETTING CASING

REMOVING CASING

EQUIPMENT REPAIR

OTHER DELAYS

REPAIRING ENGINE OR RIG

CEMENTING HOLE FROM TO

FISHING

REAMING HOLE FROM TO

CLEANING HOLE FROM TO

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4735
0	1.5								Soil
1.5	10.0			H	1/8				Tan lms - wh dust
10	13			H	1/8				Tan - wh tan dust
13	20			M	1/8				Tan - Pink dust
20	30			M	1/16				wh wh dust
30	40			M	1/16				soft wh - soft pink
40	50			M	1/8				wh lms. 5-28-79
50	60			M	1/16				" " 5-29-79
60	70			M	1/16				" "
70	80			M	1/16				" "
80	90			M	1/16				" "
90	100			M	1/16				" "

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT FEET

DEPTH OF HOLE AT END OF SHIFT FEET

SAMPLES LEFT IN TUBS

SAMPLES CANNED

SAMPLER

C..URN DRILL SHIFT REPOR.

PROPERTY Drake Limestone

..OLE NO P-16 DATE May 29 1979

DRILL NO 1 SHIFT Day

BIT TYPE Button DRILLER Frank Clark

CASING LOWERED - SIZE - FROM - TO HELPER Paul Butler

FEET WATER - DEPTH ENCOUNTERED FEET

FEET

BIT USED 8 1/2" FEET

FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP

DRILLING AND BAILING 12:00 - 3:00PM

SETTING CASING

REMOVING CASING

EQUIPMENT REPAIR

OTHER DELAYS

REPAIRING ENGINE OR RIG

CEMENTING HOLE FROM TO

FISHING

REAMING HOLE FROM TO

CLEANING HOLE FROM TO

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4749
0	2.5								Red-Flint
2.5	10.0			H					Brown
10	20			H					Blk gry - Brown
20	23			H					Brown?
23	30			S					Cam Lt Tan
30	40			S/M	1/16				40 Tan 60% Pink
40	50			M	1/16				Pinkish tan - 20 & 80%

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT FEET

DEPTH OF HOLE AT END OF SHIFT FEET

SAMPLES LEFT IN TUBS

SAMPLES CANNED

SAMPLER

C..URN DRILL SHIFT REPOR

PROPERTY Drake Limestone

HOLE NO P-17

DRILL NO 1

BIT TYPE Button

DATE May 29 19 77

SHIFT 4P-1

DRILLER Frank Clark

HELPER Paul Burton

CASING LOWERED - SIZE - FROM - TO

_____ FEET

_____ FEET

BIT USED _____ FEET

_____ FEET

WATER - DEPTH ENCOUNTERED _____ FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP _____

DRILLING ~~AND BAILING~~ 2:30 PM — 6:00 PM

SETTING CASING _____

REMOVING CASING _____

EQUIPMENT REPAIR _____

OTHER DELAYS _____

REPAIRING ENGINE OR RIG _____

CEMENTING HOLE _____ FROM _____ TO _____

FISHING _____

REAMING HOLE _____ FROM _____ TO _____

CLEANING HOLE _____ FROM _____ TO _____

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4760
0	8								Soil & Rock
8	15			S	Good				Cinders?
15	20			M	Good				Lite Brn. Cinders?
20	30		Caving	M H	Good				Cinders Grayish
30	40		Caving	M H	Good				Cinders Brownish.

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT _____ FEET

DEPTH OF HOLE AT END OF SHIFT _____ FEET

SAMPLES LEFT IN TUBS _____

SAMPLES CANNED _____

SAMPLER _____

CHURN DRILL SHIFT REPORT

PROPERTY Duke Limestone

HOLE NO P-18

DRILL NO 1

BIT TYPE ~~3½~~ Button

DATE May 30 19 77

SHIFT Day

DRILLER Frank Roberts

HELPER Paul Butler

CASING LOWERED - SIZE - FROM - TO

_____ FEET

_____ FEET

BIT USED 3½ FEET

_____ FEET

WATER - DEPTH ENCOUNTERED _____ FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP _____

DRILLING AND BAILING 7:45 AM - 10:00 AM

SETTING CASING _____

REMOVING CASING _____

EQUIPMENT REPAIR _____

OTHER DELAYS _____

REPAIRING ENGINE OR RIG _____

CEMENTING HOLE _____ FROM _____ TO _____

FISHING _____

REAMING HOLE _____ FROM _____ TO _____

CLEANING HOLE _____ FROM _____ TO _____

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4755
0	7								Soil & small rocks.
7	20			H	Good		Gray		Basalt & Cinders
20	30		Caving	S	Good	Churn	~~Gray~~ Gray		Sand - Lost drilling - water added
30	40		"	H	Good			"	Basalt - dk gray.

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT _____ FEET

DEPTH OF HOLE AT END OF SHIFT _____ FEET

SAMPLES LEFT IN TUBS _____

SAMPLES CANNED _____

SAMPLER _____

CHURN DRILL SHIFT REPORT

PROPERTY Duke Limestone

HOLE NO P-19 DATE May 30 1977

DRILL NO 1 SHIFT Day

BIT TYPE Button DRILLER Frank Clark

CASING LOWERED - SIZE - FROM - TO HELPER Paul Butler

4½" FEET WATER - DEPTH ENCOUNTERED FEET

FEET

BIT USED 3½" FEET

FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP

DRILLING ~~AND BAILING~~ 11:15 AM - 6:00 PM

SETTING CASING

REMOVING CASING

EQUIPMENT REPAIR

OTHER DELAYS

REPAIRING ENGINE OR RIG

CEMENTING HOLE FROM TO

FISHING

REAMING HOLE FROM TO

CLEANING HOLE FROM TO

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4757
0	15			No Sample					Soil & Gravel Bed
15	20			H					Clay - Gravel
20	30			H	1/8				Ft Clay "
30	40			H	1/8				" " "
40	50			H	1/8				" " "
50	60			MH	Grab				@ 54 Mid & Red Brown Bas
60	70			M	Grab				Hard vuggy Basalt
70	80			M	Grab				" " "
80	90			M	Grab				" " "
90	100			M	"				" " "

End of hole

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT FEET

DEPTH OF HOLE AT END OF SHIFT FEET

SAMPLES LEFT IN TUBS

SAMPLES CANNED

SAMPLER

CHURN DRILL SHIFT REPORT

PROPERTY Drake Limestone

HOLE NO P-20

DRILL NO 1

BIT TYPE Button

CASING LOWERED - SIZE - FROM - TO

_____ FEET

_____ FEET

BIT USED 3½" _____ FEET

_____ FEET

DATE May 31 19 79

SHIFT Day

DRILLER Frank Black

HELPER Paul Butler

WATER - DEPTH ENCOUNTERED _____ FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP _____

DRILLING ~~AND BAILING~~ 10:40AM-

SETTING CASING _____

REMOVING CASING _____

EQUIPMENT REPAIR _____

OTHER DELAYS Time Repairs 8-10:40AM

REPAIRING ENGINE OR RIG _____

CEMENTING HOLE _____ FROM _____ TO _____

FISHING _____

REAMING HOLE _____ FROM _____ TO _____

CLEANING HOLE _____ FROM _____ TO _____

SAMPLES

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4757
0	4			No Sample					Soil
4	8			No Sample					Gravel
8	20		H	Gray					Gravel - Dk gry.
20	30		M	Gray					" " Lt. gray
30	40		M	gray					30-35 Lt. gray Gravel
									35-38 - gray (Brn, SSS.)
									38-40 B.S.
40	50		M	gray					40-44 S.S.
									44-50 Gray

GENERAL REMARKS

DEPTH OF HOLE AT BEGINNING OF SHIFT _____ FEET

DEPTH OF HOLE AT END OF SHIFT _____ FEET

SAMPLES LEFT IN TUBS _____

SAMPLES CANNED _____

SAMPLER _____

C..URN DRILL SHIFT REPOR.

PROPERTY Duke Limestone

..OLE NO P-21

DRILL NO 1

BIT TYPE Button

CASING LOWERED - SIZE - FROM - TO

_____ FEET

_____ FEET

BIT USED 3 1/2" _____ FEET

_____ FEET

DATE May 31 19 79

SHIFT Day

DRILLER Frank Clark

HELPER Paul Butler

WATER - DEPTH ENCOUNTERED _____ FEET

EMPLOYMENT OF TIME

MOVING AND SETTING UP _____

DRILLING ~~AND BAILING~~ 1:30 PM

SETTING CASING _____

REMOVING CASING _____

EQUIPMENT REPAIR _____

OTHER DELAYS _____

REPAIRING ENGINE OR RIG _____

CEMENTING HOLE _____ FROM _____ TO _____

FISHING _____

REAMING HOLE _____ FROM _____ TO _____

CLEANING HOLE _____ FROM _____ TO _____

SAMPLES

~~4755~~

DEPTH FROM	DEPTH TO	COLOR OF SLUDGE	CONDITION OF HOLE (CAVING, ETC.)	HARDNESS OF ROCK (V.H. VERY HARD, H. HARD, M. MEDIUM, S. SOFT, V.S. VERY SOFT)	IS SAMPLE RELIABLE, ETC.	SIZE TO WHICH SAMPLE WAS CUT (NUMBER OF SPLITS)	NUMBER OF BAILERS	DRY WEIGHT OF SPLIT SAMPLE	REMARKS (NOTE THICKNESS OF EXTREMELY SOFT AREAS. SPECIFY DRY WEIGHT OF AQUA-GEL ADDED.) 4755
0	3			No sample					Lost small amount
3	10			M	Good				Brownish gray.
10	20			H	"				" "
20	30			H	"				" "
30	40			M	1/16				Lost 10% of 29
40	50			M	1/16				" " 1 Fr pocket #1
50	60			M	1/16				" "
60	70			M	1/16				" " 1 [illegible] 65
		End of hole							

GENERAL REMARKS

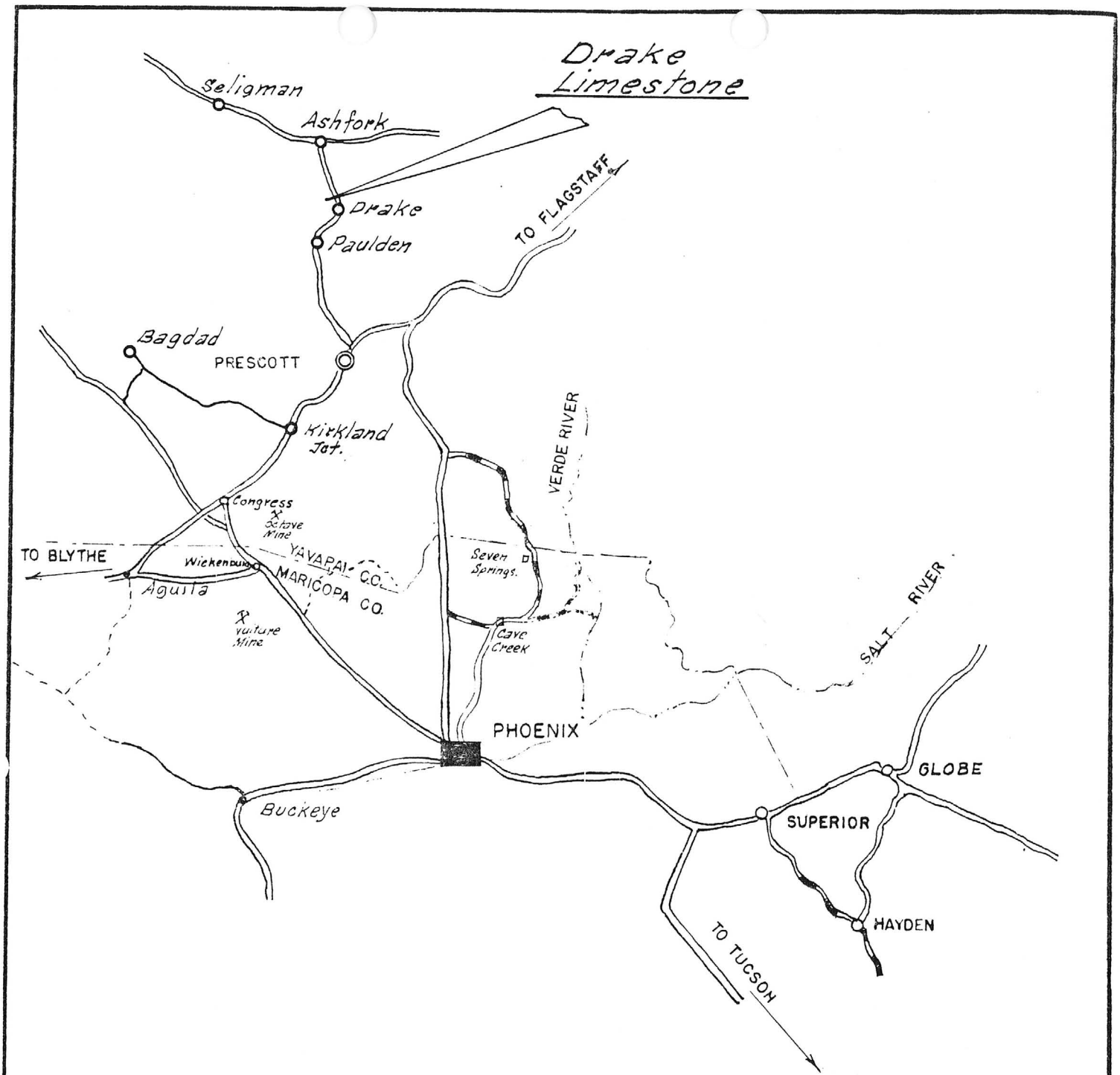
DEPTH OF HOLE AT BEGINNING OF SHIFT _____ FEET

DEPTH OF HOLE AT END OF SHIFT _____ FEET

SAMPLES LEFT IN TUBS _____

SAMPLES CANNED _____

SAMPLER _____



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R.E.M.

66

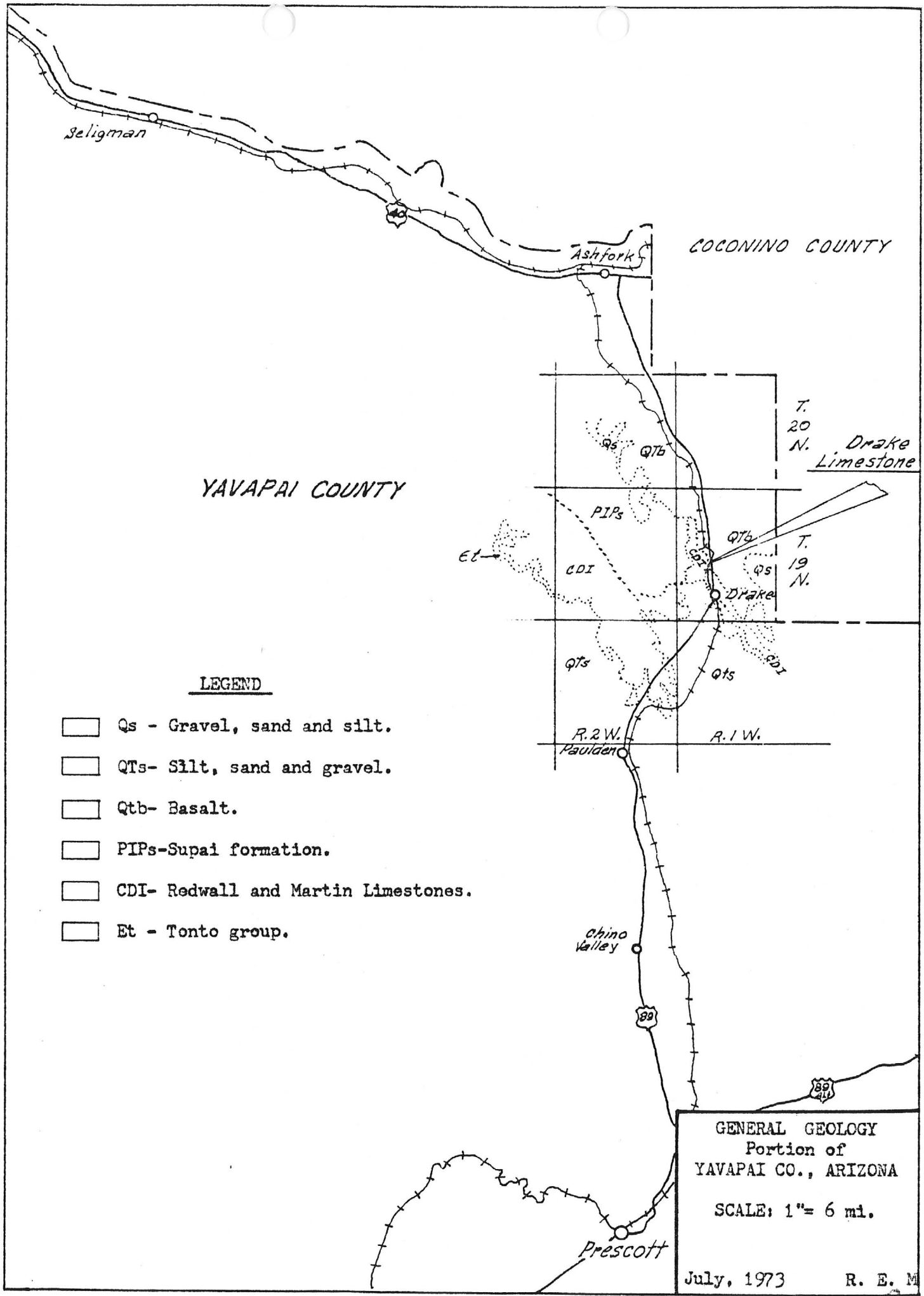
INDEX MAP
CENTRAL ARIZ.

SCALE: 1" = 27 MI.

R.E. MIERITZ, P.E. MAR., 1962

MAP No. 7

A-23


Seligman
40
Ashfork
COCONINO COUNTY
T. 20 N.
Drake Limestone
YAVAPAI COUNTY
Qs
QTb
PIPs
QTb
T. 19 N.
Et
CDI
Qs
Drake
QTs
QTs
CDI
R. 2 W.
R. 1 W.
Paulden
Chino Valley
89
89 A
Prescott
LEGEND
Qs - Gravel, sand and silt.
QTs- Silt, sand and gravel.
Qtb- Basalt.
PIPs-Supai formation.
CDI- Redwall and Martin Limestones.
Et - Tonto group.
GENERAL GEOLOGY
Portion of
YAVAPAI CO., ARIZONA
SCALE: 1"= 6 mi.
July, 1973
R. E. M

MAP No. 2

REPLY TO:
2940 N. CASA TOMAS
PHOENIX, ARIZONA 85016
TELEPHONE (602) 277-6053

Richard E. Mieritz
MINING CONSULTANT
ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

August 29, 1983

Drake Lime Co.
P. O. Box 953
Phoenix, Arizona, 85001

Att: Mr. Dwight McClure

On February 26, 1983, Mr. Dwight McClure of Drake Lime, a partnership, verbally requested of and authorized the writer to complete some annual Assessment work on their limestone property, Col #1 through Col #7 claims near Drake, Yavapai County, Arizona.

The property was field visited on March 8, 1983 and again on August 22, 1983. Office work was completed on August 29, 1983. This work was directed towards gaining geological information and and material characteristics in the area of claims Col #6 and #7. The information gained provides a basis to plan, suggest and design exploration and development programs for this portion of the property.

GEOLOGY:

During the field work days, the writer walked over most of the surface of Col #7 claim and plotted an approximate limestone-alluvium contact. In addition, three samples of limestone were taken as so indicated on the included CLAIM MAP.

The limestone exposed in this area is basically light grayish cream in color, quite dense, fine to medium crystalline grained and quite massive in character. There are few locations where bedding strikes and dips could be measured. Where possible, the strike appears to be northerly with approximately a 5° dip to the east. Much of the limestone seems to be lying horizontal.

Limestone is in evidence and outcrops in the eastern quarter of Col #7 and it is this area that exploration work should be done--from the south line of the claim to the north line of the claim. This outcropping limestone is similar in character to the formation in evidence at the PIT east of Hells Canyon which has been developed by drilling and sampling.

This limestone bed should continue into Col claims #6 and #5 on the west side of Hells Canyon.

SAMPLING:

Three samples were taken by the writer at locations as shown on the included CLAIM MAP. These are numbered and described as follows:

#2961 - A chip sample taken from the southeast pit at common Section corner 25, 30, 31 and 36--Range Line between R. 1 W. and R. 2 W. This sample was from the wall of the pit which exposed light gray, somewhat creamish, crystalline limestone. Faint bedding indicates it is horizontal or nearly so. Assay results are:

L. O. I.	=	56.81 % (Loss on ignition)
CaO	=	53.30 % (Calcium Oxide)
SiO_2	=	0.13 % (Silica)

#2962 - This sample was a chip sample of the exposed limestone outcrop about the northern limit of Co. #7 (southern line of Col #6) near the limestone-alluvium contact. The sample's physical characteristics are similar to those of sample #2961, except the material is more dense, a bit more hard and had somewhat eliptical rings or shapes of brown calcite, perhaps some are silica. Assay results are:

L. O. I.	=	42.87 %
CaO	=	52.40 %
SiO_2	=	1.09 %

#2963 - This sample was a chip of the exposed limestone outcropping near the southeast corner and south claim line of Col #7. The limestone here is similar to sample #2961, in color, hardness and density. It also lacks the calcite rings evidenced in sample #2962. Samples 2961 and 2963 are of the same bed which appears to be lower than the bed from which sample 2962 was taken. Assay results are:

L. O. I.	=	33.81 %
CaO	=	54.00 %
SiO_2	=	0.32 %

PROPOSED EXPLORATION:

The examined area and the results of the wide spaced samples indicate that exploratory work is justified. Such work can be completed by (1) grid sampling the outcropping limestone in the eastern quarter of Col #7 and (2) drilling the same area to a depth of approximately 80 feet.

Grid Sampling:

The area of interest at this time is about 800 feet wide (east-west) and a half mile long (north-south). Initially, the "grid pattern" should have a north-south spacing of 400 feet and an east-west spacing of 200 feet along the 400 foot (east-west) lines. Thirty to 35

samples would be taken. This spacing would permit "halving" the grid (200 feet north-south) and (100 feet east-west) if the initial sample results dictate this move.

Drilling:

If the above surface sampling results indicate good quality limestone, then testing to depth by drilling is warranted and justified. A drill grid pattern spacing of 600 feet north-south and 400 feet east-west should be used. The first north-sout line of holes should be approximately 600 feet west of the east line of claim Col #7. The second line should be 200 feet west of the same east line of the claim. Each line should have four holes or eight holes total. The second lone of holes should be "staggered" between the first line of holes (half the distance between the north-south spacing but at the same 600 foot spacing. This would form a "diamond" type pattern. The first hole should be near sample #2962 and progress southward on the drill pattern line.

The topography and ground cover in the area favors mobility of truck mounted drills. Occasional "scrub" vegitation might have to be removed or cleared to make a "track" or trail for the drill unit. The Forest Service has already completed this type of work as a "grazing" project, so there should be no problem in this direction.

Respectfully submitted,

R. E. Mieritz,
Mining Consultant.

EXHIBITS: Index Map, Central Arizona
General Geology, Portion of Yavapai County, Arizona
Claim Map, Drake Limestone.

REPLY TO:
2940 N. CASA TOMAS
PHOENIX, ARIZONA 85016
TELEPHONE (602) 277-6053

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GEOLOGY
EXPLORATION
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Respectfully submitted,

R. E. Mieritz,
Mining Consultant.

EXHIBITS: Index Map, Central Arizona
General Geology, Portion of Yavapai County, Arizona
Claim Map, Drake Limestone.

CAN-AM CORPORATION

R.A. BARBERO
PRESIDENT-C.E.O.

P.O. DRAWER T
DOUGLAS, ARIZONA 85607
TELEPHONE (602) 364-2429

June 28, 1979

Mr. Dick Mieritz
2940 N. Casa Tomas
Phoenix, AZ 85016

Subject: Drake Lease

Dear Dick:

I studied your report of June 20th and was sorry to learn that the drilling program and the results thereof did not come up to our initial expectations.

Your recommendation of further exploration will be given some consideration but at this time I am not looking positively toward an expenditure that would allow for your prescribed practice of sub-surface mining. Some of your thoughts would undoubtedly be proper for a larger more profit laden industry, but the production and utilization of our raw product constitutes too great a cost in the end product for us not to pursue the least expensive and most material yielding methods.

A little more regarding Can-Am's reluctance to consider a mining operation on such an apparently small reserve and competitive market area: assuming we could locate approximately ten million tons of reserves we would be required to leave a certain percentage of those reserves in the pillars, on the floor and in the roof. (For a guesstimate we could assume approximately 30%). Of the remaining seven million tons we can safely assume at least a minimum of 35 to 40% of the crushed raw product would be minus ½" and unsuitable for kiln feed (this accounts for another 2,500,000 to 2,800,000 tons loss of kiln feed). The remaining 4.5 million should yield us approximately 2,700,000 tons of saleable product. Although this tonnage would probably allow for a 20 year operation we certainly couldn't consider expansion of production facilities without additional reserves. In addition, I feel that the cost of mining the raw product would be in excess of the cost of an open pit quarry.

I'll contact you within the next couple of weeks and advise you of our decision regarding additional exploration. Whatever the decision regarding the Drake properties, I need to get with you and further discuss a couple properties we are presently considering.

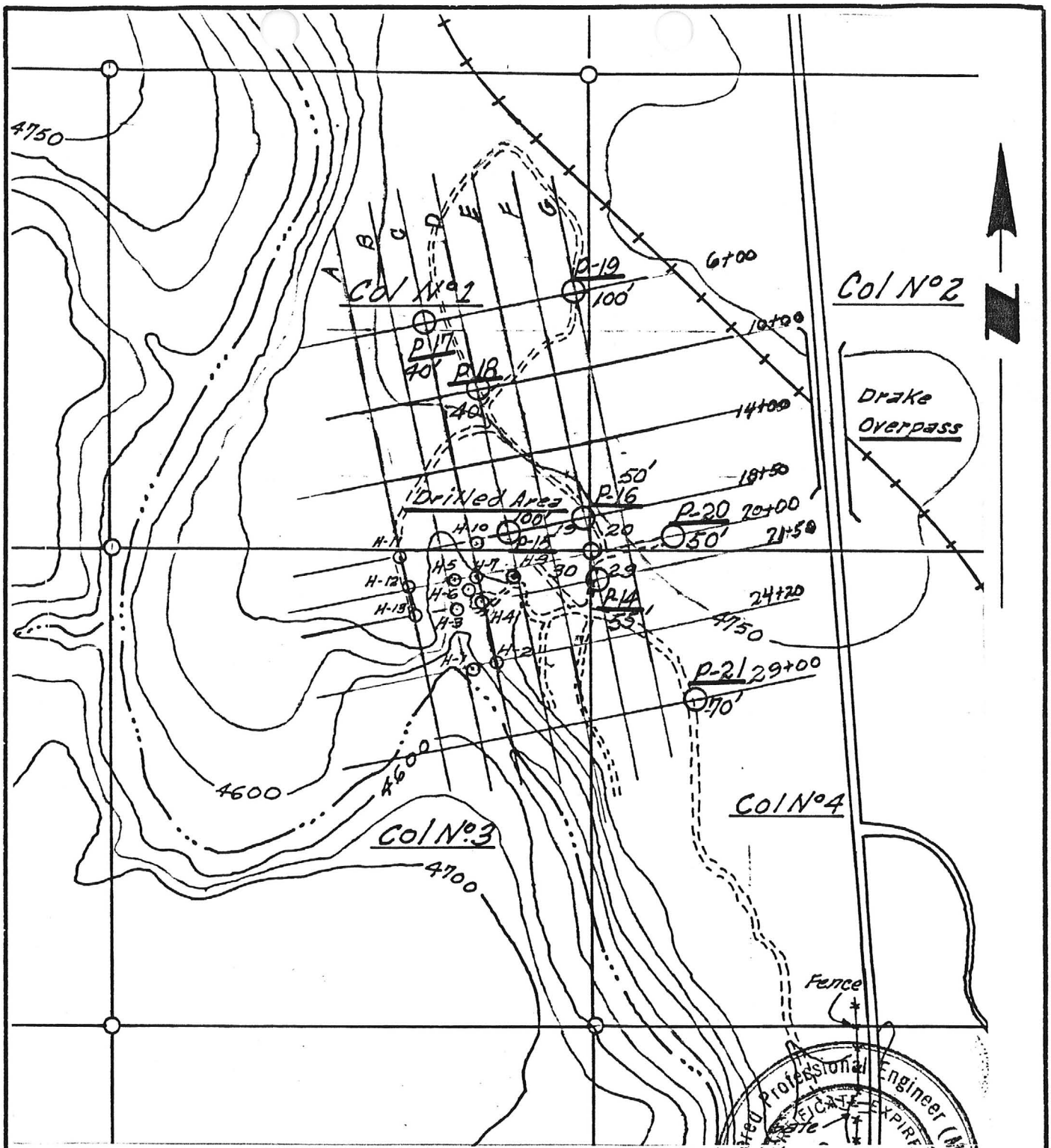
Thanks for your immediate follow through on this project, Dick. Its always satisfying to find that a professional such as yourself carries a mutual interest in our requirements.

Very truly yours,

Robert A. Barbero

RAB:jr

cc: Sherwood B. Owens



LEGEND

P.15
100'
Locations actually drilled with Hole Numbers and depths drilled

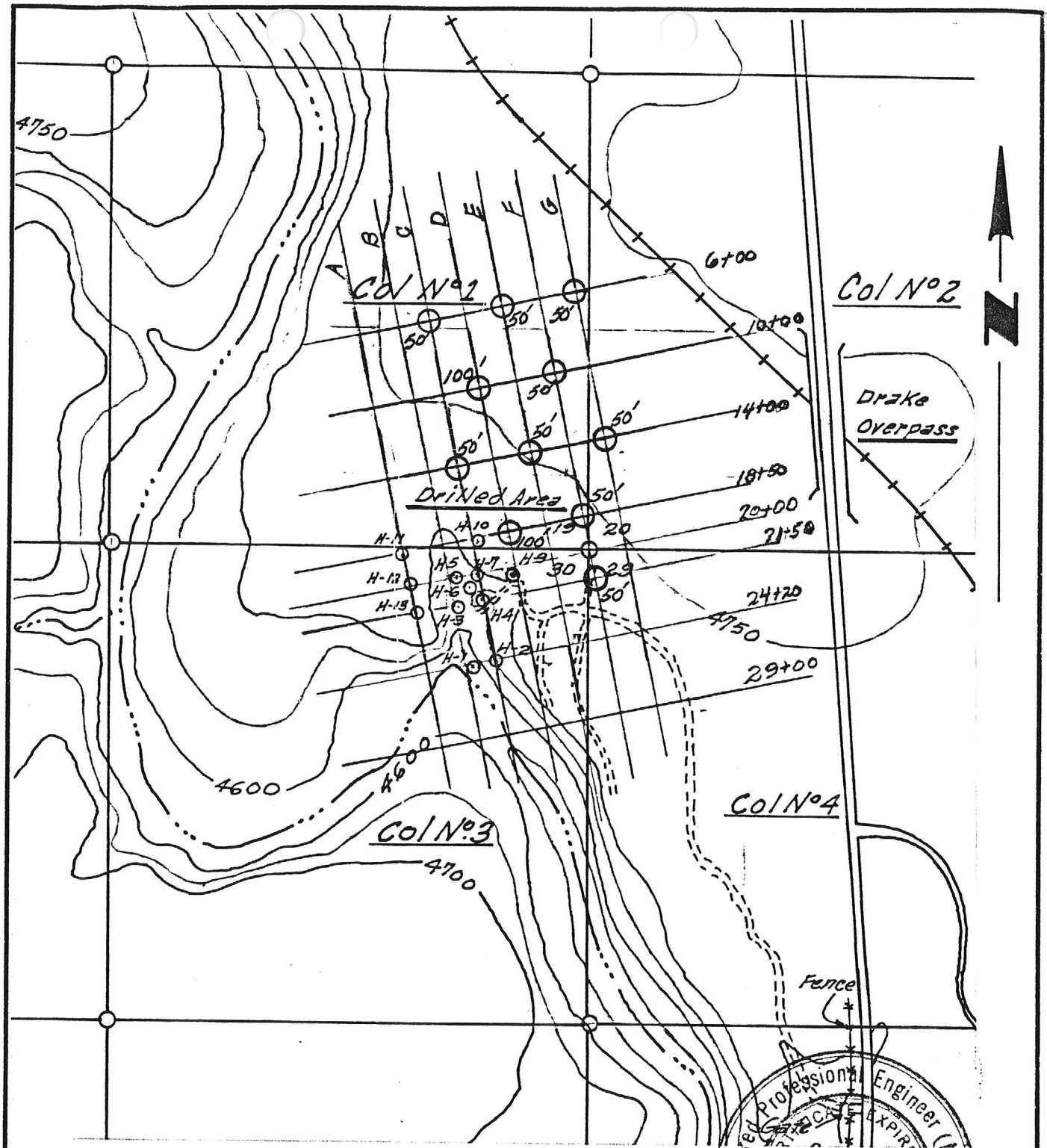
MAP of
HOLES ACTUALLY DRILLED

DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

June, 1979 R. E. Mieritz

MAP Nº ___



LEGEND

○ 50' Holes Planned for Paul Lime Drilling Project with proposed Hole Depths.

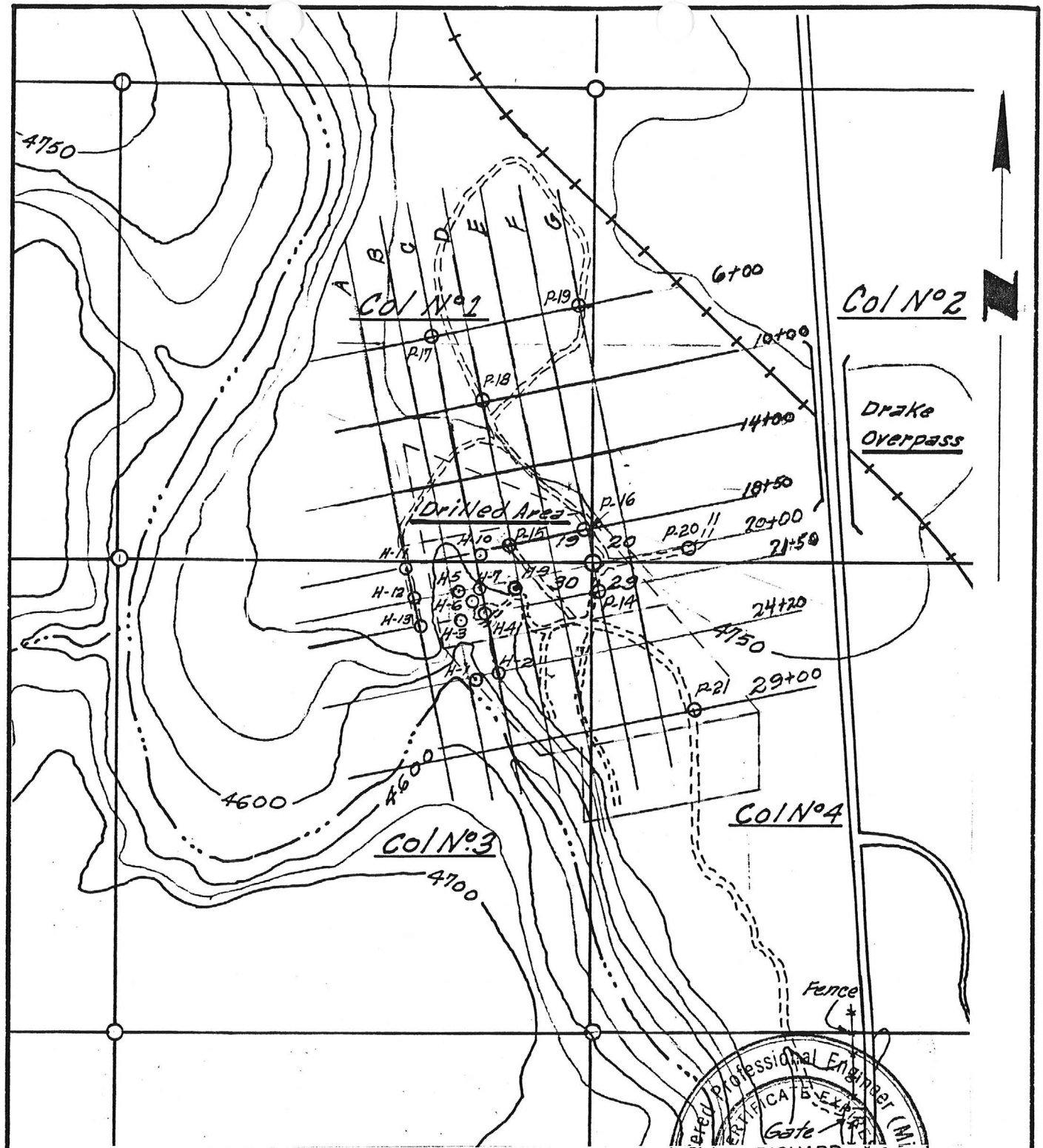
Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD E. MIERITZ
DEC. 31, 19
ARIZONA, U.S.A.

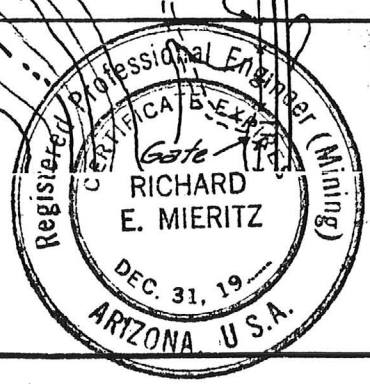
PLANNED DRILL HOLES
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

June, 1979 R.E. Mieritz

MAP Nº





LEGEND

○ ORE HOLES (Limestone encountered)

	MEASURED ORE BLOCK,	2,850,000 tons
	INDICATED ORE BLOCK,	5,100,000 tons
	INFERRED ORE BLOCK,	3,200,000 tons
Total		11,150,000 tons

ORE RESERVE MAP

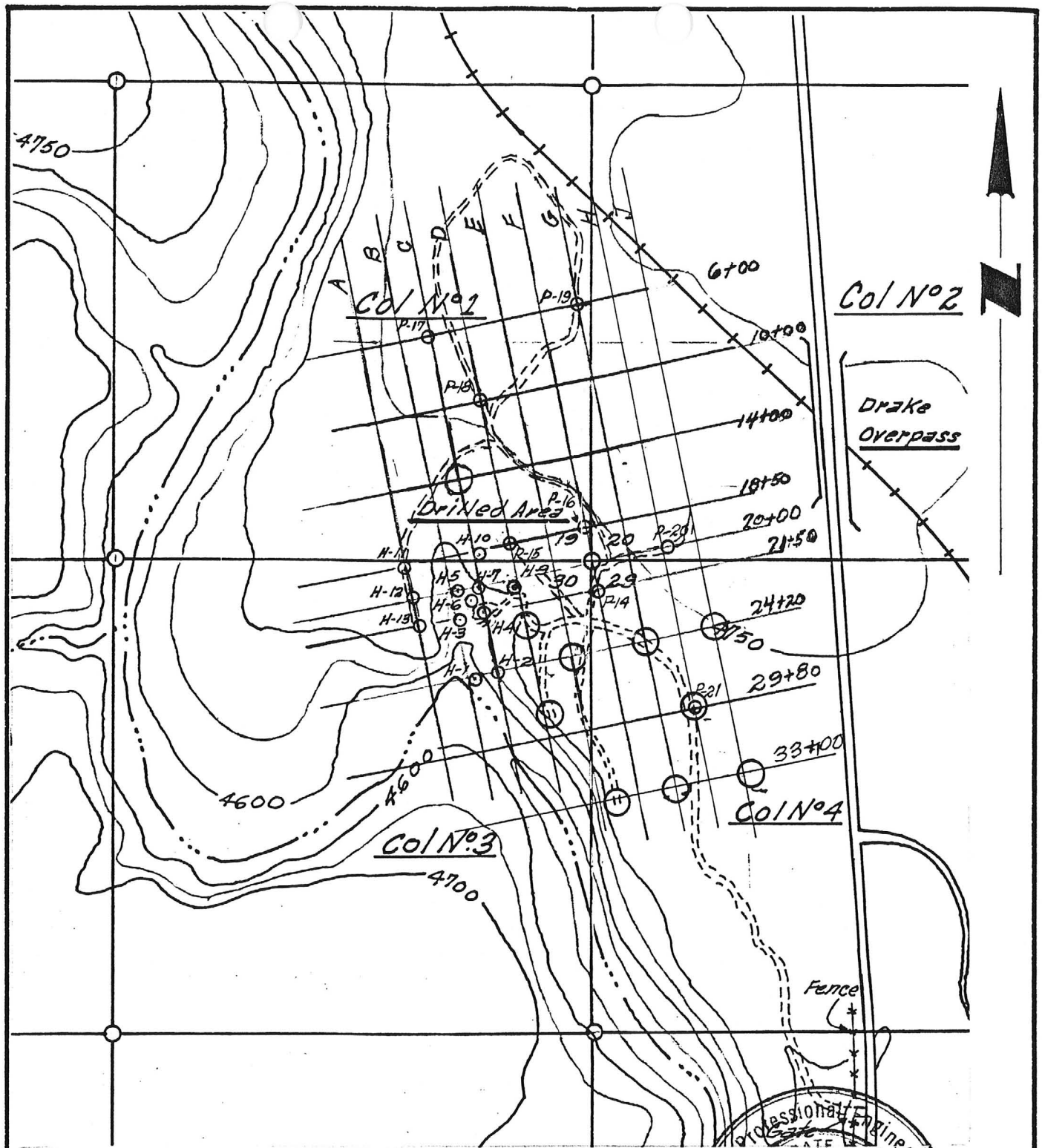
DRAKE LIMESTONE CLAIMS

Yavapai County, Arizona

SCALE: 1"= 800 Ft.

June, 1979 R. E. Mieritz

MAP Nº



LEGEND

H-6 ○ Drake Limestone Drill Holes

P-15 ○ Can-Am Corp. Drill Holes

○ Proposed Drill Holes

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD
E. MIERITZ
DEC. 31, 19__
ARIZONA, U.S.A.

PROPOSED DRILL HOLE LOCATIONS
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

June, 1979 R. E. Mieritz

MAP No

June 8, 1979

Mr. R. A. Barbero, Pres.
Can-AM Corp.
Paul Lime Division
P. O. Drawer "T"
Douglas, Arizona, 85607

Re: Drake Limestone
Drilling Project

Dear Mr. Barbero:

A brief letter to advise you the preliminary, but not conclusive results of the drilling program on the Drake Limestone. I need dome assays of the light to medium gray colored samples I sent on Tuesday last, before I can make positive statements concerning the results.

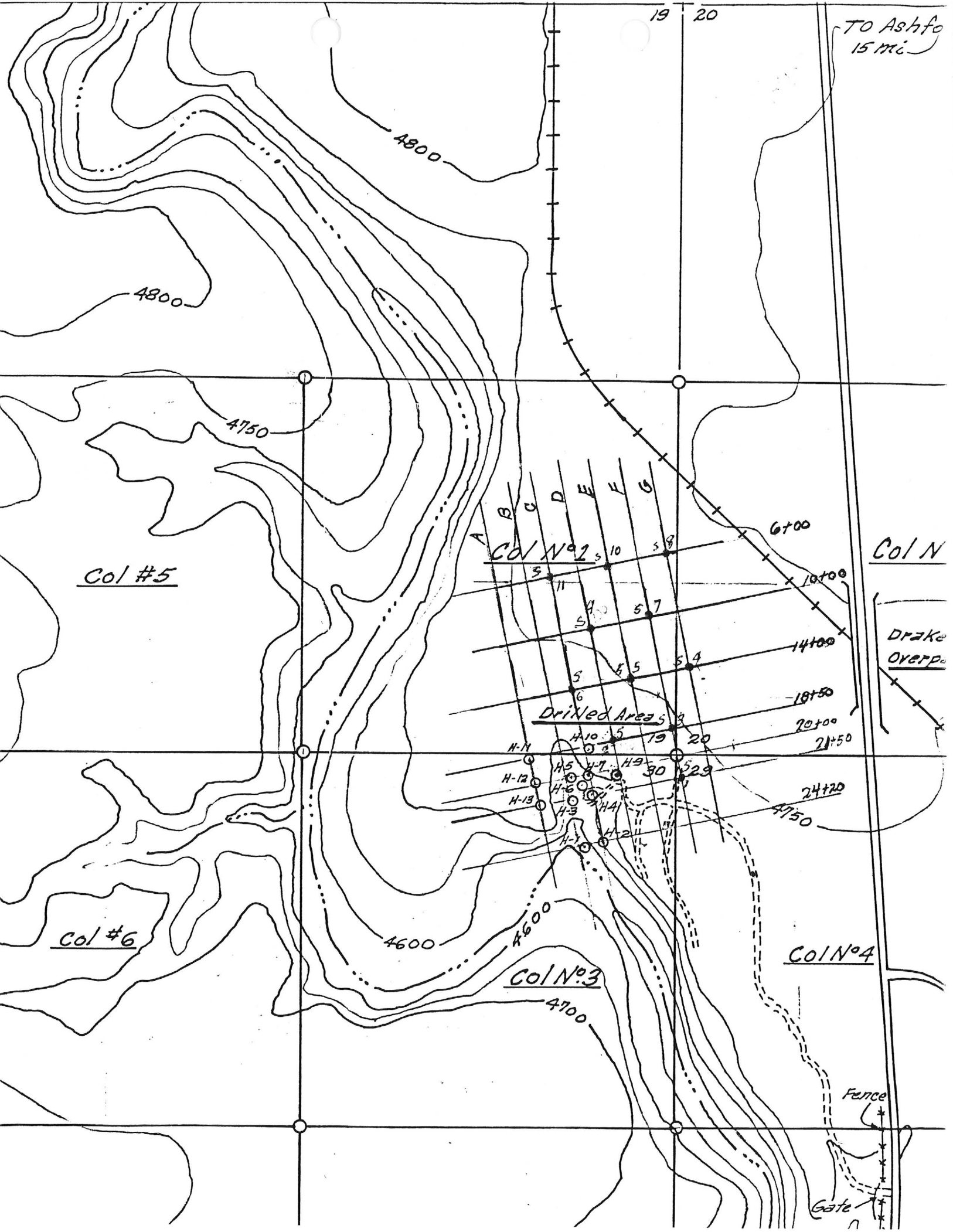
Attached are two Maps - (1) Planned Drill Holes and (2) Holes Actually Drilled. A "field change" in the normal, progressive northward route of drilling was made after drilling Hole P.-16 to be able to conserve the alloted drill footage and cover the greatest area possible. Having encountered the limestone in the first three holes, the writer made the "big jump" to the northern tiers where three holes were drilled. One hole was also drilled about 450 feet east of the Section Corner. The last hole was drilled southeast of the Section corner on the road to the gate and exit to the Hiway.

The soil-gravel (unconsolidated material, requiring no drilling and blasting) averaged 5.9 feet in thickness for the eight holes drilled which ranged from zero to a maximum of 15 feet. The writer - at this time - is not certain whether the rock encountered beneath the soil-gravel in some holes is basalt or the upper dark gray member of the limestone series in the area. Both rocks drill about the same and have about the same color. The button type bit the drill contractor used reduced the cuttings to a fine powder or chips of about 1/16th inch in size. Visual identification of such material is quite difficult, thus the writers need for the assay results.

The complete report will be forthcoming shortly after receipt of the assay results.

Sincerely yours,

R. E. Mieritz


19
20
TO Ashfo
15 mi
4800
4800
4750
Col #5
A
B
C
D
E
F
G
Col N°2
6+00
10+00
14+00
18+50
20+00
21+50
24+20
Col N
Drake
Overpa
Drilled Area
H-11
H-12
H-13
H-10
H5
H-7
H-9
H-6
H-3
H4
H-1
H-2
4750
4600
4600
Col #6
Col N°3
4700
Col N°4
Fence
Gate

CAN-AM CORPORATION

PAUL LIME DIVISION
PAUL SPUR
P.O. DRAWER T
DOUGLAS, ARIZONA 85607
TELEPHONE (602) 364-2429

June 12, 1979

Mr. Richard Mieritz
Consulting Geologist
2940 N. Casa Tomas
Phoenix, AZ 85016

The following consists of a report of test results on a series of rock samples sent in by Richard Mieritz and received here on June 6, 1979.

There were 33 samples in all. The samples were fine ground with occasional pieces as large as 6 mesh. Therefore, all samples had to be ground in the pulverizor prior to testing to insure representativeness.

The fine particle size of the samples made it impossible to make any kind of test in which behavior in a lime kiln could be predicted. By this I mean such behavior as decrepitation, dusting, shrinkage etc. Also any hydration characteristics after burning could not be determined.

Thus the only tests made were Loss on Ignition and the Available Calcium Oxide of the residue after Ignition. These tests would indicate whether a lime of suitable quality could be made from the rock, only insofar as the chemical quality is concerned.

Of the 33 samples, only 7 produced a lime residue after Ignition, of 88% Available CaO or greater. These 7 samples would thus be at least suitable from a chemical standpoint.

These samples were numbers - 1493, 1499, 1500, 1501, 1502, 1503 and 1508.

Another four samples could be classed as "second rate" and tested after Ignition on the residue an Available CaO value of from 85% to 88%. Rock such as this could be blended with high grade rock (if it were immediately available) and made use of.

These samples were numbers - 1495, 1498, 1509, and 1533.

Another six samples could be classed as possibles for blending. That is, only if a large amount of high grade rock were immediately available, could these rocks be blended. These samples tested after Ignition from 80% to 85% Available CaO on the residue.

These samples numbered - 1490, 1491, 1496, 1497, and 1507.

The remainder of the samples can be considered worthless for our purpose and might even cause serious damage to the kiln by causing rings in the kiln or fusing with and thus contaminating good lime being produced.

It should be noted here that all samples displayed a strong tendency to "fuse". That is the residue after Ignition was usually fused into a more or less solid mass and required considerable effort to "break it up" in order to properly sample for the Available CaO test. This is unusual as limestone rock goes.

Also the color of the samples were unusual in that they varied from a bright white to a coral pink to jet black.

All samples are reserved for possible further tests if desired.

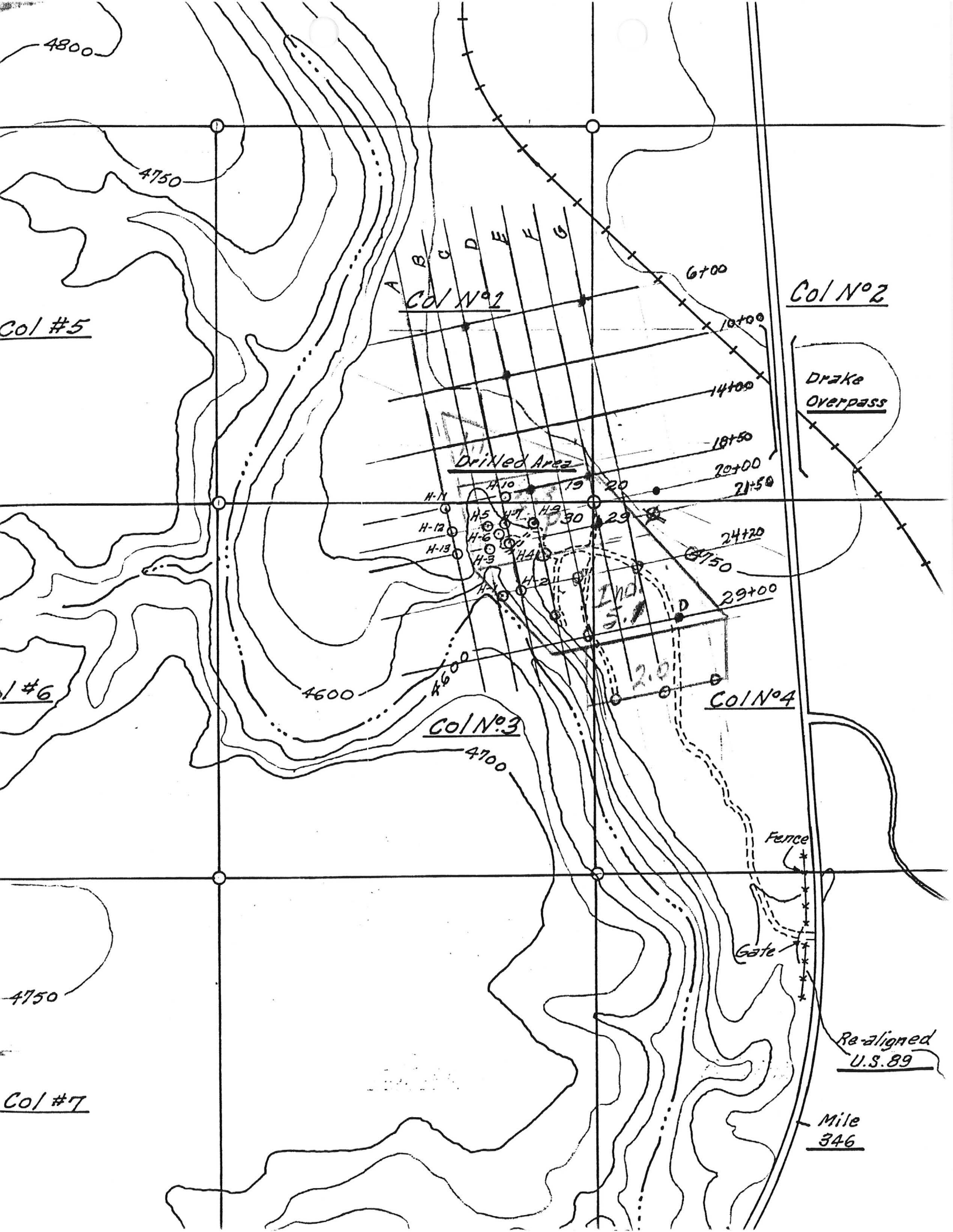
The results for each are tabulated below.

Respectfully submitted,

Robert Brinker
Chemist

RB:jr

cc: Robert Barbero
Howard Gorball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Drake Overpass
Drilled Area
H-14
H-10
19
20
H-5
H-7
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29
H-12
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H-11
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Re-aligned U.S. 89
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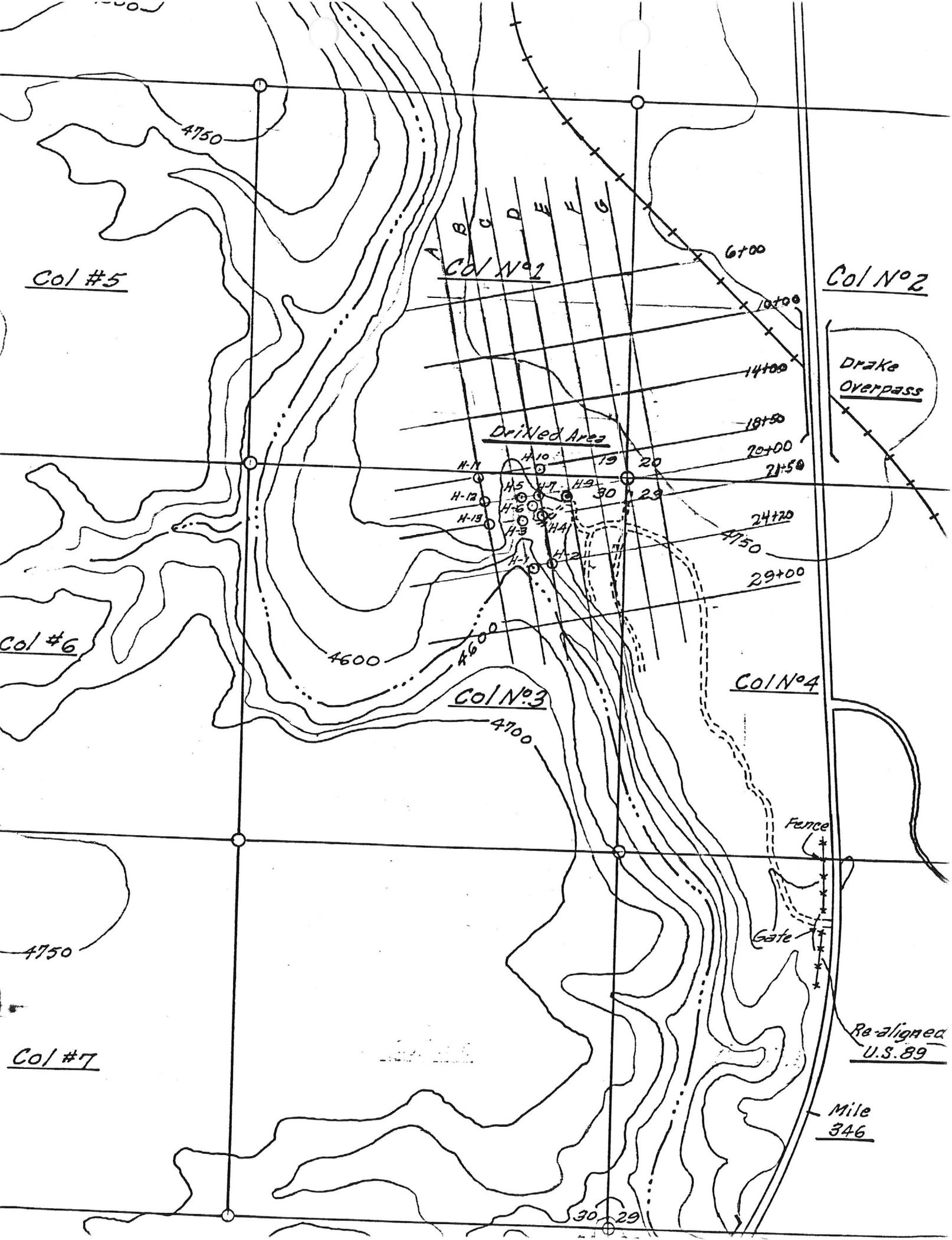
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21+50
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Drake Overpass
Drilled Area
H-11
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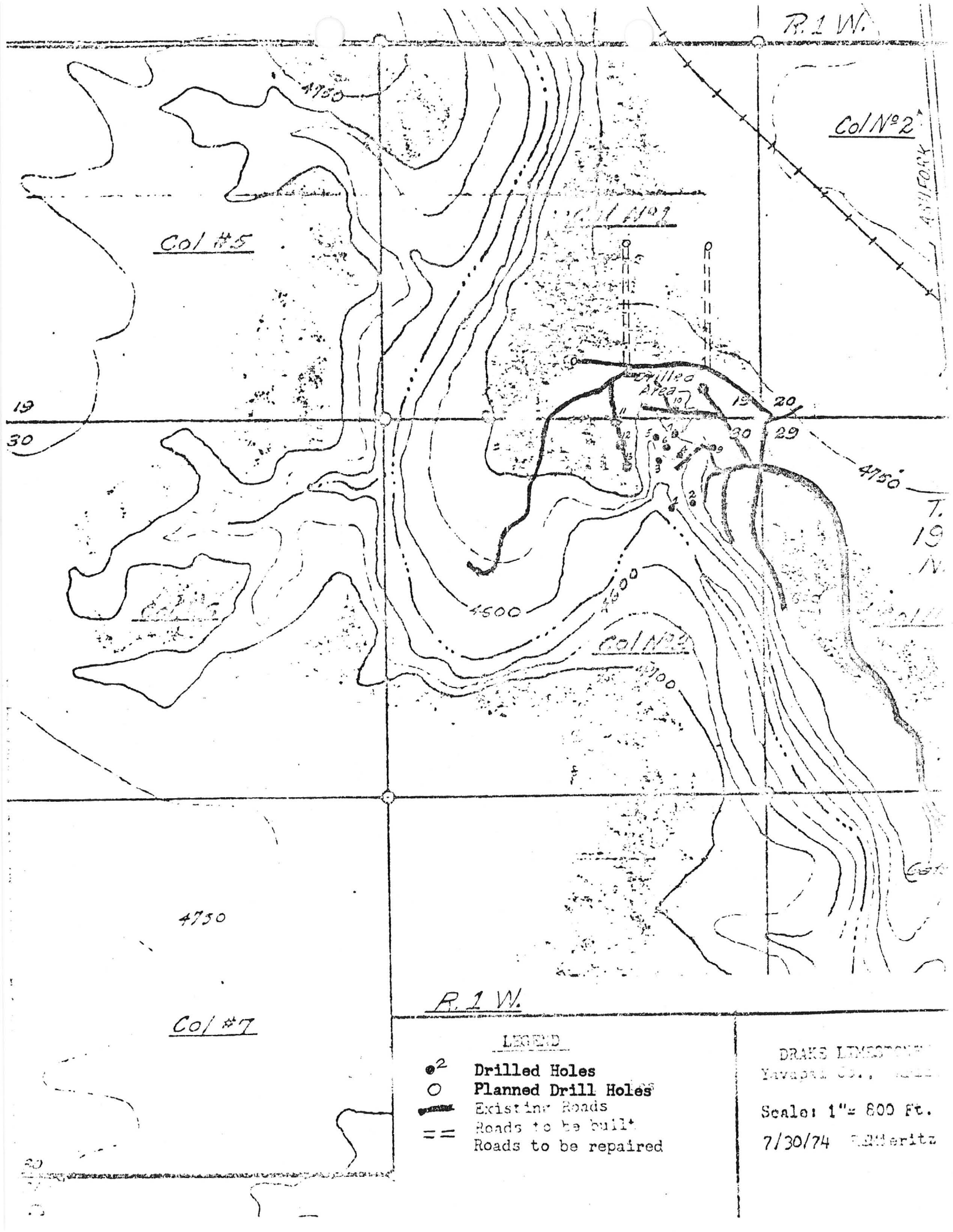
Gate
Re-aligned U.S. 89
Mile 346
30
29

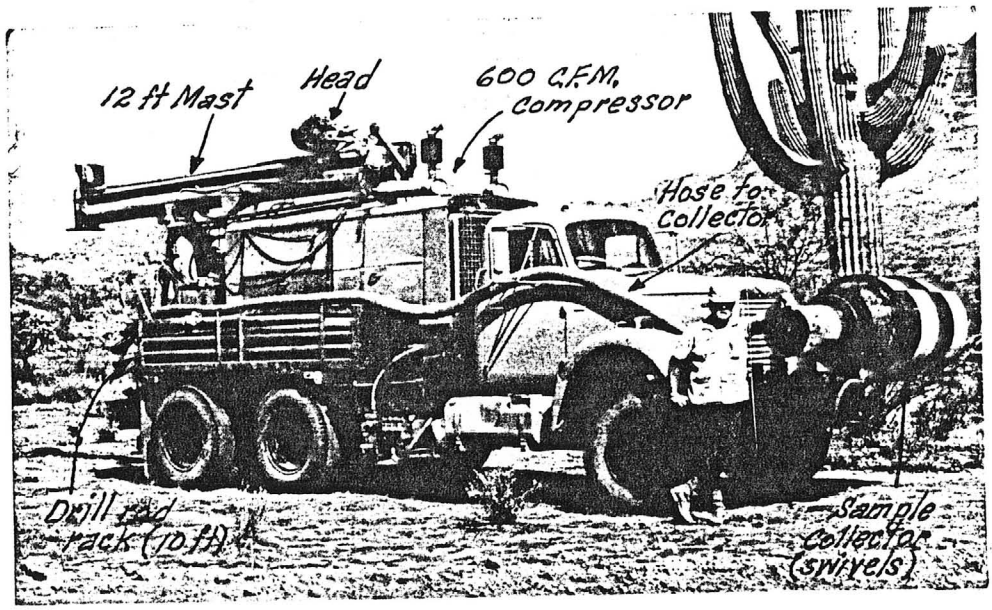

R. 1 W.
Col Nº 2
Col #5
Drilled Area
19
30
20
29
4750
4500
4600
Col Nº 1
4750
Col #7
R. 1 W.
LEGEND
Drilled Holes
Planned Drill Holes
Existing Roads
Roads to be built
Roads to be repaired
DRAKE LIMESTONE
Scale: 1" = 800 Ft.
7/30/74

TABULATION OF TEST RESULTS

	Sample Number			Loss on Ignition	Available CaO of Residue	
	1486	14	2-10	2.91%	.56% ✓	
	1488	14	20-26	2.92%	.83% ✓	
14	1490	14	34-40	41.15%	81.12% ✓	14
	1491	14	40-48	41.19%	82.15% ✓	
	1492	14	48-52	40.27%	76.22% ✓	
	1493 X	15	1.5-10	42.51%	89.29% ✓	
	1494	15	10-13	41.45%	80.90% ✓	
	1495	15	13-20	41.74%	85.58% ✓	
	1496	15	20-30	41.17%	82.28% ✓	
15	1497	15	30-40	41.01%	81.26% ✓	
	1498	15	40-50	42.06%	86.15% ✓	15
	1499 X	15	50-60	42.81%	89.46% ✓	
	1500 X	15	60-70	43.16%	92.91% ✓	
	1501 X	15	70-80	42.75%	91.82% ✓	
	1502 X	15	80-90	42.32%	88.86% ✓	
	1503 X	15	90-100	43.48%	95.57% ✓	
	1507	16	23-30	40.95%	79.34% ✓	
16	1508 X	16	30-40	42.63%	89.92% ✓	16
	1509	16	40-50	41.68%	84.67% ✓	
	1510	17	8-15	40.75%	5.66% ✓	
17	1513	17	30-40	7.09%	2.02% ✓	17
	1514	18	7-20	10.97%	1.60% ✓	
18	1516	18	30-40	5.53%	2.80% ✓	18
	1517	19	15-20	3.39%	8.29% ✓	
19	1520	19	40-50	1.26%	.50% ✓	19
	1522	19	60-70	2.69%	.40% ✓	
20	1526	20	8-20	1.70%	1.12% ✓	20
	1530	21	3-10	3.63%	.65% ✓	
	1533	21	30-40	42.28%	87.82% ✓	
21	1534	21	40-50	37.17%	63.13% ✓	21
	1535	21	50-60	36.22%	39.16% ✓	
	1536	21	60-70	37.72%	69.85% ✓	

Hole	Depth Soil	Top of Basalt	? Fault	Top of Limestone	Hole Depth
P-14	0-2	2.0	26-34.82	34.0	55
P-15	0-1.5	None	-0-	1.5	100
P-16	0-2.5	2.5	20.5	23.0	50
P-17	0-8	8.0	32.0		40
P-18	0-7	7.0	32.0		40
P-19	0-15	15.0	85.0		100
P-20	0-8	8.0	42.0		50
P-21	0-3	3.0	22.0	29.0	70
					505

Avg = $\frac{\text{[illegible] ft}}{5.9 \text{ ft}}$



PHOTOGRAPH of CLARK-OLIVER Mining Co., Inc. down-the-hole hammer drill which was used to do the drilling at the Drake Limestone property May 28 through 31, 1979. Some Notations have been made on the photograph.

D/ E HELL CANYON LIMESTONE (NEW FILE) YAVAPAI

A

GEOLOGICAL REPORT

of the

DRAKE LIMESTONE PROPERTY

in

Yavapai County, Arizona

by

Richard E. Mieritz
Mining Consultant
Sun City, Arizona

July 17, 1973

TABLE OF CONTENTS

	Page
Introduction	1
Conclusions	1
Property, Location and Accessibility	1
Facilities and Physical Features	2
General Geology	2
Property Geology	3
Development	4
Geologic Reserves	4
Recommendations	4

Exhibits
Sample Assay Schedule - Marblehead Lime Corp.

MAPS

Map No. 1 - Index Map, Central Arizona.
Map No. 2 - General Geology, Portion of Yavapai County, Ariz.
Map No. 3 - Claim Map, Drake Limestone, Yavapai County, Ariz.
Map No. 4 - Surface Geology, (Drilled Area) Drake Limestone.
Map No. 5 - Sections (Drilled Area), Drake Limestone.
" " 6 - Sections " " " "

INTRODUCTION:

At the request of and authorization by Messrs. Dwight McClure and Dennis Pickens, both of Phoenix, Arizona, part owners and spokesmen for the locators-owners of the Drake Limestone property, Yavapai County, Arizona, the writer has prepared the following geological report on said property and such report is based on the writers physical examination of the claimed area and his review and study of factual data provided him by the locators. A physical examination was completed on July 3 and 4, 1973.

CONCLUSIONS:

Based on the writers field examination of the property, a review of the available factual data and the writers knowledge of this type of deposit, the following conclusions are drawn and forwarded for your consideration.

(1) - A half million tons of excellent grade limestone (95+% $CaCO_3$, 1.0% or less silica) has been proven in a small area in which seven holes were drilled, sampled and the samples assayed, and

(2) - The property has a geologic potential of in excess of 100,000,000 tons of material which conceivably could maintain a similar grade as the proven reserve.

PROPERTY, LOCATION and ACCESSIBILITY:

The property consists of ~~ten~~ seven 160 acre contiguous placer claims known as the following:

Name	Date Claimed	Recorded Book	Recorded Page	Recorded Date
Col No. 1	June 11, 1971	666	161	June 11, 1971
Col No. 2	" " "	666	162	" " "
Col No. 3	" " "	666	163	" " "
Col No. 4	" " "	666	164	" " "
Col # 5	June 14, 1971	670	568	June 25, 1971
Col # 6	" " "	670	569	" " "
Col # 7	" " "	670	570	" " "
~~Col # 8~~	~~" " "~~	~~670~~	~~571~~	~~" " "~~
~~Col No. 9~~	~~August 5, 1971~~	~~682~~	~~705~~	~~August 11, 1971~~
~~Col No. 10~~	~~" " "~~	~~682~~	~~706~~	~~" " "~~

Locators of the claims were Dennis Pickens, Dwight McClure, Margaret McClure, James V. Girad, John R. Elliott, Jack C. Ballam, Frank McGee and George A. Freeman. The latter two are now deceased but their interest being retained by their respective estates.

The claims appear to be in good legal standing with proper discovery work and adequate accessment work completed.

160
1120

The claims are in T. 19 N., R. 1 W. of the G. & S. R. B. & M., in Yavapai County, Arizona and cover about 2 lineal miles of Hells Canyon and legal subdivision discribed as the S/2 of Sec. 19, SW/4 of Sec. 20, NW/4 W/2 of Sec. 29, ~~all of Sec. 30 and the SW/4 of Sec. 32 for a total of 1600 acres~~. This area is located approximately 34 miles north of Prescott,

N/2 of Sec 30 and the SW/4 of Sec. 30 for a total of 1120 acres.

Arizona on U. S. 89 towards Ashfork and about 1¼ miles northwest of the Santa Fe Railroad "Y" known as Drake (see Map No. 1). The Santa Fe Railroad passes through the northeast corner of the property (see Map No. 3).

Travel to and access into the property is possible by automobile, however, the recent weather has eroded to some extent the access road from the main highway to the "working area" of the property. From Prescott, (junction of U. S. 69 and U. S. 89, northeast of City Center) travel north on U. S. 89 through Chino Valley and Paulden to mile post 346 (about 10 miles north of Paulden) passing a "rest area" on the right and immediately after that crossing Hells Canyon Bridge. Mile post 346 is but 1000 feet past the bridge on the curve. Approximately 800 feet (0.15 miles) north past mile post 346 is an unlocked gate in the highway "right-of-way fence" on the left side of the highway--somewhat hidden. From the gate, follow the "dozer trail" northerly for approximately 0.6 miles to a 4-way intersection of "dozer trails". Straight ahead, westerly, leads to the drilled area, about 600 feet. Right, northerly, leads to the common corner of Sections 19, 20, 29 and 30--also the common corner of claims Col No. 1, 2, 3 and 4, this distance about 240 feet. Left, southerly, leads to the upper eastern bank of Hells Canyon in this area, thus, making the bank edge accessible.

FACILITIES and PHYSICAL FEATURES:

Railroad loading facilities are available at the Santa Fe "Y" (Drake) about 2¼ miles by road from the "working area". Paved U. S. 89 serves Ashfork 17 miles north and Prescott 34 miles south.

The writer noticed some "spring water" possibilities in Hells Canyon which could be developed to provide sufficient water for mining and lime plant operation.

~~No~~ Electric power ~~or~~ Not natural gas ~~facilities~~ are available at ~~or near~~ the property, but both are available at or just east of Drake.

The claimed area is sparsely to moderately covered with the typical upper elevation growth of juniper and cedar, trees 10 to 12 feet high, catsclaw and other similar undergrowth and several varities of cacti, particularly on theflatter areas surrounding the edges or banks of Hells Canyon. The banks of Hells Canyon are usually sparsely covered but occasionally moderately covered if soil cover prevails.

Topography-wise, the general area is "mesa-like" in nature and the main topographical feature is Hells Canyon and its tributary drainage pattern. Hells Canyon itself ranges in width from 600 to 1600 feet in width from bank top to bank top, where as the bottom ranges from 50 to 200 feet wide. The vertical elevation differences between canyon bottom and bank tops ranges from 120 to 150 feet.

GENERAL GEOLOGY:

The geology in the township and range in which the property is located as

well as the range west of the property is somewhat simple in nature. Exposed on the surface and in the various ravines and canyons are the (1) Pennsylvanian-Permian Supai formation, (2) Carboniferous-Devonian Redwall and Martin limestone, (3) Cambrian Tonto group, (4) Quaternary basalt and (5) Quaternary silt, sand and gravel. (See Map No. 2)

For the most part these formations are undisturbed and their stratifications being practically horizontal. It then follows that the contact between the two sediment ages and the recent basalt is also relatively horizontal. The Supai formation rests upon the Redwall-Martin limestones. The basalt is in contact with both sediments.

PROPERTY GEOLOGY:

The claimed area has but two prominent rock types present, the Carboniferous Martion limestone and the Quaternary basalt. The Supai formation of the Pennsylvanian-Permian period and part of the Redwall limestone has been eroded prior to basalt coverage, thus the basalt is in contact with the Martin limestone within the claimed area. (See Maps No. 2 and 3).

Recent rapid errosion (post basalt) by Hell Canyon, which traverses the claimed area from north to south, exposes a 150 foot thickness of the Martin limestone as well as its contact with the basalt at the upper reaches of Hells Canyon banks. Thus, a good stratigraphic bedding section of the Martin limestone is easily visually observed and same leaves little to "guess-work" as to horizontal projection beneath the basalt and thin soil cover common to the area.

The writer mapped in detail the surface geology of the drilled area southwest of the common corner of Sections 19, 20, 29 and 30 which is also the common corner of Placer claims Col No. 1, 2, 3 and 4. Beddings of the Martin limestone here and elsewhere in Hells Canyon are not too distinct, except by color and texture and with an almost "0" dip, it is difficult to determine a possible strike. The writer did measure three N-S strikes with two 5°W and one 10°W. dips. These however may be quite local and of little meaning.

The significant features of the local geology as mapped are: (1) a very pure $CaCO_3$ bedding, light gray and more or less crystalline which is approximately 60 feet thick, (2) a thin calcitic, perhaps siliceous, pink and yellowish stained bed, easily recognized by its color, approximately 5 to 8 feet thick and which most generally lies above the "pure" $CaCO_3$ material but sometimes within the bed (See Map No. 4), (3) a fine grained, cream-gray to green-gray bed of limestone which erodes quite differently than the two previous beds mentioned and locally becomes pinkish near its contact with the basalt. Visually, it contains silica blobs, seams and siliceous veins. It is in contact with with the pure $CaCO_3$ bed but is somewhat hard to trace as the contact is mostly gradational--cyrstalline to fine grained, and (4) basalt which is very obvious and usually forms "erosional cliffs" at the banks of the Canyon and the many drainage cuts or small canyons tributory to Hells Canyon.

It is quite obvious, to the writer as a result of his mapping, and to others who would observe the area, that the limestone beds, exposed in the drilled

area, would continue beneath the surface of the entire claimed area (~~1600~~ 1480 acres) which tus provides an immense potential of limestone, the purity of which has yet to be proven, beyond the present explored area.

DEVELOPMENT:

Only a small portion of this immense potential area has been tested by drilling and sampling. Seven air-track holes ranging in depth from 37 to 54 feet were drilled in an area approximately 200 feet wide in an east-west direction and 450 feet long in a north-south direction. (See Map No. 4)

Most sample lengths in the holes drilled were 8 or 10 feet, but a few did range from 6 feet to 19 feet. These odd lengths were used when the material penetrated appeared to have low $CaCO_3$ contents. All samples taken were assayed for $CaCO_3$ and SiO_2 and such assays were completed by the Iron King Assay Office--Walter Statler, Arizona Registered Assayer.

Development, other than the drill holes, is a fairly large area (60 feet by 20 feet) which has been blasted in the vicinity of Drill Hole 4. Several tons of bulk samples were sent to Spreckles Sugar Co., Chandler, Arizona for test purposes. The material was found to be satisfactory as to Spreckels specifications of $CaCO_3$ and silica contents, brightness and "burning" in their vertical kiln.

No other development has been completed.

GEOLOGIC RESERVES:

Map No. 5 shows the Sections through the drill holes as well as the pertinent data as to drill hole collar elevations, sample depths, assays, etc. The majority of the "pure $CaCO_3$" has less than 1.0% silica. Near the base of the "good" bed, the silica appears to increase to a range of 1 to 2%.

The seven drill holes cover an area approximately 200 feet wide and 450 feet long. The results of the drill holes indicate the "good" bed is approximately 60 feet thick. Using these dimensions and a 11.8 cubic foot factor (2.7 specific gravity), there is approximately 500,000 tons of "proven" limestone with a grade of 95+% $CaCO_3$ and less than 1.0% silica.

A review of the drill hole sample data indicates very good consistancy of $CaCO_3$ and less than 1.0% silica values from hole to hole. The writer believes that such consistancy would be maintained in this bed throughout the claimed area. Allowing for erresional features, there could be in excess of 200,000,000 tons within the claimed area. Reviewing Map No. 3, it is obvious that some of the claimed area could not be utilized because of the highway, the railroad, etc. The potential is therefor reduced to approximately ~~500~~ 400 acres which could provide in excess of 100,000,000 tons of material. Consistancy of the purity must be proven or determined.
490

RECOMMENDATIONS:

The drilled area has proven a half million tons of excellent grade lime-

stone and has also proven a good consistancy in the $CaCO_3$ and SiO_2 contents, viz, any variance is slight--not erratic.

It has been indicated that in excess of 100,000, 000 tons of material could exist in a ~~600~~ 490 acre surface area. This area would be discribed as follows:

3/4 of Claim Col No. 1	120 acres
all of Claim Col No. 3	160 acres
1/3 of Claim Col No. 4	50 acres
1/2 of Claim Col # 5	80 acres
1/2 of Claim Col # 6	80 Acres
~~2/3 of Claim Col # 8~~	~~110 acres~~
	~~600 acres~~ 490

The writer feels that approximately half this acreage should be wide space diamond drilled with 4 holes of approximately 125 feet deep to test the area for stratigraphy--position and continuance of the "good" bed and to sample the full column from surface to the bottom of the hole. It would then be known what configuration, if any, the "good" bed has taken and whether the purity consistancy is maintained. A program of 500 feet of diamond drilling should be adequate.

The area considered for this program are claims Col No. 1, 3, 4 and Col #5. The suggested positions of the holes should be:

Col No. 1 - Approximately 500 feet east of Claim center.
Col No. 3 - Approximately 400 feet north of claim south line center.
Col No. 4 - Approximately 600 feet east of claim west line center.
Col #5 - Approximately 800 feet west of claim east line and approximately 1000 feet north of claim south line.

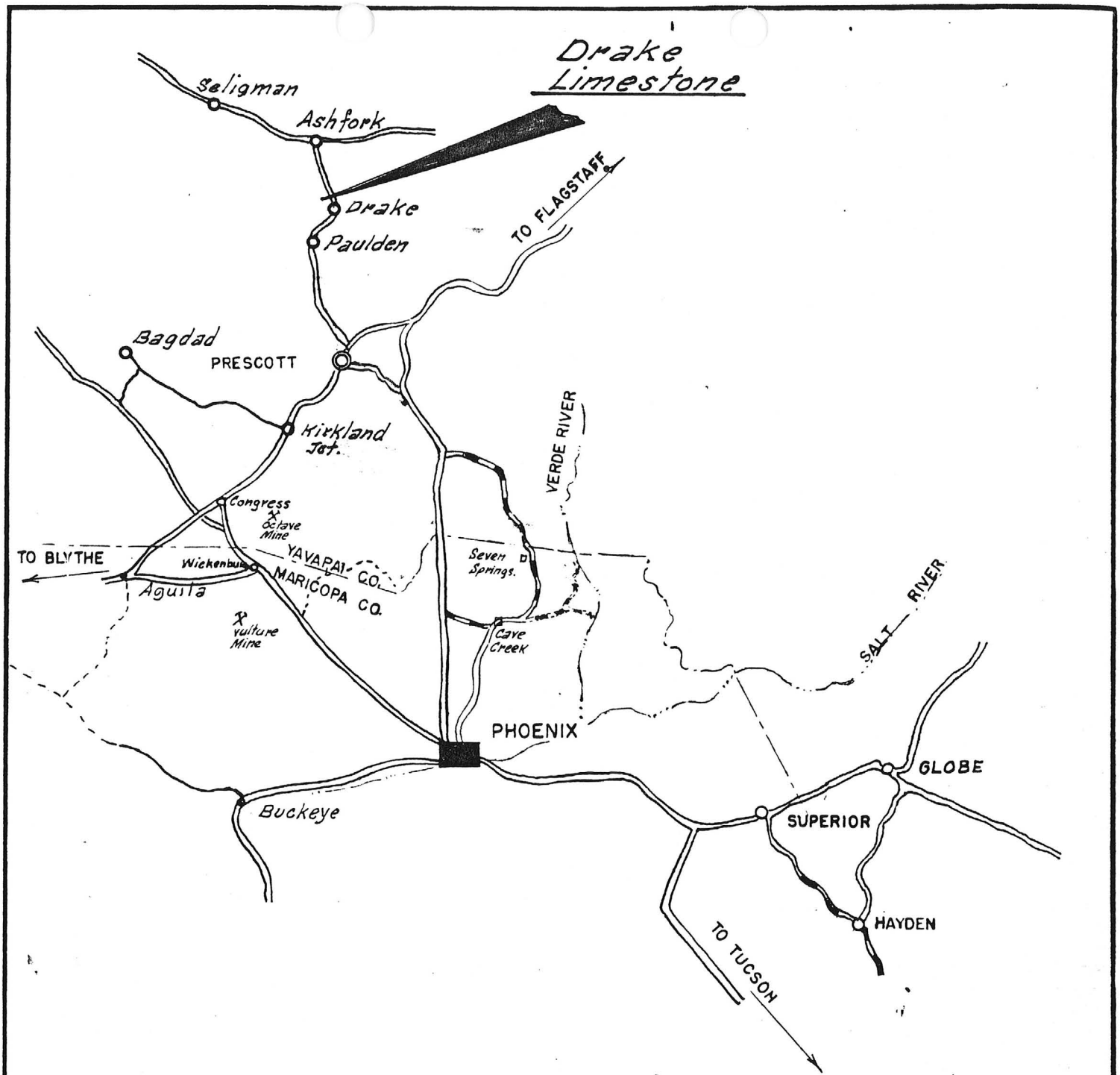
Development or "blocking out" drilling using a rotary or air-track drilling could then be expanded in all directions from the present "drilled area". The diamond drilling results would be a very helpful, useful guide to the development drilling.

Once the diamond drilling is completed, 10 to 15 development holes could easily "block out" 5,000,000 tons of material.

Respectfully submitted,

Richard E. Mieritz,
Mining Consultant
December 30, 1977

Note:
Except for slight changes as a result of reducing the number of claims from 10 to 7, this is a duplicated, retyped copy of the original report dated July 17, 1973



Not to be reproduced or altered without permission. R.E.M.

INDEX MAP
CENTRAL ARIZ.

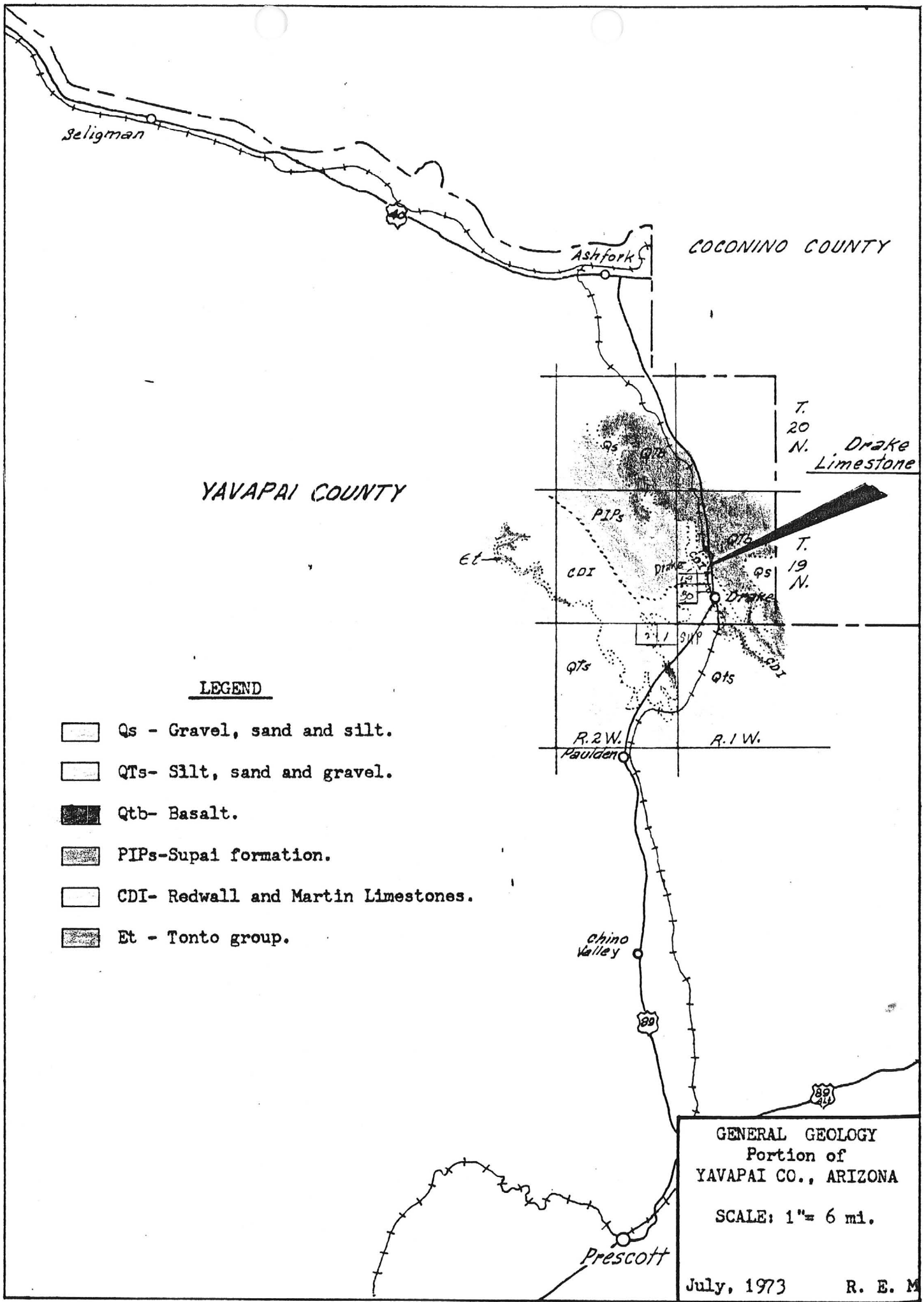
SCALE: 1" = 27 MI.

R.E. MIERITZ, P.E. MAR., 1962

MAP No. 1

66

A-23


Seligman
40
Ashfork
COCONINO COUNTY
T. 20 N.
Drake Limestone
YAVAPAI COUNTY
Qs
QTs
PIPs
Et
CDI
Drake
Qtb
T. 19 N.
Qs
Drake
QTs
Qts
CDI
R. 2 W.
R. 1 W.
Paulden
Chino Valley
89
89 Alt
Prescott
LEGEND
184 Qs - Gravel, sand and silt.
107 QTs- Silt, sand and gravel.
199 Qtb- Basalt.
144 PIPs-Supai formation.
147 CDI- Redwall and Martin Limestones.
190 Et - Tonto group.
GENERAL GEOLOGY
Portion of
YAVAPAI CO., ARIZONA
SCALE: 1"= 6 mi.
July, 1973
R. E. M

MAP No. 2 Fc

September 19, 1974

Drake Lime Corporation
Messrs. Dwight McClure,
Dennis Dickens
Phoenix, Arizona.

Gentlemen:

Please consider the following as an "Addendum" to the writers initial Report of July 17, 1973. This report should be included with the early report.

At your request and authorization an exploration program as annual assessment work on your ten limestone placer claims near Drake, Yavapai County, Arizona has been completed as/and supervised by the writer. This field work started August 30th and finished September 2, 1974, and office work continued on various days to September 19, 1974. Work completed during the period included road and drill site construction by bull-dozer, percussion drilling holes 9, 10, 11, 12 and 13 which ranged in depth from 100 to 200 feet and totalled 720 feet of hole, sampling and assaying cuttings, engineering work as to hole locations, surveying, sections of the "ore deposit", preparation of this geological and "ore reserve" report and supervision of the project in the field by the writer.

PHYSICAL FIELD WORK:

Dozer work completed by Harley Gray, Drake, Arizona, on August 30th consisted of constructing new or rehabilitating about 2000 feet of drill access road and five drill locations.

Joe Oliver, drill contractor, Chandler, Arizona, completed 720 feet of drilling in five holes as follows:

Hole Number	Depth	Number of Samples	Assays $CaCO_3$	Assays SiO_2
9	100	10	10	6
10	120	12	12	7
11	200	20	20	7
12	140	14	12	8
13	160	16	14	7
Totals	720	72	68	35

Drilling and Sampling was completed from August 30 through September 2, 1974.

The assaying of samples by Walter Statler, Iron King Assay Office

in Humboldt, Arizona was completed from September 3 through September 17, 1974.

The writer completed some field work and supervised the drilling program and sampled the drilling on July 31, 1974, August 30th through September 2, surveyed hole locations September 10th and completed Office work including preparation of this report during the month of September, 1974.

RESULTS OF DRILLING:

All five drill holes penetrated the high lime bed which was indicated by previous early drilling. The intersections were of similar high purity and thickness as the early drilling indicated.

The present drilling now indicates that the high purity bed is in an anticlinal shape with a north-south axis near the north-south drainage area west of the "blasted area"- (See included Map and Sections). The western limb appears to dip about 10° W. while the eastern limb is, for all practical purposes, horizontal, or about 1° dip E. It also appears that the anticline plunges southward, thus, rising in a north direction very much similar to the slope of the present surface in that direction.

Any further exploration should be done northward of the blasted area in a triangle one side of which is N. 45° W. of the blasted pit area and the other side as an east-west line from the blasted Pit area. Such drilling would develop the "orebody" with a minimum to a "no" overburden situation (except for soil and vegetation cover.)

ORE RESERVES:

An indicated 2,500,000 tons of high purity, low silica limestone exists with very little overburden. This is a block of 800 feet east-west and 630 feet north-south with a thickness of 60 feet and using a factor of 12 cubic feet to the ton. An additional 2½ million tons of similar quality material can be inferred to the north and east. The outline of the indicated block is shown on the included surface Map and Sections.

The high purity limestone bed is quite uniform in thickness, averaging about 60 feet. This thickness may vary slightly in as much as a 10 feet length of sample was used while drilling. If the contact between the high purity bed and the lower grade material - either on the top or bottom of the "good" bed - is at some footage other than the 10 feet sample depth, than the suspected thickness might be increased slightly, at top, at bottom ~~or both~~. A typical example; Hole 9, from 20 to 30 feet has an 88.9% CaCO3 content - which could be 6 feet of 83% and 4 feet of 97% to average [illegible], the thickness would be increased by 4 feet - 26 to [illegible] feet rather than [illegible] feet as indicated on the section.

Respectfully submitted,

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES RICHARD E. MIERITZ DEC. 31, 19 ARIZONA, U.S.A.

REGISTERED GEOLOGIST CERTIFICATE NO. 7784 RICHARD E. MIERITZ Date Signed ARIZONA, U.S.A.

September 19, 1974

R. E. Mieritz
Mining Consultant

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR
DRAKE LIMESTONE
R. E. KIRITZ
1634 W. Hazelwood St.
Phoenix, Ariz. 85015

Sept. 12, 1974

SAMPLE DESCRIPTION	% $CaCO_3$			
D.H.9, 0-10' # 1183	62.58			
20' # 1184	82.27			
30' # 1185	88.86			
40' # 1186	96.98			
50' # 1187	95.82			
60' # 1188	97.89			
70' # 1189	98.69			
80' # 1190	98.25			
80'-86' # 1191	95.73			
98'-100' # 1192	97.33			
D.H.10, 0-10' # 1193	94.59			
20' # 1194	96.06			
30' # 1195	92.59			
40' # 1196	95.54			
50' # 1197	98.07			
60' # 1198	95.18			
70' # 1199	96.90			
80' # 1200	98.16			
90' # 1201	95.45			
100' # 1202	91.57			
110' # 1203 ~~55.24~~	55.24			
120' # 1204	51.11			
# 1205	6.86	D.H. 11	15'-20'	
1206	83.39		26'	

Walter

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR
DANCE GLENSTONE
R. S. [illegible]
1634 W. Hazelwood St.
Phoenix, Ariz. 85015

Sept. 12, 1974

SAMPLE DESCRIPTION		% Cu				
D.H. 11 26'-30'	# 1207	94.89				
40'	# 1208	94.82				
50'	# 1209	95.36				
60'	# 1210	90.12				
70'	# 1211	56.08				
80'	# 1212	90.67				
90'	# 1213	92.05				
100'	# 1214	95.54				
110'	# 1215	96.00				
120'	# 1216	97.71				
130'	# 1217	96.79				
140'	# 1218	94.82				
150'	# 1219	59.42				
160'	# 1220	51.05				
170'	# 1221	53.80				
180'	# 1222	54.04				
190'	# 1223	56.43				
200'	# 1224	48.37				
D.H. 12 20'-30'	# 1225	75.24				
40'	# 1226	93.70				
50'	# 1227	95.31				
60'	# 1228	72.[illegible]1				
70'	# 1229	35.45				
80'	# 1230	91.37				

REGISTERED ASSAYER
CERTIFICATE NO. 2973
WALTER G. STATLER
Duly Signed
ARIZONA, U.S.A.

IRO. KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR
DRAKE LIMESTONE
R. E. WIRITZ
1634 W. Hazelwood St.
Phoenix, Ariz. 85015

Sept. 12, 1974

SAMPLE DESCRIPTION		% $CaCO_3$				
DH 12 80'-90'	# 1231	93.16				
100'	#1232	97.80				
110'	# 1233	94.59				
120'	# 1234	97.01				
130'	# 1235	95.31				
140'	# 1236	97.82				
DH 13 20'-30'	# 1237	69.96				
40'	# 1238	91.55				
50'	# 1239	99.07				
60'	# 1240	89.04				
70'	# 1241	79.54				
80'	# 1242	88.41				
90'	# 1243	95.76				
100'	# 1244	93.61				
110'	# 1245	95.85				
120'	# 1246	97.37				
130'	# 1247	97.46				
140'	# 1248	98.18				
150'	# 1249	64.32				
160'	# 1250	50.70				

Sept. 1974

IRO.. KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR
DRAKE LIMESTONE
RICHARD E. MIERITZ
1634 W. Hazelwood St.
Phoenix, Ariz. 85015

Sept. 19, 1974

SAMPLE DESCRIPTION		% SiO_2
D.H.9. 30'-40'	# 1186	0.29
50'	# 1187	0.24
60'	# 1188	0.65
70'	# 1189	0.15
80'	# 1190	0.25
86'	# 1191	3.64
D.H.10. 0-10'	# 1193	3.30
30-40'	# 1196	2.97
50'	# 1197	0.15
60'	# 1198	0.88
70'	# 1199	1.82
80'	# 1200	0.21
90'	# 1201	0.80
D.H.11-30-40'	# 1208	3.34
40-50'	# 1209	1.56
90-100'	# 1214	1.57
110'	# 1215	0.75
120'	# 1216	0.12
130'	# 1217	0.02
140'	# 1218	0.03
D.H.12-30-40'	# 1226	1.87
40-50'	# 1227	1.86
80-90'	# 1231	1.01
100'	# 1232	0.17

Walter C. Statler
Registered Assayer
Certificate No. 2973
WALTER C. STATLER
Signature Signed
ARIZONA, U.S.A.

IRO KING ASSAY OFFICE

ASSAY CERTIFICATE

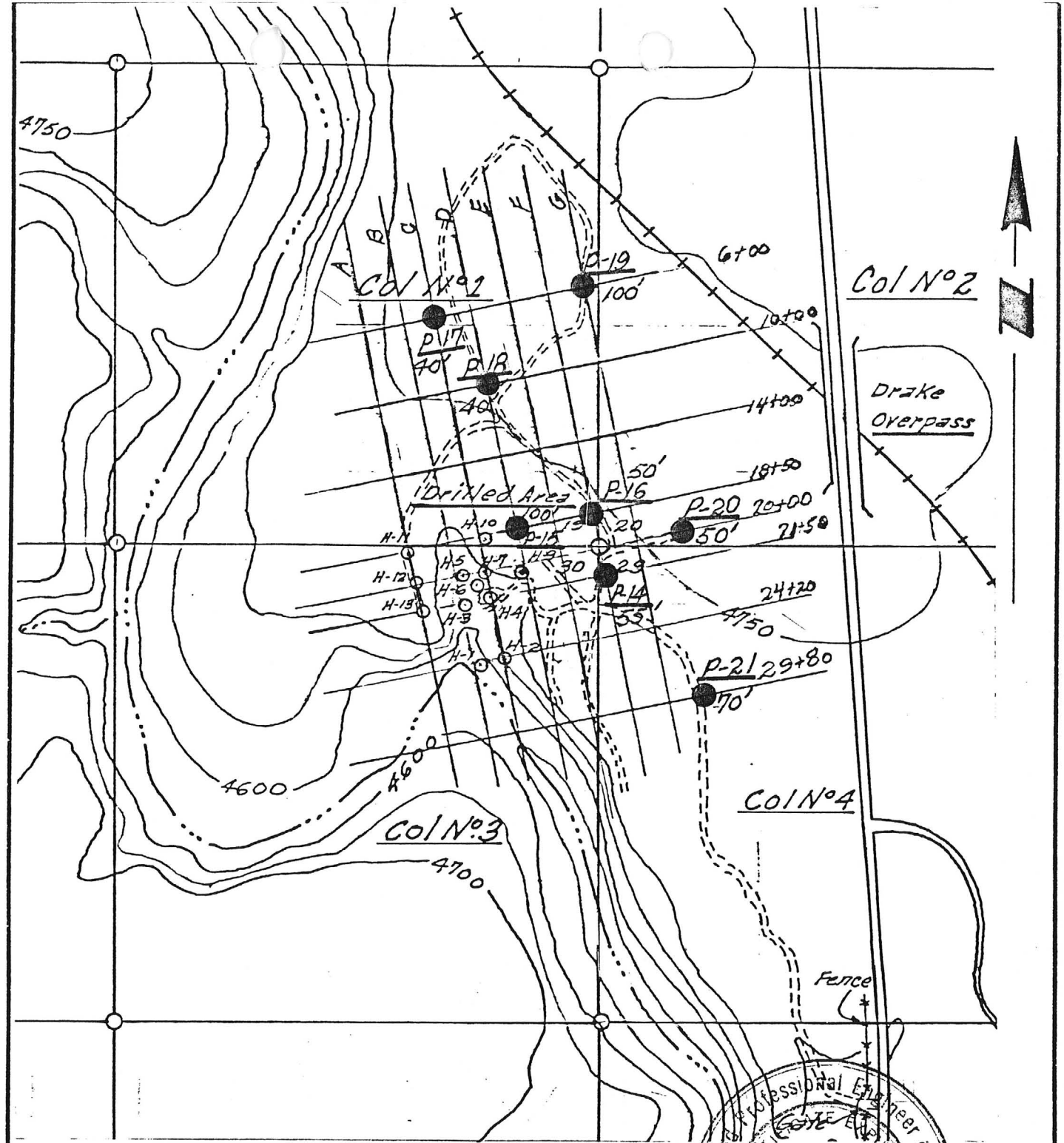
BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR
DRAKE LIMESTONE
RICHARD E. MIERITZ
1634 W. Hazelwood St.
Phoenix, Ariz. 85015

Sept. 19, 1974

SAMPLE DESCRIPTION	% SiO_2				
D.H. 12-100-110' # 1233	2.70				
120' # 1234	0.49				
130' # 1235	0.57				
140' # 1236	0.11				
D.H. 13- 40-50' # 1239	1.24				
80-90' #1243	1.04				
100' " 1244	1.04				
110' # 1245	1.95				
120' # 1246	0.06				
130' # 1247	0.10				
140' # 1248	0.56				

REGISTERED ASSAYER
CERTIFICATE NO. 2970
WALTER G. STATLER
Date Signed 9-19-74
ARIZONA, U.S.A.



LEGEND

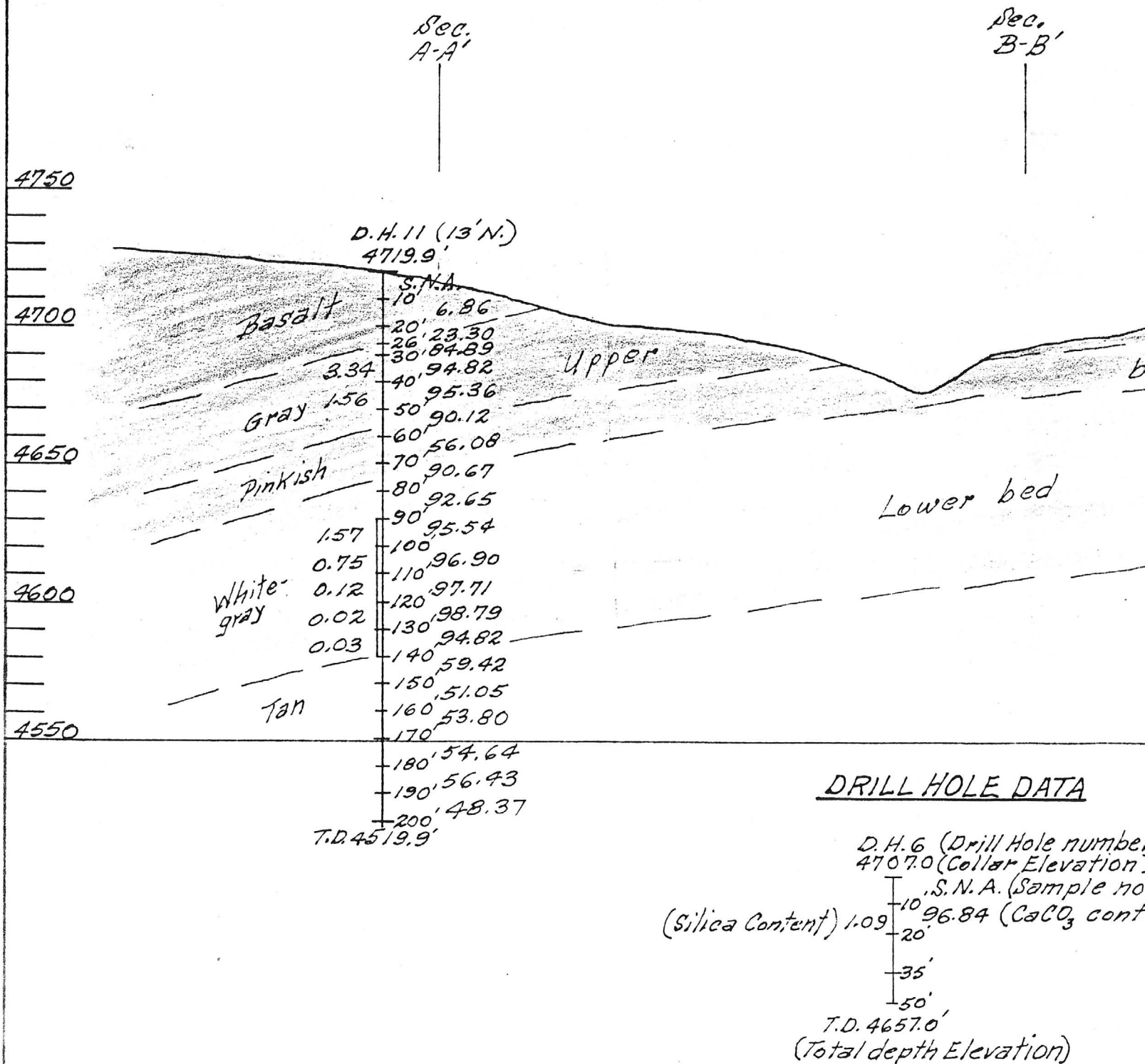
P-15
100'
Locations actually drilled with Hole Numbers and depths drilled

Registered Professional Engineer (Mining)
CENTIFICATE EXPIRES
RICHARD
E. MIERITZ
DEC. 31, 19
ARIZONA U.S.A.

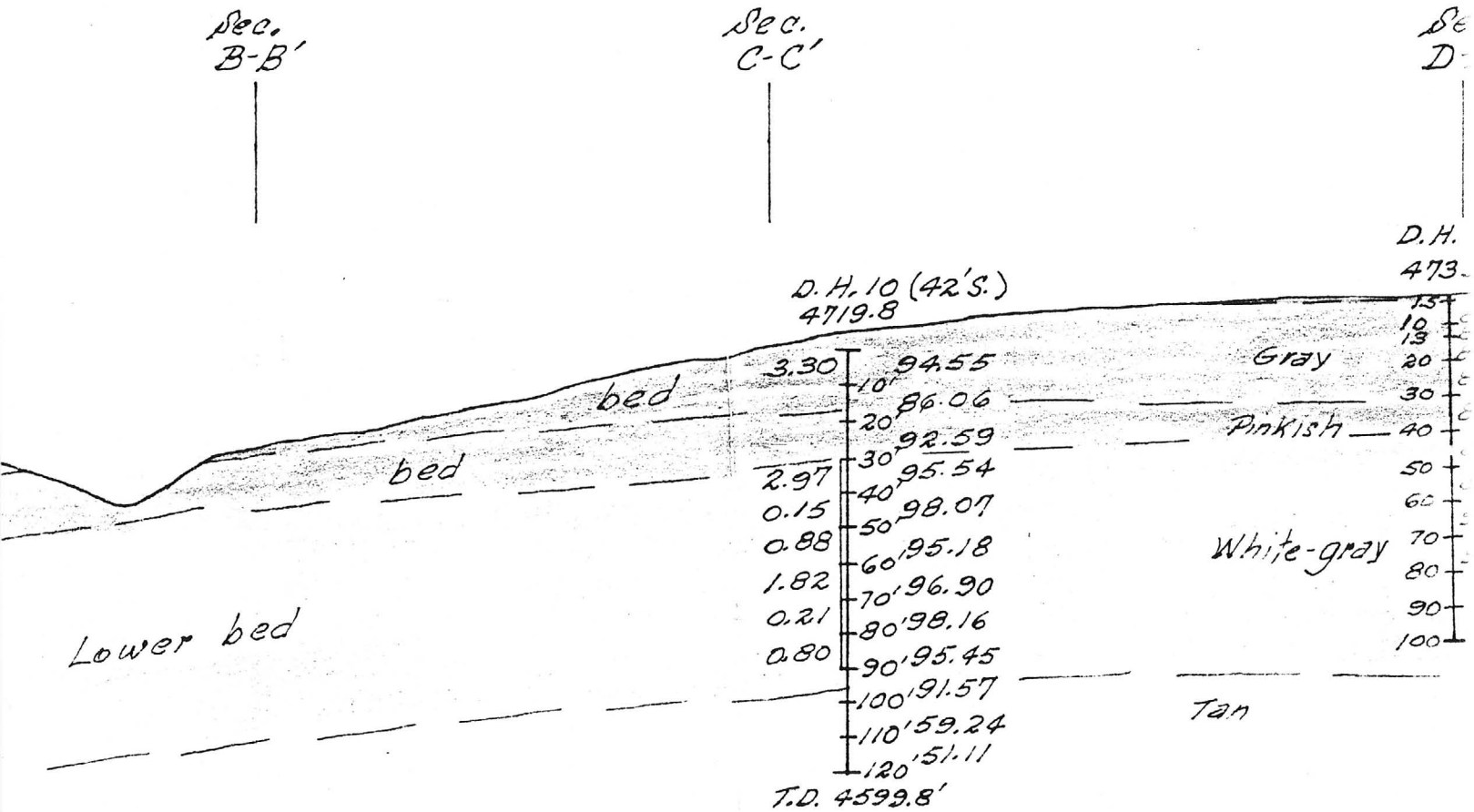
MAP of
HOLES ACTUALLY DRILLED
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona
SCALE: 1"= 800 Ft.

June, 1979 R. E. Mieritz

MAP No 5


Sec. A-A'
Sec. B-B'
4750
4700
4650
4600
4550
D.H. 11 (13' N.)
4719.9'
S.N.A.
10' 6.86
20' 23.30
26' 84.89
30' 94.82
40' 95.36
50' 90.12
60' 56.08
70' 90.67
80' 92.65
90' 95.54
100' 96.90
110' 97.71
120' 98.79
130' 94.82
140' 59.42
150' 51.05
160' 53.80
170' 54.64
180' 56.43
190' 48.37
200'
T.D. 4519.9'
Basalt
3.34
Gray
1.56
Pinkish
1.57
0.75
White-gray
0.12
0.02
0.03
Tan
Upper
Lower bed
DRILL HOLE DATA
D.H. 6 (Drill Hole numbe
4707.0 (Collar Elevation
S.N.A. (Sample no
(Silica Content) 1.09
10' 96.84 (CaCO3 cont
20'
35'
50'
T.D. 4657.0'
(Total depth Elevation)

Map No. 6 (A) [A|B|C]



DRILL HOLE DATA

D.H.6 (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A. (Sample not assayed.)
10 96.84 ($CaCO_3$ content)
) 1.09
20'
35'
50'
T.D. 4657.0'
tal depth Elevation)

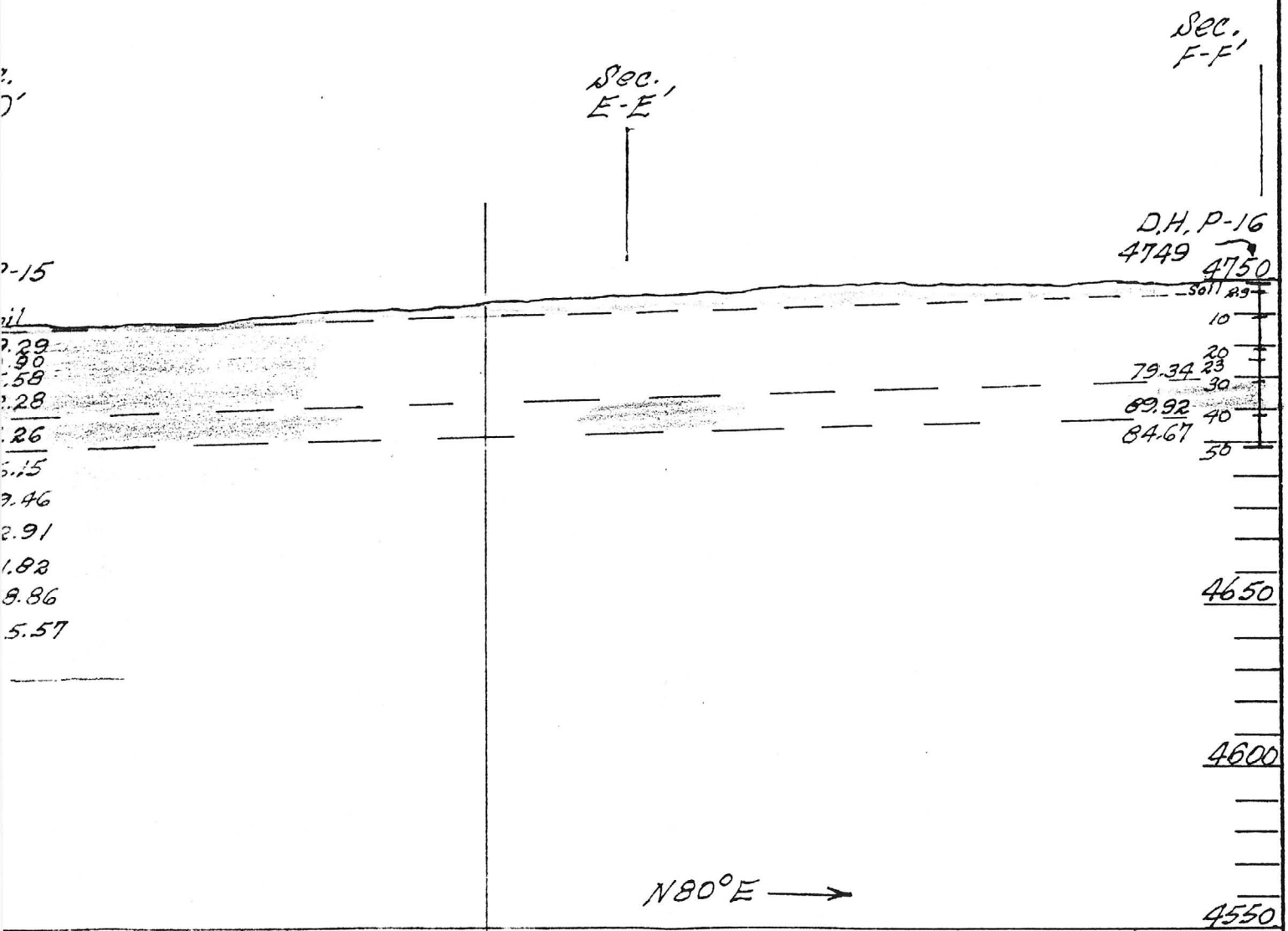
Section 18+50

Looking N. 10° W.

LEG

- High lime, low silica
- Limestone bed, calc
- Limestone, fine graine
- Alluvium & basalt f
- Basalt

Map No. 6 (B)



END

crystalline limestone bed. (ORE).

siliceous (Marker).

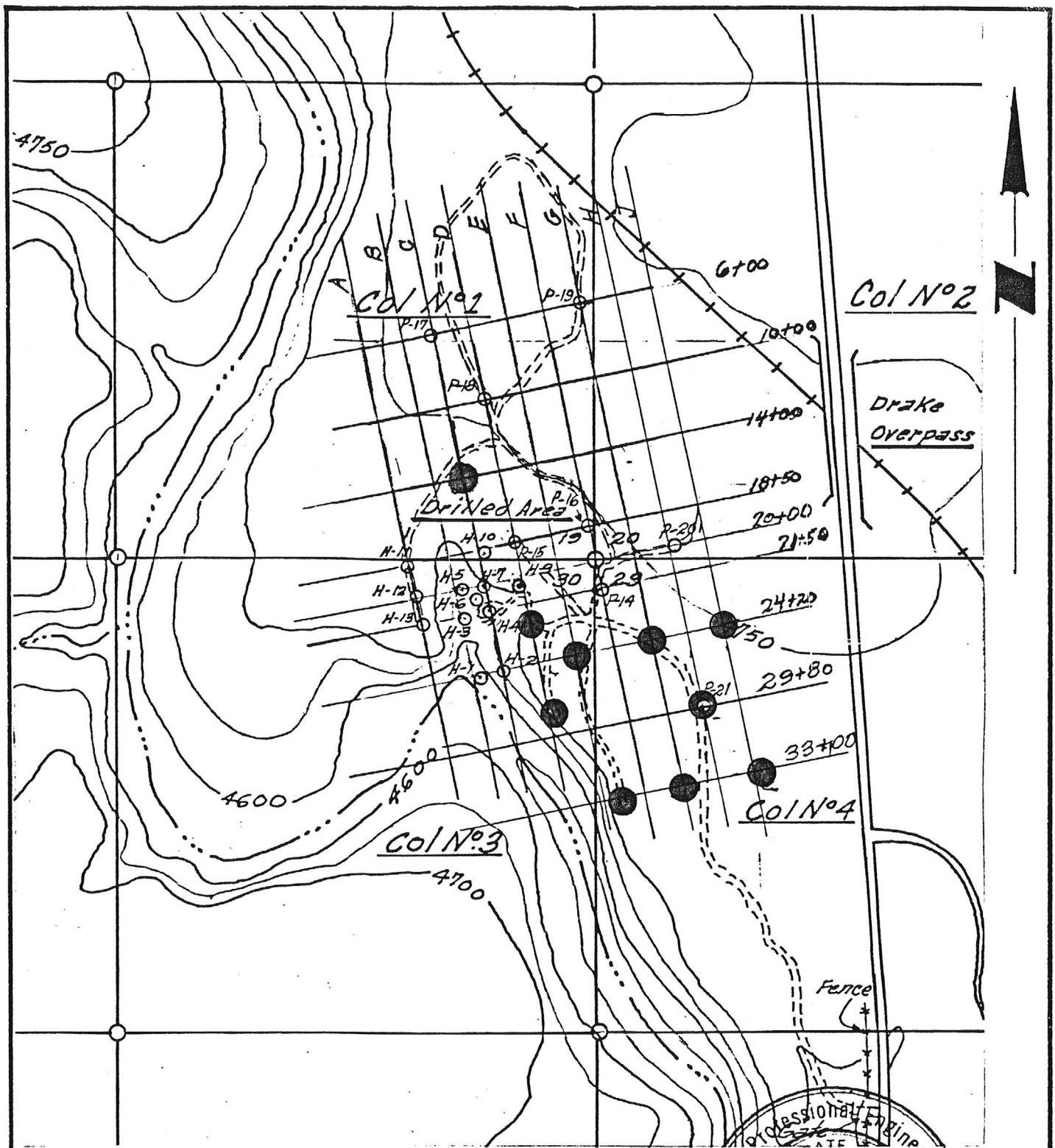
visible silica.

at.

SECTIONS
(Drilled Area)
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 50 ft.

SEPT., 1974 R. E. MIERITZ

(c) Map Nº 6



LEGEND

H-6 ○ Drake Limestone Drill Holes

P-15 ○ Can-Am Corp. Drill Holes

● Proposed Drill Holes

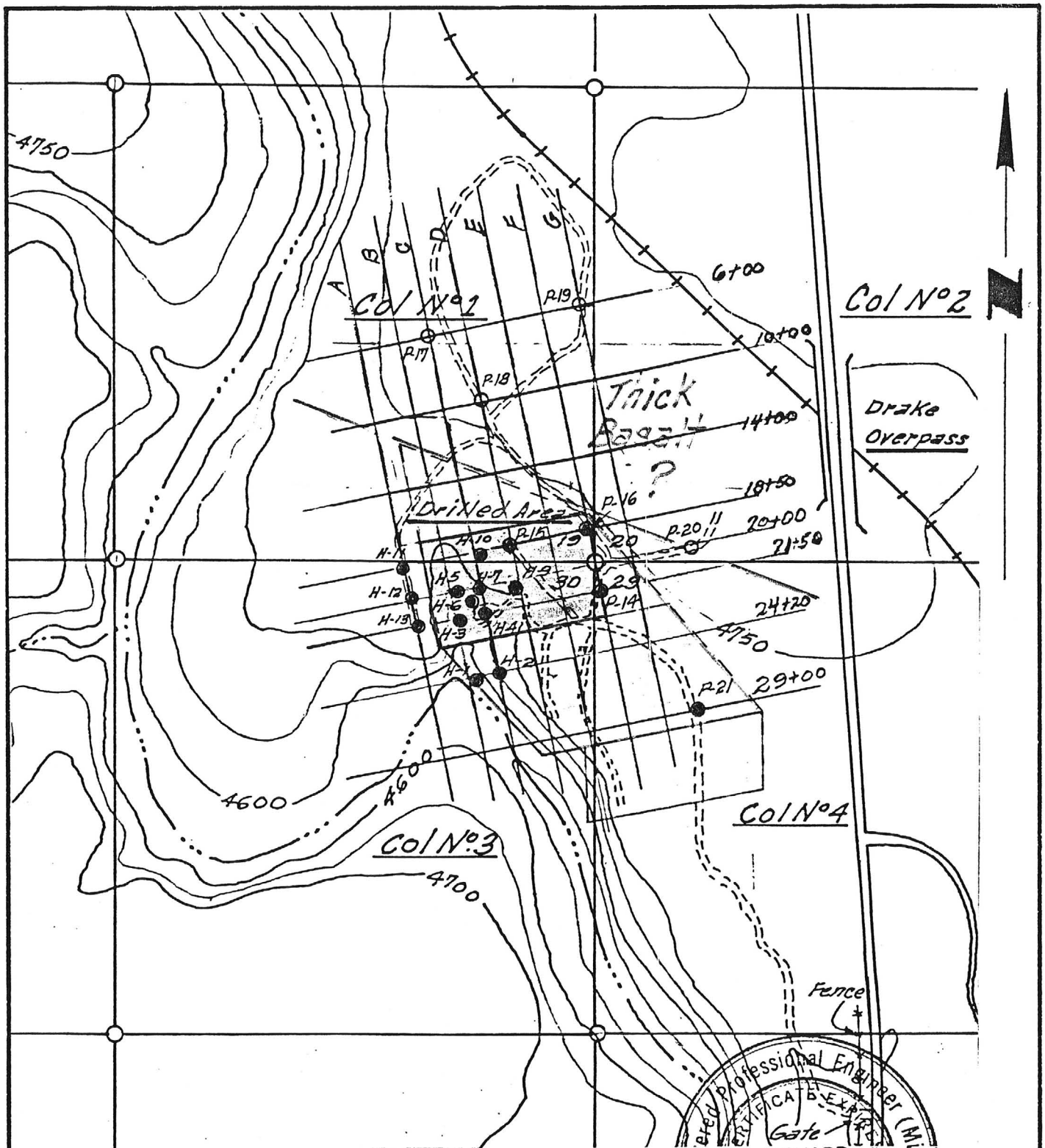
Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD
E. MIERITZ
DEC 31, 19
ARIZONA, U.S.A.

PROPOSED DRILL HOLE LOCATIONS
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

Jun 1979 R. E. Mieritz

MAP No 11



LEGEND

● ORE HOLES (Limestone encountered)

	MEASURED ORE BLOCK,	2,850,000 tons
	INDICATED ORE BLOCK,	5,100,000 tons
	INFERRED ORE BLOCK,	3,200,000 tons
Total		11,150,000 tons

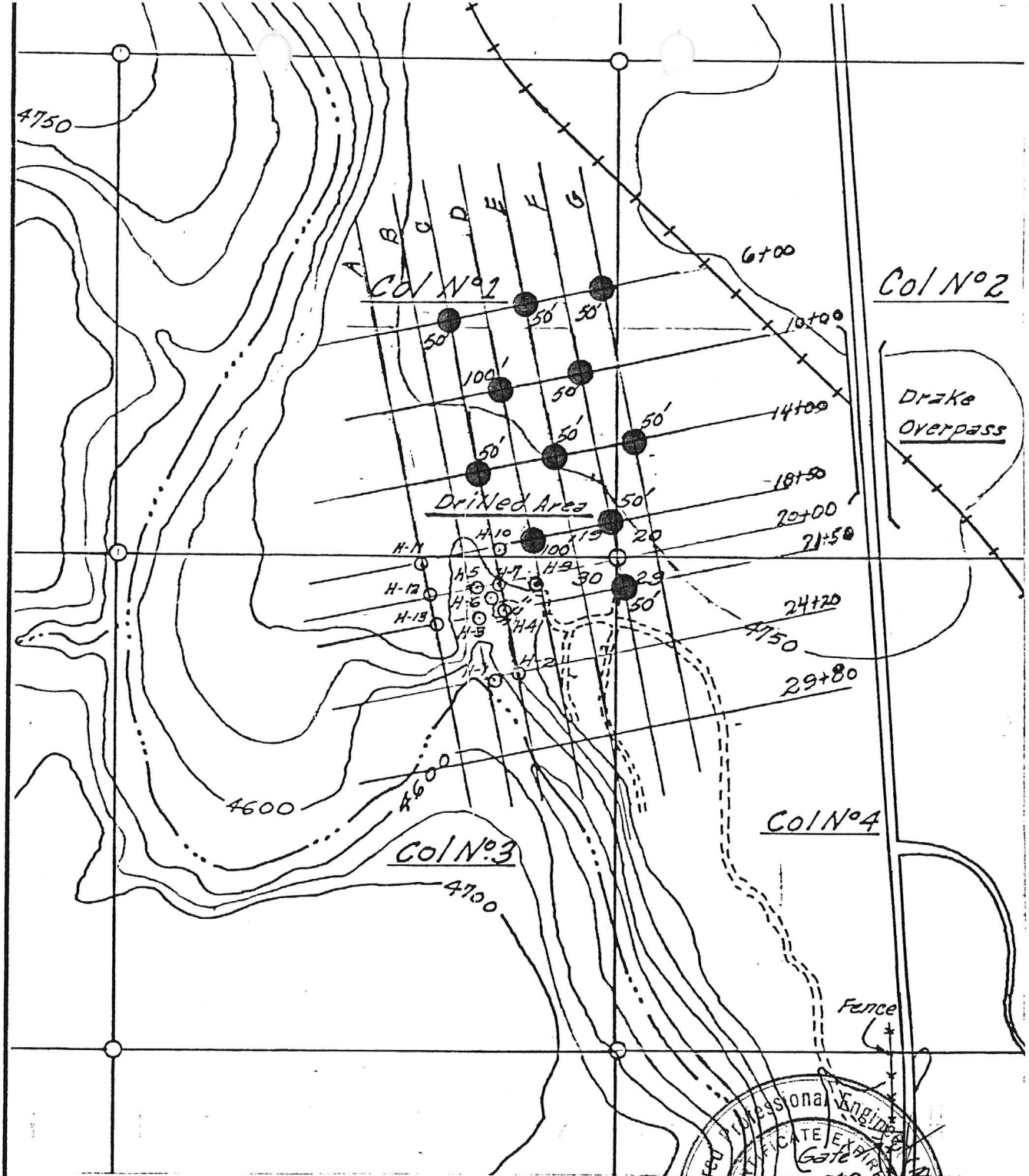
Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD
E. MIERITZ
DEC. 31, 19
ARIZONA U.S.A.

ORE RESERVE MAP
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

[illegible], 1979 R. E. Mieritz

MAP No 2



LEGEND

● 50' Holes Planned for Paul Lime Drilling Project with proposed Hole Depths.

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES DEC. 31, 19
RICHARD E. MIERITZ
ARIZONA, U.S.A.

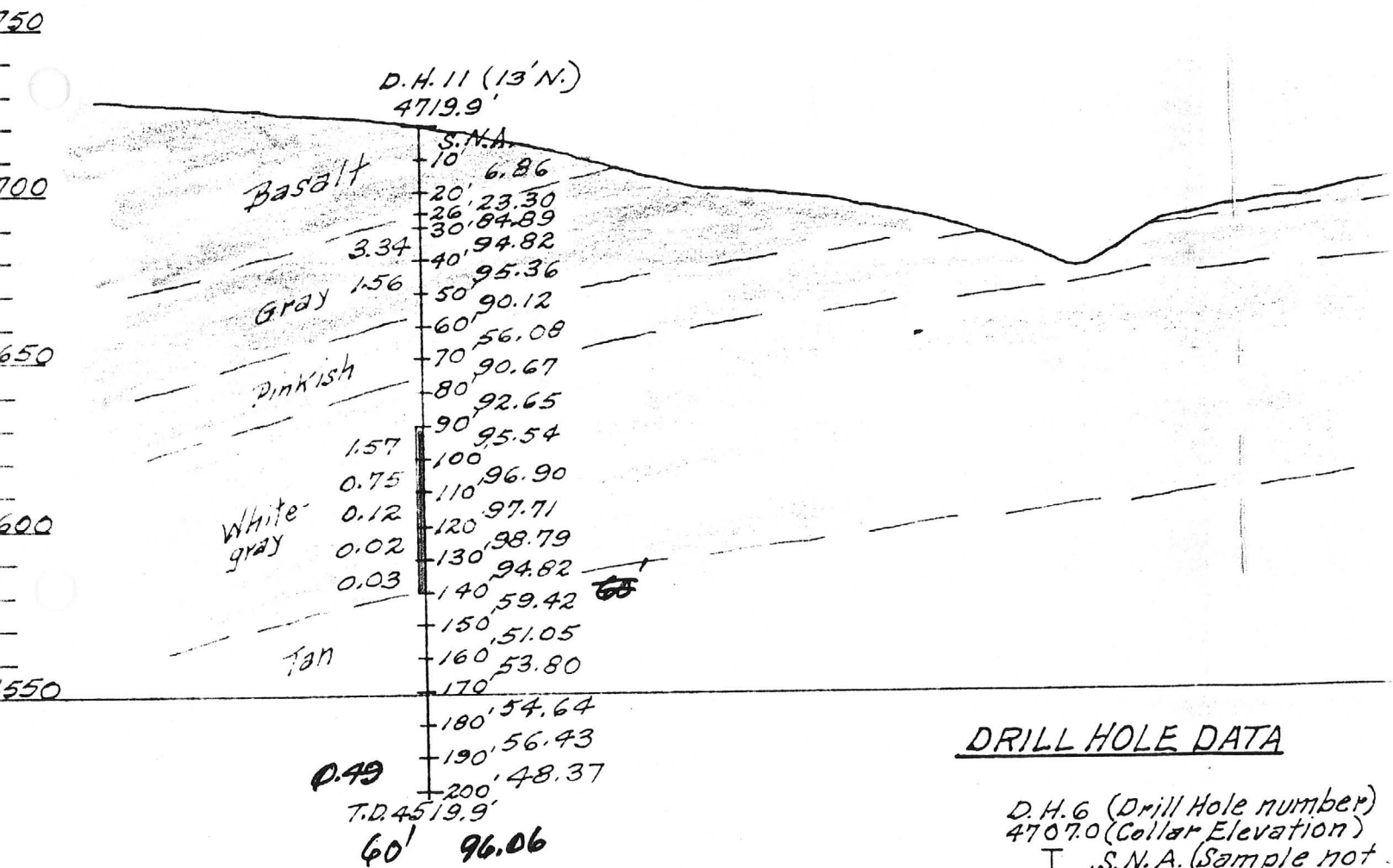
PLANNED DRILL HOLES
DRAKE LIMESTONE CLAIMS
Yavapai County, Arizona

SCALE: 1"= 800 Ft.

June, 1979 R.E. Mieritz

MAP Nº 3

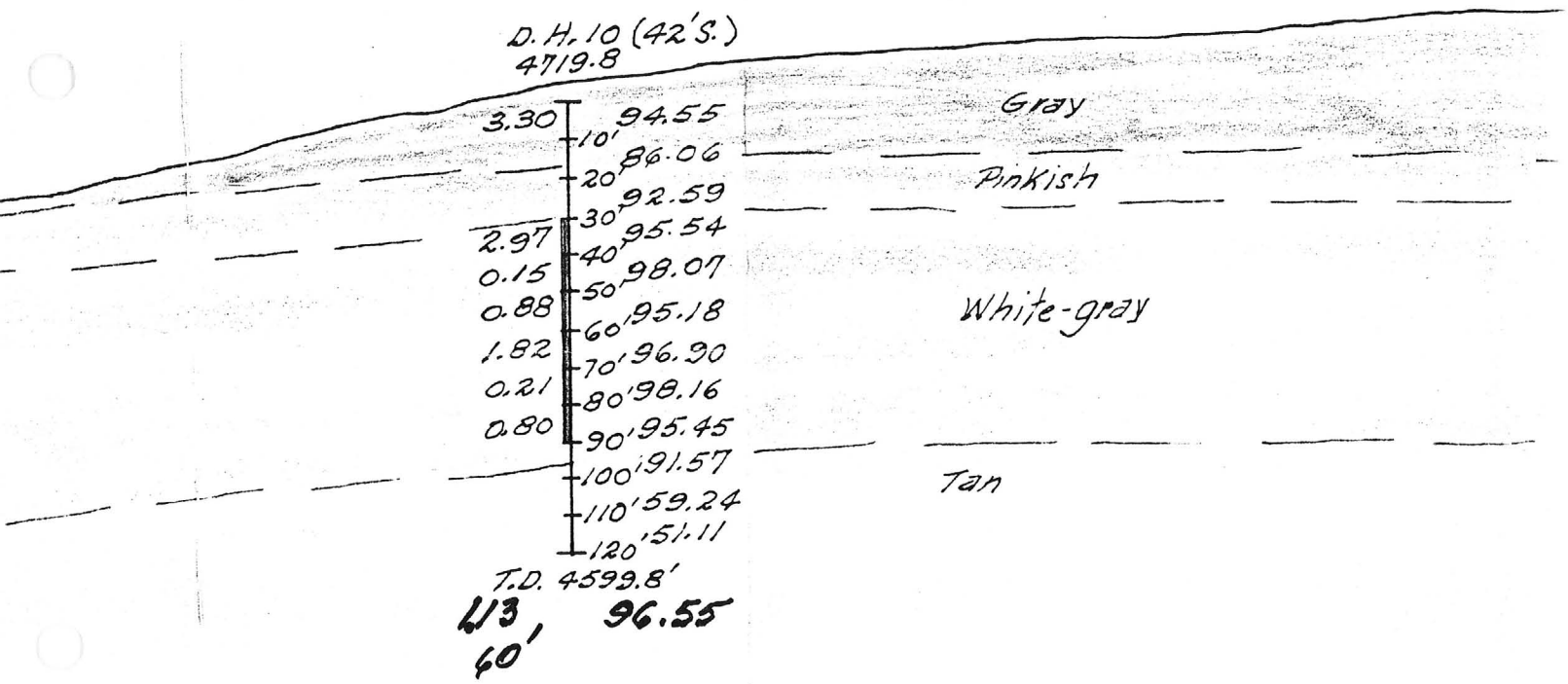
Map No. 6(A)



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)
10' S.N.A. (Sample not
(Silica Content) 1.09 20' 96.84 ($CaCO_3$ conten
35'
50'
T.D. 4657.0'
(Total depth Elevation)

Map No. 6 (B)



Section 8+50

Looking N. 10° W.

TA

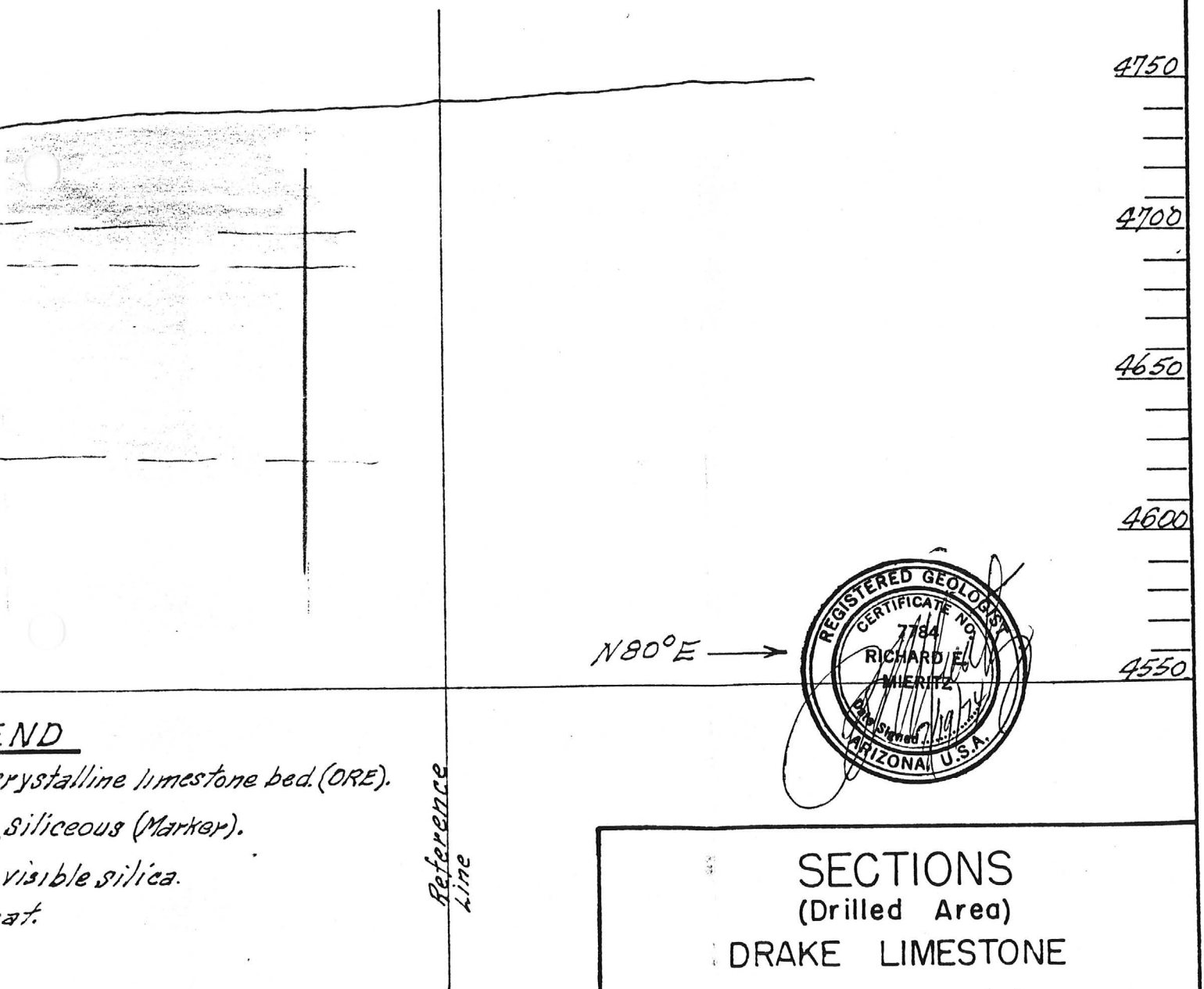
number)
vation)
ple not assayed.)
O_3 content)

)

LEGEND

- High lime, low silica, crystalline limeston
- Limestone bed, calcitic, siliceous (Marker).
- Limestone, fine grained, visible silica.
- Alluvium & basalt float.
- Basalt.

Map No. 6 (C)



REGISTERED GEOLOGIST
CERTIFICATE NO. 7784
RICHARD E. MIERITZ
Date Signed
ARIZONA, U.S.A.

END

rystalline limestone bed. (ORE).

siliceous (Marker).

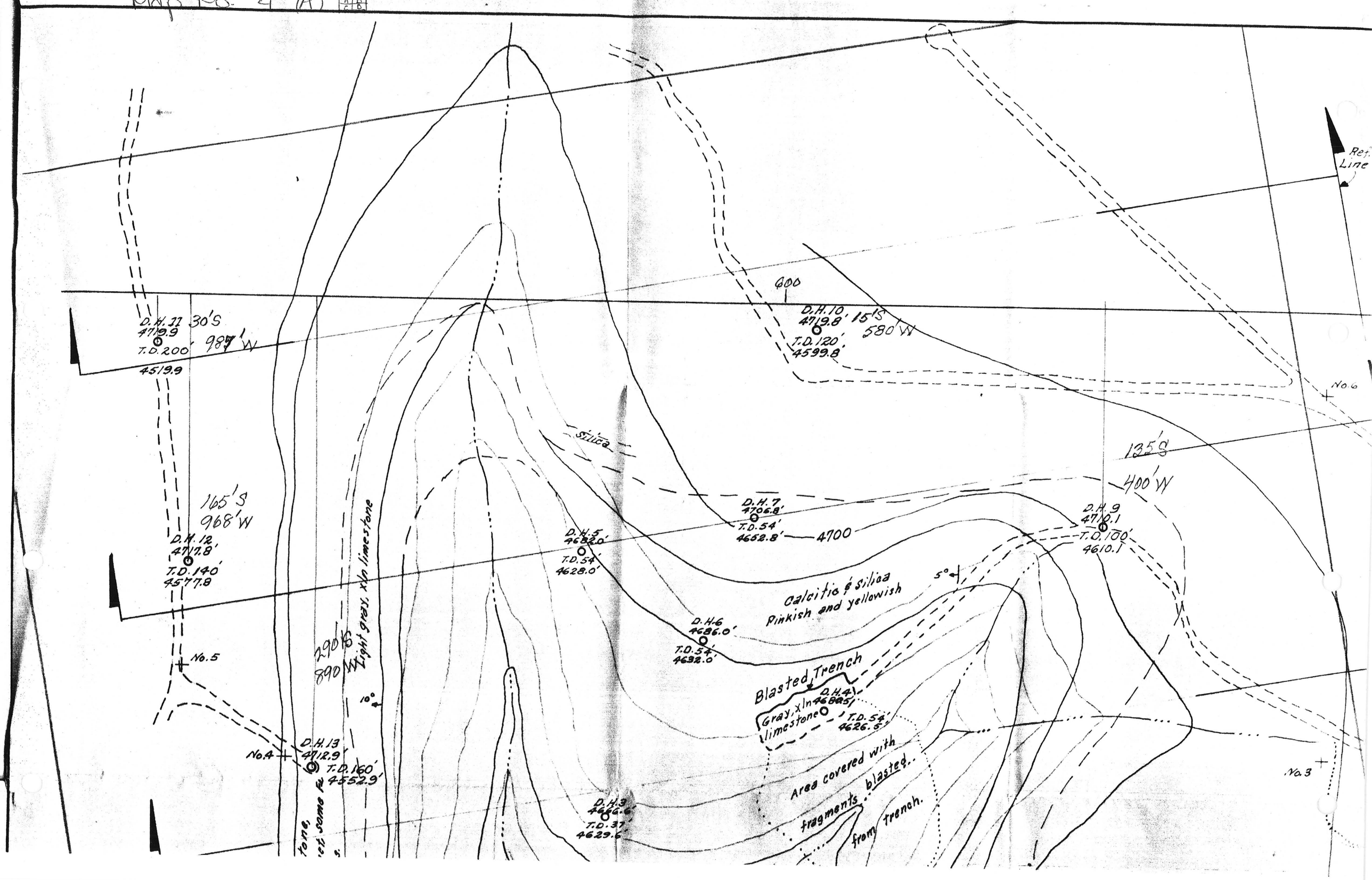
visible silica.

at.

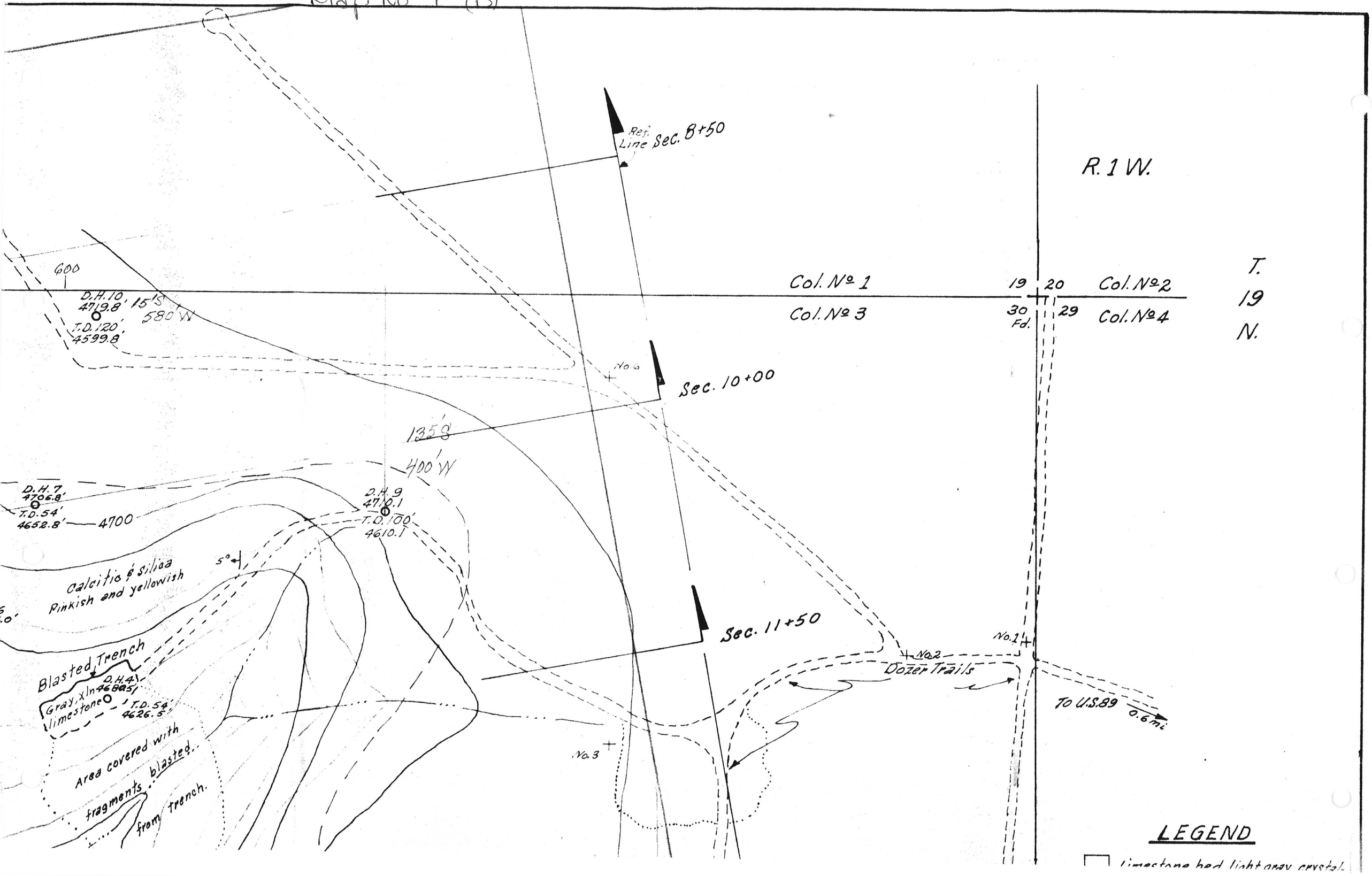
SECTIONS
(Drilled Area)
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 50 ft.

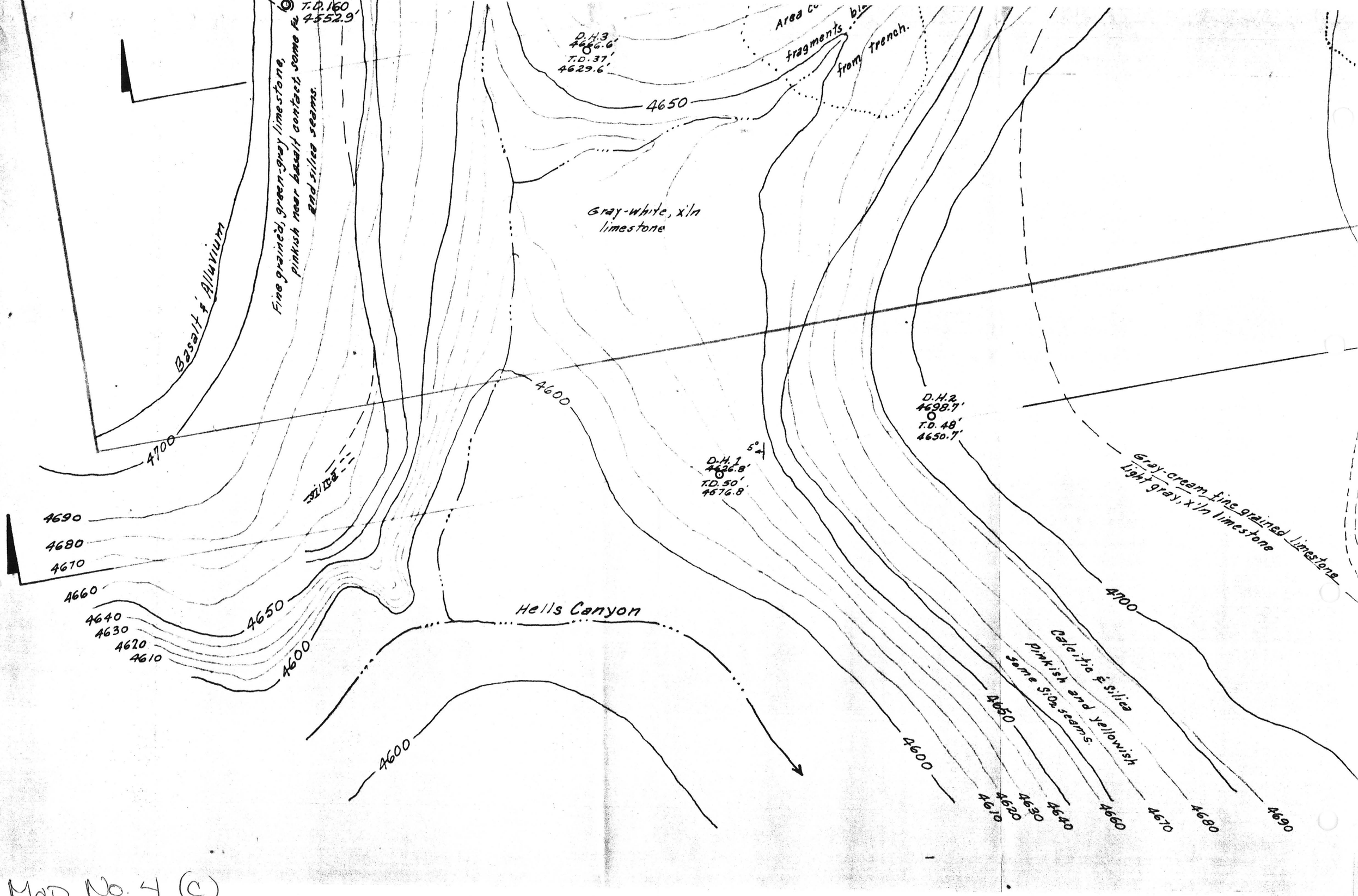
SEPT., 1974 R. E. MIERITZ

Map No. 6

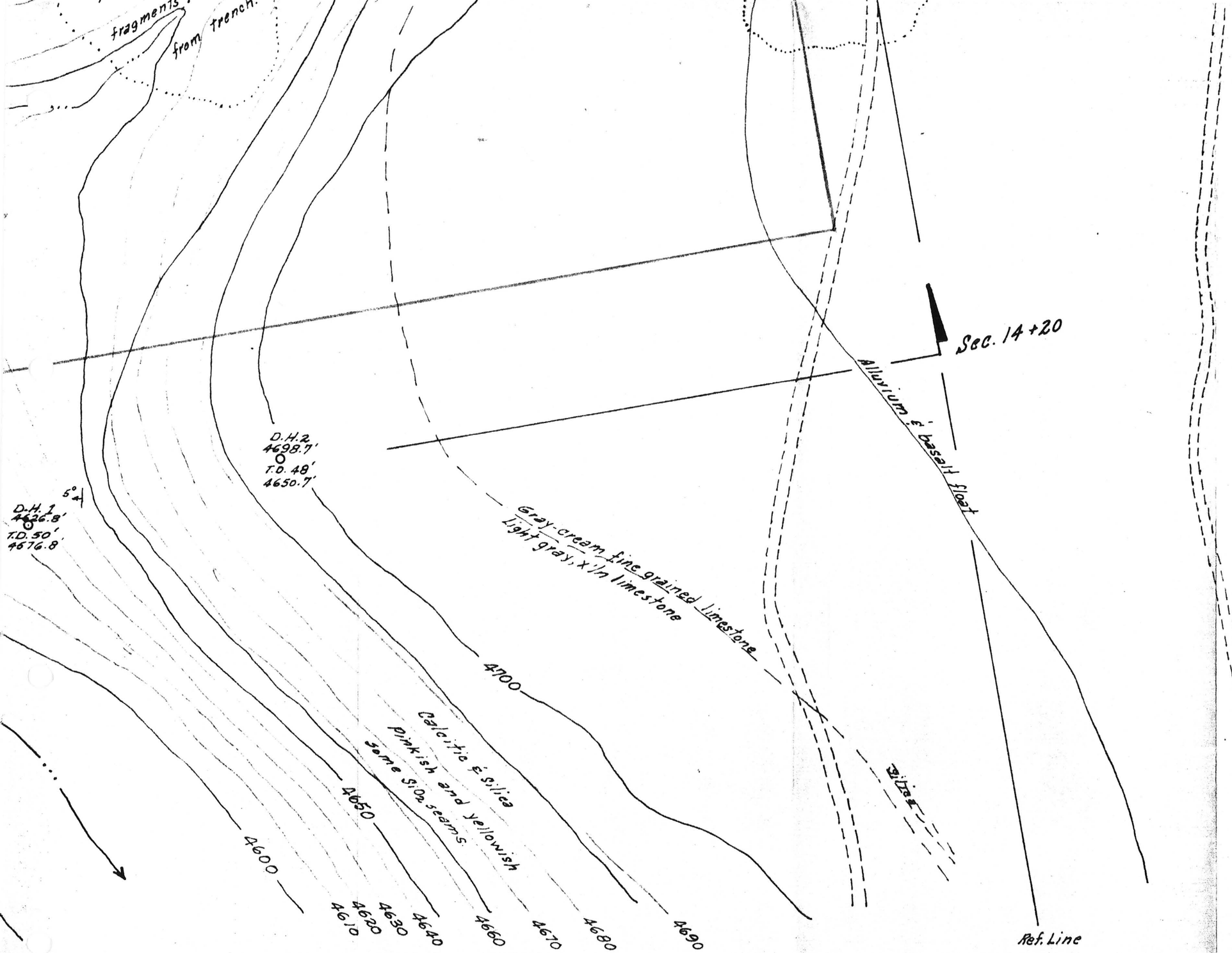

Ref. Line
D.H.11
4719.9
T.D.200'
4519.9
30'S
987'W
600
D.H.10
4719.8'
T.D.120'
4599.8'
15'S
580'W
No.6
Silica
135'S
400'W
D.H.7
4706.8'
T.D.54'
4652.8'
4700
D.H.9
4718.1
T.D.100'
4610.1
D.H.5
4682.0'
T.D.54'
4628.0'
165'S
968'W
D.H.12
4717.8'
T.D.140'
4577.8
Calcitic & Silica
Pinkish and yellowish
5°
D.H.6
4686.0'
T.D.54'
4632.0'
Light gray, xln limestone
290'S
890'W
No.5
10°
Blasted Trench
D.H.4
4680.5'
Gray, xln limestone
T.D.54'
4626.5'
No.4
D.H.13
4712.9'
T.D.160'
4552.9'
Area covered with fragments blasted from trench.
No.3
D.H.3
4666.6'
T.D.37'
4629.6'

Map No 4 (B)


Ref. Line Sec. 8+50
R. 1 W.
T. 19 N.
600
D.H. 10
4719.8'
15'S
580'W
T.D. 120'
4599.8'
Col. No 1
Col. No 2
Col. No 3
Col. No 4
19
20
30
Fd.
29
No 6
Sec. 10+00
135'S
400'W
D.H. 7
4706.8'
T.D. 54'
4652.8'
4700
D.H. 9
4710.1
T.D. 100'
4610.1
5°
Calcitic & Siliaa
Pinkish and yellowish
Sec. 11+50
No. 1
No. 2
Dozer Trails
To U.S. 89
0.6 mi
Blasted Trench
D.H. 4
Gray, xln
limestone
T.D. 54'
4626.5'
Area covered with
fragments blasted
from trench.
No. 3
LEGEND
Limestone bed light gray crystal


T.D. 160
4552.9'
Fine grained, green-gray limestone, pinkish near basalt contact, some Fe and silica seams.
Basalt & Alluvium
D.H.3
4666.6'
T.D. 37'
4629.6'
Area co
fragments bl
from trench.
4650
Gray-white, xln limestone
4600
4700
D.H.2
4698.7'
T.D. 48'
4650.7'
D.H.1
4626.8'
T.D. 50'
4676.8'
Gray-cream fine grained limestone
Light gray, xln limestone
4690
4680
4670
4660
4640
4630
4620
4610
Hells Canyon
Calcite & Silica
pinkish and yellowish
some SiO2 seams.

Map No. 4 (c)



LEGEND

- Limestone bed, light gray, crystalline, high lime, low silica.
- Limestone bed, calcitic, siliceous, pink & yellowish, (Marker).
- Limestone bed, cream-gray to green-gray, fine grained, pinkish near basalt contact.
- Alluvium & basalt float.

Sections are N.80°E., looking N.10°W.

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES DEC. 31, 19
RICHARD E. MIERITZ
ARIZONA, U.S.A.

SURFACE GEOLOGY

(Drilled Area)

DRAKE LIMESTONE

Yavapai County, Arizona

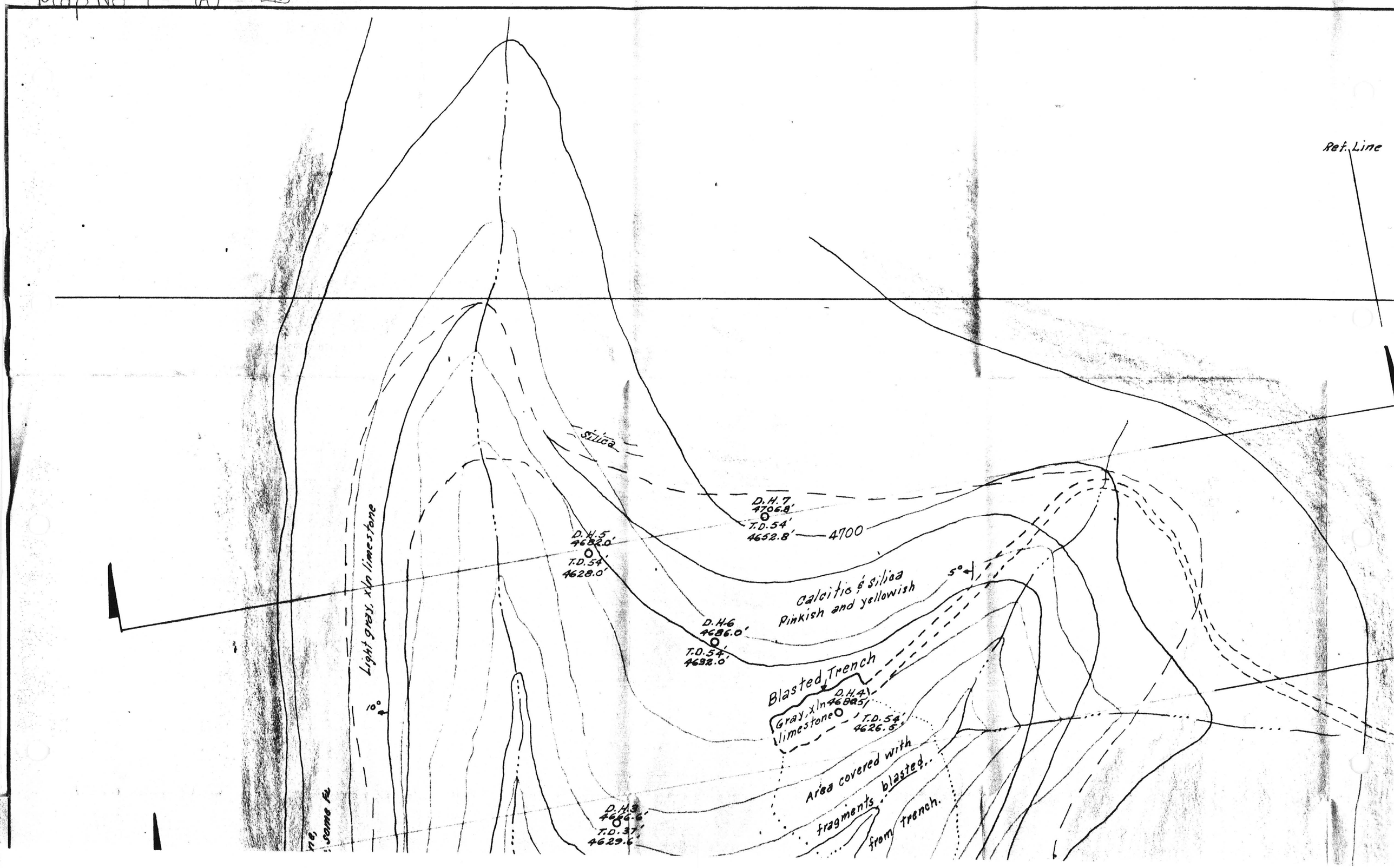
Scale: 1" = 50 ft.

JULY, 1973

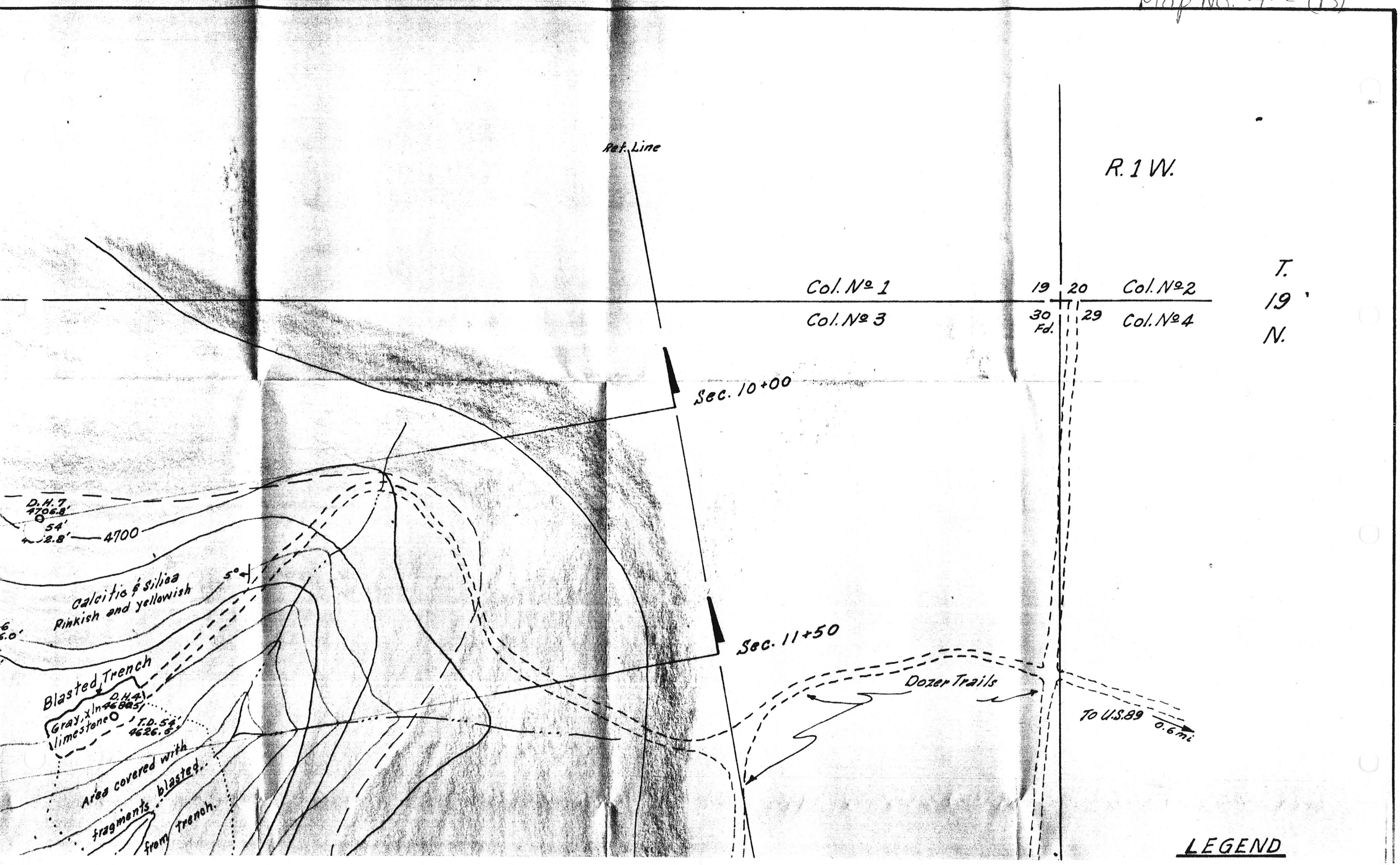
R.E. MIERITZ

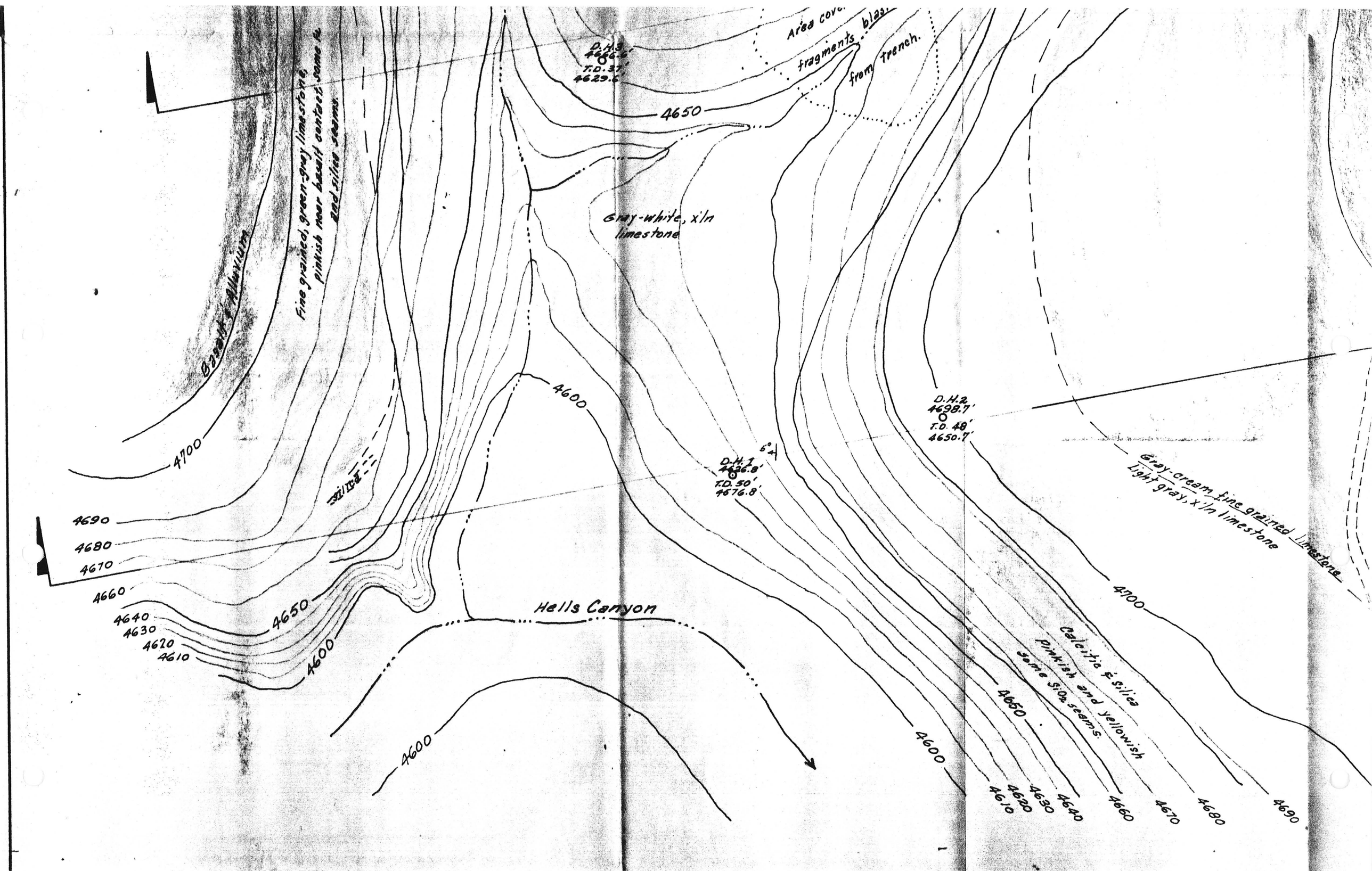
(D) MAP NO 4

Map No 4FC (A)

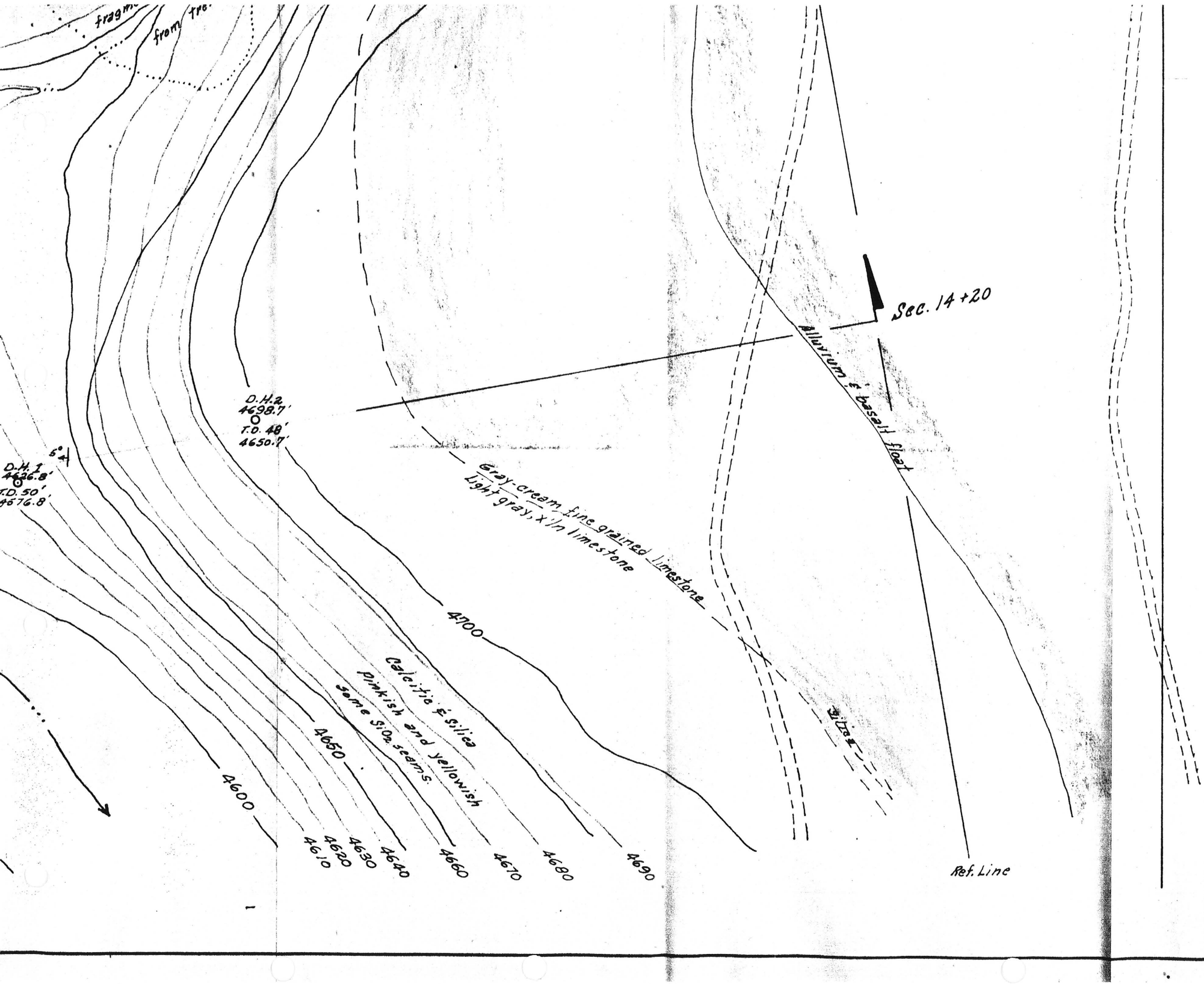

Ref. Line
Silica
D.H.7
4706.8'
T.D.54'
4652.8'
4700
D.H.5
4682.0'
T.D.54'
4628.0'
Calcite & silica
Pinkish and yellowish
5°
D.H.6
4686.0'
T.D.54'
4632.0'
Blasted Trench
D.H.4
4689.5'
Gray, xln limestone
T.D.54'
4626.5'
Area covered with
fragments blasted
from trench.
Light gray, xln limestone
10°
D.H.3
4686.6'
T.D.37'
4623.6'

Map No. 4FC (B)


Ref. Line
R. 1 W.
T. 19 N.
Col. № 1
Col. № 2
Col. № 3
Col. № 4
19
20
30 Fd.
29
Sec. 10+00
Sec. 11+50
D.H. 7
4706.8'
54'
2.8'
4700
Calcitic & silica
Pinkish and yellowish
5°
Blasted Trench
D.H. 41
Gray, xln limestone
T.D. 54'
4626.8'
Area covered with
fragments blasted
from trench.
Dozer Trails
To U.S. 89
0.6 mi
LEGEND


Area covered by fragments blasted from trench.
D.H.3
4666.6'
T.D. 37'
4629.6'
4650
Gray-white, x'ln limestone
Basalt & Alluvium
Fine grained, green-gray limestone, pinkish near basalt contact, some Fe and silica seams.
4700
4600
D.H.2
4698.7'
T.D. 48'
4650.7'
D.H.1
4626.8'
T.D. 50'
4676.8'
Gray-cream fine grained limestone
Light gray, x'ln limestone
4690
4680
4670
4660
4640
4630
4620
4610
4650
4600
Hells Canyon
Calcitic & silica pinkish and yellowish some SiO2 seams.
4700
4650
4600
4610
4620
4630
4640
4660
4670
4680
4690

MAP NO. 4FC (C)



LEGEND

- Limestone bed, light gray, crystalline, high lime, low silica.
- Limestone bed, calcitic, siliceous - pink & yellowish, (Marker).
- Limestone bed, cream-gray to green-gray, fine grained, pinkish near basalt contact.
- Alluvium & basalt float.

Sections are N.80°E., looking N.10°W.

SURFACE GEOLOGY

(Drilled Area)

DRAKE LIMESTONE

Yavapai County, Arizona

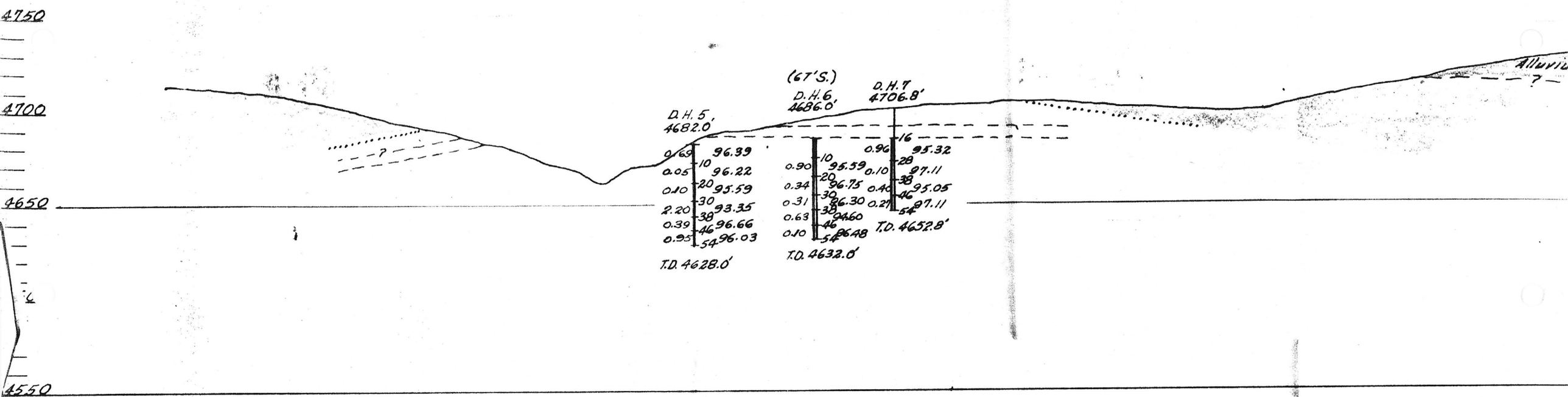
Scale: 1" = 50 ft.

JULY, 1973

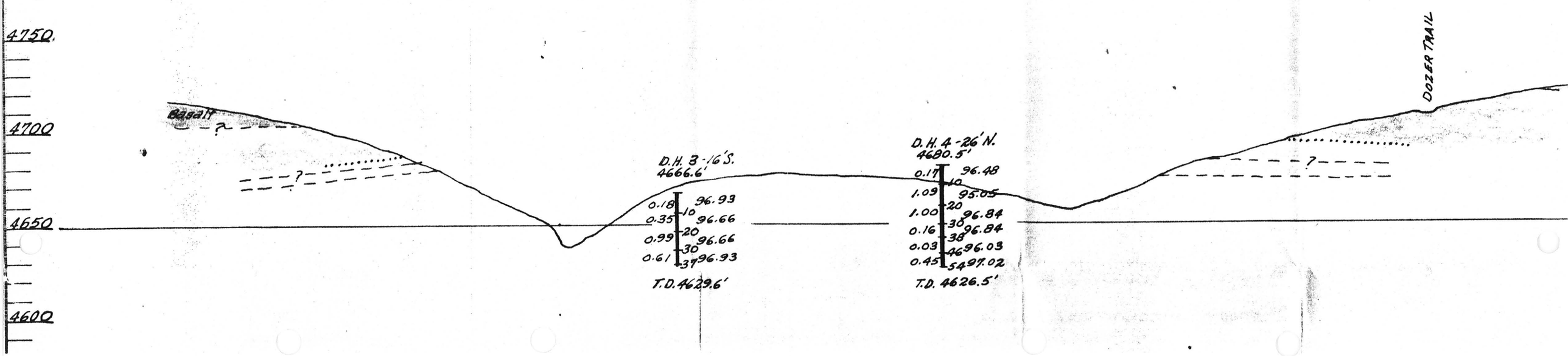
R.E. MIERITZ

Map No 4

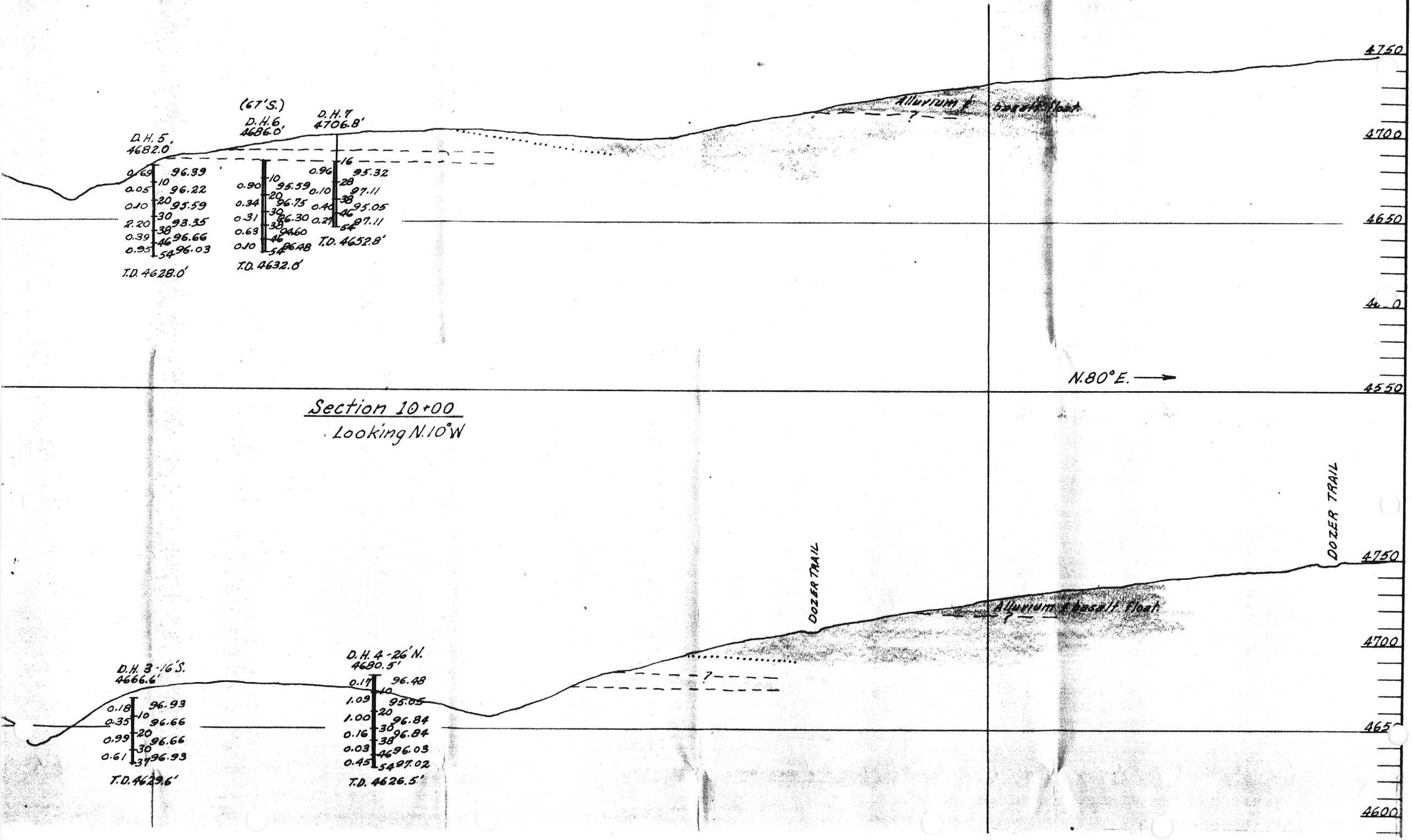
Map No. 5FC (A)

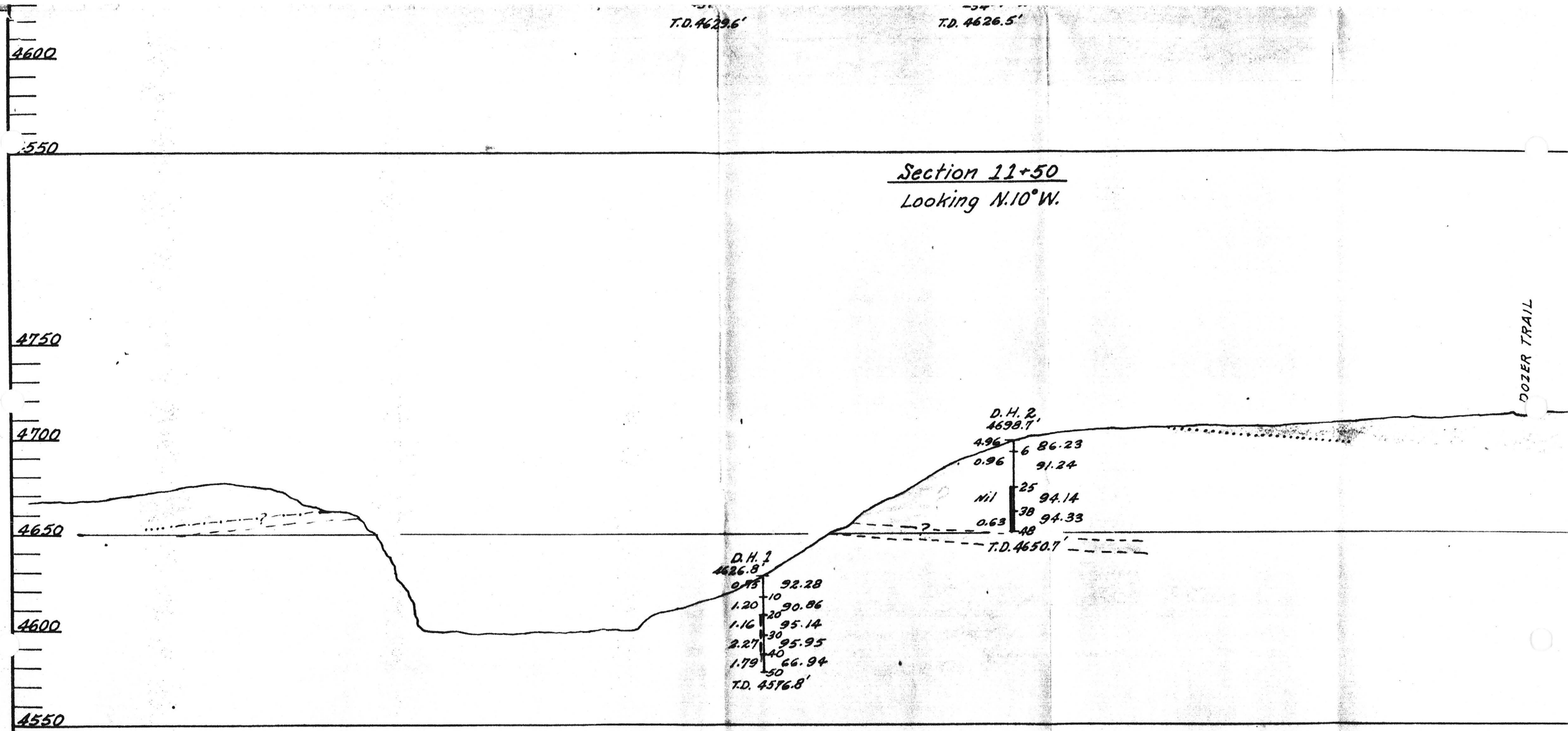


Section 10+00
Looking N.10°W



Map No. 5FC (B)


4750
4700
4650
4600
4550
Alluvium & basalt float
?
D.H. 5,
4682.0'
0.69 10 96.39
0.05 96.22
0.10 20 95.59
2.20 30 93.35
0.39 38 96.66
0.95 46 96.03
54
T.D. 4628.0'
(67'S.)
D.H. 6,
4686.0'
0.90 10 95.59
0.34 20 96.75
0.31 30 96.30
0.63 38 94.60
0.10 46 96.48
54
T.D. 4632.0'
D.H. 7
4706.8'
16
0.96 95.32
0.10 28 97.11
0.40 38 95.05
0.27 46 97.11
54
T.D. 4652.8'
N.80°E.
Section 10+00
Looking N.10°W
DOZER TRAIL
DOZER TRAIL
Alluvium & basalt float
?
D.H. 3-16'S.
4666.6'
0.18 10 96.93
0.35 96.66
0.99 20 96.66
0.61 30 96.93
37
T.D. 4629.6'
D.H. 4-26'N.
4680.5'
0.17 10 96.48
1.09 95.05
1.00 20 96.84
0.16 30 96.84
0.03 38 96.03
0.45 46 97.02
54
T.D. 4626.5'



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)

(Silica content) 1.09 | 10 | 96.84 ($CaCO_3$ content) | 20

35 (Depth)

50

T.D. 4657.0
(Total depth Elevation)

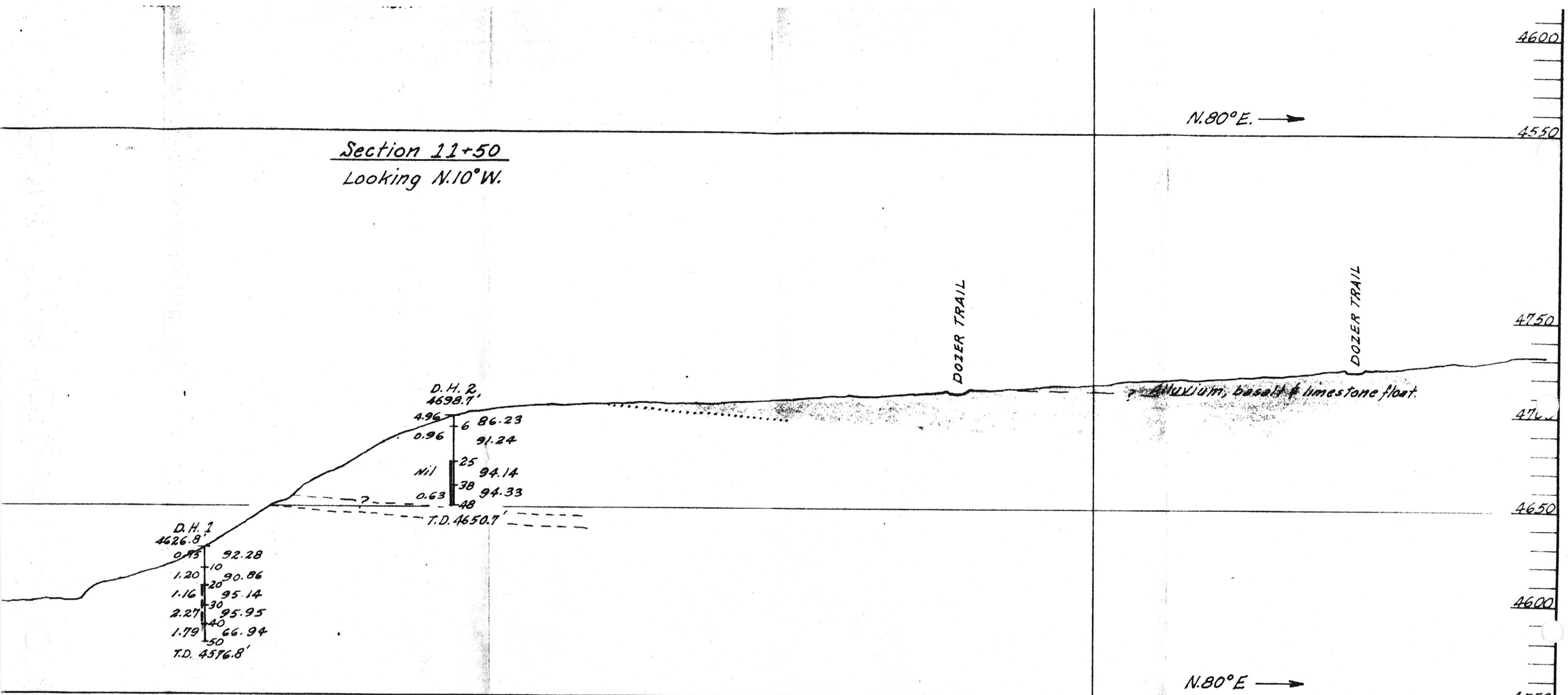
Section 14+20

Looking N.10°W.

LEGEND

- High lime, low silica, crystalline limestone be
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica, purity un
- Alluvium & basalt float.
- Basalt.

Map No. 5 FC (C)



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)

10
content) 0.09 96.84 ($CaCO_3$ content)
20
35 (Depth)
50
T.D. 4657.0
(Total depth Elevation)

Section 14+20

Looking N.10°W.

LEGEND

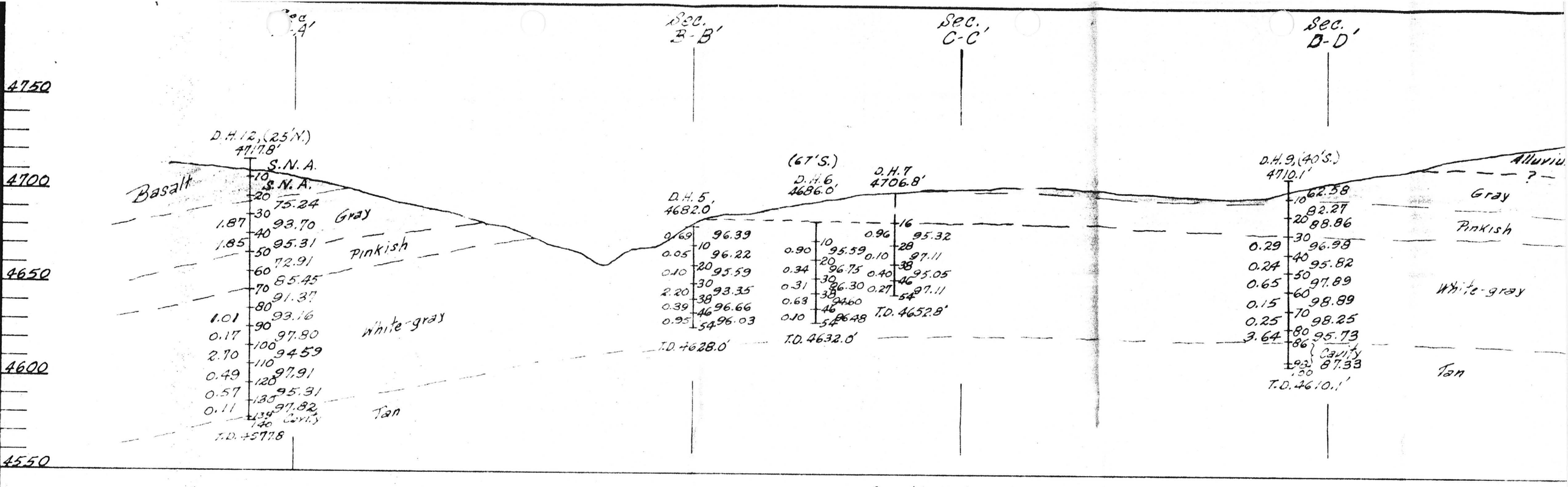
- High lime, low silica, crystalline limestone bed. (ORE).
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica, purity unknown.
- Alluvium & basalt float.
- Basalt.

SECTIONS
(Drilled Area)
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 50 ft.

JULY, 1973

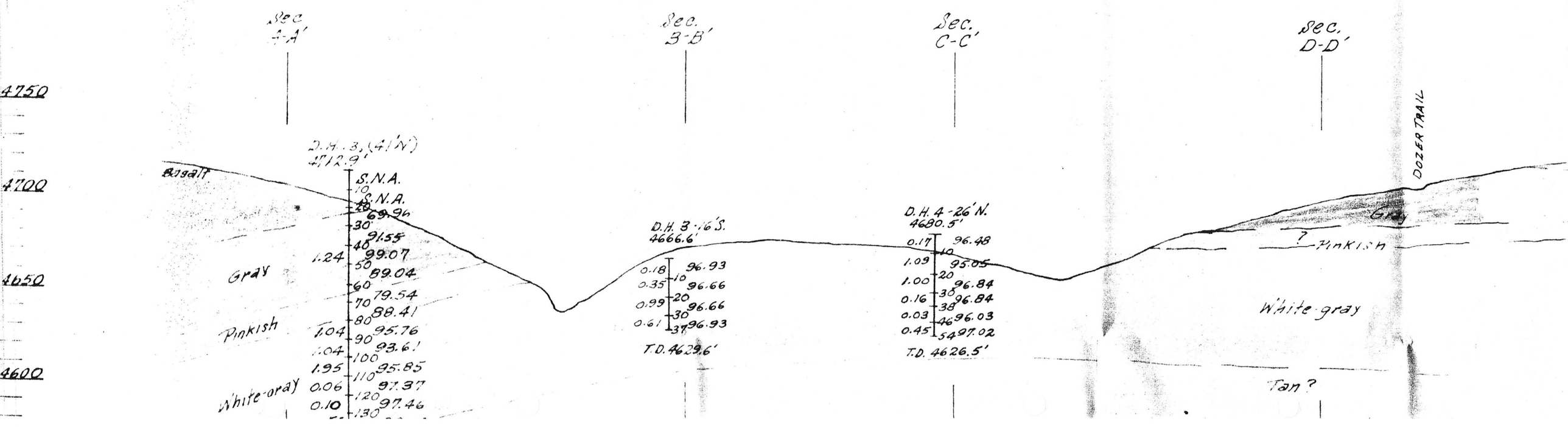
R.E. MIERITZ

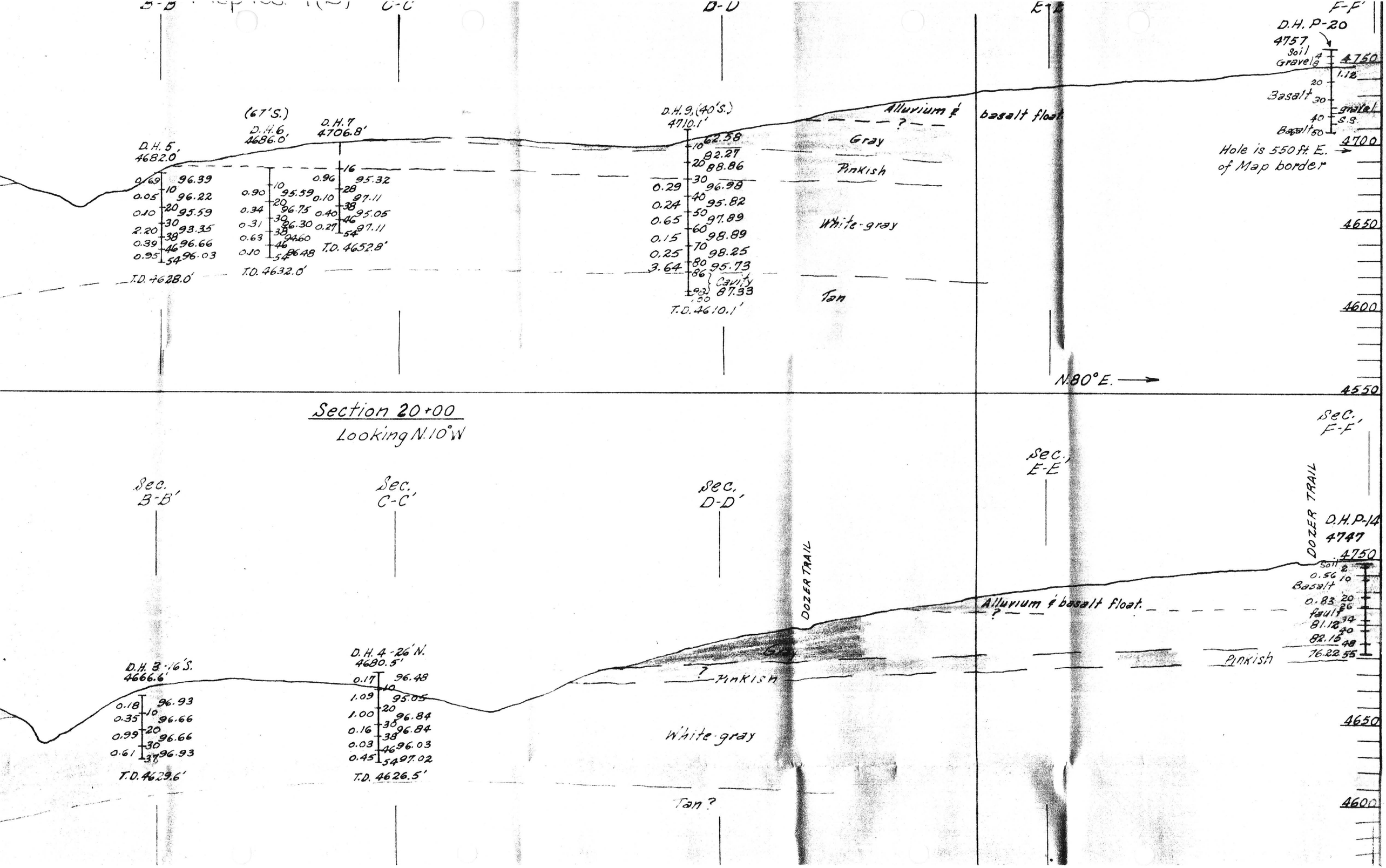
(D) Map No 5

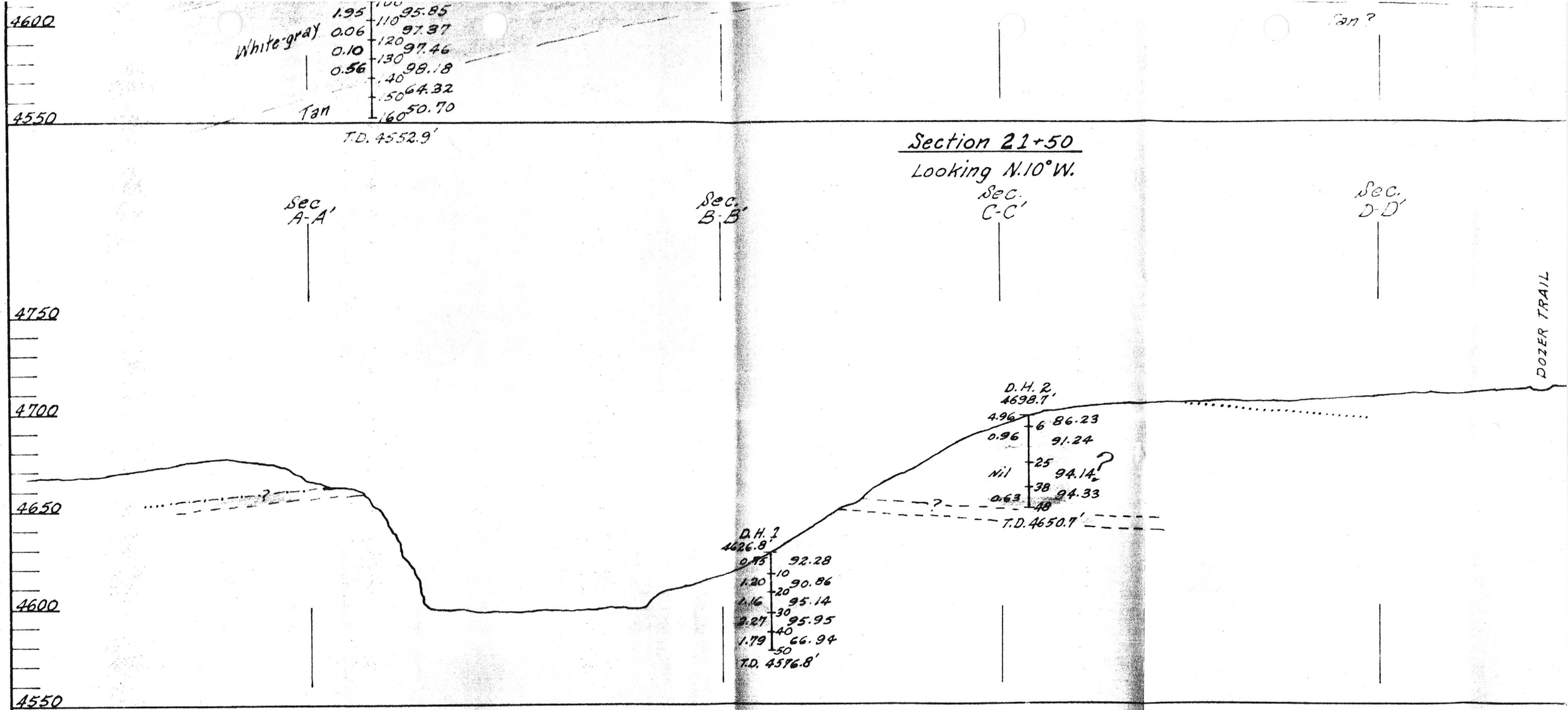


Section 20+00

Looking N.10°W




B-B'
C-C'
D-D'
E-E'
F-F'
D.H. P-20
4757
Soil
Gravel
Basalt
gravel
S.S.
Basalt
Hole is 550 ft. E. of Map border
D.H. 5, 4682.0'
0.69 96.39
0.05 96.22
0.10 95.59
2.20 93.35
0.39 96.66
0.95 96.03
T.D. 4628.0'
(67'S.) D.H. 6, 4686.0'
0.90 95.59
0.34 96.75
0.31 96.30
0.63 94.60
0.10 96.48
T.D. 4632.8'
D.H. 7 4706.8'
0.96 95.32
0.10 97.11
0.40 95.05
0.27 97.11
T.D. 4652.8'
D.H. 9, (40'S.) 4710.1'
62.58
82.27
88.86
0.29 96.98
0.24 95.82
0.65 97.89
0.15 98.89
0.25 98.25
3.64 95.73
Cavity
87.33
T.D. 4610.1'
Allurium & basalt float
Gray
Pinkish
White-gray
Tan
N.80°E.
4750
4700
4650
4600
4550
Section 20+00
Looking N.10°W
Sec. B-B'
Sec. C-C'
Sec. D-D'
Sec. E-E'
Sec. F-F'
DOZER TRAIL
D.H. P-14
4747
Soil
0.56
Basalt
0.83
fault
81.12
82.15
76.22
Allurium & basalt Float.
Pinkish
D.H. 3 -16'S. 4666.6'
0.18 96.93
0.35 96.66
0.99 96.66
0.61 96.93
T.D. 4629.6'
D.H. 4 -26'N. 4680.5'
0.17 96.48
1.09 95.05
1.00 96.84
0.16 96.84
0.03 96.03
0.45 97.02
T.D. 4626.5'
White-gray
Tan?



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A (Sample not assayed.)
(Silica content) .09 10 96.84 ($CaCO_3$ content)
20
35 (Depth)
50
T.D. 4657.0
(Total depth Elevation)

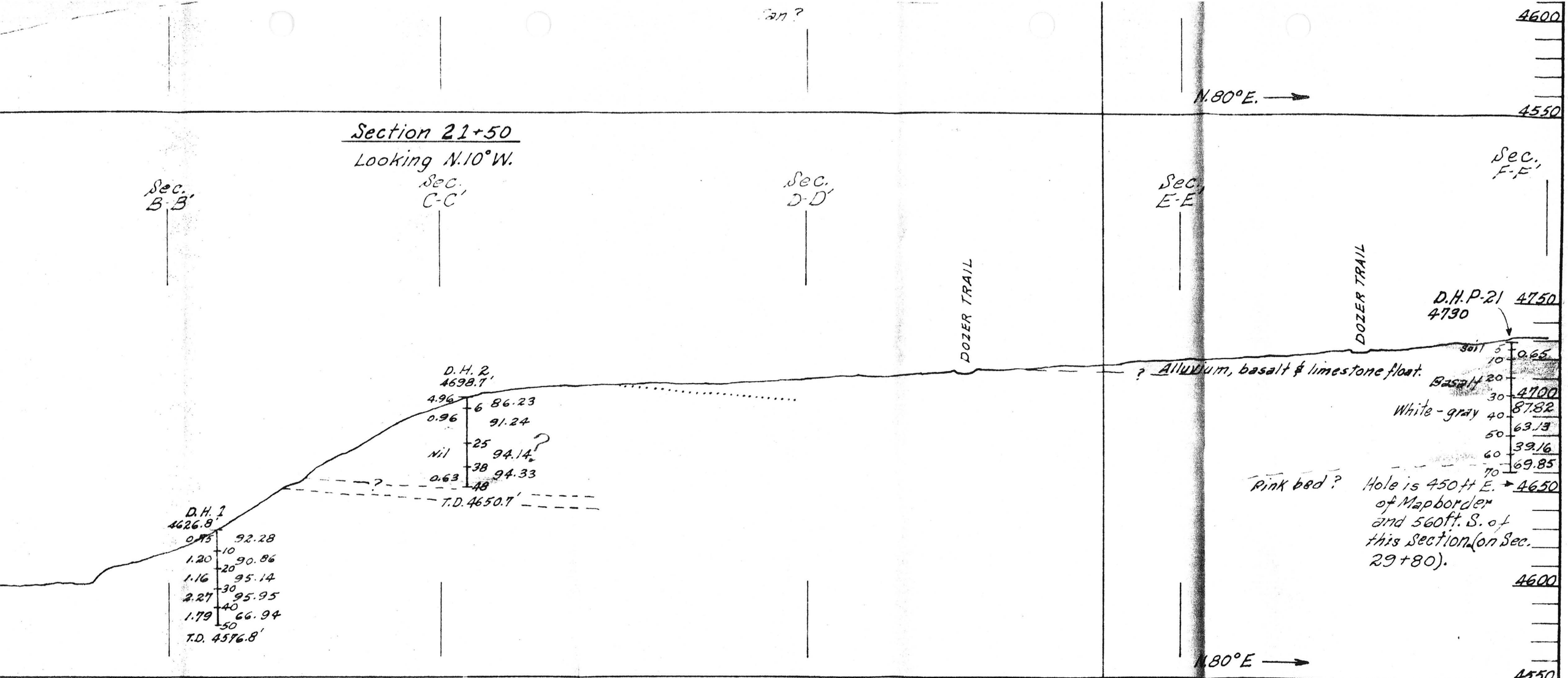
Section 24+20

Looking N.10°W.

LEGEND

- High lime, low silica, crystalline limestone
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica, purity
- Alluvium & basalt float.
- Basalt.

Map No. 7 (c)



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A (Sample not assayed.)
content) 1.09
96.84 ($CaCO_3$ content)
35 (Depth)
T.D. 4657.0
(Total depth Elevation)

Section 24+20

Looking N.10°W.

LEGEND

- High lime, low silica, crystalline limestone bed. (ORE).
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica, purity unknown.
- Alluvium & basalt float.
- Basalt.

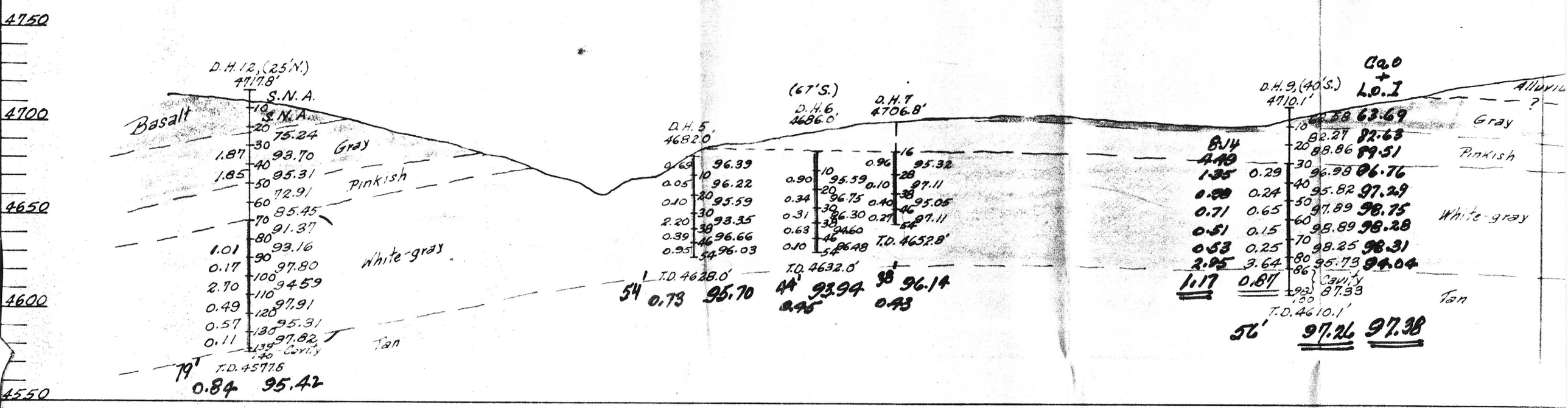
Reference Line

SECTIONS
(Drilled Area)
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 50 ft.

JULY, 1973

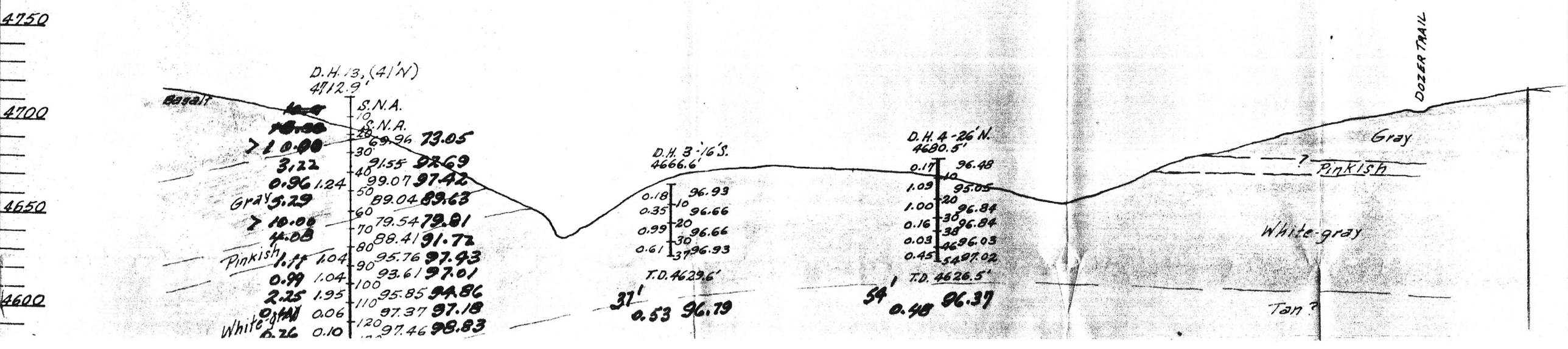
R.E. MIERITZ

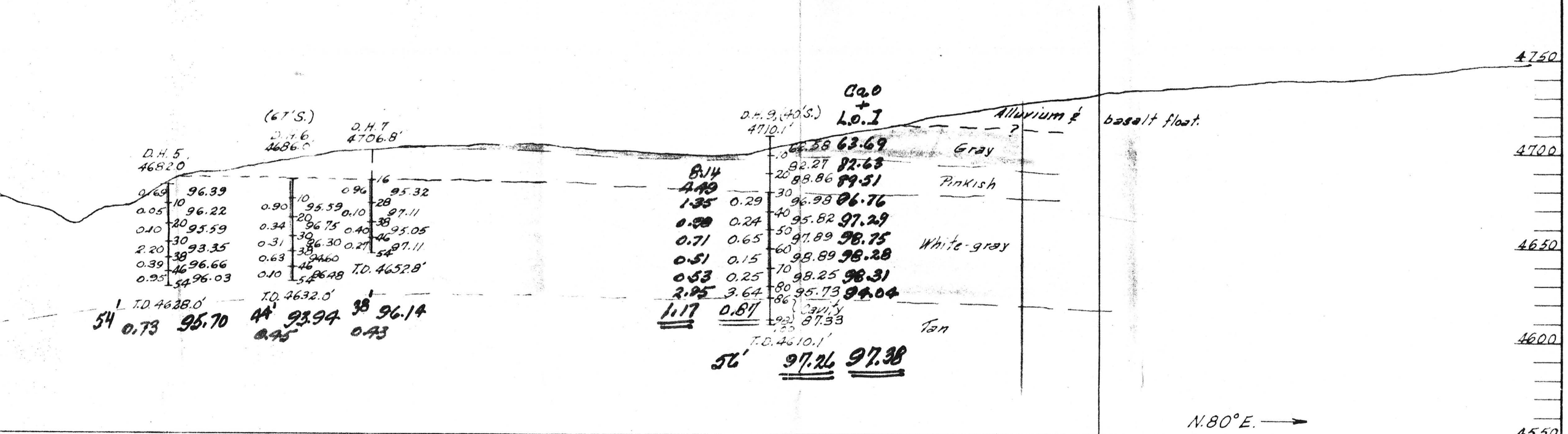
(D) Map No 7



Section 10+00

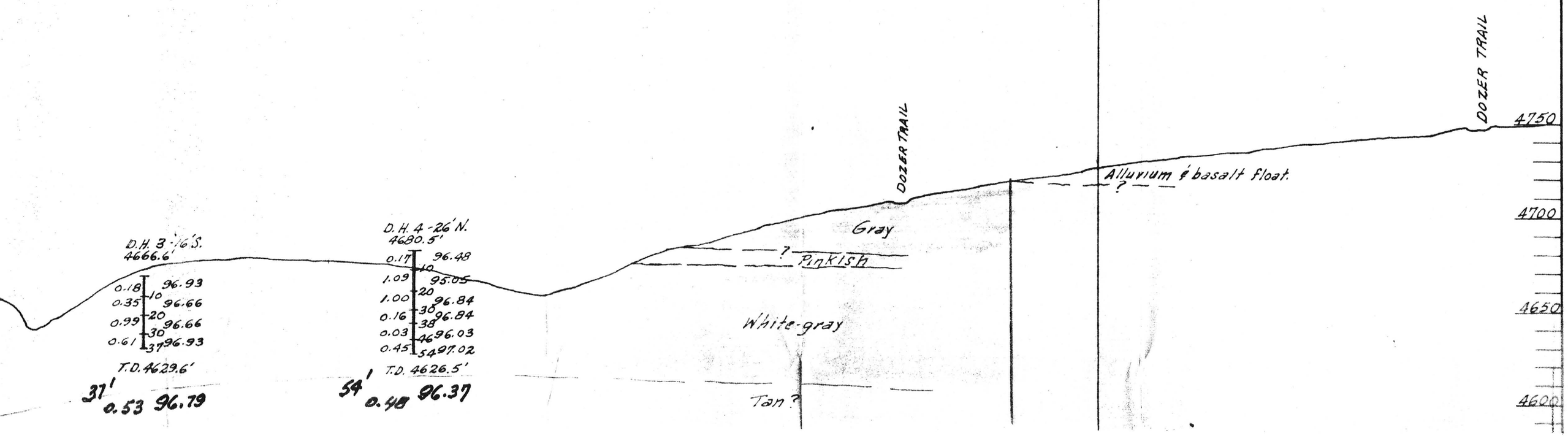
Looking N.10°W

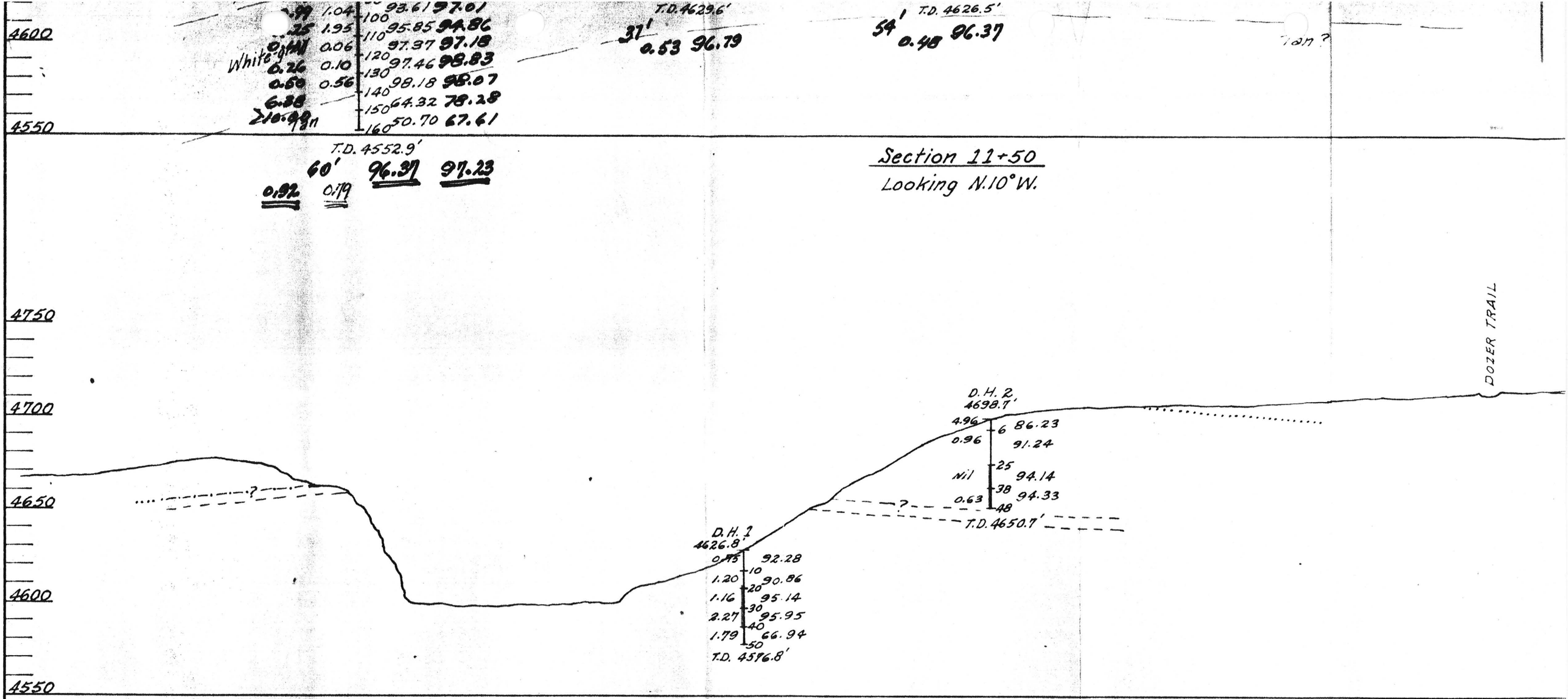




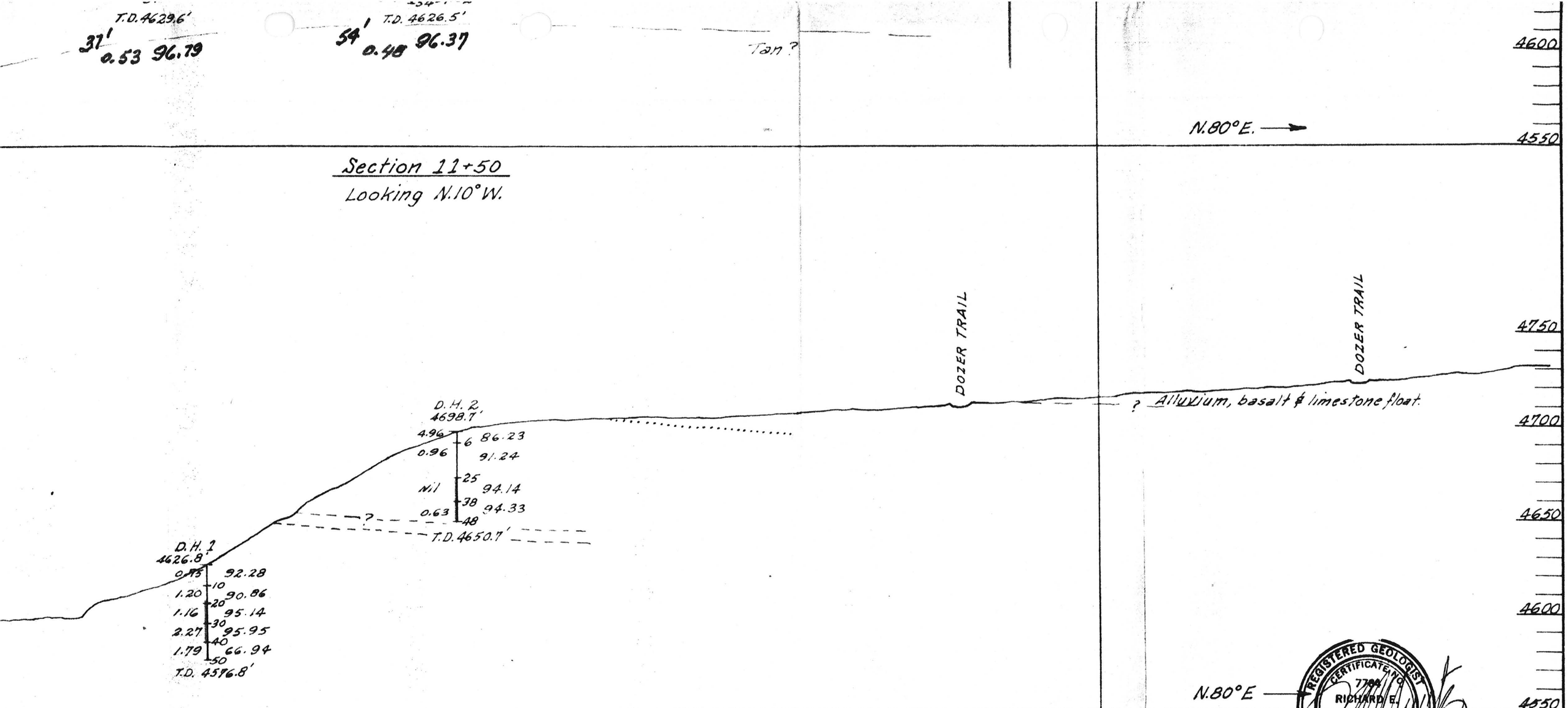
Section 10+00

Looking N.10°W




4600
4550
.99 1.04 100 93.61 97.01
.25 1.95 110 95.85 94.86
0.94 0.06 110 97.37 97.18
White-gray 0.26 0.10 120 97.46 98.83
0.60 0.56 130 98.18 98.07
6.38 140 64.32 78.28
>10.99 150 50.70 67.61
160
T.D. 4552.9'
60' 96.37 97.23
0.32 0.79
T.D. 4629.6'
37' 0.53 96.79
T.D. 4626.5'
54' 0.48 96.37
Tom ?
Section 11+50
Looking N.10°W.
4750
4700
4650
4600
4550
DOZER TRAIL
D.H. 2,
4698.7'
4.96 6 86.23
0.96 91.24
Nil 25 94.14
0.63 38 94.33
48
T.D. 4650.7'
D.H. 1
4626.8'
0.75 92.28
10
1.20 20 90.86
1.16 30 95.14
2.27 40 95.95
1.79 50 66.94
T.D. 4576.8'
Section 14+20
Looking N.10°W.
DRILL HOLE DATA
D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A (Sample not assayed.)
(Silica content) 1.09 10 96.84 ($CaCO_3$ content)
20
35 (Depth)
50
T.D. 4657.0
(Total depth Elevation)
LEGEND
High lime, low silica, crystalline limestone bed. (O.
Limestone bed, calcitic, siliceous. (Marker).
Limestone, fine grained, visible silica, purity unknow
Alluvium & basalt float.
Basalt.

Map No. 5 (c)



DRILL HOLE DATA

D.H. 6 (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A (Sample not assayed.)
10
content) .09
96.84 ($CaCO_3$ content)
20
35 (Depth)
50
T.D. 4657.0
(Total depth Elevation)

Section 14+20

Looking N.10°W.

LEGEND

- High lime, low silica, crystalline limestone bed. (ORE).
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica, purity unknown.
- Alluvium & basalt float.
- Basalt.

Reference Line

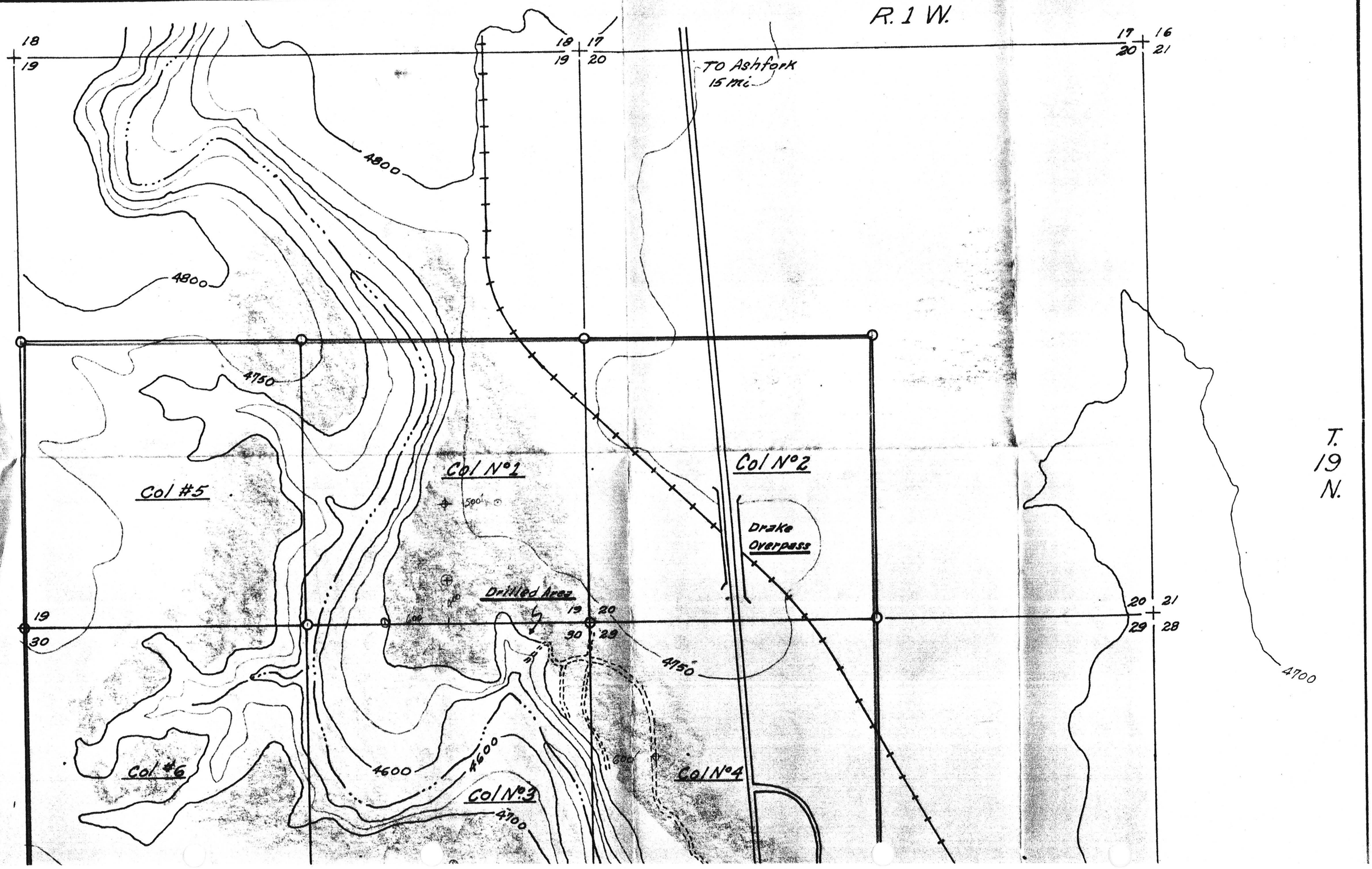
REGISTERED GEOLOGIST
CERTIFICATE NO. 7788
RICHARD E. MIERITZ
Date Signed 1-19-
ARIZONA, U.S.A.

SECTIONS
(Drilled Area)
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 50 ft.

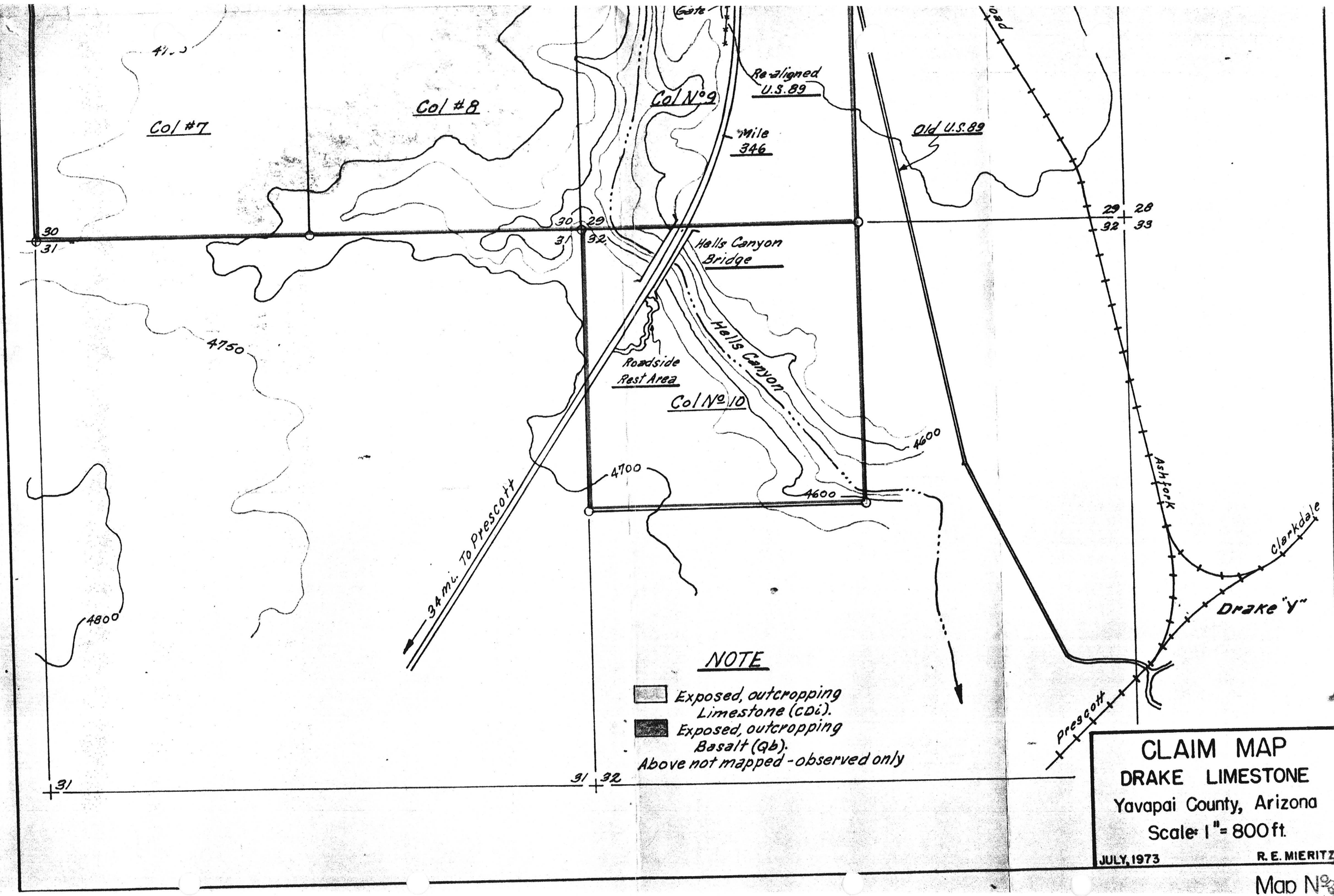
JULY 1973 R.E. MIERITZ

(D) Map No. 5

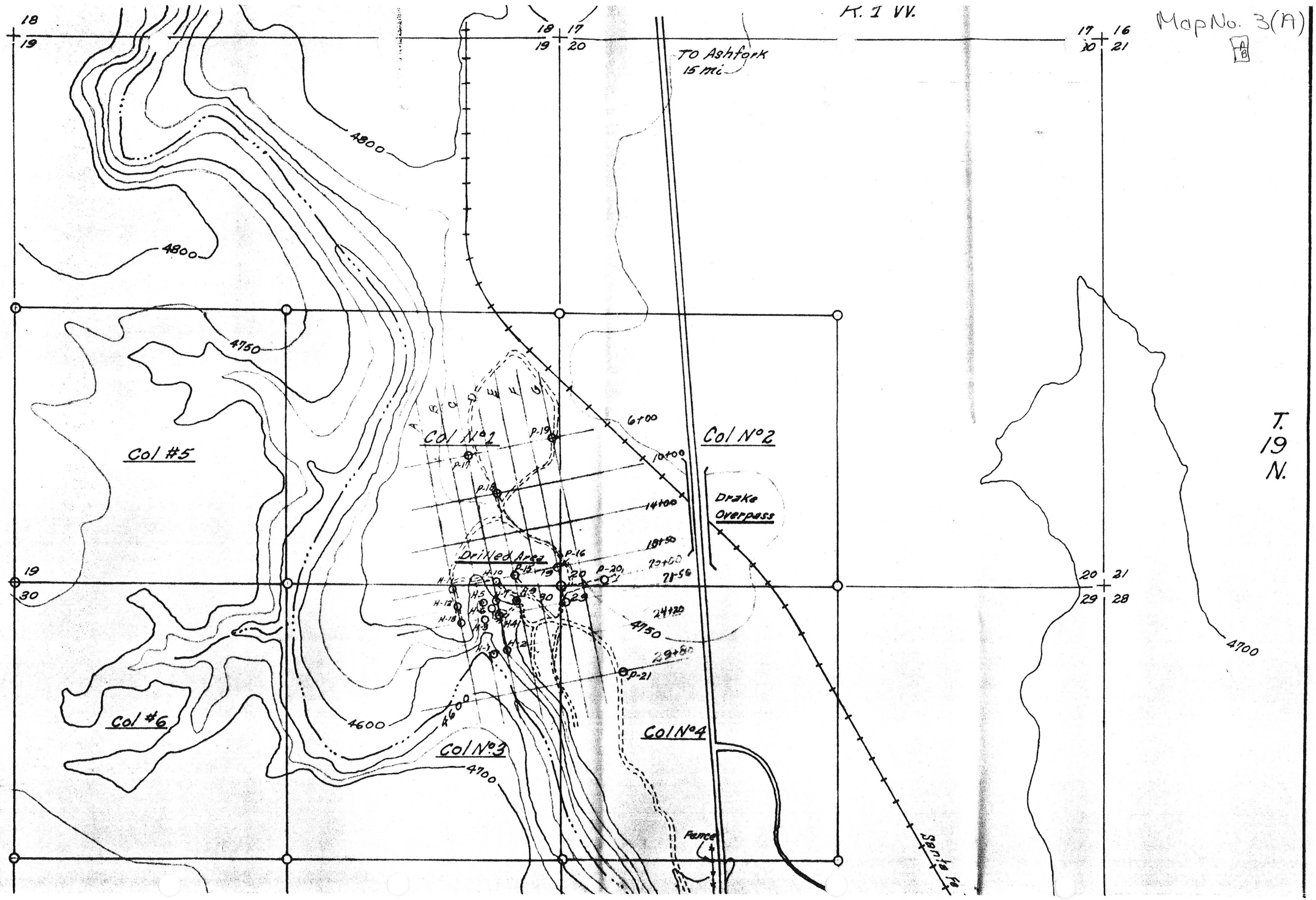
Map No 2 (A) A/B

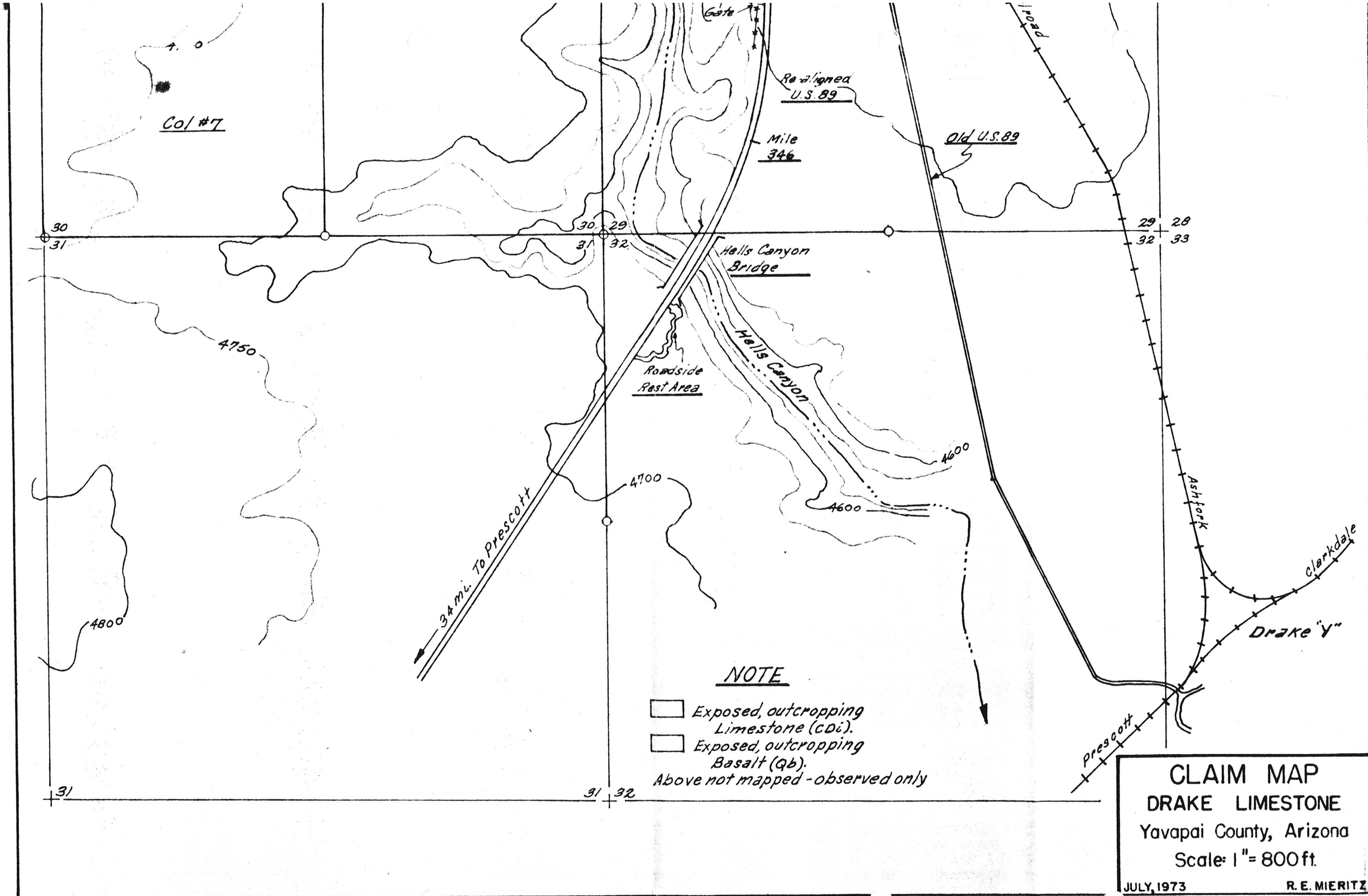

R. 1 W.
T. 19 N.
TO Ashfork 15 mi.
Col #5
Col N°1
Col N°2
Col N°3
Col N°4
Col #6
Drake Overpass
Drilled Area
4800
4750
4700
4600
500'
600'
18
19
17
20
16
21
30
29
28

(B)


Col #7
Col #8
Col No 9
Col No 10
Gate
Re-aligned U.S.89
Old U.S.89
Mile 346
Hells Canyon Bridge
Hells Canyon
Roadside Rest Area
34 mi. To Prescott
Ashfork
Clarkdale
Drake "Y"
Prescott
4750
4800
4700
4600
4600
30
31
30
29
31
32
29
28
32
33
31
31
32
NOTE
Exposed, outcropping Limestone (CDi).
Exposed, outcropping Basalt (Qb).
Above not mapped - observed only
CLAIM MAP
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 800 ft.
JULY, 1973
R. E. MIERITZ

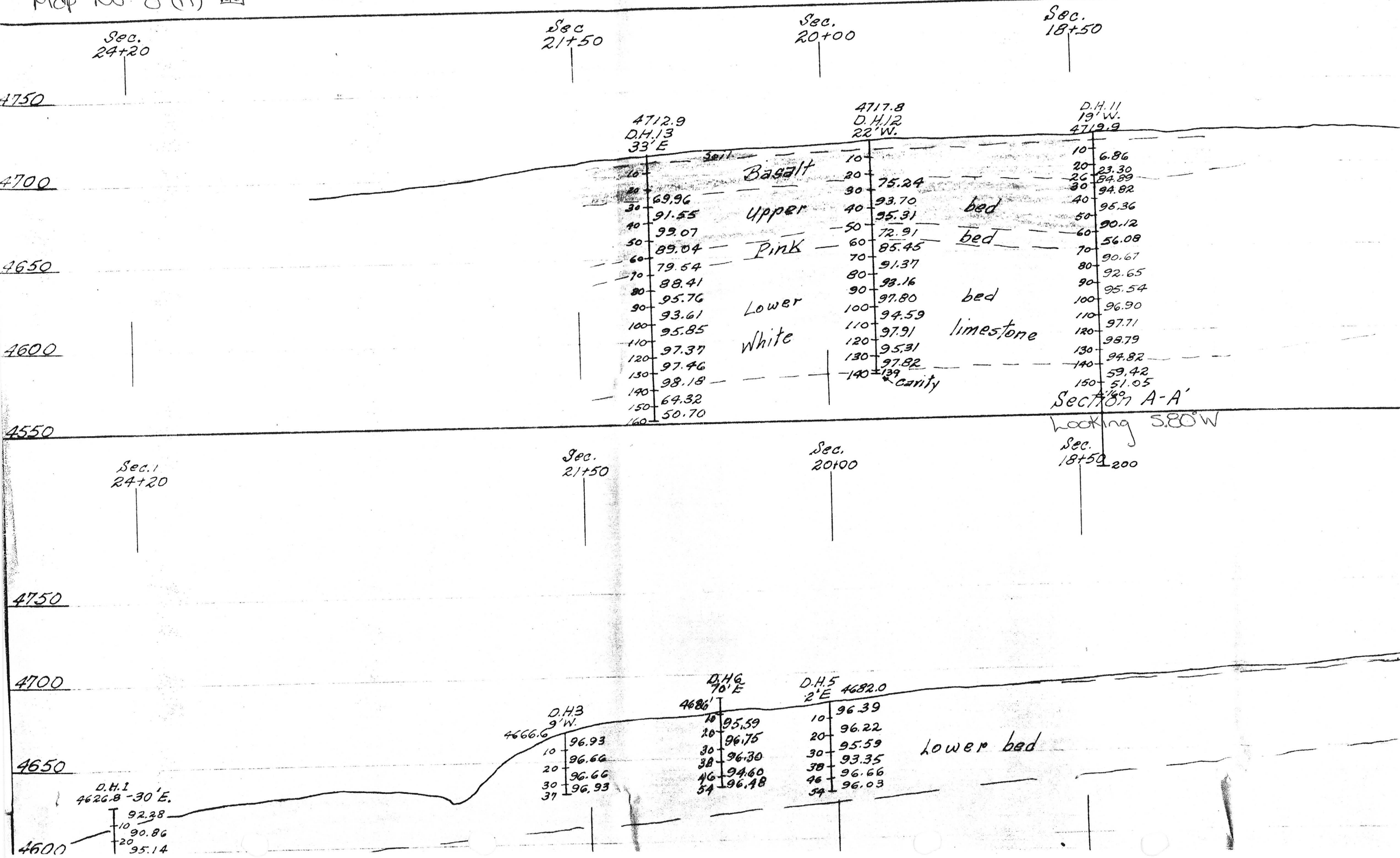
Map No

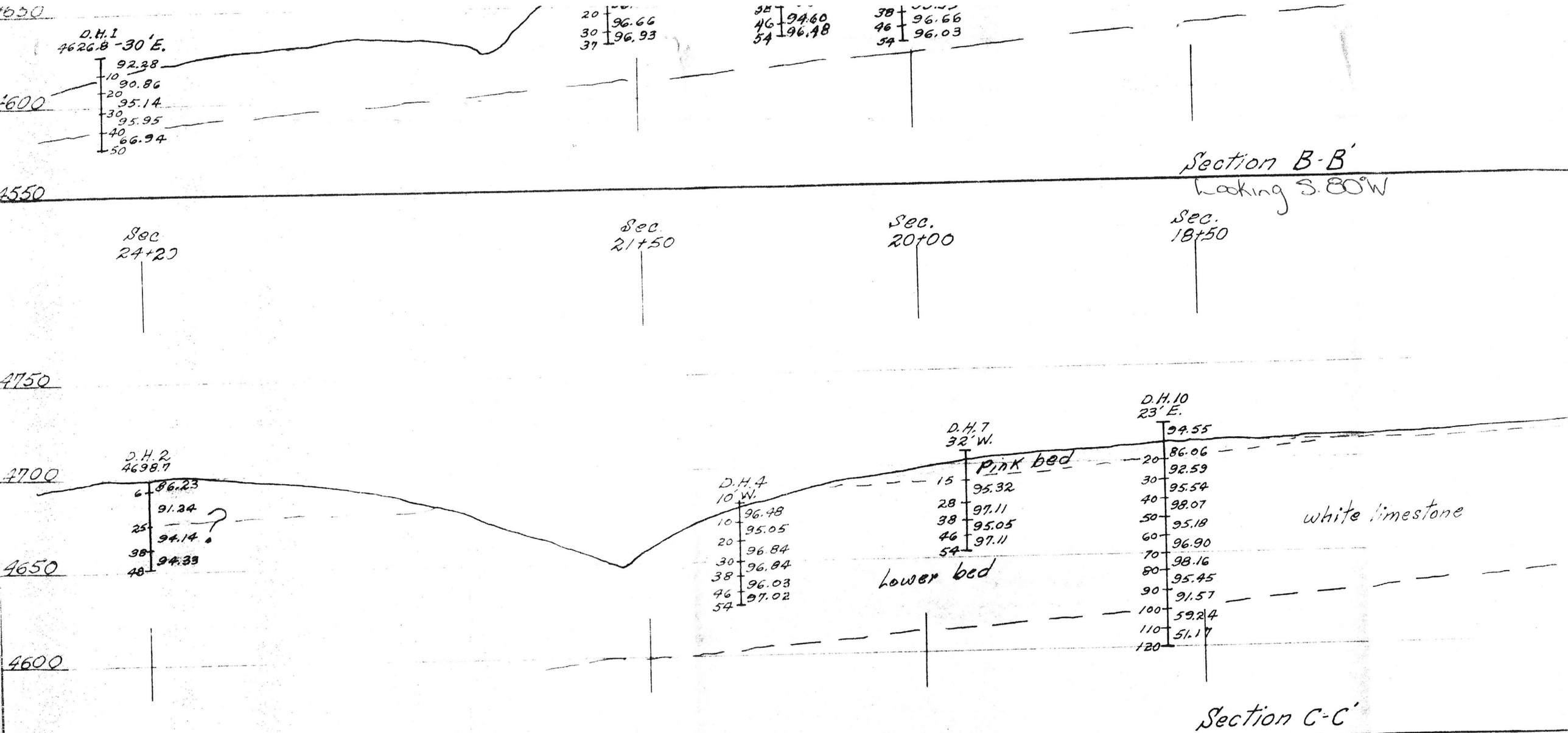

R. 1 W.
Map No. 3(A)
T. 19 N.
TO Ashfork 15 mi.
4800
4800
4750
4700
4600
4600
4700
Col #5
Col #6
Col N°1
Col N°2
Col N°3
Col N°4
Drake Overpass
Drilled Area
Fence
Santa Fe
6+00
10+00
14+00
18+50
19+60
21+56
24+20
29+80
P-19
P-17
P-18
P-16
P-20
P-21
H-10
H-5
H-12
H-18
H-41
H-2
H-1
A
B
C
D
E
F
G

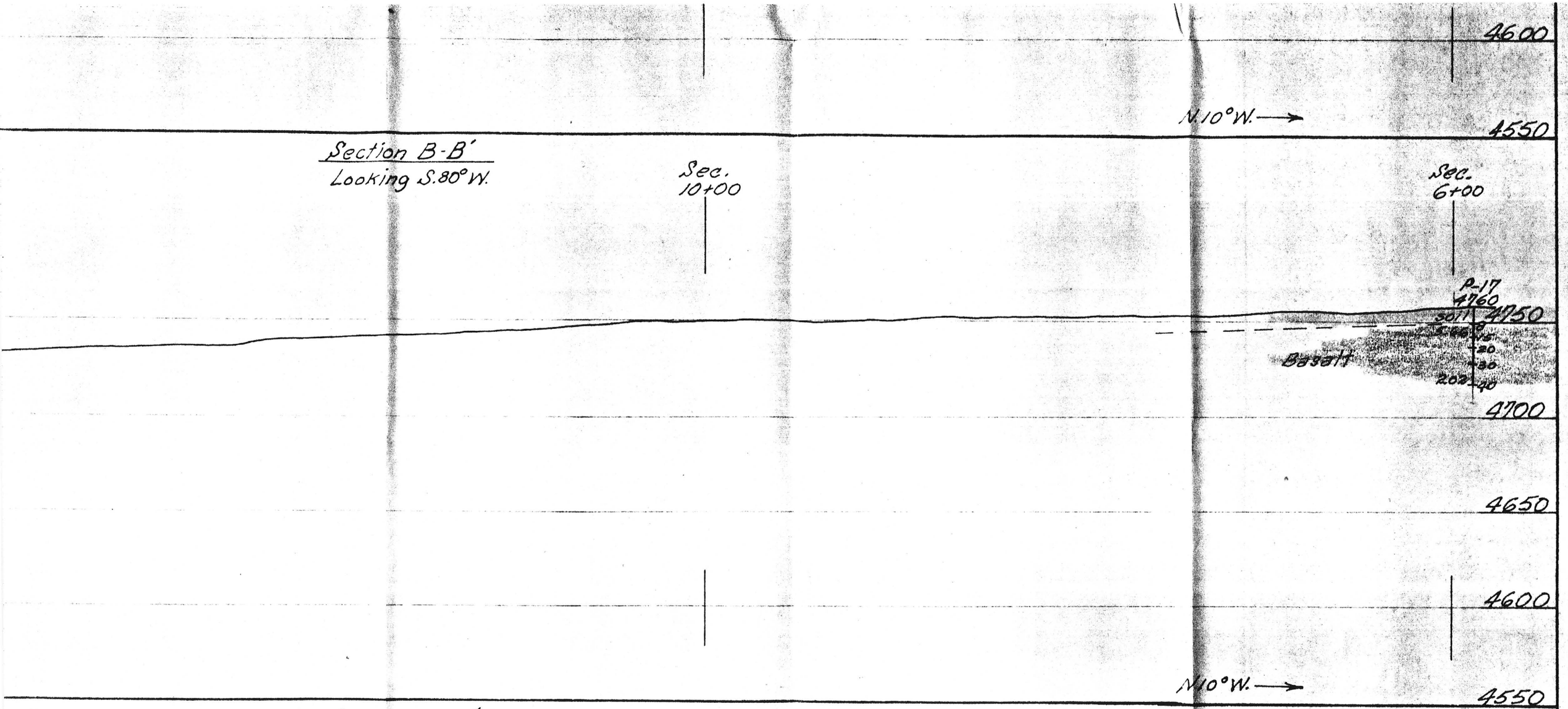

Gate
Realigned U.S. 89
Mile 346
Old U.S. 89
Col #7
Hells Canyon Bridge
Roadside Rest Area
Hells Canyon
34 mi. To Prescott
4750
4700
4600
4600
4800
Ash Fork
Clarkdale
Drake "Y"
Prescott
Peoli
30
31
30
29
31
32
29
28
32
33
31
31
32
NOTE
Exposed, outcropping Limestone (CDi).
Exposed, outcropping Basalt (Qb).
Above not mapped - observed only
CLAIM MAP
DRAKE LIMESTONE
Yavapai County, Arizona
Scale: 1" = 800 ft.
JULY, 1973
R. E. MIERITZ

(6) Map No. 3

Map No. 8 (A)


Sec. 24+20
Sec 21+50
Sec. 20+00
Sec. 18+50
4750
4700
4650
4600
4550
4712.9
D.H.13
33'E
Soil
Basalt
Upper
Pink
Lower
White
10 69.96
20 91.55
30 99.07
40 89.04
50 79.54
60 88.41
70 95.76
80 93.61
90 95.85
100 97.37
110 97.46
120 98.18
130 64.32
140 50.70
160
4717.8
D.H.12
22'W.
10 75.24
20 93.70
30 95.31
40 72.91
50 85.45
60 91.37
70 93.16
80 97.80
90 94.59
100 97.91
110 95.31
120 97.82
130 139
140
Cavity
bed
bed
bed
limestone
D.H.11
19'W.
4719.9
10 6.86
20 23.30
26 84.89
30 94.82
40 95.36
50 90.12
60 56.08
70 90.67
80 92.65
90 95.54
100 96.90
110 97.71
120 98.79
130 94.82
140 59.42
150 51.05
160
Section A-A'
Looking S.80°W
Sec. 18+50
200
Sec. 24+20
Sec. 21+50
Sec. 20+00
4750
4700
4650
4600
D.H.1
4626.8 -30'E.
92.28
10 90.86
20 95.14
D.H.3
9'W.
4666.6
96.93
10 96.66
20 96.66
30 96.93
37
D.H.6
70'E
4686'
10 95.59
20 96.75
30 96.30
38 94.60
46 96.48
54
D.H.5
2'E
4682.0
96.39
10 96.22
20 95.59
30 93.35
38 96.66
46 96.03
54
Lower bed


4650
D.H.1
4626.8 -30' E.
92.28
10 90.86
20 95.14
30 95.95
40 66.94
50
4600
20 96.66
30 96.93
37
38 94.60
46 96.48
54
38 96.66
46 96.03
54
Section B-B'
Looking S.80°W
4550
Sec
24+20
Sec
21+50
Sec.
20+00
Sec.
18+50
4750
4700
D.H.2
4698.7
6 86.23
91.24
25 94.14
38 94.33
48
4650
D.H.4
10' W.
10 96.48
95.05
20 96.84
30 96.84
38 96.03
46 97.02
54
D.H.7
32' W.
Pink bed
15 95.32
28 97.11
38 95.05
46 97.11
54
Lower bed
D.H.10
23' E.
94.55
20 86.06
92.59
30 95.54
40 98.07
50 95.18
60 96.90
70 98.16
80 95.45
90 91.57
100 59.24
110 51.17
120
white limestone
4600
Section C-C'
4550



DRILL HOLE DATA

P-14
H-6 } (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A. (Sample not assayed)
Silica content 1.09 — 0 — 96.84 ($CaCO_3$ content)
20
35 (Depth)
50
T.D. 4652.0 (Total depth Elevation)
H-6 Holes drilled by Drake Lime Co.
P-14 Holes drilled by Can-Am Corp.

Section C-C'

Looking S.80°W.

LEGEND

- High lime, low silica, crystalline limestone bed. (ORE).
- Limestone bed, calcitic, siliceous. (Marker).
- Limestone, fine grained, visible silica.
- Alluvium & basalt float.
- Basalt.

N.10° W. SECTIONS

DRAKE LIMESTONE

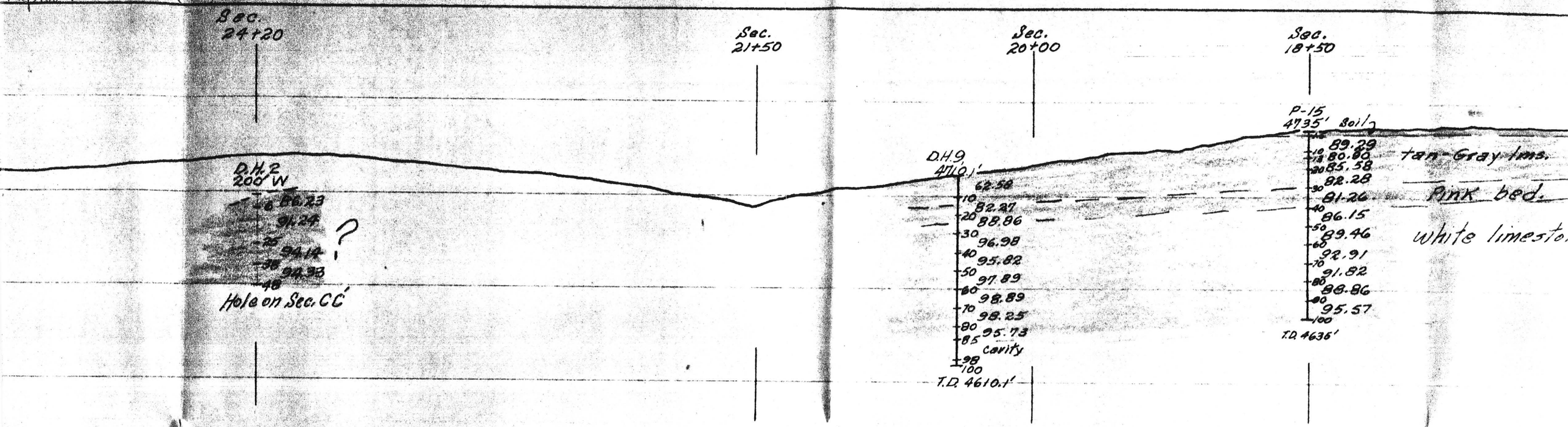
Yavapai County, Arizona

Scale: 1" = 50 ft.

JUNE, 1979

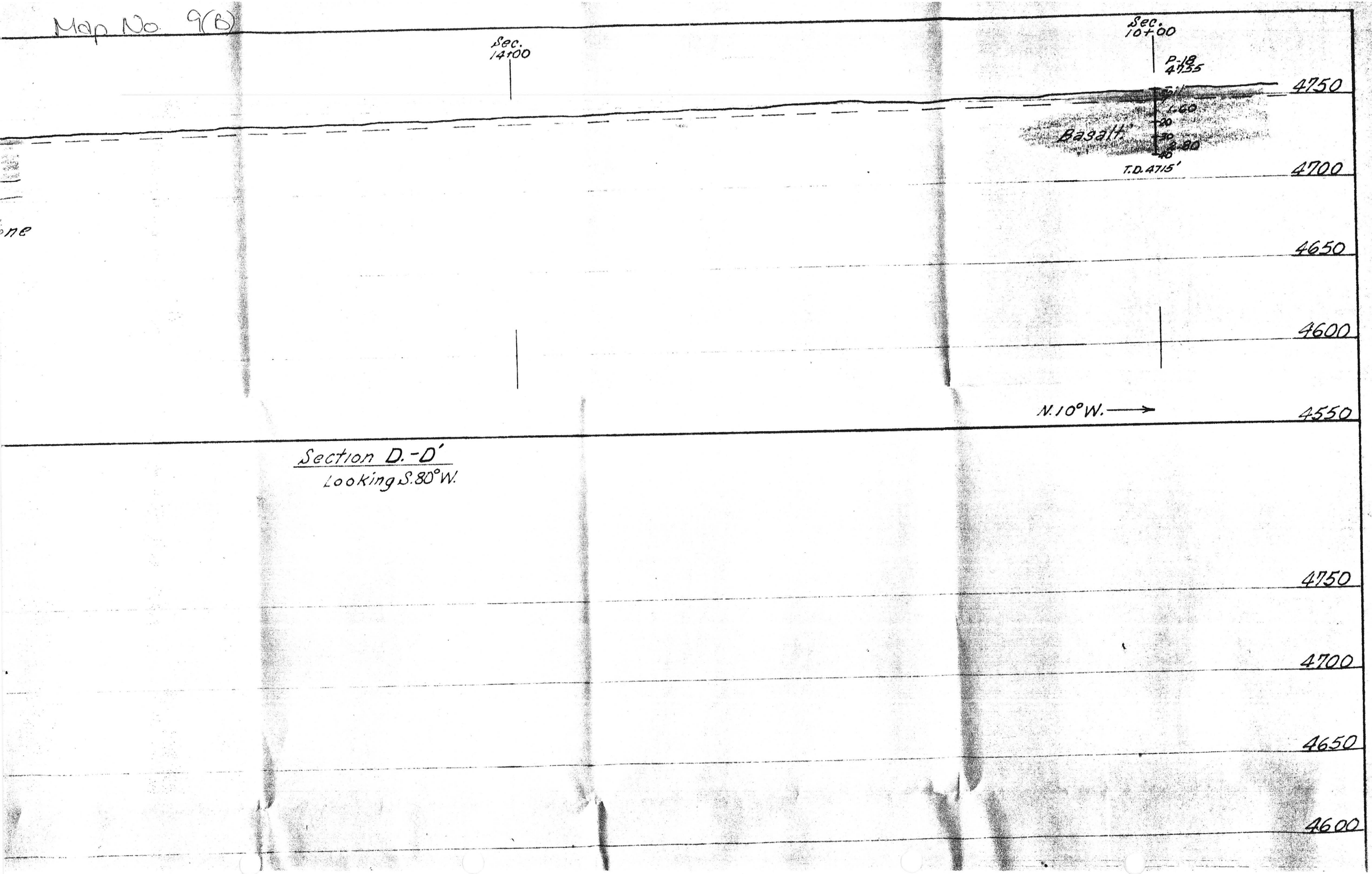
R. E. MIERITZ

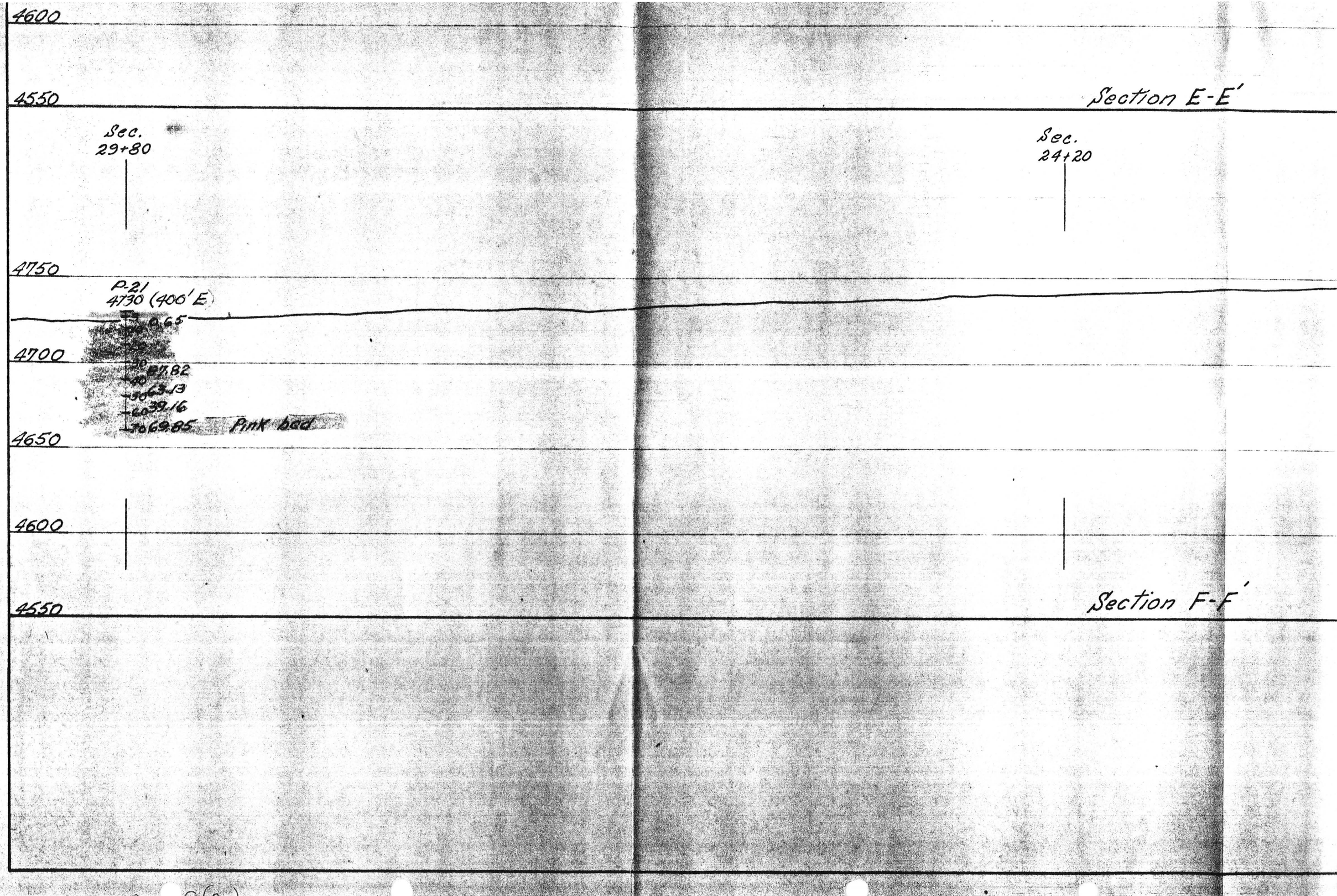
Map No 9. (A)



Section D-D'

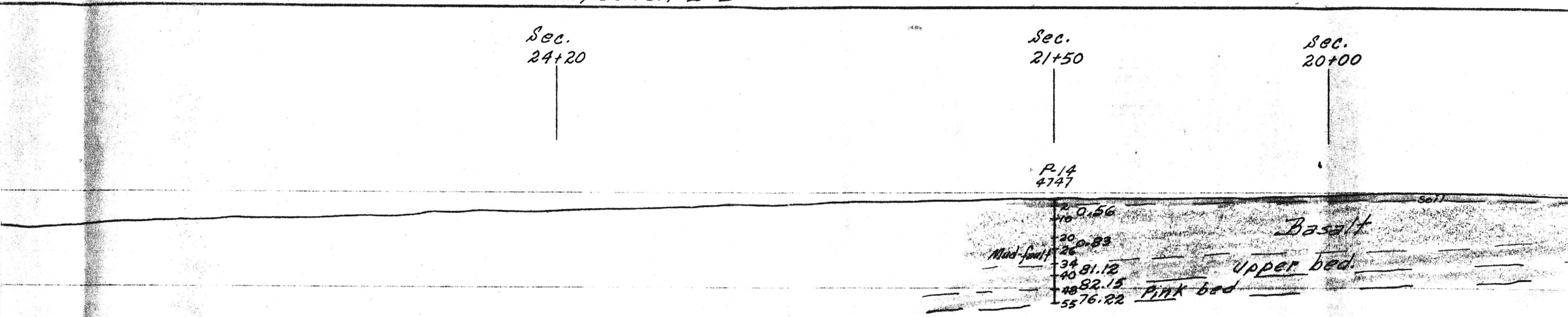
Map No. 9(B)


Sec. 14+00
Sec. 10+00
P-18
4735
Basalt
T.D. 4715'
4750
4700
4650
4600
4550
N.10°W.
Section D.-D'
Looking S.80°W.
4750
4700
4650
4600

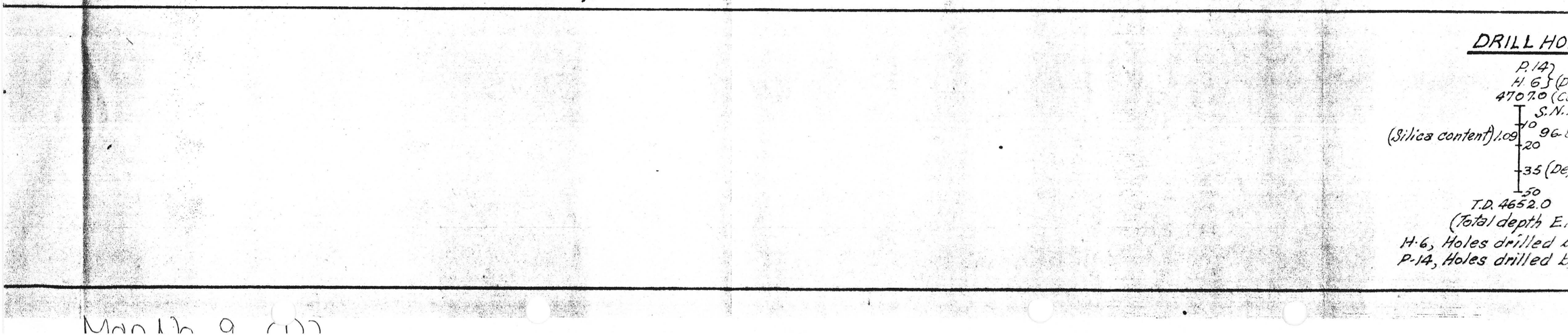

4600
4550
Section E-E'
Sec.
29+80
Sec.
24+20
4750
P.21
4730 (400' E)
0.65
4700
17.82
23.13
39.16
69.85
Pink bed
4650
4600
4550
Section F-F'

Map No. 9(c)

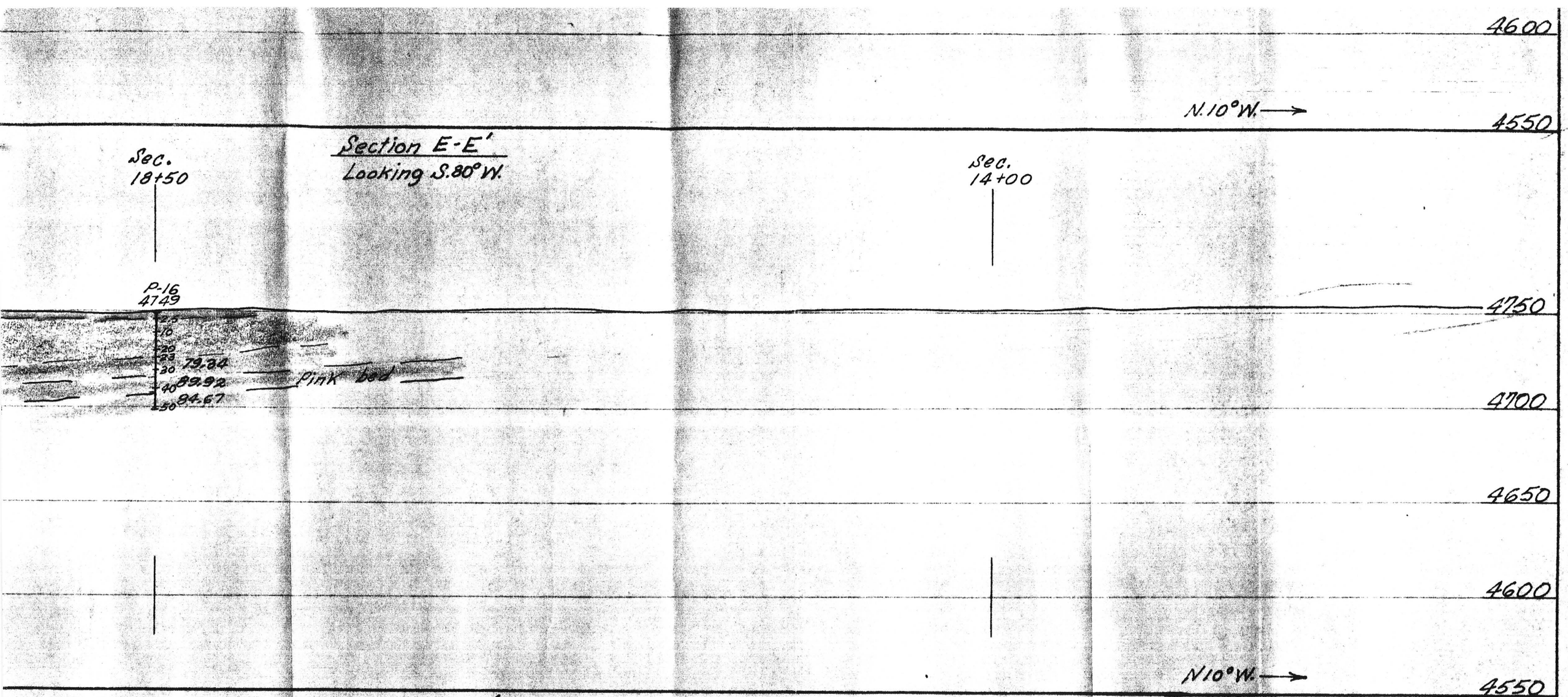
Section E-E'



Section F-F'



Map No. 9 (1)



DRILL HOLE DATA

P.14)
H. 6 } (Drill Hole number)
4707.0 (Collar Elevation)
S.N.A. (Sample not assayed)
10 96.84 ($CaCO_3$ content)
ntent) 1.09
20
35 (Depth)
50
T.D. 4652.0
(Total depth Elevation)
oles drilled by Drake Lime Co.
oles drilled by Can-Am Corp.

LEGEND

- High lime, low silica, crystalline limestone bed (ORE).
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- Limestone, fine grained, visible silica.
- Alluvium & basalt float.
- Basalt.

N.10° W. SECTIONS

DRAKE LIMESTONE

Yavapai County, Arizona

Scale: 1" = 50 ft.

JUNE, 1979

R. E. MIERITZ

(E) Map No 9