

3601019  
UURI EARTH SCIENCE LAB

GEOPHYSICAL LOGS  
LOG RUN

SHEET NO. 1 OF 1  
DATE COMPANY

PROJECT ROOSEVELT  
DRILL HOLE UNIV. OF UTAH 76-1  
DEPOSIT TYPE GEOTH.  
LOGGED BY J.B. HULENT JULY 1977

DATE STARTED \_\_\_\_\_  
DATE COMPLETED \_\_\_\_\_  
DRILLING CO. \_\_\_\_\_  
FINAL DEPTH (m. ft.) \_\_\_\_\_  
COLLAR ELEV. (m. ft.) \_\_\_\_\_  
CO-ORDINATES LAT. \_\_\_\_\_  
LON. \_\_\_\_\_  
GRID 5620 M N 600 M E  
T. 26 S R. 9 W SEC. 34 (SW 1/4)

CORE SIZE (mm. in.)

FROM (m. ft.) TO (m. ft.)

DEPTH (m. ft.)

* GRAPHIC LOGS										DOWN HOLE LOCATION	* GEOLOGIC NOTES (Use also for general comments)										DOWN HOLE SURVEY DATA			THIN & POLISHED SECTIONS					
SCALE ft.	FRACTURE INTENSITY (FRACTURES)	ALTERATION					TOTAL SULPHIDES (vol. %)	ROCK TYPE & STRUCTURE	DISTANCE DOWN HOLE (ft.)	ELEVATION	ROCK TYPE	DESCRIPTION MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE.	MINERALIZATION		STRUCTURE				FRACTURE INTENSITY (% PER METRE)	DEPTH ft.	INCLINATION	BEARING	DEPTH ft.	SAMPLE NUMBER					
		CLAY	CHLOR. EPID.	ALLAN.	ILLITE	KSPAR							WEAK MODERATE STRONG	DISTRIBUTION Massive, Disseminated, Veinfill, Replacement	TYPE Hypogene, Supergene, Ore and Limonite Mineralogy	DOWN HOLE DIST. (ft.)	FOLIATION WITH CORE	BEDDING WITH CORE							FRACTURE WITH CORE	DESCRIPTION OF STRUCTURES Post or Pre-Ore (Evidence)			
10								10 <sup>th</sup> 12 <sup>th</sup>			ALTERED SILTY TO SANDY GRAVEL; ALLUVIUM ANG. SUBANG FRAGS FR. (Largely) << 1mm. TO AT LEAST 30 granitic cm. MAX DIMENSION; CRUDE fragments BEDDING LOCALLY APPA- as near BENT; POROSITY 7-25% as the (MAX IN GRAVEL LAYERS) logger can IRREG, ELONGATE VUGS tell (also (SECONDARY) (UP TO 15 mm. misc. lithic MAX DIMENSION) frags [volc] "ROCK" IS LIGHT-COLORED tr obsidian) w/ OVERALL PLINKY, CRUMBY, VUGGY CHARACTER, BUT IS LOCALLY PORCELLANEOUS (ALLINITE?); OVERALL, AP- PEAR TO BE A FINE-X-LINE AGGREGATE OF QTZ (OPAL) CLAY, AND FINE WHITE MICA (ILLITE? BLEACHED CHL.?) - RARE PARTIALLY UNAL- TERED FSP. BELOW 345'	- OVERALL: 3-4% GOETHITIC TO HEMA- TITIC (largely the latter) LIMONITE as: ① DISS IRREG GRAINS AVG < 0.1mm. DIA IN BOTH- MATRIX AND FRAGS. ② AS PARTIAL VUG LININGS w/ MINE- RALS DESCRIBED TO THE LEFT ③ w/ ABOVE MINE- RALS IN VNLTs.	60-70° 30'	"ROCK" TENDS TO CRUMBLE RATHER THAN FRACTURE; FRACTURES → 3?															
20											- THROUGHOUT: HYALITE- CLAY VNLTs. AT ALL 1/2'S TO CORE AXIS; IRREG, AVG. 1 mm. WIDE (UP TO 7 mm.); VUGGY (VUGS UP TO 25x7 mm. IN X-SECT) - VUGS LINED w/ BOTRYOIDAL HYALITE; EST AVG. 7-10 VNLTs/m.	- RARE, SCATTERED "ISLANDS" UP TO 10 mm. DIA, OF UNOXIDIZED PYRITE. BELOW 125'																	
30											- 23 <sup>rd</sup> -25', 26-27', 36.5-38': UNKNOWN GRAYISH TO GREENISH-YELLOW MINER., LOCALLY UP TO 1/2", AS DISS., IRREG MASSES UP TO 5 mm. DIA. w/ OPAL (HYALITE), ALLINITE, CLAY, RARELY LIMONITE; ALSO PARTIALLY LINING VUGS & w/ ABOVE MINE- RALS; IN SCATTERED VNLTs; TRACES OF AS <sub>2</sub> S <sub>3</sub> w/ THE SULFUR	(MAY BE NATIVE SULFUR IN PART)																	
40											- SPHERE IN GRANITIC FRAGS. ALT TO PAPERY BLUFF-COLORED BOX- WORKS OF UNKNOWN MINER.																		

W.R. SILL SAMPLES (Core Intact)

21<sup>30</sup> - 21<sup>55</sup>'  
24 - 24<sup>50</sup>'  
26<sup>30</sup> - 27<sup>10</sup>'  
42<sup>30</sup> - 43<sup>30</sup>'  
50<sup>30</sup> - 50<sup>50</sup>'  
58<sup>30</sup> - 58<sup>55</sup>'  
73 - 73<sup>40</sup>'  
88 - 88<sup>40</sup>'  
100<sup>30</sup> - 101<sup>30</sup>'  
108<sup>30</sup> - 109'  
112<sup>30</sup> - 113<sup>05</sup>'  
124<sup>30</sup> - 125<sup>05</sup>'  
155 - 155<sup>05</sup>'  
199<sup>35</sup> - 200<sup>30</sup>'

\* NOTE: GEOLOGIC NOTES & GRAPHIC LOGS NOT AT SAME SCALE.

102

# UURI EARTH SCIENCE LAB

PROJECT ROOSEVELT  
 DRILL HOLE UNIV of UTAH 76-1  
 DEPOSIT TYPE GEOTH.  
 LOGGED BY J.B. HULEN JULY 1977

DATE STARTED \_\_\_\_\_  
 DATE COMPLETED \_\_\_\_\_  
 DRILLING CO. \_\_\_\_\_  
 FINAL DEPTH \_\_\_\_\_ (m. ft.)  
 COLLAR ELEV. \_\_\_\_\_ (m. ft.)  
 CO-ORDINATES LAT. \_\_\_\_\_  
 LON. \_\_\_\_\_  
 GRID 5620 III N 600 III E  
 T 265 R 9W SEC. 34 (SW 1/4)

CORE SIZE (mm. in.) \_\_\_\_\_  
 FROM (m. ft.) \_\_\_\_\_ TO \_\_\_\_\_

GEOPHYSICAL LOGS  
 LOG RUN \_\_\_\_\_  
 DEPTH (m. ft.) \_\_\_\_\_

SHEET NO. 2 OF 4  
 DATE \_\_\_\_\_ COMPANY \_\_\_\_\_

103

GRAPHIC LOGS*										GEOLOGIC NOTES* (Use also for general comments)																					
SCALE (m. ft.)	FRACTURE INTENSITY (NO. OF FRACTURES PER METRE)	ALTERATION					TOTAL SULPHIDES (wt. %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION	ELEVATION	ROCK TYPE	DESCRIPTION	MINERALIZATION		STRUCTURE				FRACTURE INTENSITY (NO. PER METRE)	DOWN HOLE SURVEY DATA			THIN & POLISHED SECTIONS								
		CLAY	EPID.	BIO.	SER.	KSPAR.							SILICA	CO <sub>3</sub>	DISTRIBUTION	TYPE	DOWN HOLE DIST. (m. ft.)	FOLIATION WITH CORE		BEDDING WITH CORE	FRACTURE WITH CORE	DEPTH (m. ft.)	INCLINATION	BEARING	DEPTH (m. ft.)	SAMPLE NUMBER					
100								47-492		ALTERED TUFF (?)	... PINKY, V. LT. GRAY; (AIR FALL?) 10% ANGULAR FRAGS. & PROB. BROKEN XLS. ERRATICALLY DISTRIBUTED, SET IN A V. FINE-XLINE MATRIX; FRAGS UP TO 15 mm. DIA. (AVG. 5 mm.) ALTN. ESS. SAME AS 108-423, EXC. PROB. MUCH LESS OR NO ALLINITE																				
110								47-492		ALTERED ALLUVIUM (?)	... ESSENTIALLY IDENTICAL TO 108-423; HEM-ATITE-JAROSITE-CLAY-rich altered tuff																				
120								492-503		ALTERED TUFF (?)	... SAME AS 423-47, EXC. RICHER IN FRAGS, LESS ALTERED (SOME RELICT FSP/SANIDINE?)																				
130								503-504		ALTERED LITHIC TUFF (?)	... SAME AS 423-47, EXC. RICHER IN OBVIOUS GRANITIC FRAGMENTS, SCATTERED RELICT FSP																				
140								504-507		ALTERED GRANITIC ROCK	CRS.-XLINE; PRONOUNCED CATACLASTIC (?) FOLIATED ASPECT HIGHLIGHTED BY (PROBABLY CRUDELY SUBPARALLEL ELONGATE VUGS (SUB// TO "CATACLASTIC" FOLIATION) UP TO 15x5 mm. X-SECT (AVG. ~ 3x1 mm.), AC-COUNTING FOR 7-10 VOL. % OF ROCK																				
150								507-508		ALTERED GRANITIC ROCK	VUGS ARE COMMONLY PARTIALLY TO COMPLETELY LINED W/CLAY, MINOR OPA, DRUSIES OF TINY WHITE XLS. (ZEOLITE?)																				
160								508-509		ALTERED GRANITIC ROCK	STR. CHL. ALTN. 613-64' (MASSES OF FINE-XLINE CHL. THIS INTERVAL UP TO 15 mm. DIA.																				
170								509-510		ALTERED GRANITIC ROCK	OBVIOUS SULFIDES BEGIN TO APPEAR AT ~ 75'; THESE OCCUR MAINLY AS DISSEMINATED IRREG. GRAINS < 0.1 mm. (may be present, but unrecognized higher in hole); ALSO OCCUR BELOW 77' AS RARE AGGREG. OF THESE GRAINS UP TO 5 mm. DIA. MANY GRAINS & GRAIN AGGREGATES ARE DULL BROWNISH & SUBMETALLIC (MAY BE SPHALERITE IN PART)																				
180								510-511		ALTERED GRANITIC ROCK	SULF. ALSO OCCUR IN PART AS IRREG. GRAINS & GRAIN AGGREGATES ALONG CLAY-SILICA VULTS.																				
190								511-512		ALTERED GRANITIC ROCK	79-80': HEAVILY ARGILLIZED & SILICIFIED PORTION OF FLT. ZONE ~ 5-7% DC. BROWNISH-GRAY SUBMETALLIC MINER. (W/ SOME OBVIOUS PYRITE IN STREAKY SUB// BANDS @ ~ 40° TO CORE AXIS CONSISTING OF IRREG. DISCONTINUOUS MASSES UP TO 10 mm. DIA.																				

\* NOTE: GRAPHIC LOGS & GEOLOGIC NOTES NOT AT SAME SCALE

79-80': HEAVILY ARGILLIZED & SILICIFIED PORTION OF FLT. ZONE ~ 5-7% DC. BROWNISH-GRAY SUBMETALLIC MINER. (W/ SOME OBVIOUS PYRITE IN STREAKY SUB// BANDS @ ~ 40° TO CORE AXIS CONSISTING OF IRREG. DISCONTINUOUS MASSES UP TO 10 mm. DIA.



