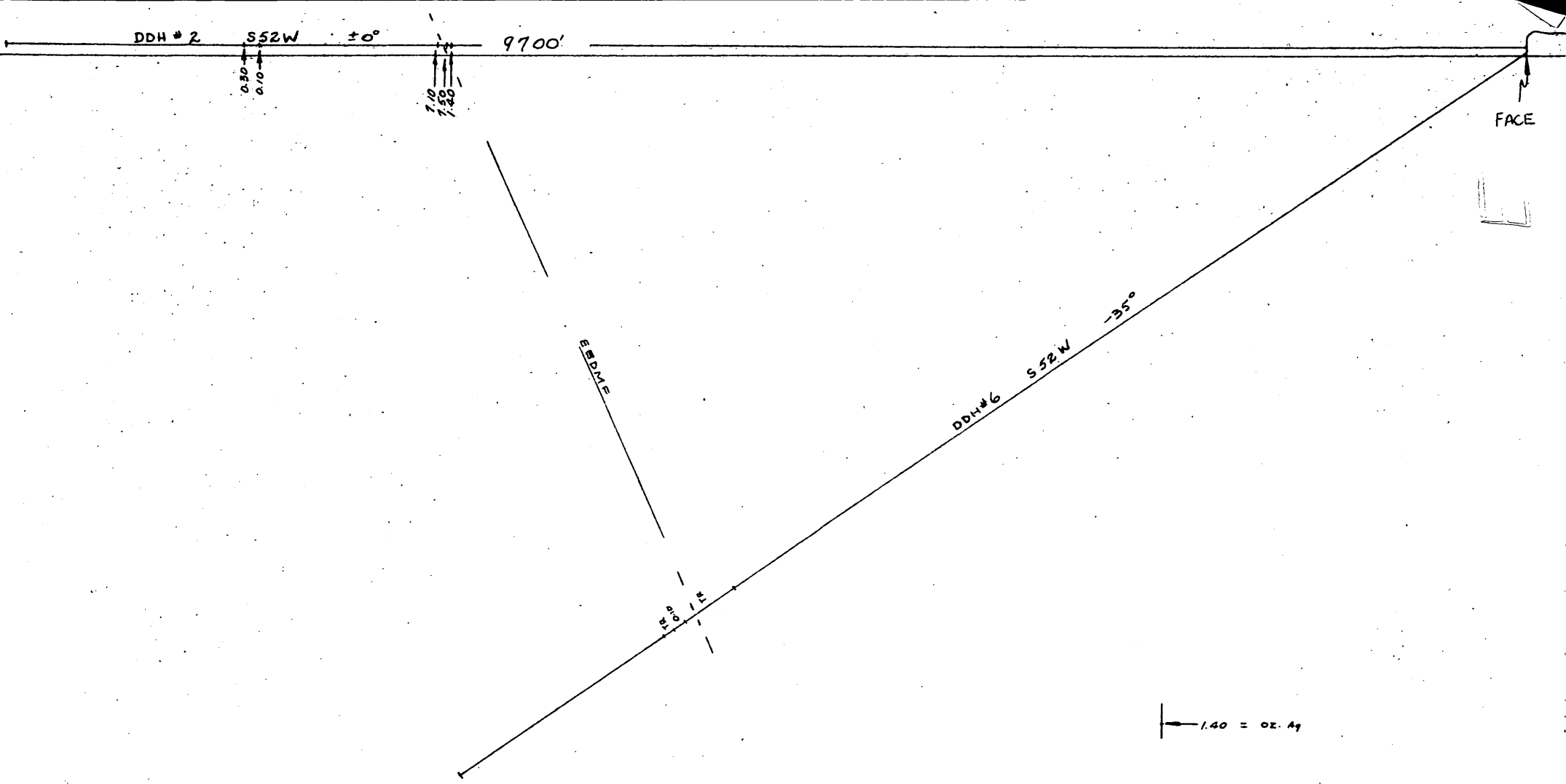
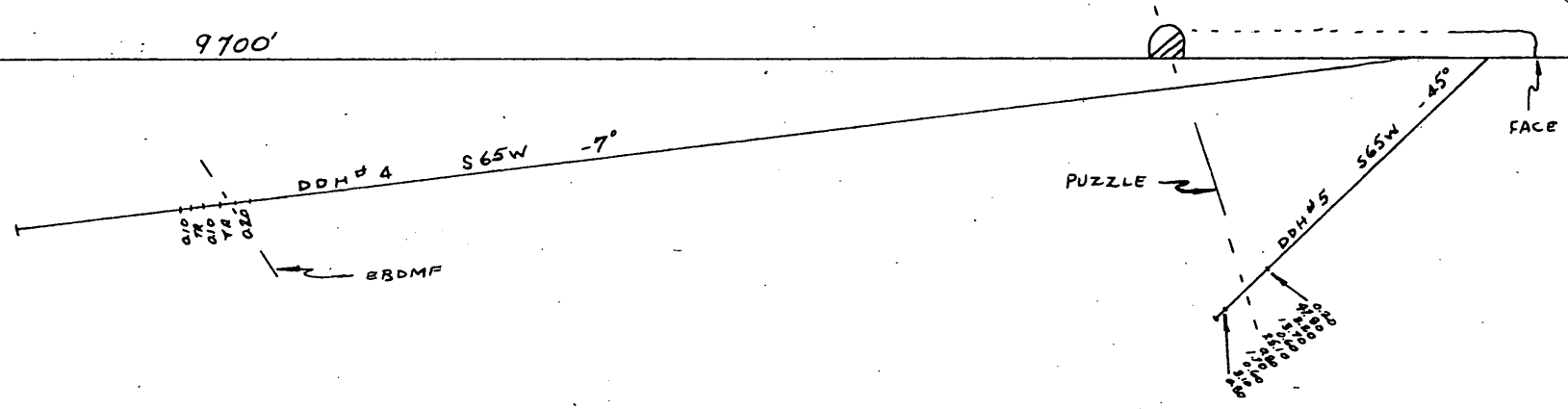
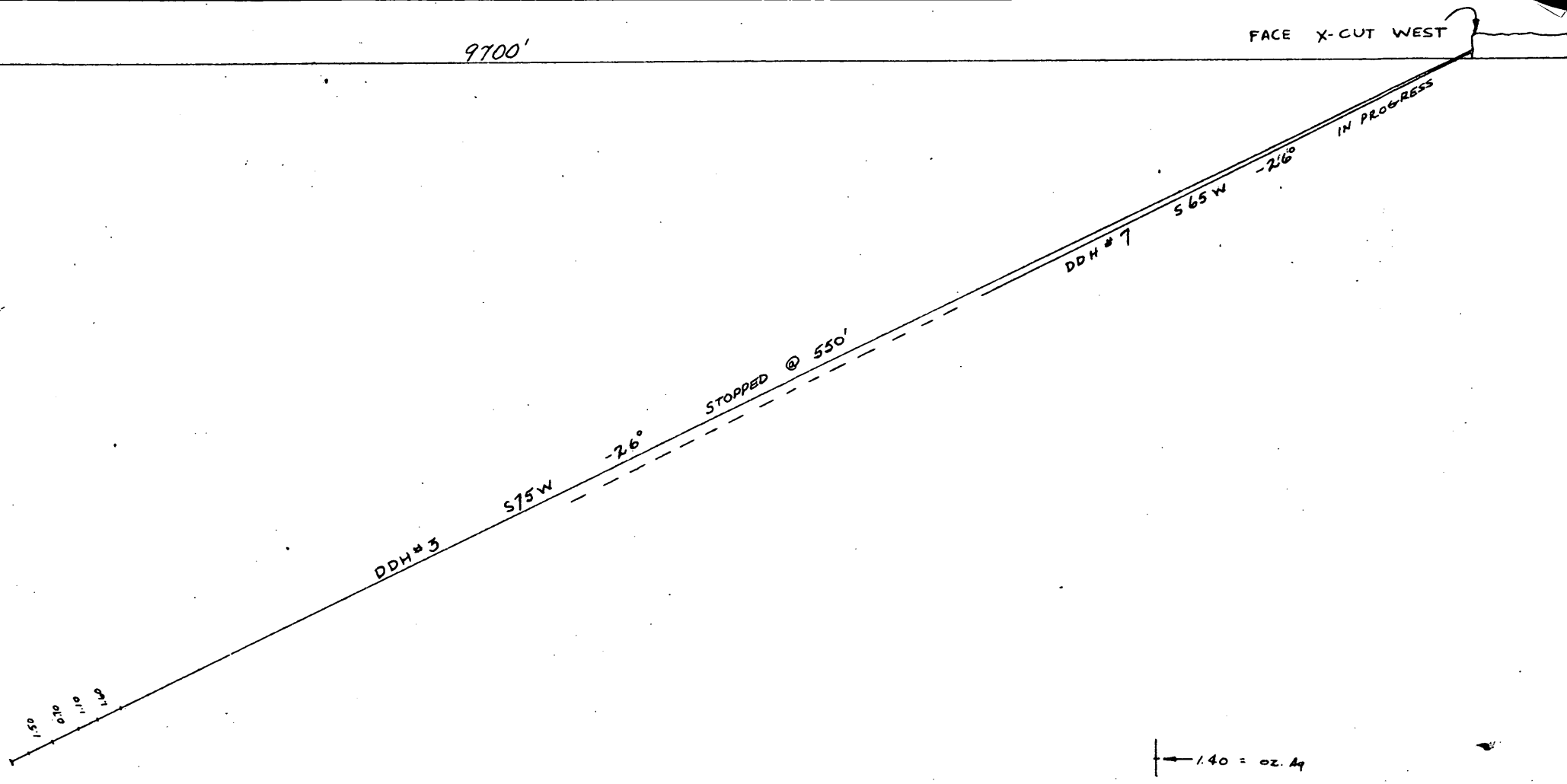


CROSS-SECTION THRU
DDH # 2 AND # 6
LOOKING NORTHWEST
SCALE 1" = 50'

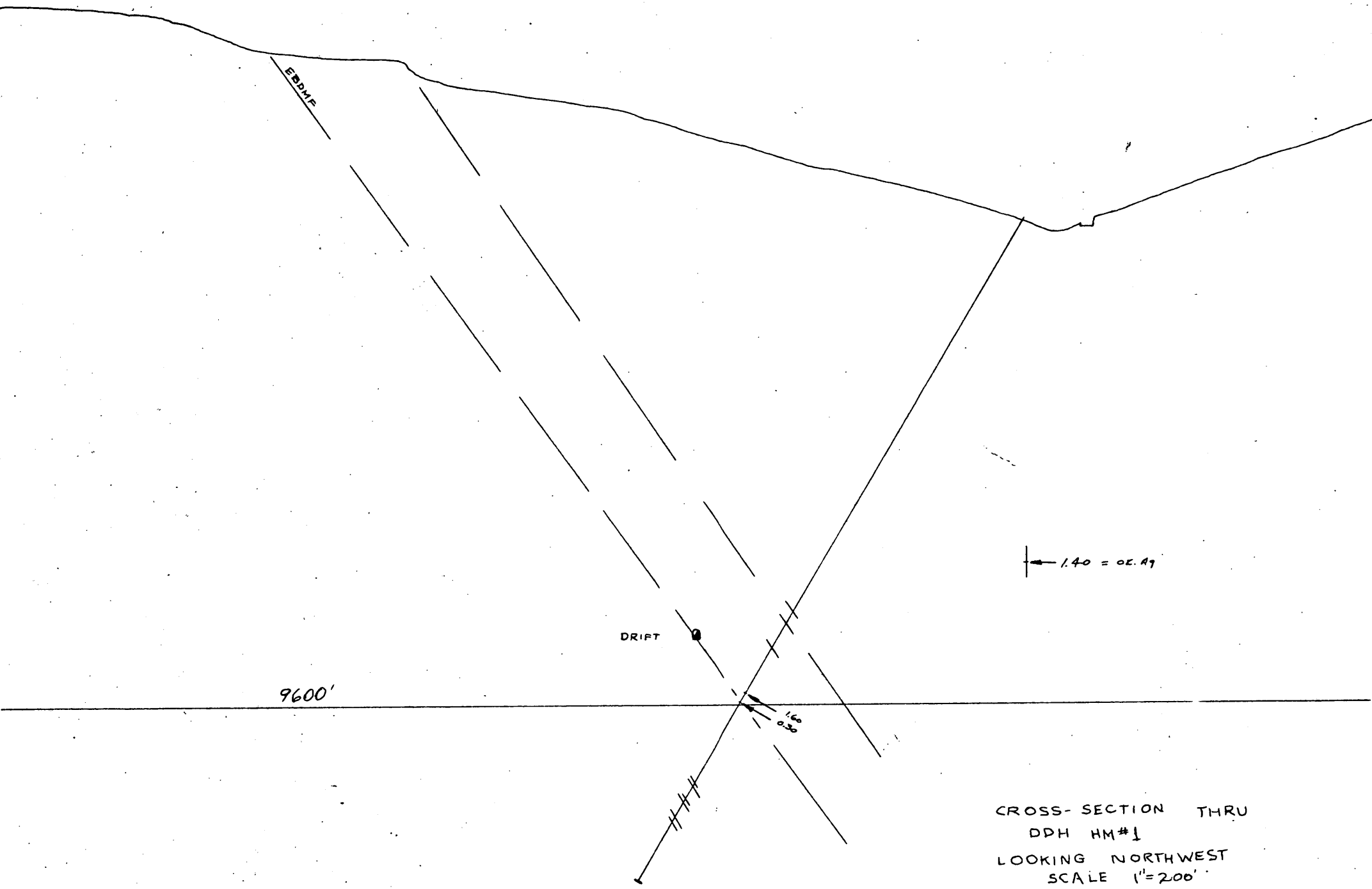


1.40 = oz. Ag

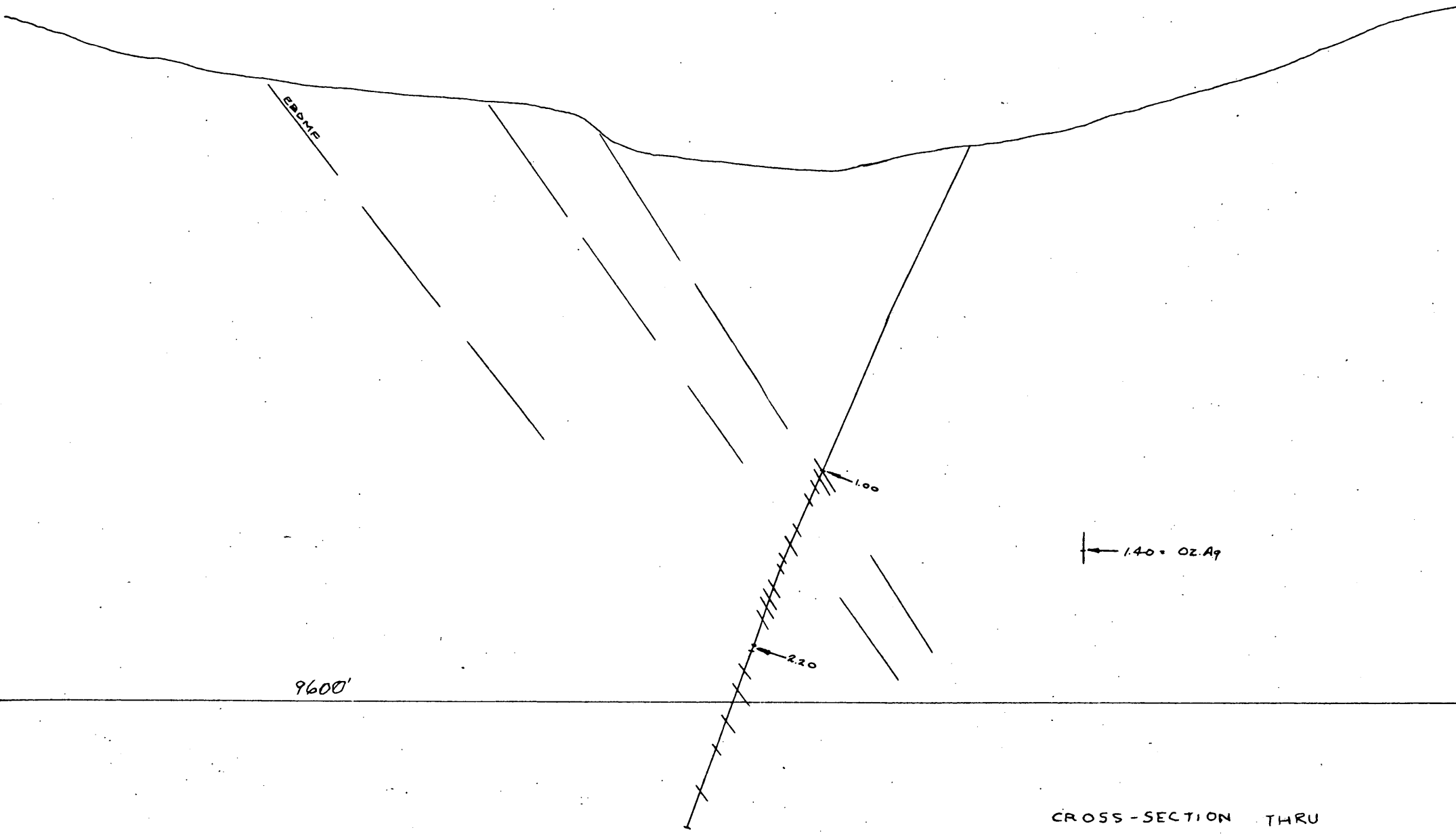
CROSS-SECTION THRU
DDH # 4 AND # 5
LOOKING NORTHWEST
SCALE 1" = 50'



CROSS-SECTION THRU
DDH # 3 AND # 7
LOOKING NORTHWEST
SCALE 1" = 50'



CROSS-SECTION THRU
DDH HM#1
LOOKING NORTHWEST
SCALE 1"=200'



CROSS-SECTION THRU
DDH HM#2
LOOKING NORTHWEST
SCALE 1"=200'

DIAMOND DRILL CORE LOG

Hole No. 1

Coordinates - E97,720
N104,110

Inclination: -60°

Date Started - 12/1/64
Date Completed - 3/9/65
Drilled By - MacPherson
Logged By - T.M.R.

Collar Elev. 10,375

Bearing - S75°W

From	To	Ft. Rcvd	Fm.	Lithology
0	32	0	Al.	Not Possible to Core.
32	60.6	23.6	W.P.	Rhyolite; brown; kaolin blebs; black and gold biotite; core solid; few scattered FeOx slips and fracs.
60.6	64.6	4.0	W.P.	Rhyolite; dk grey; core solid; kaolin blebs; gold and black biotite; several FeOx fracs. or slips.
64.6	74.1	9.5	W.P.	Rhyolite; brown-dk grey; kaolin blebs; bl. biotite; alt. to brn-yel. 73-74.1; gradational to red rhy. breccia at 74.1.
74.1	85.7	11.6	W.G.	Rhyolite; resembles Campbell Mtn.; massive; several FeOx slips; wh. pum. frag.; bl. mng coated fr. at 83.5.
85.7	88.0	2.3	W.G.	Rhyolite; red bx; few bl. mng. frs., core soft and spongy.
88.0	101.0	9.2	W.G.	Tuff; maroon to pink; core solid; gritty in part; pumice blebs.
101.0	105.5	4.1	W.G.	Pumaceous-Tuff, pink-tan; gritty; large fragments of hard red rhy throughout.
105.5	132.0	26.2	W.G.	Tan pumaceous tuff; some soft clayey zones; core fairly solid for most part; gritty at 110 ft.; several clay slips.
132.0	141.7	8.9	W.G.	Grey pumaceous tuff; core solid; wh. pum. blebs.
141.7	152.0	10.2	W.G.	Tan pumaceous tuff; core solid; clay slips at 149 and 150.6 ft.; scattered wh. pum. blebs.
152.0	157.2	5.1	W.G.	Grey, gritty, pumaceous tuff; wh. pum. blebs, some pink coloring 156-157.2 ft.
157.2	178.4	21.0	W.G.	Grey, pumaceous tuff; core fairly solid; small vugs throughout; some pink coloring in part; abund bl. biotite; few clay slips; sulfide mnlz. (chalcopyrite?) at 160 ft.

Hole No. 1 Cont.

From	To	Ft. Rcvd	Fm.	Lithology
178.4	284.0	105.1	W.G.	Pink to Maroon pumaceous tuff; phen. wh. pum. and red-dk red rhy. (up to ½" size) throughout; few clay slips; core soft to medium hard; few med. vugs; some bl. biotite.
284.0	296.0	12.0	W.G.	Same as above but core is more maroon in color; core fairly hard.
296.0	305.7	8.7	W.G.	Same as for 178 to 284 except more pink in color and grading to grey near bottom.
305.7	313.7	6.7	W.G.	Grey-pink pumaceous tuff; altered in pt; gritty in pt.; medium to large vugs; few phen. of wh. pum. and red rhy. up to ½"; core is medium hard.
313.7	318.6	4.5	W.G.	Grey, gritty, pumaceous tuff; core soft; abund. biotite and vuggy to 313.5 ft.
318.6	378.0	59.3	W.G.	Pink-maroon pumaceous tuff; phen of wh. pum and red-dk red rhy (up to 3/4"); core med. hard; abund pumice blebs 375-376, 377-378; small to med. vugs throughout.
378.0	452.0	67.4	W.G.	Same as above but with phen. of pum. and red rhy. up to 1" in size; few clay seams at 30° to core; small vugs; gold biotite; clay galls; core medium hard.
452.0	475.6	17.2	W.G.	Same as above (378-452) except that vugs are large; gold biotite.
475.6	492.2	16.6	W.G.	Pink-maroon pumaceous tuff; phen. of wh. pum. and red-dk. red rhy. throughout; small yellow stained areas (limonite) throughout; bl. manganese oxide coated frcs. at 482, 485, 491 (also calc. in frs.; numerous small vugs; some clay galls; core med. hard.
492.2	505.7	13.1	W.G.	Maroon pumaceous tuff; large phen of wh. pum. and red rhy.; med. to large vugs throughout; few clay galls; core med. hard.
505.7	509.6	3.8	W.G.	Maroon-pink pumaceous tuff; yellow stained (limonite) throughout; bl. mang. oxide stained fr. at 506.5 ft.; large phen. of wh. pum. and red-dk. red rhy. throughout; core med. hard.
509.6	725.3	212.2	W.G.	Maroon pumaceous tuff; med. to large vugs; phen. of wh. pum. and

From	To	Ft. Rcvd.	Fm.	Lithology
				red-dk. red rhy. (up to 1½") throughout; yellow staining (alteration) in fr. at 520'; some yellow staining (alteration) at 525', 534'; clay seam at 550' with yellow staining; bl. mang. oxide coated fr. at 565.5'; clay seam at 585.5' (30° to core); bl. mang. oxide coated frs. at 602' (15° to core), at 607.5', 621.5' (30° to core); clay slip at 636'; yellow staining 635-636'; abund yellow staining 649-655; thin bl. mang. oxide coated frs. at 649', 655'; yellow stained frs. at 657', 659', 663'; yellow stained areas 1' at 666', 1' at 670', 2' at 683'; several thin bl. mang. oxide coated frs. at 683-685; bl. mang. oxide fr. at 707'; yellow stained frs. at 679', 696', 698', 703'; 1' alt. zone at 705'. Iron (limonite) oxide staining in vugs and fracs. for most of interval.
725.3	730.6	5.3	W.G.	Bleached maroon pumaceous tuff; large phen. of wh. pumice and red rhy. frag.; bl. mang. oxide fr. at 729' (75° to core); fr. at 725.3' coated with pyrite? marcasite? - the sulfide mnlz extends as thin veinlets to 725.8'; med. to large vugs throughout; yellow staining (limonite) extends throughout most of core, vugs and frs.
730.6	749.0	17.2	W.G.	Maroon-pink pumaceous tuff; med to large phen of pum. and red-dk. red rhy frag.; medium vugs; black carb. matter (.2') at 735'; calc. xstals in vugs at 731'; few scattered clay seams.
749.0	752.8	1.8	W.G.	Bleached pink pumaceous tuff; med. sized phen. of wh. pum. and red-dk. red rhy; 2' core loss at 749'; .2' of mud with calc. at 749'; calc. fr. at 749.3'; thin sulfide (pyrite? marcasite?) mnlz. at 749.3 to 749.6.
752.8	771.0	18.1	W.G.	Pink-maroon pumaceous tuff; med sized phen. of wh. pum. and red-dk. red rhy. frag.; some bleaching in part; few clay seams; thin barite fr. at 757'
771.0	796.0	9.1	W.G.	Pink-maroon pumaceous tuff; small to med. sized phen. of wh. pum. and red-dk. red rhy frags; few clay seams; small vugs; soft clayey material at 771'; 1.5' core recovered between 775 and 787'; 4.6' core recovered between 787 and 795'; core soft and spongy.
796.0	820.0	1.0	W.G.	Only one (1) ft. of core recovered from this section; encountered a large (6') open fracture at 796 '.; small calc. frags. recovered.

Hole No. 1 Cont'd.

From	To	Ft. Rcvd.	Fm.	Lithology
820.0	831.0	10.7	W.G.	Pink-maroon pumaceous tuff; small phen. of wh. pum. and red-dk red rhy. for most part - few up to 2" in size; few clay seams; abund. small vugs; some calc. seams scattered throughout.
831.0	888.0	49.7	W.G. C.M.?	Light maroon pumaceous tuff; phen of wh. pum. and bl. rhy. up to 1" size; dk. gy. 853.9-856.0 and 863.2-864.0; core fairly soft for most part; some limonite staining throughout; very soft core 864-865 (½' core loss); mud 874-876; gy bleached 877-878, 887-888; core loss of 2' between 868-874, 1' core loss between 878-882, and 3' core loss between 882-888. Some core loss at contact between Windy Gulch and Campbell Mountain Rhyolite - unable to determine how much of the 3' loss between 882 & 888 is at the contact. There is some core loss at contact however.
888.0	912.0	22.2	C.M.	Dense, gy-red rhyolite; numerous small phen. of wh. pum and dk. red rhy. fragments; small to medium vugs scattered throughout; mud filled thin fractures paralled to core 890 to 892.5'; open frac. parallel to core 908-912; sulphide mineralization (.3') at 888' at contact. Some core loss at 888'. Sulphide min. is possibly pyrite or marcasite with some manganese. Sulphide mineralization occurs at 900', approx .2'; some core loss at 900 ft. also but unable to tell how much - less than .5' however.

Assay:

.3' - 888.0-888.3	.2' - 900.0-900.2
Ag. 1.60 Oz.	Ag. 0.30 Oz.
Au. Tr.	Au. Tr.
Pb. 0.3%	Pb. 0.15%
Zn. 0.8%	Zn. 0.4%
Cu. 0.08%	Cu. 0.07%

From	To	Ft. Rcvd.	Fm.	Lithology
912.0	1128.0	214.3	C.M.	Pink-maroon to red, massive, dense, hard rhyolite; small vugs throughout; numerous small white pumice fragments; thin clay seams at 922' (30° to core); 3 thin open calc. lined frac. (20° to core) at 926'; calc lined frac. parallel to core 942.5-944.0; few scattered dk red rhy phen (up to 1½") scattered throughout core; calc fr. (45° to core) at 959.5'; calc frac parallel to core 963-966'; calc frac (60° to core) 969.5'; calc. frac parallel to core 971-972'; calc. gouge frac (60° to core) at 987'; fracs. parallel to core and at 70° to core 988-989'; calc. fracs parallel to core 997-997.7'; calc frac (70° to core) 999.5'; calc. fracs. (50° to core) 1000.0'; calc. frac. parallel to core 1003-1005'; fracs. (30° to core) at 1025'; fracs. 1030-1031; fracs. near parallel to core 1032-1033; frac. (30° to core) at 1040.3'; large vugs 1041-1042; frac. (80° to core) 1049'; .5' of heavily broken up and frac. core at 1052'; mang. & py. coated frac (60° to core) at 1055', also at 1056 to 1058'; (1056.9'-1058.0 only .8' of core recovered); large vugs 1059-1063; gypsum? coated fracs 1065-1065.6; several calc lined fracs (30° to core) 1069-1069.6'; heavily frac. core, vugs, calc, bar. 1072.5-1075'; bar. coated fr with small Pb. cubes at 1079'; frac. parallel to core 1079-1080.5'; frac. with sev. very small Pb. cubes (30° to core) at 1082.5'; .2' gy gritty material (resembles coarse volcanic ash) at 1084.5' and 1087.5'; few scattered large vugs 1088-1121'; calc frac (45° to core) at 1098'; open fracs (45° to core) at 1107.5' and at 1112'; frac. (60° to core) at 1114'; calc. filled vugs and few small Pb. cubes 1115-1116.5'; fracs and gypsum? filled vugs at 1128'.

From	To	Ft. Rcvd.	Fm.	Lithology
1128.0	1235.0	93.0	C.M.	Maroon-red-pink, massive, moderately dense to hard rhyolite, small vugs throughout, small wh. pum. and alt. kaoline specks throughout. Few small fracs and gyp. filled vugs 1128.5-1133'; gyp. coated frs (30° to core) 1132.5-1153.5; Fr. (30° to core) at 1155.5'; pyrite coated fr. (30° to core) at 1157.5'; calc. coated frs. (30° to core) 1158.7-1159.3'; thin calc. fr. (45° to core) at 1162'; fine disseminated pyrite noted at 1162'; calc. coated vugs with chalcedony 1169.5-1170; some fine specks bio. 1169.5-1170'; few phen. (up to 1") of dk. red rhy. scattered throughout core; some fine specks bio. noted from 1170 to bottom of hole; few small vugs coated with chalcedony and some calc. 1170-1180; some lim. staining 1173 to bottom of hole; calc. fr. (45° to hole) 1179'; bio. and calc. in vug at 1193'; calc. fr. (45° to core) at 1196.5', 1204' and 1205'; calc. & chalcedony in frs. and vugs at 1208'; grey gritty material (.1') at 1216', (.3') at 1219.5'; also .1' at 1223'; calc. fr. (60° to core) at 1219.5'; calc. fr. par. to core at 1224'; (1.0' core loss between 1219 and 1223'; only 2.6' core was recovered from last run of hole 1223-1235. End of Hole Hole drilled by MacPherson Drilling Company, Montrose, Colorado Hole collared at approximately 10,375' elevation. Hole drilled at -60° angle Hole Location is approximately 4,200' N26°W of portal of Exploration tunnel. Hole was started - December 1, 1964 Hole was completed - March 9, 1965 Hole was surveyed with Tropari Instrument from collar to 1000 Ft. depth on February 24, 1965. Depth & Dip are as follows: 100' -60° 200' -60½° 300' -59° 400' -60° 500' -61½° 600' -62° 700' -62° 800' - 63° 900' -63½° 1000' -64° From 32.0' to 1235.0' a core loss of 98.3' was had. Total Core Recovery was 92% overall.

Ted M. Rizzi
Geol

DIAMOND DRILL CORE LOG

Hole No. 2

Coordinates - E97,200 N105,250 | Inclination -65° | Bearing S75°W

Collar Elev. 10,485'

Date Started - March 15, 1965
Date Completed - April 26, 1965
Drilled By - MacPherson
Logged By - TMR

From	To	Ft. Rcvd.	Fm.	Lithology
0.0	21.0	0	Al.	Overburden - not possible to core.
21.0	168.0	131.0	W.P.	Brn-maroon rhy. breccia, gritty appearance and texture; numerous small soft white frag.; some brn muscovite; few small vugs; limonite staining in part; rock not very much altered but is rather soft - highly crushed and broken up between 21 and 39'; numerous thin white bands and streaks throughout; few scattered clay slips; approximately 60% of core between 61' and 100' is crushed and broken; few scattered frac. par. to core 145-154'; 1.4' core loss between 92 & 99'; 8.5' core loss between 105 & 117'; 5.0' core loss between 124 & 134'. In part the section resembles a rhyolite tuff with abund. frag. of a pum. texture.
168.0	205.0	33.7	W.P.	Lt. brn-maroon rhyolitic tuff; less gritty than above section; few fracs. parallel to and at 60° to core 168-205'; 2' core loss between 195 & 199'; 1.2' core loss between 199 & 205'.
205.0	222.5	17.5'	W.G.	Red, dense rhyolite bx; pum. & kaolin specks throughout; few clay seams; .3' of red mud at 217'; few scattered frs. 60° to core; some bio. noted.
222.5	242.5	19.6'	W.G.	Brown, gritty to dense hard rhy. bx.; small vugs; numerous small white kaolin specks from 234 to 242.5'; pum. alt. to dk. brn. soapy clay in part; 234-242.5 bentonitic mud, soapy, clayey.
242.5	271.0	28.5'	W.G.	Dense, hard pink rhy. bx.; numerous small vugs; few fracs. par. to and at 30° to core throughout; some bio.; few small dk. red frag. as phen; hem. coated fr. 60° to core at 267'. (Pumice is soft but no very apparent alteration to clay)

From	To	Ft. Recd.	Fm.	Lithology
271.0	281.5	9.8	W.G.	Dark red rhy; bio; white pum. specks; core is massive to gritty in texture from 271.0 to 278.0'; dk. red mud 278-281.5; (278-281.5 core loss of .7'.)
281.5	311.5	30.0	W.G.	Grey-green dense rhy.; numerous small dk. red to bl. rhy. frag. as phen.; somewhat gritty in part; small wh. pum specks. (Pumices alt. to apple-green giving core greenish appearance)
311.5	524.0	209.5	W.G.	Maroon-pink rhy. tuff; core fairly solid and competent; wh. pum. and kaolin specks; phen. in core consist of dk. red rhy. frags; some apple-green alt. pum; some lim. staining; dk. red mud 348.2-353.1', 2.5' core loss between 348.2-353.1'; gyp. lined fracs at 420' (60° to core); core has dark red color 435-437'; 453.5-465' core is soft and clayey; few scattered clay seams.
524.0	535.0	11.0	W.G.	Maroon-grey rhy. tuff; dk. red and bl. rhy frags. as phen; num. small vugs; wh. pum & kaolin specks; few scattered fracs at about 30° to core.
535.0	565.0	30.0	W.G.	Grey rhy. tuff; siliceous in pt.; red-bl. rhy frags. as phen; core is moderately hard and solid; numerous small vugs; kaolin altered to apple-green color; marcasite filled frac (45° to core) at 544.4' and at 550.5'.

From	To	Ft. Recd.	Fm.	Lithology
565	598	33	W.G.	Grey, alt. rhy. bx., sil. in part, extremely vuggy in part; frac. with marc.& sm. Pb. cubes (par. to & 60° to core) at 570.4'; marc. & sm. cubes Pb. lined fr. par. to core 573.4-577.9 (1' core loss between 571 & 579'); marc. filled fr. (60° to core) 586.2-586.6; fr. 30° to core, with sm. Pb. cubes, at 588'; frac. at 594' with marc. and sm. Pb. cubes; 3'- grades fr. grey to pink to red.
598	636.4	38.4	W.G.	Red rhy. bx., pum. specks, dk rhy. frags; sm. to med. vugs; some kaolin alt. to apple green color; marc. lined frs. at 614' (60° to core); at 630' (30° to core); at 631' (near par. to core); apple-green color at 635' contains sm. Pb. cubes; 1.0' core loss between 594-623; 623-633; 633-643'.
636.4	649	12.6	W.G.	Grey, alt. rhy. bx.; numerous sm. vugs, sm. dk. rhy. frags; some lim. staining; some alt. of kaolin to apple green color; .2' mud zone at 646'; some red color 648-649'; 1' core loss between 637'-643'; sm. fr. at 637.9' (30° to core), marc. filled; fr. at 639.6' (30° to core),.1" thk. marc. filled; vuggy.
649	658.8	9.8	W.G.	Grey, alt. rhy. bx.; sm. vugs; hrline frac. at 656.1' (60° to core) marc.and mn. filled
658.8	666.8	8.0	W.G.	Maroon -grey alt. rhy. bx.; claylike 658.8-660.8'; coarse bx. 660.8-663.
666.8	702	4.8	W.G.	Grey alt.rhy. bx.; vuggy 671-672'; some vugs filled with marc. AND/OR ~~has~~ chalcopyrite; many sm. frac. 672-673.7' filled with marc., chalco. Pb. xls, barite; sil. frac. and gouge at 681.5'; some sm. Pb. xls (10° to core); sm. frac. at 685.2 contain some sm. Pb. xls (40° to core); Frc. at 686' sil., some marc. (20° to core); thin frc. at 689' sil.; some marc. (20° to core) ; thin frc. at 695.7,696, 696.5; sil., sm. amunt Pb. xls (30° to core) color becomes darker (maroon) 702'-on.

From	To	Ft. Recd.	Fm.	Lithology
702	764.5	62.5	W.G.	Maroon-grey rhy. bx., sm. vugs, frac. at 704', sil. marc. (30° to core), some bx. frags. kaolinized; sm. frac. at 716.5, 716.9, 718', marc. sil., (30° to core); some sm. frac. 718-727.7', all sil., some marc.; 727.7 sm frac. with gouge and slicks, barite? (35° to core); 731.5 sm. frac. filled with marc. some mn. (25° to core); 733.8 sm. frac. hem staining and asso. apple green coloring; 747.3-748' gouge zone; 752.9 sm frac. (50° to core), marc. some apple green color; 757' sm frac. 0.1", vuggy, marc. filled (10° to core); 759.8 thin frac. (35° to core, marc. some apple green color; 763-745.5 lt. grey in color (bleached) some Pb. xls.
764.5	830	65.5	W.G.	Maroon-grey rhy. bx., sm. vugs, bx. frag. alt.; sm. frac. 769.9 (0.2") (30° to core), contains marc. chalco.?.,quartz, hem staining, apple green color in places & sm. xls of (pyrite? sphalerite?) with triang. shaped faces; 773.5 sm. frac with marc. apple green color in places, sil., sm. Pb. xls; 774.0 sm. gouge zone; 783.3 thin frac. (PAR. to core), marc., hem staining,some apple green color, sil.; 792.5 & 792.9 sm. frac., marc. (60° to core); 798.8 frac. hem staining and apple green color; 802 803 num. thin marc. filled frac. to core; 0.5' core loss 798-807'; 814' hem staining frac. zone, thin fracs.; 818.4 830 num. fracs. filled with alt. matl. (kaolinite) some marc; color becomes greyer 823-830' (bleached); (clayey) gouge matl. 829-830'.
830	865	35	W.G.	Grey alt. rhy. bx.; 830.5 sm. frac. (20° to core); contains quartz, bar. kaolinite, chalco., mnox. few Pb. xls, hem stain ing 831.8-836'; sample 2.0' rec., (2.2 core loss) zone contains vugs, 0.5'+ solid marc., Pb.& quartz in vugs; 836-847 1' core recovered (10'core loss); some vuggy matl., vugs contain Pb. & marc.; 847-850 0.5' core recovery; (2.5' loss); 850-860 7.3' core loss, vuggy, 0.3" marc. vein (60° to core- close to 850'); sm. frac. with marc., chalco., Pb. xls, hem stain close to 860' (60° to core); 863.6 sm. frac. filled with sil. matl., some chalco. xls, some Pb. (40° to core).

From	To	Ft. Recd.	Fm.	Lithology
865	902	37	W.G.	Grey-maroon alt. rhy. bx.; some frag. alt. 865-878 num. hem stained frac.; 881.2 sm. frac. hem stained & apple green coloring (30° to core), 884.4 sm. kaolinized frac. (15° to core) some Pb. xls; 892-893 hem stain in frac. PAR to core; 0.5' core loss 892-900; 900-902 apple green coloring in frac. with hem staining.
902	968.5	66.5	W.G.	Grey-maroon alt. rhy. bx., num. sm. frac. with hem staining some with apple green coloring; 904-908 4' core loss; 929-935 2.5' core loss; 940.7 & 941.7 sm. (0.5") fracs.vuggy with marc. quartz, Pb. xls (30° to core); 950-956 0.5' core loss.
968.5	1120	151.5	W.G.	Grey alt. rhy. bx.; 971.5 silica filled frac.; 971-973 1.2' core loss; 973.7-976.2 vuggy, vugs filled part with silica (apple green in places); 980.6 vugs asso. with frac. with apple green color & silica; 990-999.5 0.5' core loss; 2" gouge zone @1001'; hem stained frac. 1002.7 & 1003'; clayey zone (0.5") 1059.4'; 1101.3-1118 num. sm. frac. with hem staining.
END OF HOLE				

Hole Survey

Depth	Inclination
100'	-65°
200'	-65°
300'	-65 1/2 °
400'	-66°
500'	-67°
600'	-68°
700'	-68 1/2°
800'	-69°
900'	-70°
1000'	-70°

Assay Data

544.3-544.6
Ag. 1.00 OZ
Pb. .20 %

831.8-836.0 (2.0' rec.)
Au. .005 oz.
Ag. 2.20 oz.
Cu. .05%
Pb. 5.3%
Zn. 0.6%

DIAMOND DRILL CORE LOG

Underground Hole No. 2

Coordinates E97850 N102159
Collar Elev. 9702

Inclination - Horizontal
Bearing - S52°W
Location - Drill Sta. Near Spad B-33

Date Started - 12/6/65
Date Completed - 1/7/66
Drilled By - Mac Pherson
Logged By - MMR, HRM

From	To	Ft. Rcvd.	Fm.	Lithology
0.0'	10.5'	10.5'	CMR	Dense; red; some bx. frags. kao.; vuggy (small; sm. mnox. + lim. stn. frac. 40° to core at 2.3', 2.4' and 70° to core at 2.7' (silicified in part); v. thin mnox. + lim. stn. frac. 20° to core at 3.5'; sm. (1/2") qtz. xl. lined vug. at 3.8'; 1/4" wide mnox., ba.+lim. filled frac. 75° to core at 4.4'; v. thin mnox. + lim. stn. frac. perp. to core at 4.9'; v. thin mnox. + lim. stn. frac. 50° to core at 6.0', 6.7', 7.5'; lim. stn. mnox.+ba. (sm. amts) coated thin frac. 70° to core at 8.2'; mnox. stn. hackly frac. at 9.5'.
10.5'	293.3'	277.8'	CMR	3' core loss 10.5'-20.0'; dense, red, rhyo.; some bx. frags. kao; numerous sm. vugs.; v. thin mnox. + lim. stn. frac. at 10.6', 11.0', 11.8', 13.0', good core rec. to 15.5'; 15.5'-20.0' slightly alt. (lim. stn.) zone, core greatly broken; v. thin mnox. +lim. stn. frac. at 21.3', 24.4', 24.9', 25.7', 26.9', 27.4', 30.7', 31.0' (1/3"), 30.3', 33.7', 34.2'; 4 ea. 1/8" frac. w/ba. from 37.4'-38.4'; v. thin mnox. + lim. stn. frac. at 38.4'; 1/16" ba. filled frac. at 39.8' + 40.6'; 1/4" mnox. filled frac. perp. to core at 43.1'; 44.5', 1 1/2" qtz. zone 60° to core; 50.1', 1/4" mnox. frac. 50° to core; 50.8', 1" qtz. zone 50° to core; 51.7' mnox filled frac. 1/8" 60° to core; 65.6' 1" qtz. zone 60° to core; 70.2', 1/2" mnox. frac. 20° to core; 1' core loss between 67.6' & 74.8' probably at 70.2'; 74.1', 1/8" mnox. frac. 60° to core; 75.7', 1" qtz. zone 40° to core; 76.9', 1/8" mnox. frac. 40° to core; 78.4', 1/2" qtz. & lim. stn. frac. 60° to core; 78.6', 1/8" lim. stn. & qtz. frac. 60° to core; 79.9', 1/8" qtz. frac. 70° to core; Frac. zone from 81.6'-82.0' minz. w/qtz/. lim. stn.; 83.1', 1/8" mnox. frac. perp. to core;

From	To	Ft. Rcvd.	Fm.	Lithology
			CMR	84.2', 1/8" mnox. frac. perp. to core; 85.0', 1/8 mnox. frac. 50° to core; 85.8', 1" qtz. zone 60° to core; 89.5'-90.5', qtz., lim. stn., monx. frac. zone; 99.0', 1/8" mnox. frac. 30° to core; 110.0' 1/8" lim. stn. frac. 60° to core; 110.4', 1/8" lim. stn. frac. 60° to core; 110.7', 1/8" lim. stn. frac. 60° to core; 111.4', 1/8" lim. stn. frac. 60° to core; 117.5', 1" qtz. zone 40° to core; 126.0', 1/8" qtz. frac. 40° to core; 126.3', 1/4" qtz. frac. 70° to core; 128.3', 1/8" mnox. frac. 60° to core; 130.0', 1/8" sulphide, mnox., qtz. frac. perp. to core; 137.5', 1/2" frac. of qtz., lim. stn. perp. to core; 138.0', 1/2" frac. of sulphide, qtz., ba., lim. stn. perp. to core; 139.5', 1/8" lim. stn. frac. 60° to core; 140.4', 1/8" mnox. frac. 40° to core; 1/8" mnox. at 140.8' & 141.0' 70° to core; 143.8', 1/8" sulf. 70° to core; 1/8" lim. stn., mnox. & qtz. frac. at 147.8', 149.4' all perp. to core; 150.5', 1/8" lim. stn. frac. 30° to core; 151.7', 1/8" lim. stn. frac. 40° to core; 152.7', 1/8" mnox. frac. 60° to core; 155.5', 3" zone mnox. & lim. stn.; 156.0', 1/2" frac. of ba. 60° to core; 156.4', to 157.3' zone of mnox. & lim. stn.; 161.3', 1/2" frac. sulf., lim. stn., ba., mnox. 40° to core; 165.8'-166.4' zone of lim. stn.; 166.8'-167.1' zone of ba., lim. stn., sulf.; 170.2'-170.9' zone of ba., sulf., qtz., lim. stn., frac. vary from 60, perp. to core; lim. stn. & ba. filled frac. at 171.9', 172.3', 173.9', 174.5', 175.0', 175.3', 176.0', 176.6'; 1/8" frac. of ba., lim. stn. at 177.4', 178.0', 178.2', 178.4', 178.7', 179.8'; 1' core loss between 181.0' & 184.0'; 182.0' to 182.6' broken frag. w/mnox.; lim. stn. frac. at 184.2', 184.7', 185.3', 185.4', all 60° to core; 188.5', 1/4" frac. hem.; lim. stn. & mnox. frac. at 190.2', 190.4', 190.5', 190.7', 190.8' 191.1', 191.3', 191.5', 192.5', 1/8" lim. stn. frac. 30° to core; 192.8', 1/8" frac. of sulf., mnox. lim. stn., ba. 60° to core; broken zone from 194.0'-195.5' of hem., lim. stn., ba. qtz.; 196.3', 1/8" mnox. frac. 60° to core; 197.6', 1/8" mnox., lim. stn. frac. 70° to core; 201.8', 1/8" mnox. frac. 60° to core; 207.8', 1/8" hem. frac. 60° to core; 216.4', 1/8" lim. stn. frac. 40° to core; 221.0', 1/8" lim. stn. frac. 60° to core; lim. stn. mnox. at 228.7', 228.8', 229.0', 229.5', 230.0', 233.6', 235.4', 238.1', 247.1', 251.5', 253.0'

From	To	Ft. Rcvd.	Fm.	Lithology
			CMR	255.8', 257.2', 257.4', 270.7', 270.9', 271.3', 273.8', 274.3', 275.2', 276.2', 276.5', 278.0', 278.5', 278.8', 279.0'; zone of gray bx. frag. between 279.8' & 280.3'; lim. stn. & mnox. w/ba. at 282.6', 293.0'.
293.3' (Box #12)	296.8'	3.5'	CMR	Gray, rhy., alt. more strongly, clay content higher, dense, color contacts visible on both ends but don't seem to be formational contacts; 293.6', kaol. frac. perp. to core; 293.7'-293.9', zone of lim. stn. frac. 60° to core; 294.7', lim. stn. frac. 60° to core; 295.5', lim. stn. frac. 60° to core;
296.8'	329.0'	32.2'	CMR	Red rhy., dense, vuggy, bx. frag. present; 297.0', lim. stn. frac. 60° to core; lim. stn., mnox. w/ba. at 298.7', 299.0', 299.7', 300.2', 301.4', 302.2', 306.0', 307.0', 308.2', 314.5', 315.0', 316.0', 316.7', 317.4', ba. zone 60° to core; 317.7', mnox. frac. 60° to core; 323.4', mnox. frac. perp. to core;
329.0'	348.2'	18.7'	CMR	Gray rhy., dense, altered, clay content higher, contact visible but is not formational; 332.8', mnox. frac. 40° to core; 333.2', mnox. frac. 40° to core; 334.7', kaol. frac., highly altered; 337.1'-337.8', highly alt. zone; 1/2" core loss between 335.0' & 340.0'; 340.5'-341.8' kaol. zone; 344.0', mnox. frac. perp. to core; 344.4' mnox. frac. 40° to core; 346.7', large qtz. vug.; 348.2', 1/2" ba. frac. 50° to core;
348.2'	376.25'	28.1'	CMR	Mottled red & gray rhy., dense, vuggy; 349.7', mnox. & lim. stn. frac. 40° to core; 350.0', mnox. frac. 40° to core; 354.0', 1/4' ba. frac. perp. to core; 354.4', mnox. frac. 40° to core; 355.3', lim. stn. frac. 50° to core; 368.2', 1/8" ba. frac. 60° to core; 370.0', 1" altered zone; 370.4', 1/2" alt. zone; 372.0', 1/4" ba. zone 60° to core; 372.6', 1/4" ba. zone 60° to core; 375.5', lim. stn. frac. 60° to core;

From	To	Ft. Rcvd.	Fm.	Lithology
376.25' (SAM)	380.5'	3.2'	CMR	Mottled red & gray, dense, vuggy, SAMPLE @ 376.25' to 377.5' fault zone, minz. (ba., qtz., Pb,Am), dense, Go 379.5'-380.5', 1' core loss 379.5'-380.5', 50° to core angle of fault zone, sample 377.5'-380.5' (2'only), some lim. stn. in small vugs.
380.5'	382.0'		CMR	Dense mottled red & gray, sample 380.5'-382.0', 381.5', 1/2" ba., lim. stn. zone.
382.0'	392.0'	5.0'	CMR	Dense mottled red & gray, well broken up, 5' core loss 382.0'-392.0', lim. stn., mnox., ba. visible on frac. surfaces, some frag. lim. stn.
392.0'	398.0'	3.5'	CMR	Dense, mottled red & gray, 2 1/2' core loss 392.0'-398.0', 392.0'-391.0' well broken up, frac. show lim. stn. & mnox., 392.0'-398.0' well broken up zone minz. w/ba., qtz., lim. stn., mnox.
398.0'	400.0'	1.5'	CMR	Dense, red, 1/2' core loss 398.0'-400.0', well broken up zone 398.0'-400.0'.
400.0'	403.0'	2.6'	CMR	Dense mottled red & gray, .4' core loss 400.0'-403.0', lim. stn., mnox. coated frac. at 400.0', 400.4', 400.5', 400.7', 401.0', 401.7';
403.0'	411.0'	7.7'	CMR	Highly lim. alt. increasing in intensity from 403.0'-404.8' then decreasing alt. to 407.5', (most intense lim. alt. 404.5'-405.2) 405.2' mnox. frac. 50° to core, 406.1', 1/4" ba. frac. perp. to core; well broken up zone 408.0'-410.0', 408.7', 1/2" ba. frac. 60° to core; .3' core loss 403.0'-411.0'; frag. lim. alt. 403.0'-411.0'.
411.0'	421.0'	10.0'	CMR	Desnse mottled red & gray; 411.0', lim. stn., mnox. frac. 60° to core; lim. stn., mnox. fracs. at various angles to core at 411.2', 411.5', 413.0', 414.0', 415.0', 416.1', 417.0', 417.5', 417.8', 419.7', 420.2';

From	To	Ft. Rcvd.	Fm.	Lithology
421.0'	431.0'	9.0'	CMR	Dense, red; 421.9', lim. stn., mnox., ba., frac. perp. to core; 422.7', ba., lim. stn. mnox. frac. 60° to core; 423.2', lim. stn. mnox. frac. 60° to core; 423.9', lim. stn., mnox. frac. 70° to core; 424.8', lim. stn. frac. 60° to core; mnox. fra. at various angles to core 425.2', 425.3'; lim. stn., mnox. fracs. various angles to core at 426.8', 427.2', 427.3', 427.8', 428.2', 428.7', 429.5', 429.8', 430.1', 430.2', 430.4'; 1' core loss 421.0'- 431.0'; 1" lim. alt. zone 427.2';
431.0'	433.0'	1.0'	CMR	Dense well broken up, red; frags. coated with lim. stn., mnox. om frac. surfaces; 1' core loss 431.0-433.0';
433.0'	440.0'	4.5'	CMR	Dense, red, mod. broken up; 433.0'-433.8', well broken up with fracs.' lim. stn., mnox., lim. stn., mnox. fracs. at 434.6', 343.8', 435.1', 435.4', 435.7', 436.3'; 436.3'-437.5' well broken up with fracs. lim. stn., mnox.; 2 1/2' core loss 433.0'-440.0';
440.0'	447.0'	6.7'	CMR	Dense, red; slight alt. zone 441.3'-442.0', lim. stn., mnox. fracs. at various angles to core at 442.4', 442.5', 442.8',; highly mnox. zone 443.1'-445.0'; sample 443.1'-445.0', extensive lim. alt. 445.0'-447.0' with some mnox.; .3' core loss 440.0'-447.0';
447.0'	452.0'	5.0'	CMR	Mottled red & gray, dense; 447.0'-448.3', cmr & bx. frags. lim. alt.; 448.3'-452.8', extensive mnox.; sample 448.3'-450.2', fracs. [illegible] parallel to core; 448.3'-452.0';
452.0'	455.0'	3.0'	CMR	Dense, gray; 452.0'-455.0', lim. alt. with mnox. fracs. at various angles to core;
455.0'	459.0'	4.0'	CMR	Dense mottled red & gray; lim. stn., mnox. frac. various angles to core at 455.0', 445.6', 456.0', 456.3', 456.8', 457.3', 457.7', 458.7'; bx. frags. kaol. with lim. stn. 455.0'-457.1';
459.0'	462.0'	3.0'	CMR	Dense mottled red & gray; lim. stn. fracs. various angles at 459.6', 460.0', 460.5', 461.0', 462.0';

From	To	Ft. Rcvd.	Fm.	Lithology
462.0'	504.0'	30.0'	CMR	Dense mottled red & gray; 463.0'-463.4', lim. stn. zone; 463.4' mnox. frac. 60° to core; lim. stn., mnox. fracs. various angles to core at 463.6', 465.0', 465.4', 465.'6, 466.0', 466.4', 466.5', 467.4', 467.7', 468.0', 469.0', 469.2', 469.5', 470.4', 470.7', 471.7', 473.4', 474.2'; 475.0'-476.5' well broken up zone with mnox., lim. stn. fracs.; lim. stn., mnox. fracs. various angles at 477.2', 478.6', 478.9', 479.7', 480.0'; 480.0'-480.2', lim. alt. zone; 480.7', ba. frac. 60° to core; lim. stn., mnox. frac. at 481.8', 482.3', 482.6', 483.0', 483.4', 483.8', ba. frac. 60° to core; lim. stn., mnox. frac. at 484.0', 484.5', 485.2', ba. lim. stn. mnox. frac. 60° to core; lim. stn., mnox. fracs. at 486.8'; well broken up zone with mnox., lim. stn. 488.0'-489.6'; 490.3'-490.5', lim. alt. zone; lim. stn., mnox. fracs. at 491.0', 491.5', 492.4', 493.0', 496.7', 497.4', 498.3', 498.6', 498.9'; mod. broken up zone 499.6'-504.0' with fracs. lim. stn., mnox.; 2' core loss 492.0'-504.0';
504.0'	514.0'	9.6'	CMR	Dense, mottled red & gray lime stn., mnox. fracs at 504.5', 504.8', 505.0', 505.4', ba., lim. stn., mnox. frac 60° to core; lim. stn., mnox. fracs. at 507.0', 507.5', 508.2', 511.', 512.4', 512.7', 513.1', 513.3'; .4' core loss 504.0'-514.0';
514.0'	521.0'	6.6'	CMR	Dense mottled red & gray; 514.0'-517.0', well broken up zone with lim. stn., mnox. fracs.; lim. stn., mnox. fracs at 518.5', 518.8', 519.2'; .4' core loss 514.0'-521.0';
521.0'	528.0'	5.4'	CMR	Dense mottled red & gray; 521.0'-521.5', lim. zone; lim. stn., mnox. fracs. at 522.3', 524.3', 525,5', 525.6', 525.8', 526.1', 527.0'; 1.6' core loss 521.0-528.0;
528.0'	535.0'	7.0	CMR	Dense, mottled red & gray; 528.0'-528.8', broken zone with lim. stn. mnox. coatings; 529.4'-535.0', well broken zone with frags. lim. stn., mnox;

(END)

Core Assay

443 - 445	.10	376.25 - 377.5	1.40
448.3 - 450.2	.30	377.5 - 380.5	7.50
		380.5 - 382.0	7.10

35.9' of core loss 0.0'-535.0'. Recovery was 93% overall.

NX - 0-10.5'
BX - 10.5'-535.0' (WIRELINE)

DIAMOND DRILL CORE LOG

Underground Hole No. 3

Coordinates E 96875
N 102518

Collar Elev. 9704

Inclination - -26°
Bearing - S75°W
Location - West of X-Cut from Spad B-44

Date Started - 1/24/66
Date Completed - 4/25/66
Drilled By - Mac Pherson
Logged By - HRM

From	To	Ft. Rcvd.	Fm.	Lithology
0.0'	2.0'	1.7'	CMR	Bx. core, gray, vuggy, bx. frags. kao.; 0'-2.0', broken up zone .3' core loss 0'-2.0';
2.0'	4.0'	2.0	CMR	Red, well sil.; vuggy, bx. frags.;
4.0'	10.0'	2.0'	CMR	Red, well sil., 4.0' core loss 4.0'-10.0'; vuggy bx. frags.;
10.0'	226.0'	205.3'	CMR	Mottled red & gray, bx. frags., vuggy, 13.5-13.7', kao. zone; 15.7'-16.0', kao. zone with ba.; 17.4', lim. frac. perp. to core; 20.3'-21.0', kao. zone, broken up, lim. stn., unbroken surfaces; 30.0'-30.5', bx. frags. kao.; 39.6'-40.2', broken, kao. zone, 50.2'-51.5', kao. zone; 54.6'-55.3', kao. zone; 56.7'-59.0' kao. zone; 57.6', py. frac. at 60° to core; 57.5', py., mnox. frac. 60° to core; .3' core loss 40.0'-60.0'; 60.0'-61.3', kao. weakly minz. zone (ba., py., sp.), matrix & frags. alt. gray; 61.3'-63.7', frags. alt. gray, matrix only slightly alt.; 63.7'-65.4', sharp alt. con tacts on both ends, matrix & frags. slightly alt. gray; 65.4'-69.6', broken up, matrix & frags. alt. gray, slight mnlz.; 70.0'-75.3', alt. zones of alt. varying in color from med. red cmr to gray cmr with bx. frags. more extensively alt. then matrix; 75.3'-76.7', gray alt. zone with mod. mnlz. (ba.,py.); 76.7'-78.7', med. red cmr with gray alt. bx. frags.; 78.7'-92.6', core mod. broken up, matrix slightly alt. bx. frags. extensively alt.; 92.6'-93.2', lim. stn., slightly mnox. zone, bx. frags. extensively alt. gray with lim. stn.; 93.2'-96.6', matrix slightly gray, bx. frags. extensively alt.

From	To	Ft. Rcvd.	Fm.	
				gray; 96.6'-97.0', matrix & bx. frags. equally alt. gray; 96.7', lim. stn., mnox. frac. to 70° to core; 97.0'-101.3', bx., frags. extensively alt. gray matrix slightly alt. gray; 101.3', 1/4" mnox., py. frac. 60° to core; 101.3'-104.0', bx. frags. & matrix equally & slightly alt. gray; 104.0'-129.9', bx. frags. extensively gray, alt., matrix slightly alt. gray fracs. at various angles to core and contain only slight lim. stn. 129.1'-130.0', matrix & bx. frags. equally extensively alt. gray; 130.0'-132.4', well broken up zone, matrix & bx. frags. well alt. gray; 132.4'-140.0', bx. frags. well alt. gray, matrix mod. alt. gray; 2.4' core loss 130.0'-140.0'; 140.0'-150.0', bx. frags. well alt. gray, matrix mod. alt. gray; 6.0' core loss 140.0'-150.0'; 150.0'-154.0', well broken up zone, bx. fags. well alt. matrix mod. alt. gray, fracs. 60° to core; amd ba.; 164.7'-172.1', bx. frags. mod. alt., matrix unalt.; fracs. ba.; 173.1'-173.4', highly alt. zone of both matrix & bx. frags., frac. con tains green coloration; 173.4'-174.0', unalt. core; 174.0'-177.0', matrix & bx. frags. increase from unalt. to extensive alt.; 177.0'-181.0', bx. frags. & matrix highly alt. slight am't. of silicified in fracs.; 181.0'-188.5', bx. frag surfaces; 188.5'-195.0', bx. frags well alt., matrix slightly alt., .5' core loss 188.5'-195.0'; 195.0'-196.0', bx. frag. & matrix alt.; 196.0'-197.5', broken zone with slight min. (Pb); 197.5'-198.8', bx. frags. well alt., matrix slight alt.; 198.8'-200.7', zone of well alt. matrix & bx. frags.; 200.7'-202.4', bx. frags. well alt., matrix slightly alt.; 202.4'-205.1', bx. frags larger in size & well alt. (1/4"), matrix slightly alt.; 204.1-204.8', zone of well alt. bx. frags., slight alt. matrix; 204.8'-205.8', zone of well alt. bx. frags. & matrix; 205.8'-208.8', bx. frags. well alt., matrix slightly alt.; 208.8'-209.3', well alt. zone, matrix & frags equally alt.; 209.3'-210.0', matrix slightly alt., bx. frags. well alt.; 210.0'-210.4', well alt. zone; 210.4'- 211.7', bx. frags. well alt., matrix slightly alt.; 211.7'-215.0', well alt. bx. frags., matrix slightly alt.; 215.5', fragc 60° to core, mnox. lim. stn.; 215.7', 1/8" frac 60° to core, py., mnox.; 216.0'-218.3', bx. frags. larger & mod. alt.; 218.3'-218.5', gray, alt. zone with py.; 218.7

From	To	Ft. Rcvd.	Fm.	Lithology
				py. frac. 60° to core; 219.6'-219.8', gray alt. zone with py., bx. frags. well alt. white; 220.3'-321.2', 1/8" fracs at various angles to core bearing py.; 221.2'-223.3', bx. frags. well alt., matrix slightly alt.; 223.3'-224.1', zone containing py.; 224.1'-226.0', well alt. bx. frac. & matrix;
226.0'	236.9'	10.9'	CMR	Gray, 226.2', lim. stn., mnox. frac. 60° to core; 227.4', 1/8" py., mnox. frac. 60° to core; 227.8'-230.5', fracs. at various angles to core containing py.,mnox.,Pb; 232.9', 1/8" py. frac. 60° to core; 234.2', 1/8" py. frac. perp. to core; 234.6', 1/8" Pb, py., frac. 60° to core; 234.9', 1/8" py. frac. perp. to core; 235.0'-236.9', zone containing py., Pb;
236.9'	428.0'	172.3"	CMR	Mottled red & gray, bx. frags. larger than average (1/4"); 236.9' 242.3', bx. frags. well alt. gray, matrix unalt.; 242.3'-243'5, bx. frags. & matrix well alt.; 243.5-253.0', matrix & bx. frags. alt. gray; 253.0',-265.6', bx. frags. alt. gray, matix unalt.; 265.6'-267.0', matrix & bx. frag. well alt. gray; 267.0'-267.8' bx. frag. well alt. gray, matrix unalt; 267.8'-269.0', matrix & bx. frags. well alt. gray; 269.0'-275.5', bx. frags. well alt. gray, matrix unalt.; 275.5', 1/8" lim. stn. frac. 60° to core; 275.5'-279.5', bx, frags. well alt., matrix unalt.; 279.7', chloritized frac perp. to core; 279.7'-284.2', bx. frags. well alt., matrix unalt.; 284.3', lim. stn. frac. 60° to core; 284.2' 288.0', bx. frag. well alt. matrix unalt.; 288.0', lim. stn. mnox. frac 60° to core; 288.0'-290.5', bx. frag. well alt., matrix unalt.; 1 1/2' core loss 280.0'-292.0', broken zone with py., frac well alt. zone; 294.5'-297.2', bx. frags. well alt., matrix unalt.; 297.2'-297.5', chloritized zone; 298.0'-lim. stn. frac. & broken zone 2.0' core loss 292.0'-300.0'; 300.3', lim. stn. frac 60° to core; 300.3'-311.0', bx. frags. mod. alt., matrix unalt.; 1 1/2' core loss 300.0'-311.0'; 311.0'-316.0', hard cmr unlat.; 316.0'-321.6', bx. frags slightly alt., matrix unalt; 321.6'-323.3', matrix & bx. frag. highly alt. gray, core well silicified; 323.2'-333.0', core is mottled red & gray; 328.6'-329.0', thin frac. of py. 60° to core; 333.0'-353.0',

From	To	Ft. Rcvd.	Fm.	Lithology
				bx. frags. slightly alt., matrix unalt.; 1' core loss 343.0'-353.0'; 353.0'-360.0', core well broken up, bx. frags. & matrix unalt.; 3.0' core loss 353.0'-360.0'; 360.0'-363.5', unalt. bx. frag. & matrix; 363.5'-365.0', well broken zone, some lim. stn. mnox., ba.; 365.0'-366.0', unalt. zone; 366.0'-366.9', well broken zone, lim. stn.; 366.9'-369.0', unalt. zone; 369.0'-380.0' mottled red & gray cmr, hard; .5' core loss 369.0'-380.0'; lim. stn. frac. with some mnox. at 382.7', 389.0'; .5' core loss 380.0'-390.0'; lim. stn. at 390.5'; 390.0'-393.0', .5' core loss 394.2'-399.0', zone broken up, slight lim. stn., some frags. show slight chl. grn. clay; 399.0'-403.0', mottled red & gray cmr 404.5'-408.0', broken zone contains very little ba.; 1.0' core loss 403.0'-408.0'; 408.0'-413.0', hrd. mottled red & gray cmr, slight lim. stn. at 411.0'; 1.0' core loss 408.0'-413.0'; 413.0'-417.0', hrd., red cmr; 2.0' core loss 413.0'-417.0'; 417.0'-421.5', broken zone, some lim. stn., mottled red & gray cmr; gray hrd.; 421.5'-425.0', hrd. gray, cmr.; 2.5' core loss 421.5'-425.0'; 425.0'-428.0', hrd. gray, cmr; broken zone; 2.0' core loss 425.0'-428.0';
428.0'	544.8'	41.2'	CMR	Gray hard; 428.0'-432.0', 2.5' core loss; 432.0'-439.0', 4.6' core loss; 439.0'-443.0', 2.2' core loss; 443.0'-452.3', 5.6' core loss; 452.3'-457.2', 3.0' core loss; 457.2'-467.6', 8.9' core loss; 467.6'-468.4', .2' core loss; 468.4'-476.0', 2.4' core loss; 476.0'-480.0', 2.4' core loss; 480.0'-500.0', 16.5' core loss; 500.0'-508.0', 5.8' core loss; 508.0'-517.1', 5.5' core loss; 508.0'-517.1', sam.; 517.1'-524.4', 4.0' core loss; 517.1'-524.4', sam.; 524.4'-534.8', 6.8' core loss; 524.4'-534.8', sam.; 534.8'-544.8', 5.0' core loss; sam.; 508.0'-544.8', disseminated Pb, ba., py.;
544.8' (END)	550.0'	2.9'	CMR	Red, hard, bx. frags., vuggy; 2.3' core loss; 544.8'-550.0'; TD UGDDH #3, 550.0';

Hole stopped short of destination (600'-700') due to loss of water, caving ground; 200 sacks of cement, numerous sacks of bran, 4 sacks paper, 4 sacks high seal, 13 sacks D.O., 2 drums AM9 Chemical Grout were pumped down hole with no results.

Core Assays

508.0 - 517.1 - 1.60
517.1 - 524.4 - 1.10
524.4 - 534.8 - .70
534.8 - 544.8 - 1.50

111.7' core loss 0.0'-550.0' giving a total recovery of 80%.

NX - 0.0'-10.0'
BX Wireline - 10.0'-428.0'
AX - 428.0'- 550.0'

DIAMOND DRILL CORE LOG

Underground Hole No. 4

Coordinates E97775
N102451

Collar Elev. 9699

Inclination - -7°
Bearing - S65°W
Location - East of X-Cut of Spad B-38

Date Started - 2/22/66
Date Completed - 3/12/66
Drilled By - Mac Pherson
Logged By - HRM

From	To	Ft. Rcvd.	Fm.	Lithology
0.0'	48.0'	41.5'	CMR	Mottled red & gray, small vugs, bx.; 0.0'-11.0', broken zone, small am't. ba. 4.0'; 5.5' core loss 4.0'-11.0'; 110.'-31.8', core is uniform cmr, mod. hrd., small bx. frags., no. mnlz., fracs. vary from perp. to 60° to core; 31.8' 1/2" mnlz. (py., chl., grn. mineral, lim. stn.) frac. at 60° to core; 31.8'-36.0', mod. hrd., uniform cmr; 36.0', 2.0'ba. filled vug.; 36.0'-42.0', core broken, .5' core loss; 42.0'-45.5', core broken, .5' core loss; 45.5'-48.0', core broken, hrd. no. mlz.;
48.0'	73.5'	21.7'	CMR	Gray hrd, small vugs., bx.; 48.0'-54.1', core well broken up, 3.0' core loss; 54.1'-55.9', .5' core loss; 55.9'-73.5', .3' core loss;
73.5'	169.5'	91.9'	CMR	Gray, hard, small vugs., 74.0', 1/8" bx. frac. 60° to core; 76.4' 1/4" ba. qtz. frac 60° to core; 77.5', 1/8" ba. frac. 60° to core; 78.3', 1/8" ba. frac. 60° to core; 79.3', 1/2" ba. qtz. frac. 60° to core; 82.4', 1/8" ba. frac. 20° to core; 82.7'-83.3', disseminated Pb, & ba.; 88.0'-89.5', 1/8" Pb frac. para. to core; 92.3', 1" ba. vug.; 93.0'-93.7', disseminated Pb & ba., vugs. slightly larger than usual; 98.0'-98.3', 1/8" ba., sulph., lim. stn. frac. para. to core; 99.4'-99.7', mnox., lim. stn., ba. frac. para. to core; 1.0' core loss 94.0'-102.8'; 103.6'-104.5', ba., sulph., lim. stn. fracs. 30° to core; 106.0', 1/2" ba., mnox. frac. 40° to core; 106.8', 1/4" ba. frac.35° to core; 107.8', mnox., lim. stn. frac. 60° to core; 108.0'-108.3', ba., fracs. 60° to core; 110.1'-110.3', 1/8" mnox. ba. frac. 40° to core; 111.2', 1/4" ba., Pb, frac. 30° to core; 115.1', 1/8" ba.

From	To	Ft. Rcvd.	Fm.	Lithology
				mnox., lim. stn. frac. 40° to core; 116.7', 1/8" ba. frac. 40° to core; 117.6' 3/4" ba. frac. 40° to core; 124.3', 1/2" ba., mnox. lim. stn. frac. 40° to core; 2.6' core loss 118.0'-127.6'; 1/4" ba., mnox., lim. stn. frac. 60° to core; 139.4', mnox., lim. stn. frac.; 140.4' mnox., lim. stn. frac.; 141.2', 1/4" ba. frac. 60° to core; 141.6', 1/2" ba. frac. 60° to core; 149.6', 1/8" ba. frac. 60° tocore; 2.7' core loss 144.8'-154.7'; 159.8', 1/2" ba. frac. 50° to core; .5' core loss 154.7'-164.0'; 167.5', 1/2" ba. frac. 60° to core; 167.8'-168.0', disseminated Pb, ba.;
169.5'	313.0'	114.6'	CMR	Mottled red & gray, hrd., vuggy, bx., 2.7 core loss 164.0'-181.7'; 182.2, 1/2" ba. frac. 50° to core; 2.7' core loss 181.7'-188.7'; 189.5'-194.4', mnox., lim. stn., fracs. para. to core; 1.0' core loss 188.7'-197.0'; lim. stn., mnox., fracs. at 197.2', 197.4', 198.0', 200.4', 200.6', 201.6'; .7' core loss 197.0'-202.3'; 203.7', 1/8" ba. frac. 60° to core; 204.7', 1/2" mno. frac. 50° to core; 205.4', 1/8" mno., lim. stn. frac. 60° to core; 206.2' 1 1/2" mno., lim. stn., ba. frac. perp. to core; 206.6', 1" bx. frac. with mno., lim. stn. 60° to core; 207.0', 1/4" mno. frac. 60° to core; 207.0'-209.0', lim. stn. mno. filled vugs., vugs larger than uaual (1/8"-1"); 2.2' core loss 202.3'-211.5'; 1.2' core loss 211.5'-219.7'; 1.0 core loss 219.7-221.2'; 223.4', mno. frac. para. to core; 224.2' mno. frac. 30° to core; 1.0' core loss 221.2'-226.0'; 227.1', 1/2" ba. frac. 40° to core; 227.8', 1/8" mno., lim. stn. frac. 60° to core; 230.0', 1/2" mno. lim. stn. frac. 50° to core; 231.7', 1/2" mno., lim. stn. frac. 60° to core; 234.3', 1/8" mno. frac. 60° to core; 1/3' core loss 226.0'-236.3'; 241.0', 1/2" ba. mno. frac. 60° to core; 241.9', 1/8" ba. mno., lim. stn. frac. 60° to core; 243.0', 1/8" ba. lim. stn., frac. 60° to core; 244.1', 1/8" ba., lim. stn. frac. 60° to core; .3' core loss 236.3'-246.3'; .7' core loss 246.3'-249.3'; 1.4' core loss 249.3'-253.6'; 254.0', 1/2" lim. stn. zone; 255.2, 1/8" lim. stn., mno. frac. 30° to core; 256.4', 1/4" lim. stn., py. frac. 30° to core; 257.1'-258.0'; mno. lim. stn. frac. para. to core; .7' core loss 253.6'-262.1'; 2.5'

From	To	Ft. Rcvd.	Fm.	Lithology
				core loss 262.1'-267.0'; 268.0' 1/8" mno., lim. stn. frac. 60° to core; 268.5', 1/8" lim. stn., mno. frac. 60° to core: 272.6', mno. frac. para. to core; 279.3', 1/8" greenish white clay frac. 30° to core; 284.4', 1/4" ba. frac. perp. to core; 2.2' core loss 277.0'-287.2'; 289.6', 1/8" ba., grn. clay frac. 30° to core; 290.3', 1/8" mno. frac. perp. to core; 291.0', lim. stn., ba. frac. perp. to core; 294.2' 1/8" lim. stn., mno. frac. 30° to core; 295.5'-296.0', mno. lim. stn. frac. para. to core; .5' core loss 294.2'-297.1'; 301.0', 1" lim. stn. alt. zone perp. to core; .8' core loss 297.1'-301.8'; 2.0' core loss 302.7'-207.4'; .3' core loss 308.5'-313.0'.
313.0' (SAM)	332.2'	13.2	CMR	313.0'-318.6' core is well broken; 2.0' core loss 313.0'-318.6'; 319.2', 1/8" ba. frac. 50° to core; 319.4', 1/8" grn clay frac. 30° to core; 1.0' core loss318.6'-321.0', 322.4', 1/8" lim. stn., ba. frac. 60° to core; 322.8', 1/8" lim. stn., ba. frac. perp. to core; 3.0' core loss 321.0'-325.8'; 327.8', 1/8" ba. frac. 60° to core; 330.0', 3" ba. zone core is small chips; 2.0' core loss 328.8'- 332.2'.
332.2' (END)	376.0	20.3	CMR	Mno. fracs. at 333.5', 333.7', 334.2', 1.4! core loss 332.3'-335.8'; .4' core loss 335.8'-337.8'; lim. stn. fracs. at 338.2', 338.3', 338.4', 338.8', 339.2', 339.5', 339.6', 339.9', 340.1'; .7' core loss 337.8'-340.8'; 342.8' lim. stn., mno. zone 1/4" wide; 2.0 core loss 342.8'-246.0'; 2465.' lim. stn., mno. zone; 347.8'-348.2' ba. lim. stn. mno. zone; 7.0' core loss 356.0'-356.2'; 356.6'-357.0' lim. stn., mno. zone; 358/6' lim. stn. alt. zone 1" wide; 359.5'-360.1', mno., lim. stn. frac. para. to core; 6.0' core loss 356.2'-366.2'; 367.0' 1/8" mno. frac 50° to cpre; 6.0' core loss 366.2'-376.0'; TD 376.0'

71.1' core loss 0.0'-376.0' with a recovery of 81%

Core Assay

313.0'-318.5' - .20
318.5'-321.0' - Trace
321.0'-325.8' - .10
325.8'-328.8' - Trace
328.8'-332.2' - .10

BX Wireline 0.0'-73.0'
AX 73.0'-376.0'

DIAMOND DRILL CORE LOG

Underground Hole No. 5

Coordinates E 97792
N 102460

Collar Elev. 9699

Inclination - -45°
Bearing - S65°W
Location - East of X-Cut at Spad B-38

Date Started - 3/14/66
Date Completed - 3/16/66
Drilled By - Mac Pherson
Logged By - HRM

From	To	Ft. Rcvd.	Fm.	Lithology
0.0'	18.5'	13.8	CMR	Punky, red, vuggy, bx.; core in bad shape (extremely broken up); non-swivel core barrel used in drilling; 1.5' core loss 0.0'-2.0'; .5' core loss 2.0'-5.0'; .5' core loss 5.0'-6.5'; .2' core loss 6.5'-8.0'; 1.1' core loss 8.0'-10.0'; .4' core loss 10.0'-15.8'; .5' core loss 16.8'-18.5';total core loss 0.0'-18.5' is 4.7';
18.5'	44.0'	22.5	CMR	Punky, bx., vuggy, red; core well broken up; 19.1', 1/8" ba., py. frac. 60° to core; 27.3', 1/4" ba., py. sulph. frac. 60° to core; 27.7', 1/4" ba., py. sulph. frac. 60° to core; 28.6', 1/8" ba. frac. perp. to core; 32.9', 1/4" ba., sulph. frac. perp. to core; 33.6', 1" ba., sulph. frac. perp. to core; 35.4', 1/8" sulph., ba. frac. 60° to core; 36.1', 2" ba., sulph. frac. 60° to core; 3.0' core loss 34.5'-41.0';
44.0'	48.0'	4.0	CMR	Vuggy, mottled red & gray, bx. fracs. larger than rest of core;
48.0'	78.0'	21.7	CMR	Vuggy, punky, red, bx.; 1/5' core loss 44.0'-51.4'; 1.0' core loss 51.5'-56.0'; 1/0' core loss 56.0'-60.0'; 1.5' core loss 60.0'-66.4'; 2.5' core loss; 66.4'-70.4'; .3' core loss 70.4'-71.3'; .5' core loss 71.3'-75.7'; 78.0' ba., sulph. chips;
78.0' (SAM)	98.8'	18.8	CMR	80.0'-81.5', rhy., sam.; 81.5'-85.2', ore sam.; 1' core loss 82.0'- 84.0'; .3' core loss 85.2'-86.0'; 85.2'-86.0', rhy. sam.; 86.0'-68.7', ore sam.; 86.7'-87.7', rhy. sam.; 87.7'-89.2', ore sam.; .7' core loss 89.2'-90.7'; 89.2'-91.0', rhy. sam.; 91.0'-91.8', ore sam.; 91.8'-92.3', rhy sam.; 92.8'-93.5', ore sam.; 93.5'-95.0', rhy. sam.; TD 98.8';

18.0' core loss 0.0'-98.8' with a 82% recovery

0.0'-99.0' Bx

Core Assays

80.0' - 81.5'	-	.20
81.5' - 85.2'	-	47.80
85.2' - 86.0'	-	3.20
86.0' - 86.7'	-	13.70
86.7' - 87.7'	-	.60
87.7' - 89.2'	-	25.10
89.2' - 91.0'	-	.80
91.0' - 91.8'	-	1.70
91.8' - 92.8'	-	.60
92.8' - 93.5'	-	3.10
93.5' - 95.0'	-	.80

DIAMOND DRILL CORE LOG

Underground Hole No. 6

Coordinates E 97850
N 102159

Collar Elev. 9701'

Inclination - -35°
Bearing - S52W
Location - Drill Sta. Near Spad B-33

Date Started - 3/17/66
Date Completed - 4/12/66
Drilled By - Mac Pherson
Logged By - HRM

From	To	Ft. Rcvd.	Fm.	Lithology
0.0'	10.0'	8.5'	CMR	Hard, red, vuggy, bx. fracs.; 0.0'-0.4', ba. chips; .8' core loss 0.0'-2.0'; 1.0', 2" qtz. vug; .4' core loss 2.0'-4.4'; .3' core loss 4.4'-6.0'; 6.1', mnox., lim. stn. frac.; 8.3', 2" qtz. vug.; 9.4'-10.0', core well broken;
10.0'	30.4'	19.4'	CMR	Hard, red, vuggy, bx. frags.; 1/0' core loss 10.0'-20.0'; 22.3', 1/8" mnox. frac. 60° to core; 29.3', 1/4" mnox. frac. 60° to core;
30.4'	169.8'	139.0	CMR	Hard, red, vuggy, bx. frags.; 31.2'-31.8', qtz. filled vug with lim. stn.; 32.1', 1/8" mnox. frac. 60° to core; 38.3'-39.1', mnox., bx. frags.; 40.8', 3" lim. stn. vug; lim. stn. frac. at 43.2', 43.6', 43.8', 44.2'; 46.8', 1/8" mnox., lim. stn. frac. 60° to core; 52.5', 1/8" mnox. frac. 30° to core; 62.9', 1/8" mnox., frac. 30° to core; 81.4', 1/8" mnox., lim. stn. frac. 30° to core; 82.4', lim. stn. frac. 30° to core; 83.4', 1/8" mnox., lim. stn. frac. 45° to core; 86.6', 1/8" mnox. frac. 45° to core; .4' core loss 87.0'- 95.2'; 114.8'-122.0', alt. zone; cmr white, lim. stn.; 116', 1/8" mnox. frac. 30° to core; 156.4', 4" vug, mnox., lim. stn.; 169.3', 1/4" ba., mnox., lim. stn., frac. 45° to core;
169.8'	242.0'	70.2	CMR	Hard, gray, vuggy, bx. frags.; 170.0'-172.0', vugs larger than normal & coated with mnox., lim. stn.; .4" core loss 172.0'-182.0'; 188.8', 1/4" mnox. frac. 45° to core; .2' core loss 197.2' to 198.2'; .2' core loss 206.2'-214.2'; 1/0' core loss 220.8'-229.4'; .2' core loss 229.4'-227.0'; 241.3', 1/8" ba. frac. 45° to core; Box #11, 217.0'-241.6' much heavier than rest of boxes;

From	To	Ft. Rvcd.	Fm.	Lithology
242.0'	286.0'	41.8	CMR	Hard re, vuggy, bx. frags.; 251.0', 1/8" lim. stn., mnox., ba. frac. 45° to core; 2.0' core loss 247.0'-256.0'; 258.2', 1/8" ba. frac. 45° to core; 263.5', 1/8" ba. frac. perp. to core; .2' core loss 256.0'-266.0'; 267.2', 1/8" mnox. frac. 45° to core;
286.0'	336.0'	49.2	CMR	Hard red vuggy, bx. frags.; .3' core loss 286.0'-296.0'; .5' core loss 296.0'-300.0'; 312.'5-314.0', well bx. sec. with qtz. filled vugs; 315.5', 1/8" lim. stn. frac. 30° to core; 328.2', mnox., lim. stn. fracs. 45° toc core; 329.8', lim. stn. frac.; 332.0', mnox. frac;
336.0'	368.5'	30.8'	CMR	336.0'-337.0', rhy. sam.; 337.0'-338.0', trhy. sam.; 338.0'-339.0', rhy. sam.; 339.0'-340.0', rhy, sa.; 340.0'-341.0', ore sam.; 341.0'-342.0', rhy. sam.; .2' core loss 337.0'-341.0'; 340.2', 1/4" ba. frac. perp. to core; 340.6', 1/8" bas. frac. 60° to core; 344.3', 1/8" ba. frac. 30° to core; 352.0'-353.0', lim. stn., mnox. vugs; 354.0', mnox. frac. para. to core; 358.4', mnox. lim. stn. frac. 30° to core; 355.7', mnox. lim. stn. frac. 45° to core; 356.5', lim. stn., mnox. frac. 45° toc core; 357.7', mnox., frac. 40° to core; 358.2', 1" mnox., ba., lim. stn. vug.; 359.9', 1/4" ba., lim. stn., mnox. frac. 45° to core; 360.0'-361.8', mnox. lim. stn., ba. vugs & fracs.; 363.8', 1/ 4" ba. vug.; 1/8" ba. lim stn. frac. 45° to core; trhy. sam. 357.5'-362.0'; rhy. sam. 362'-366.0'; 365.8', 5" zone mnox., lim. stn., qtz. vugs & fracs.; 1/5' core loss 358.5'-368.5';
368.5'	377.5'	7.5	CMR	Hard, gray, vuggy bx. frags.; 386.5', 1" mnox. vug; 370.5', mnox. lim. stn. frac. 30° to core; 1/5' core loss 368.5'-373.5'; 375.3' 4" bx. frag. alt. white; 376.0', 2" bx. frag. alt. white;
377.5'	454.0'	73.9	CMR	Hard, red, vuggy, bx. frags.; 381.5', 1" mnox., lim. stn. vug; 382.8', 4" lim. stn. frac. & vug; .3' core loss 381.3'-386.0'; .5' core loss 399.0'-404.0'; 408.2', 3" lim. stn., mnox. vug & frac.; .3' core loss 404.0'-409.0'; lim. stn., mnox. vugs & fracs.

From	To	Ft. Rcvd.	Fm.	Lithology
				at 409.4', 409.9', 410.4', 411.0', 412.4', 417.5', 422.0', mnox. frac. 45° to core; 424/5'-425.5', mnox. vugs & fracs.; mnox., fracs at 426.3', 426.6', 426.9', 427.3', 438.0', 438.3', 438.9', 445.3', 445.7', 447.6', 1/2" hydrothermal alt. frac. 60° to core; 1/5' core loss 450.0'-454.0'; TD is 454.0'; (END)

13.7' core loss 0.0'-454.0' giving 97% recovery

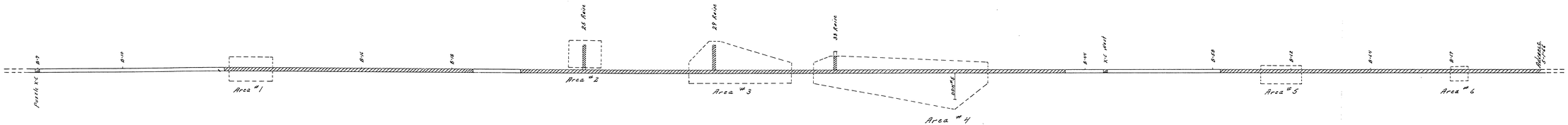
Hole surveyed 4/16/66 by Tropari Method

Depth	Inclination
150	-33°
200	-33°
250	-33°
300	-33°
350	-32°
400	-24°

Assay

	SLUDGE		CORE	
#40	337.0' - 339.0'	Trace	336.0' - 337.0'	Trace
#41	339.0' - 341.0'	Trace	337.0' - 338.0'	Trace
#42	341.0' - 343.0'	Trace	338.0' - 339.0'	Trace
#50	358.5' - 360.5'	Trace	339.0' - 340.0'	Trace
#51	360.5' - 362.5'	Trace	340.0' - 341.0'	Trace
#52	362.5' - 364.5'	Trace	341.0' - 342.0'	Trace
#53	364.5' - 366.5'	.20	357.5' - 362.0'	.10
			362.0' - 366.0'	Trace

0-454.0' BX Wireline



Elev. Portal of Puzzle Drift - 9700'

LEGEND

Proven Ore

Probable Ore

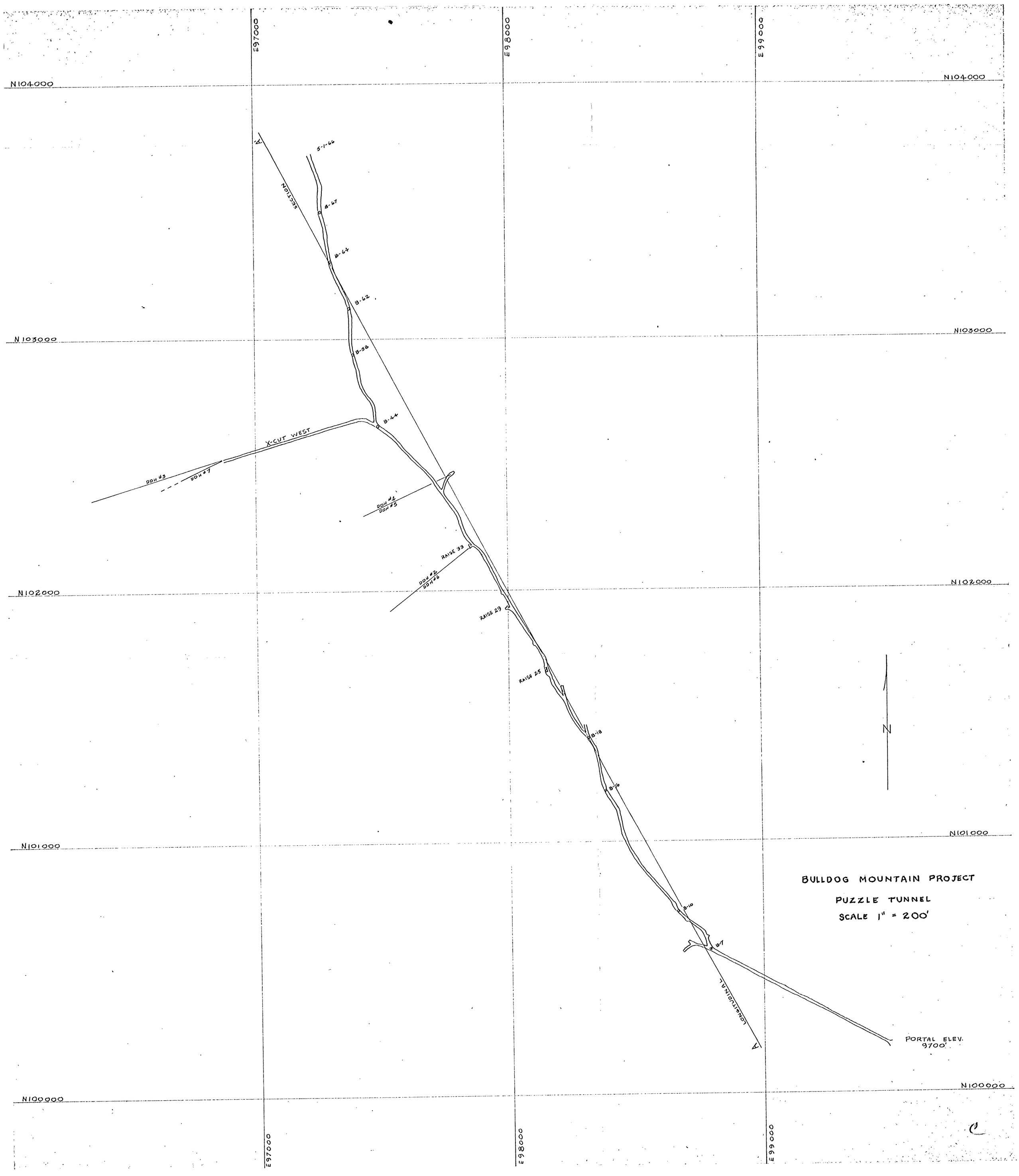
LONGITUDINAL SECTION A-A'

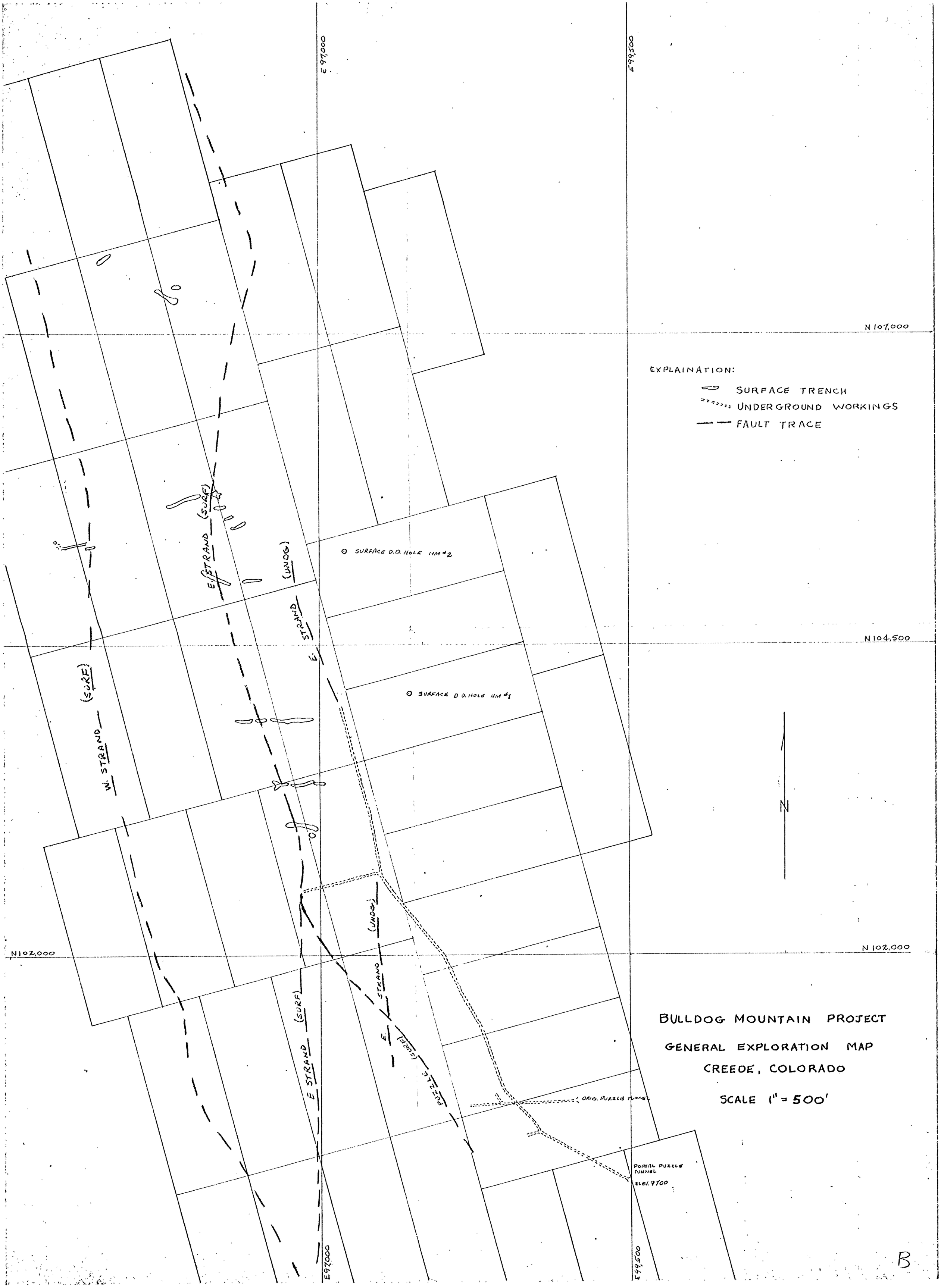
SECTION THROUGH PLANE OF VEIN - PUZZLE DRIFT

LOOKING SOUTHWEST

Scale: 1" = 100'

TMR


E97000
E98000
E99000
N104000
N103000
N102000
N101000
N100000
5-1-66
B-67
B-64
B-62
B-58
B-44
X-CUT WEST
DDH #3
DDH #7
DDH #4
DDH #5
RAISE 33
DDH #2
DDH #6
RAISE 29
RAISE 25
B-18
B-16
B-10
B-1
LONGITUDINAL
N
BULLDOG MOUNTAIN PROJECT
PUZZLE TUNNEL
SCALE 1" = 200'
PORTAL ELEV.
9700'


N 107,000
N 104,500
N 102,000
N 102,000
E 97,000
E 99,500
E 97,000
E 99,500
EXPLAINATION:
SURFACE TRENCH
UNDERGROUND WORKINGS
FAULT TRACE
SURFACE D.D. HOLE HM #2
SURFACE D.D. HOLE HM #1
E. STRAND (SURF)
E. STRAND (UNDG)
W. STRAND (SURF)
E. STRAND (SURF)
E. STRAND (UNDG)
PUZZLE (SURF)
ORIG. PUZZLE TUNNEL
PORTAL PUZZLE TUNNEL
ELEV. 9700
N
BULLDOG MOUNTAIN PROJECT
GENERAL EXPLORATION MAP
CREEDE, COLORADO
SCALE 1" = 500'

B