APPENDIX G

TEST ROOMS GEOLOGIC MAPS AND SECTIONS

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The following descriptions pertain to the geologic map units shown on Figures G-1 through G-4:

UNIT DESCRIPTIONS

- UNIT 6⁽¹⁾ <u>Halite</u>: colorless with grayish orange-pink (1 OR 8/2)⁽²⁾ tint: transparent to translucent; coarsely crystalline: trace of dispersed polyhalite; unit extends into the roof; lower contact with Unit 5 is gradational and/or diffuse.
- UNITS <u>Halite</u>: colorless; transparent to translucent; coarsely crystalline; trace of bluish-white (58 9/1) to light bluish-gray (58 7/1) argillaceous materia) occurring as pods (1/2-inch diameter) and discontinuous laminations or filling interstices; lower contact with Unit 4 is generally sharp and based on prominent color change in argillaceous material (gray to red-brown) from Unit 5 to Unit 4.
- UNIT 4 <u>Argillaceous halite</u>: coloriess to moderate reddish-brown (1 OR 4/6), less frequently light bluish-gray (58 7/1); transparent; coarsely crystalline; trace of dispersed polyhalite; trace to abundant argillaceous material (decreasing downward) consisting of clay containing a trace of silt and fine crystals of halite, occurring as discontinuous laminations in upper half of unit and interstitially in lower half; lower contact with Unit 3 is gradational and based on absence of argillaceous material in Unit 3,
- UNIT 3 <u>Halite</u>: colorless to moderate reddish-orange (1 OR 6/6); transparent to translucent; coarsely crystalline; trace of dispersed polyhalite; polyhalite content commonly increases downward; lower contact with Unit 2 is sharp.
- UNIT 2 <u>Argillaceous halite</u>: moderate reddish-brown (1 OR 5/5), less frequently light bluish-gray (58 7/1); medium to coarsely crystalline; argillaceous material primarily occurs interstitially or as discontinuous laminations; lower contact with Unit 1 is generally sharp, less frequently gradational.
- UNIT i <u>Halite</u>: light reddish-orange (1 OR 8/6) to moderate reddish-orange (1 OR 6/6), less frequently colorless; translucent to transparent; medium to coarsely crystalline; trace of dispersed polyhalite; lower contact with Unit 0 is sharp.
- UNIT 0 <u>Argiliaceous halite</u>: colorless to moderate reddish-orange (1 OR 6/6) and moderate reddish-brown (1 OR 4/6); medium to coarsely crystalline; trace of dispersed polyhalite; some argiliaceous material occurs as discontinuous laminations and blebs or fills interstices (decreasing downward); contains finely crystalline halite; unit extends into the floor.

NOTES:

- (1) Units listed in descending order from roof to floor.
- (2) Alpha-numeric color designations are based on Geological Society of America Rock Color Chart.

The following legend and notes pertain to the geologic maps shown on Figures G-1 through G-4:

LEGEND:

CONTACTS

SHARP (LESS THAN 0.05 FEET)

------ GRADATIONAL (0.05 TO 0.2 FEET)

•••••• DIFFUSE (0.2 TO 0.5 FEET)

<u>WEEP</u>

DAMP AREA WITH 1/4" TO 3/4" DIAMETER KNOBS AND INCRUSTATIONS OF FINELY-CRYSTALLINE HALITE.

BREAKS IN BED CONTINUITY

UNIT 3	
UNIT 2	
UNIT 1	
UNITO	\sim \neg

SYN- OR IMMEDIATELY POST-DEPOSITIONAL DISSOLUTION OR SCOUR CHANNELS FILLED WITH SEDIMENT FROM OVERLYING UNIT. (TYPICAL)

NOTES:

- 1. VERTICAL CONTROL FOR MAPPING IS MEAN SEA LEVEL (MSL) REFERENCED TO UNDERGROUND SURVEY POINTS ESTABLISHED BY CEMENTATION WEST, INC.
- 2. HORIZONTAL CONTROL FOR MAPPING REFERENCED TO ZERO POINT AT CENTER-LINE OF C&SH SHAFT.



-22.23 NUMBER WEST RIB ROOF DRAWN 20 2 CHECKED BY 20 2 BY 2-28-33 APPROVED BY 80H 300 1305 2 2 FOLD LINE FOLD LINE (RIB)-7 🕆 (RI B) RÇ 1G-213 203 JG-203 GE-237 GE-214 GE-238 1G-204 GE-213 1G-214 GE-:215 FLOOR EL. 0 . '0D IG-211 1294.7'-UNITUNIT FOLD LINE (ROOF) FOLD LINE (ROOF) UNIT O 4 EL. 1307.9'-— EL. 1308.1' 4 : H+ 3 UNIT 6 UNIT 5 UNITI (IN ROOF) (IN ROOF) UNIT2 UNIT 2 EXPLANATION FOR UNIT DESCRIPTIONS, LEGEND AND NOTES ROOM 4 LOCATION MAP SEE FRONT OF THIS APPENDIX. PORTION NOT TO SCALE FOLD LINES ROOF MAPPED ROOM 3 EAST RIB - MAPPING UNIT CONTACTS ARE OBSCURED w 900 BY GROUT TO 2' SOUTH AND 4' NORTH OF INSTRUMENT LINE. INDICATED CONTACTS ARE PROJECTED FROM WEST RIB. THESE POINTS. IG-215 INCLINOMETER • - w 20 C B SH SHAFT EAST RIB O EAST DRIFT GE-214 BOREHOLE • EXTENSOMETER NIA20 DRIFT E 140 DRIFT - (100 SCHEMATIC SECTION ▲ RC/TC CONVERGENCE NOT TO SCALE POINTS

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SECTION THROUGH TEST ROOM 3





LARGE DIAMETER DRILL HOLES









^{4.} UNLESS NOTED OTHERWISE, THE BOITOM OF THE DRILL HOLE (B.D.H.) COINCIDES WITH CLAY E.

FIGURE G-11









4. UNLESS NOTED OTHERWISE, THE BOTTOM OF THE DRILL HOLE (B.O.H.) COINCIDES WITH CLAY E.

FIGURE G-13





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FIGURE G-15





















FIGURE G-21

CLAY E.









MAPPED BY: J.E. GALLERANI





- NOTES:
- 1. DRILL HOLE IS 36 INCHES IN DIAMETER.
- 2. MAPPING WAS PERFORMED FROM INSIDE THE HOLE. ALL FEATURES WERE MEASURED FROM A SURVEYED REFERENCE LINE.
- 3. ORIGINAL MAPPING WAS PERFORMED AT A SCALE OF ONE INCH TO ONE FOOT.
- 4. UNLESS NOTED OTHERWISE, THE BOTTOM OF THE DRILL HOLE (B.O.H.) COINCIDES WITH CLAY E.



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4. UNLESS OTHERWISE NOTED. THE BOTTOM OF EACH DRILL HOLE (B.O.H.) COINCIDES WITH

FIGURE G-27











CLAY E.











		EXPLANATION
		MINED SALT BACKFILL HALITE
		MARKER BED 139 UPPER CONTACT OF MB-139
		FRACTURE TRACE DISTINCT FRACTURES, USUALLY CLOSED WITHIN A FEW INCHES OF THE DRILL HOLE SIDE.
		FRACTURE ZONE ZONE OF FRACTURED ROCK BOUNDED BY DISTINCT FRACTURES.
		SMALL FRACTURE CLOSED HAIRLINE FRACTURES, USUALLY FORMING FRACTURE ZONES LESS THAN ONE INCH WIDE.
	<u>(</u> 1/2)	APPROXIMATE FRACTURE SEPARATION, IN INCHES. SEPARATIONS ARE MEASURED WITHIN FRACTURE OR ZONE 12 INCHES IN FROM DRILL HOLE WALL.
DT	ES:	
1.	DRILL TEST DIAME	HOLE IS IN SOUTHWEST CORNER OF ROOM 4 AND IS 36 INCHES IN TER.
2.	MAPPING WAS PERFORMED FROM INSIDE THE HOLE, ALL FEATURES WERE MEASURED FROM AN UNSURVEYED REFERENCE LINE.	
3.	origi Scale	NAL MAPPING WAS PERFORMED AT A E OF ONE INCH TO ONE FOOT.
1.	UNLES OF TH CLAY	SS OTHERWISE NOTED, THE BOTTOM HE ORILL HOLE (B.O.H.) COINCIDES WITH E.

5. HOLE CONTAINS SALT FILL AT BOTTOM.

FIGURE G-34