

REPORT ON THE DRILLING PROJECT \* INDEX

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April 26, 1963

**REPORT ON THE DRILLING PROJECT OF A SECTION IN THE WILD HORSE RIVER AREA NEAR FORT STEBLE, BRITISH COLUMBIA**

**AUTHORITY**

A telephone conversation with Mr. V. Zay Smith, President V. Zay Smith Associates, from Denver, Colorado on March 7th, 1963, and several subsequent telephone conversations thereafter with Mr. Smith, Mr. C. Newmarch and Mr. Richard L. Hughes.

**SCOPE OF THE PROJECT**

I was authorized to engage Mr. Oscar T. McShane as placer engineer and professional panner; and to supervise and check the drilling of several holes in the Wild Horse River area near Fort Steele, British Columbia.

The drilling was accomplished under a separate contract with Mr. Norman D. Becker of Calgary, Alberta, Canada, using his special impact drill and his crew of four men.

**PURPOSE**

The purpose of the project was to have five specially located holes drilled to bedrock, or to a depth of 150 ft. below surface, whichever was reached first.

**PERFORMANCE**

Mr. McShane and I left San Francisco, California on Thursday April 4th, 1963 and arrived at Cranbrook, British Columbia on April 5th. We were met by Mr. George M. Collins, Jr. and Mr. Angus McKenzie. Shortly thereafter we were taken to the property where we saw the first hole started. As the drill was not near a water location where Mr. McShane could function as usual in the panning process, and at the same time observe the action of the drill to determine the formation encountered it was necessary to carry on the panning operation at some distance from the drilling; therefore the observation of the drill and determination of the formation encountered was accomplished by the writer, and others, and reported to Mr. McShane, who recorded this data on his field log sheets.

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#### REPORT

The report of Mr. McShane of April 15th is attached, as well as a map, marked Figure #1, which pinpoints the location of this project.

#### OPINION

Both Mr. McShane and I agree that your attempt to learn the gold values, formation and depths to bedrock with the Becker drill was correct procedure.

Unfortunately, although the Becker drill had promising possibilities, it did not function as intended on your property, due to being too light for the formation and depths encountered. I had been given several verbal reports showing this drill had performed satisfactorily in placer gravels elsewhere, but evidently none of these placers were as deep, or the formation was not as difficult.

I believe this drill did not have the power to pick up the gold colors, nor the black sands. Black sand is usually indicative of the presence of gold. One hole, #4C, was going satisfactorily to a depth of approximately 116 ft., when the supply of pipe ran out and the hole had to be abandoned, at least temporarily. This hole was located near a high magnetometer reading, and black sands should have shown. The absence of black sands was very apparent. Usually, when this occurs, it is an indication that placer gold is not present. Here, however, it appears to me the drill was responsible for false information, due entirely to its being under powered. A penny, when dropped in the drill pipe, should have been brought immediately to the surface in the collecting tank, but this did not occur because of lack of power.

It is regrettable the Becker drill results were so incomplete, because this drill can make great depths very much faster than the churn drill, but to accomplish its work in the formation on your property, the drill will have to be more powerful. There is also a doubt, from the results of this drilling, whether this drill is capable of picking up metals as heavy as gold, especially when in nugget sizes; therefore the only course left open is for you to make use of the slower, but reliable, churn drill. Even though this type drill is more costly, it will be possible to obtain all the data you are seeking.

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## **FINDINGS**

The observations, from the operation of the Becker drill, are as follows, but could be different if and when a churn drill is used:

It appeared that two formations were encountered. One was very hard and bouldery, which will have a great effect upon the maximum yardage obtainable with a dredge, however this formation is within the capabilities of the bucket-line dredge. The gold contents of the gravels will necessarily have to be higher, to be profitably mined.

The second formation was indicated to be firm and with boulders, but not so difficult, so that a dredge properly constructed for the conditions, can operate at higher maximum yardage and lower cost, than above.

It seems certain that the ground water is at a great distance below the surface, making possible the use of a dredge with less digging depth than if the water was near the surface. This will entail the use of a long stacker, which is a simple design. The shallower digging depth dredge affords a saving in the cost of equipment. It is further indicated that a dredge of approximately 18 cu. ft. bucket capacity would be needed.

## **FUTURE CHURN DRILL PROGRAM**

The purpose of the proposed churn drilling would be to define an area for the operation of one dredge. It is recommended the highest magnetometer readings be depended upon for locating the holes for your drilling program. More magnetometer readings than you now have are necessary, to reduce the cost of churn drilling.

The churn drill could be expected to more quickly determine the presence of large quantities of black sands, which in turn, will be the most likely places to find gold values.

On this basis, it appears the best place to start the first drill hole would be at your #4C. The other holes should be along a line at right angles to the stream flow, with all holes spaced at easily calculated distances, such as 400 ft. centers suggested by Mr. McShane. Next, follow along this line either farther away, or closer to #4C, as indicated by

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the drill hole results. The distances between the parallel drill lines can be at least 1000 ft., again depending upon the magnetometer readings.

#### CONCLUSIONS

The use of the Becker drill on your property for the drilling of five preliminary holes was of sound judgement. I had looked forward to seeing the drill at work, after hearing so many good reports from various sources, but unfortunately the results were very disappointing, due apparently to the rig being too light for the work involved. No one could possibly foresee the results which were obtained.

A churn drill program will now be necessary, if you wish to obtain a proper report of your values. As it now stands, the property has produced only a few gold colors and no black sands.

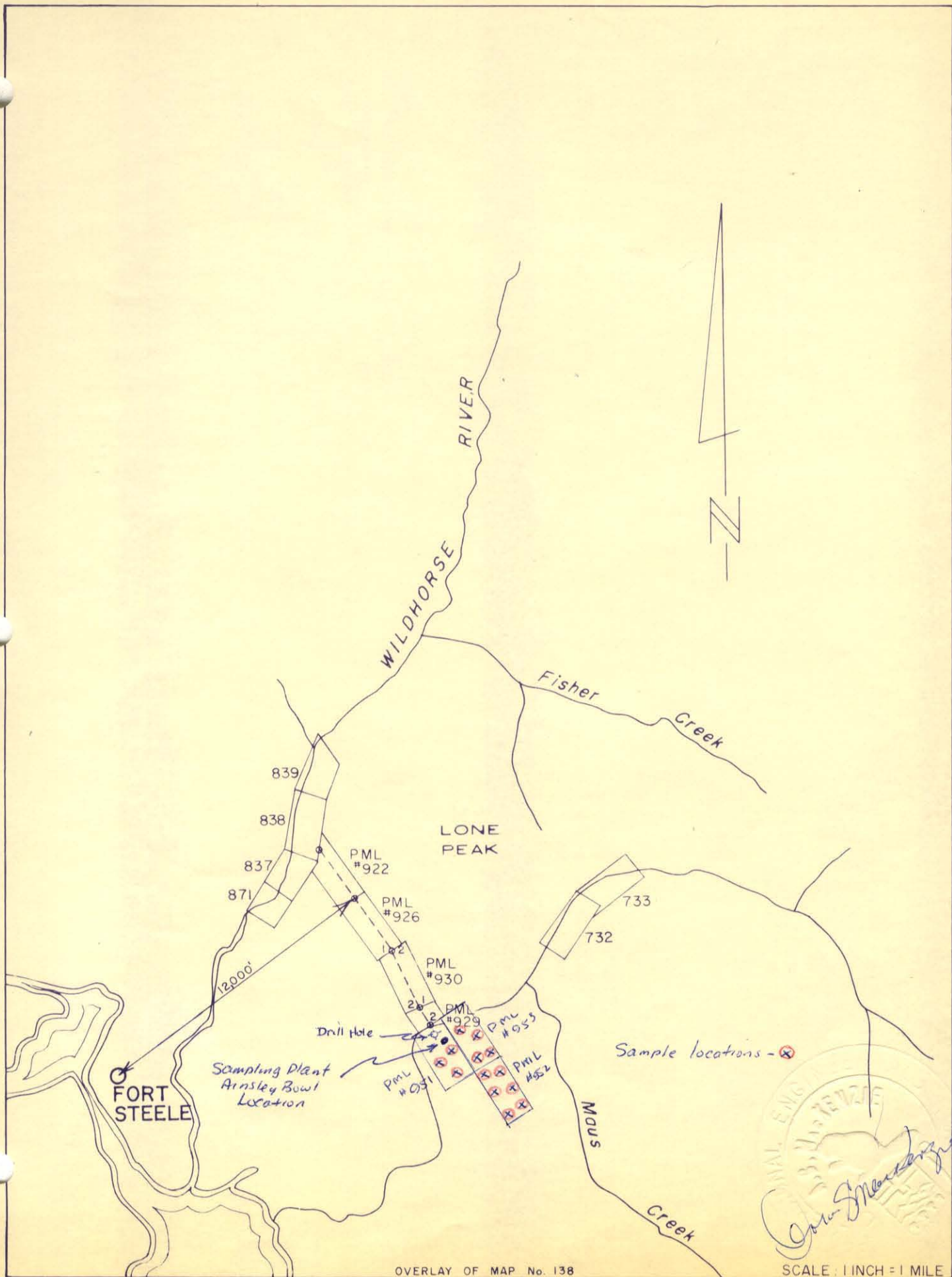
Your property appears to be in a gold zone and the only way to prove values exist is with a churn drill program. A few holes with a churn drill will indicate if gold is present, and what the future program should be.

It has been very pleasant working with you and your associates, all of whom are of one mind - that is, to prove your property for a gold mining operation.

I trust your immediate churn drill program will prove up to your expectations, and am looking forward to serving you further on this project.

Charles M. Romanowitz  
Consulting Engineer

CMR:mar



OVERLAY OF MAP No. 138

FIGURE 1

# FIELD LOG

DRILL BECKER

O.D. = 5.5 INCHES DIA.  
SHOE DIAM. I.D. = 3.0 IN. DIA.

TIME LOG	DEPTH				CORE		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY	
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		1	2	3	F. Specks			FORMATION AND REMARKS	FORT STEELE DISTRICT
	FT.	IN.	FT.	IN.											WILDHORSE CREEK, B.C.
	6	-	6	-				-	-	-	0		SOIL-GR-Sm. CL. V. LITTLE BL. SD.		
	6	-	14	-				-	-	-	0		BOULDER-F. GR. Sm. CL. V. " " "		
	14	-	22	-				-	-	-	0		Cs. GR. Sm. Sdy. GREY CL. V. LITTLE BL. SD.		
	22	-	30	-				-	-	-	TR		" " " " " " " " " " " "		
	30	-	40	-				-	-	-	TR		MED. GR. - LITTLE GREY Sdy. CL. V. LITTLE BL. SD.		
	40	-	46	-				-	-	-	0		MED. & F. GR. - SD. V. LITTLE BL. SD.		
APRIL 6 <sup>th</sup>	46	-	56	-				-	-	-	0		" " " " " " " " " " " "		
	56	-	64	-				-	-	-	0		SD. F. GR. No BL. SD.		
	64	-	72	-				-	-	-	0		" " " " " " " " " " " "		
	72	-	80	-				-	-	-	0		Cs. GR. Sm SD. No BL. SD.		
	80	-	88	-				-	-	-	0		Cs. GR. - SD. - Sm. TIGHT CL. No BL. SD.		
	88	-	96	-				-	-	-	0		MED. GR. - SD. - Sm. CL. No BL. SD.		
	96	-	104	-				-	-	-	0		Cs. + MED. GR. SD. Sm. CL. No BL. SD.		
	104	-	108	-				-	-	-	0		HARD CEMENT WITH Cs. GR. Sm. BL. SD.		

Wt. of Gold.....TR.....mg.

Bedrock...NOT REACHED.....

Water Level.....      .....Ft.

Val. per Cu. Yd.....      .....cts.

Depth to B.R.....      .....Ft.

Driller...LOYD BECKER.....

Depth Figured.....      .....Ft.

Frozen.....      .....to.....      .....Ft.

Panner...O.T. McAlane.....

Muck Not Figured.....      .....Ft.

Thawed.....      .....to.....      .....Ft.

Date Begun...4/5/63.....

Date Finished...4/6/63.....

Line.....      .....Hole No. 1.....

### ABBREVIATIONS

F.—Fine  
Cs.—Coarse  
Mk.—Muck

Sd.—Sand  
Gr.—Gravel  
Cl.—Clay

Med.—Medium  
Hd.—Hard  
Sm.—Some

[OVER]

## NOTES

Shoe used in this hole threw the material to the outside and obtained the 3 inch diameter pipe core.

Gold recovered in hole too little to weigh and to figure the value for the hole.

Core volume figured at 3 inch diameter hole.



# FIELD LOG

DRILL... B. BECKER...

SHOE DIAM. 3" DIA. CORE, IN.

TIME LOG	DEPTH				TIME TO CLOSE		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY	
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		1	2	3	F. Specks			FORMATION AND REMARKS	FORT STEELE DISTRICT,
	FT.	IN.	FT.	IN.											
8:45 AM	0	-	7	-	6	MIN		-	-	-	-			TOP SOIL - Sdy. CL. F. GR.	
8:51	7	-	12	-	9	MIN		-	-	-	-			BOULDER AT 12' - GR. - Sm. Sd.	
9:00	12	-	15	-	7	MIN		-	-	-	-			BOULDER - Cs. GR. Sd.	
9:16	15	-	22	-	16	MIN		-	-	-	-			MED. + F. GR. - BOULDER Sm. BLK. Sd.	
9:24	22	-	30	-	9	MIN		-	-	-	-			Cs. GR. GREY Sd. Sm. BLK. Sd.	
9:35	30	-	38	-	11	MIN		-	-	-	-			Cs. GR. GREY Sd. V. LITTLE BLK. Sd.	
9:37	38	-	46	-	(See Notes)			-	-	-	-			MED. + Cs. GR. LITTLE Sd. - V. LITTLE BLK. Sd.	
10:16	46	-	54	-	5	MIN		-	-	-	-			MED. + F. GR. Sm. Sd. - No BLK. Sd.	
10:22	54	-	62	-	6	MIN		-	-	-	-			F. GR. GREY Sd. - No BLK. Sd.	
10:28	62	-	70	-	6	MIN		-	-	-	-			F. GR. Sm. GREY Sd. - No BLK. SAND.	
10:39	70	-	78	-	11	MIN		-	-	-	-			TIGHT MED. + F. GR., GREY Sd. No BLK. Sd.	
10:49	78	-	86	-	10	MIN		-	-	-	-			TIGHT BOULDER - F. GR. - Sd. No BLK. Sd.	
11:03	86	-	94	-	14	MIN		-	-	-	-			TIGHT GROUND. Sd. + GRAVEL - No BLK. Sd.	
11:35	94	-	98	-	32	MIN		-	-	-	-			TIGHT GROUND GRAVEL - Sd. No BLK. Sd. BED ROCK AT 98'	

Wt. of Gold.....mg.      Bedrock. HARD QUARTITE.....      Water Level.....Ft.  
 Val. per Cu. Yd.....cts.      Depth to B.R. 98-0.....Ft.      Driller..... BECKER.....  
 Depth Figured.....Ft.      Frozen.....to.....Ft.      Panner..... O.T. McFarlane.....  
 Muck Not Figured.....Ft.      Thawed.....to.....Ft.  
 Date Begun. 4/7/63.....      Date Finished. 4/7/63.....      Line.....Hole No. 2.....

### ABBREVIATIONS

F.—Fine  
Cs.—Coarse  
Mk.—Muck

Sd.—Sand  
Gr.—Gravel  
Cl.—Clay

Med.—Medium  
Hd.—Hard  
Sm.—Some

(OVED)

## NOTES

LOCATION OF THIS HOLE IS NEAR MAUS CREEK, ABOVE  
SMALL BRIDGE ON MAIN ROAD.

Shoe used in this hole pushed the material to the outside  
and obtained the 3" diameter core.

From depths 38'-46' CREW experienced difficulty in driving  
pipe. Lifted pipe, poked rocks in pipe, discharge hose  
clogged. Found rock stuck in head. This explains the time  
break in the section 38'-46'

No gold recovered from this hole.

# FIELD LOG

DRILL BECKER

SHOE DIAM. 5.5 O.D. IN.

TIME LOG	DEPTH				CORE		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY	
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		1	2	3	F. Specks			FORMATION AND REMARKS	FORT STEELE DISTRICT.
	FT.	IN.	FT.	IN.											WILDHORSE CREEK - B.C.
1:20 PM	0	-	6	-	.2004		-	-	-	-	-		TOP SOIL - F. GR. - Sm. CL. No Blks. - Much Sulphid		
1:33	6	-	14	-	.2004		-	-	-	-	-		TIGHT GRAVEL TO 12' - LOOSE GR. SULPHIDES		
1:43	14	-	22	-	.2672		-	-	1	-	100g		TIGHT GR. SULPHIDES - No BLK. SD.		
2:30	22	-	30	-	.6346		-	-	-	2	TR		F. + MED. GR. Sm. BLUE GL. LARGE BOULDER AT 30'		
					1.3026	CU. FT.									

Wt. of Gold.....mg.      Bedrock. NOT REACHED - HOLE ABANDONED      Water Level.....Ft.

Val. per Cu. Yd.....cts.      Depth to B.R.....Ft.      Driller LLOYD BECKER

Depth Figured.....Ft.      Frozen.....to.....Ft.      Panner O.T. McKeane

Muck Not Figured.....Ft.      Thawed.....to.....Ft.

Date Begun APRIL 7<sup>th</sup> 1963      Date Finished APRIL 7<sup>th</sup> 1963      Line.....Hole No. 3

**ABBREVIATIONS**

- |            |            |             |
|------------|------------|-------------|
| F.—Fine    | Sd.—Sand   | Med.—Medium |
| Cs.—Coarse | Gr.—Gravel | Hd.—Hard    |
| Mk.—Muck   | Cl.—Clay   | Sm.—Some    |
- (OVED)

## NOTES

Location of hole No. 3. North central part of most northerly claim No. 922 approximately on the axis of channel and about 300' S.E. of north boundary.

Shoe used at start of No. 3, threw the material to the outside and obtained only the 3" core to start the hole, then changed the shoe to throw the material towards the core, at 30 feet, thus give a volume of the full 5.5 inch core volume.

0 to 6' Gravel with very little top soil, but with some clay. At 4' apparently a boulder was reached, and the formation from 4' to 12' was hard. From 12' to 14' some loose gravel with sand. Apparently the same formation from 14' to 22'. At 22' rock jammed in pipe, requiring use of the poking rods to loosen the rock. At 24' a boulder was reached. Pulled back the pipe a short distance to clear the pipe. At 27' apparently drilled through a boulder, formation tight with some clay at this depth to 30'. Progress was slow, decided to pull out and change shoe. This new shoe would throw the material to the center and therefore give a larger core, after changing shoe no progress was made, as pipe did not reach previous depth. Decided to abandon the hole. And when shoe was examined it was noticed it was smaller in diameter than the shoe it replaced. It could not make hole large enough for the pipe to pass through.

# FIELD LOG

DRILLER BECKER

SHOE DIAM. 5 1/2 O.D. IN.

TIME LOG	DEPTH				CORE		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY	
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		BIG	MEDIUM	SMALL	F. Specks			FORMATION AND REMARKS	FORT STEELE DISTRICT. WILDHORSE CREEK - B.C.
	FT.	IN.	FT.	IN.											
9:42	0	-	6	-										TOP SOIL - F. GR. - Sd.	
10:05	6	-	12.5	-										BOULDER AT 8' WITH Sd + GR.	
BIT USED IN THIS HOLE, PUSHED MATERIAL TOWARDS CENTER OF THE HOLE. DIAMETER OF BIT = 5 1/2" O.D.															
AT 8'-0" APPARENTLY REACHED A LARGE BOULDER, PROGRESS VERY SLOW, THIS SLOW PROGRESS CONTINUED TO 12.5' APPARENTLY NO IMPROVEMENT WAS POSSIBLE. DECIDED TO MOVE TO NEW LOCATION AND START HOLE NO. 4-A															
LOCATION OF HOLE NO. 4, WOULD BE SHOT POINT 9 ON NORTH SEISMIC LINE															

Wt. of Gold.....mg.

Bedrock NOT REACHED

Water Level.....Ft.

Val. per Cu. Yd.....cts.

Depth to B.R.....Ft.

Driller LLOYD BECKER

Depth Figured.....Ft.

Frozen.....to.....Ft.

Panner O.T. McPherson

Muck Not Figured.....Ft.

Thawed.....to.....Ft.

Date Begun 4/8/63

Date Finished 4/8/63

Line.....Hole No. 4

### ABBREVIATIONS

F.—Fine  
Cs.—Coarse  
Mk.—Muck

Sd.—Sand  
Gr.—Gravel  
Cl.—Clay

Med.—Medium  
Hd.—Hard  
Sm.—Some

# FIELD LOG

DRILL... BECKER

SHOE DIAM. 5.5 O.D. IN.

TIME LOG	DEPTH				CORE CU. FT.		MEASURED VOL. CU. FT. 1000 TIME	COLORS				EST. MG.	DRILLED BELOW	PROPERTY
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		BIG	MEDIUM	SMALL	F. Specks			FORMATION AND REMARKS
	FT.	IN.	FT.	IN.				1	2	3				
10:16	0	-	6	-	0.3306	6 MIN	-	-	-	-	-	-		TOP SOIL - Sm. CL. F.GR. No BLK. Sd.
10:29	6	-	14	-	.6012	18 MIN	-	-	-	-	-	-		FIRM MED. & F. GR. No BLK. Sd.
11:06	14	-	22	-	.6012	37 MIN	-	-	-	-	-	-		LARGE + SMALL BOULDERS F.GR. No BLK. Sd.
11:25	22	-	30	-	.4008	19 MIN	-	-	-	-	-	-		MED. + FINE GR. SAND. No BLK. Sd.
11:30	30	-	33	-	.1336	5 MIN	-	-	-	1 TR	-	-		MED. GR. GREY SAND. No BLK. SAND.
					2.0374									
THIS HOLE LOCATED ABOUT 4' EAST OF HOLE No. 4														
BIT USED 5 1/2" DIA. AND CAST ALL MATERIAL INTO CENTER OF 3" CORE PIPE.														
AT 8' REACHED FIRM GRAVEL, NOT USING WATER, THE PROGRESS WAS SLOW. 10' TO 13' USED WATER, DRILLING WAS MUCH BETTER.														
LARGER SAMPLE RECOVERED DUE TO USING LARGER SHOE. AT 14' STRUCK A LAYER OF SMALL BOULDERS, SLOW DRILLING. AT 15' STRUCK A LARGE BOULDER, SLOW DRILLING, EVEN WHEN RAISED PIPE AND PUT WATER IN HOLE. AT 19' PROGRESS WAS GOOD. DRILLING EAST FROM 22' TO 30' ALTHOUGH IN COARSE GRAVEL. AT 32' NOTICED GROUND WATER IN HOLE. AT 33' PIPE SEEMED TO PLUG. PIPE PLUGGED SECOND TIME. BY USING RADS, IT APPEARED SOMETHING BROKE 28' FROM TOP. DECIDED TO PULL ALL PIPE. AT SECOND JOINT, PIPE WAS BROKEN, LEAVING TWO LENGTHS OF 8' PIPE IN THE HOLE AND NOT RECOVERABLE. DECIDED TO MOVE TO HOLE No 4-B.														

Wt. of Gold..... TR.....mg.      Bedrock... NOT REACHED.....      Water Level... 32'-0" Ft.

Val. per Cu. Yd..... \_\_\_\_\_ cts.      Depth to B.R..... \_\_\_\_\_ Ft.

Depth Figured..... \_\_\_\_\_ Ft.      Frozen..... \_\_\_\_\_ to..... \_\_\_\_\_ Ft.

Muck Not Figured..... \_\_\_\_\_ Ft.      Thawed..... \_\_\_\_\_ to..... \_\_\_\_\_ Ft.

Date Begun... 4/8/63.....      Date Finished... 4/8/63.....      Line..... \_\_\_\_\_ Hole No... 4-A.....

### ABBREVIATIONS

F.—Fine	Sd.—Sand	Med.—Medium
Cs.—Coarse	Gr.—Gravel	Hd.—Hard
Mk.—Muck	Cl.—Clay	Sm.—Some

# FIELD LOG

DRILL. BECKER.....

SHOE DIAM. 5.5 O.D......IN.

TIME LOG	DEPTH				CORE CU. FT.		MEASURED CH-LET VOL. 1000 TIME	COLORS				EST. MG.	DRILLED BELOW	PROPERTY FORT STEELE DISTRICT WILDHORSE CREEK - B.C.  FORMATION AND REMARKS
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		BIG	MEDIUM	SMALL	F. Specks			
	FT.	IN.	FT.	IN.										
2:05	0	-	6	-	.2004	6MIN	-	-	-	-	-		TOP SOIL - Sdy. CL. - V. LITTLE GR.	
2:35	6	-	10	7"	.3340		-	-	-	-	-		BOULDER ABOUT 8'	
					.5344									
<p>PROGRESS SLOWED MATERIALLY AT 8'. DECIDED TO BLAST BOULDER. USED 4 STICKS 40% POWDER. RESULTS WERE POOR, OBTAINED ONLY 3" MORE DEPTH. WHEN PROGRESS SLOWED TO A STOP, DECIDED TO USE 15 STICKS OF 40% POWDER FOR SECOND SHOT. AFTER SHOT ONLY MADE 4" MORE OF DEPTH. IT WAS DECIDED THIS MUST BE A LARGE BOULDER, IT BEING OF THE SAME MATERIAL AS THAT IN HOLE 4-A. ABANDONED HOLE AND MOVED TO 4-C.</p>														
<p>LOCATION OF HOLE 4-B IS ABOUT 20' S, E OF HOLE 4</p>														

Wt. of Gold.....0.....mg.      Bedrock...NOT REACHED.....      Water Level.....Ft.

Val. per Cu. Yd.....cts.      Depth to B.R.....Ft.      Driller...LLOYD DECKER.....

Depth Figured.....Ft.      Frozen.....to.....Ft.      Panner...O.T. McKeane.....

Muck Not Figured.....Ft.      Thawed.....to.....Ft.

Date Begun...4/8/63...      Date Finished...4/8/63...      Line.....Hole No...4-B...

### ABBREVIATIONS

- |            |            |             |
|------------|------------|-------------|
| F.—Fine    | Sd.—Sand   | Med.—Medium |
| Cs.—Coarse | Gr.—Gravel | Hd.—Hard    |
| Mk.—Muck   | Cl.—Clay   | Sm.—Some    |

# FIELD LOG

 DRILL... BECKER...

 SHOE DIAM. 5.5" O.D......IN.

TIME LOG	DEPTH				CORE CU. FT.		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY FORT STEELE DISTRICT WILDHORSE CREEK - B.C.  FORMATION AND REMARKS
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		BIG	MEDIUM	SMALL	F. Specks			
	FT.	IN.	FT.	IN.										
3:41	0	-	6	-	.16	80		-	-	-	-	-	-	TOP SOIL - GLACIAL CL. LITTLE BLK. Sd.
4:00	6	-	14	-	.50	10	19 MIN	-	-	-	-	-	-	TIGHT GR. WITH BOULDERS. Sd. NO BLK. Sd.
4:14	14	-	22	-	.36	74	14 MIN	-	-	-	-	-	-	CS. GR. WITH BOULDERS Sd. NO BLK. Sd.
4:27	22	-	30	-	.40	08	13 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
4:47	30	-	38	-	.40	08	20 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
4:56	38	-	46	-	.20	04	9 MIN	-	-	-	-	-	-	MED. + F. GR. GREY Sd. NO BLK. SAND.
5:08	46	-	54	-	.40	08	12 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
5:16	54	-	62	-	.40	08	8 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
5:25	62	-	70	-	.20	04	9 MIN	-	-	-	-	-	-	F. GR. GREY SAND, NO BLK. SAND.
8:15	70	-	78	-	.16	80	7 MIN	-	-	-	1	2	-	CS. + F. GR. SAND. NO BLK. SAND.
8:24	78	-	86	-	.13	36	9 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
8:41	86	-	94	-	.10	03	17 MIN	-	-	-	-	-	-	" " " " " " " " " " " "
8:51	94	-	102	-	.06	68	10 MIN	-	-	-	-	-	-	F. GR. Sd. WITH Sm. CS. GR. NO BLK. Sd.
8:58	102	-	112	-	.35	091		-	-	-	-	-	-	RAISED PIPE (NO SAMPLE)
9:18	112	-	116	-				-	-	-	-	-	-	EASY GOING (NO SAMPLE) OUT OF PIPE AT 116'

 Wt. of Gold.....2.....mg.  
 Val. per Cu. Yd.....      .....cts.  
 Depth Figured.....      .....Ft.  
 Muck Not Figured.....      .....Ft.  
 Date Begun 4/8/63...

 Bedrock... NOT REACHED.....  
 Depth to B.R.....      .....Ft.  
 Frozen.....      .....to.....      .....Ft.  
 Thawed.....      .....to.....      .....Ft.  
 Date Finished 4/9/63.....  
 Water Level.....      .....Ft.  
 Driller ALLOYD BECKER.....  
 Panner O.T. McPherson.....  
 Line.....      .....Hole No. 4-C...

### ABBREVIATIONS

F.—Fine	Sd.—Sand	Med.—Medium
Cs.—Coarse	Gr.—Gravel	Hd.—Hard
Mk.—Muck	Cl.—Clay	Sm.—Some

(OVER)



## NOTES

THIS HOLE LOCATED ABOUT 75' TOWARDS THE ROAD FROM HOLE NO. 4.

0' TO 6' TOP SOIL AND GLACIAL CLAY. AT 9' GROUND TIGHTENED, PERHAPS A BOULDER. THIS CONDITION CONTINUED FOR 2 FEET TO 11'

11' TO 16' FAIR PROGRESS WAS MADE. FROM 16' TO 70' THE PROGRESS WAS GOOD WITH THE OCCASIONAL DELAY DUE TO PIPE CLOGGING. ALSO SOME DELAY DUE TO MOVING DRILL AWAY FROM HOLE, AS WET GROUND WAS ~~SLIP~~ CAUSING DRILL TO SLIP FROM HOLE, SINCE DRILL WAS SET ON A SLIGHT ENCLINE, AND WAS SLIPPING FORWARD.

SHOE USED 5.5" DIA. GAVE A LARGER SAMPLE AS THIS SHOE PUSHED MATERIAL TOWARDS THE CORE PIPE.

# FIELD LOG

DRILLER BECKER.....

SHOE DIAM. 5.5" O.D......IN.

TIME LOG	DEPTH				CORE		MEASURED VOL. CU. FT. 1000	COLORS				EST. MG.	DRILLED BELOW	PROPERTY	
	PIPE		HOLE		BEFORE PUMP	AFTER PUMP		1	MEDIUM	SMALL	F. Specks			FORMATION AND REMARKS	FORT STEELE DISTRICT.
	FT.	IN.	FT.	IN.											WILDHORSE CREEK
	0	-	6	-	.4676		-	-	-	-	-		F. + MED GR. - Sd. TOP SOIL		
	6	-	14	-	.3674		-	-	-	-	-		"		
	14	-	22	-	.8016		-	-	-	4	TR.		TIGHT MED. + F. GR. - SAND. V. LITTLE BLK. SD.		
	22	-	30	-	.5344		-	-	-	-	-		"		
	30	-	38	-	.4008		-	-	-	-	-		"		
	38	-	46	-	.4008		-	-	-	-	-		MED. + F. GR. GREY Sd. NO BLK. SAND		
	46	-	54	-	.4008		-	-	-	-	-		"		
	54	-	62	-	.4008		-	-	-	-	-		Sd. F. GR. Sm. Sdy. CL. NO BLK. Sd.		
	62	-	64	-	.3340		-	-	-	1	1		MED. + F. GR. Sd. TOP B-R at 64'		
	64	-		-	<del>.3340</del> <del>.675</del> 4.422		-	-	-	-	-		BED ROCK OR BOULDER.		

Wt. of Gold.....mg.

Bedrock. BED ROCK OR BOULDER.....

Water Level.....Ft.

Val. per Cu. Yd.....cts.

Depth to B.R. ?.....Ft.

Driller. LLOYD BECKER.....

Depth Figured.....Ft.

Frozen.....to.....Ft.

Panner. O.T. McArone.....

Muck Not Figured.....Ft.

Thawed.....to.....Ft.

Date Begun APRIL 9<sup>th</sup> 1963

Date Finished 4/9/63.....

Line.....Hole No. 5.....

### ABBREVIATIONS

F.—Fine  
Cs.—Coarse  
Mk.—Muck

Sd.—Sand  
Gr.—Gravel  
Cl.—Clay

Med.—Medium  
Hd.—Hard  
Sm.—Some

(OVER)

NOTES

LOCATION OF THIS HOLE = 2000' SOUTH 30° EAST FROM 4-C.

PULLED OUT AT 62' WASHED OUT HOLE, HARDER DRILLING FOR NEXT FOOT, 62'-63' MEDIUM GRAVEL, PULLED AGAIN AT 63' PIPE PULLED HARD, WASHED OUT HOLE AGAIN.

FROM 63'-64' MEDIUM TO COARSE GRAVEL. AT 64' PULLED PIPE AGAIN AND WASHED OUT HOLE. STARTED DRILLING AGAIN AT 64' GROUND VERY HARD, DRILLED FOR EIGHT MINUTES, PULLED AGAIN, DROVE ANOTHER 17 MINUTES, GAINED ABOUT 2 INCHES. APPARENTLY HARD BOULDER.