APPENDIX F

EXHAUST SHAFT GEOLOGIC LOG

## CONTENTS

Figure No. <u>Title/Description</u>

F-1 Exhaust Shaft Geologic Log (49 Sheets)



	ROCK	TYPE	•	
SAND/SAND	STONE MUDST		SILTSTONE	
			<del>, , , , , , , , , , , , , , , , , , , </del>	
<u> </u>	ANHYDRITE/		DOLONIT.	£
HALITE	GYPSUM	POLYHALITE	DOLOMIT	_
				4
				=
SILTY MUDSTON	E/ SIL	TV	A11.695	
CLAYSTO			CALICHE	
	크 (38)			
			G-120 C	
	ACCES	SORY CONSTIT	UENTS	
	ESTIMATE CONSTITUE	D PERCENTAGE OF ENTS INDICATED AS	ACCESSORY FOLLOWS	
	TRACE	SOME	ABUNDANT	
		F	F	
Argiliaceo	us			
Halitic			1 1 1	
	<u> </u>	<u> </u>	1	
Anhydritic	/		[22]	
Gypsiferou	s			
	[X]	[X X]	x x x	
Polyhalitie		x x x	XXX	
		* MIN * O FT * TI	050	
	_	AMINAR FEATU Seam Par	KES ting	
	( Be	ween 6" (Betwe	en 1/4" 16" thick)	
Clays	91.4			
Cidys				
	Anhydri	ite/Gypsum Palyi	halite	
Stringer 7	Zones VVV	///// XXXX	xxxx	
•	CONT	ACTS		
SHARP	GRADA	TIONAL	DIFFUSE	
( Identifiable _0.05 fee	t) (1gentific t) 0.05 to	ible within (1 0.2 feet)	dentificable within 0.2 to 0.5 feet)	
	→ -			

EXPLANATION

SALADO MARKER BEDS ARE IDENTIFIED BY NUMBER IN THE STRATIGRAPHIC COLUMN



PRELIM	INARY	STRATIGRAPHIC	05.140.10
ELEV.	DEPTH	COLUMN	REMARKS
(FT. MSL)	(FT.)	<del> </del>	
3411.5			
3 - 11.3		<u> </u>	COLLAR PAD
3410			
3409 -	<del>-</del> 0		QUATERNARY DUNE SAND. SAND, SILTY, REDDISH-BROWN, POORLY SORTED, SUBANGULAR GRAINS, A FEW MAFIC GRAINS (LESS THAN 10%); WEAKLY CONSOLIDATED.
			A COM CARLOS (LLGS ILAN 101/, WEARLI CONSCIDENCED.
1			
3404	_ 5		
3404	_ J		
1			
]			MESCALERO CALICHE. CALICHE, WHITE TO TAN, NODULAR, SIZE AND QUANTITY OF NODULES
			INCREASING WITH DEPTH; CARBONATE CONTENT HIGHEST IN LIGHT COLORED SUBHORIZONTAL STRINGERS: UPPER 1.0' HARD, HARDNESS DECREASING TOWARD BASE; MOIST; CONTAINS LOCAL
3399-	<del></del> 10		CONCENTRATIONS OF SILTSTONE AND SANDSTONE; COLOR BECOMES REDDISH-BROWN TOWARD BASE:
			IRREGULARLY-SHAPED DISCONTINUOUS SEDS OF SILISTONE, CHERT AND SANDSTONE PEBBLE
			CONCLONERATE MIGRATE VERTICALLY AND LATERALLY; THICK DISCONTINUOUS BEDS OF GRANGISH-
			BROWN SAND OCCUR NEAR BASE; BASAL CONTACT DIFFUSE.
.3394	-15		
			CATUMA FORMATION. SANDSTONE, FINE TO VERY FINE GRAINED, REDDISH-BROWN, POORLY
			SORTED, CALCAREOUS, FRIABLE, DRY; SASAL 1.5' IS SANDSTONE, COARSE TO FINE GRAINED,
3389	-20		POORLY SORTED, ROUNDED, CONTAINING ANGULAR DEBRIS FROM UNDERLYING REDBEDS; BASAL CONTACT SHARP, EROSIONAL, SLIGHTLY UNDULATORY.
1			
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3384	-25 I		
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	į		
1			
3379	_ <sub>30</sub> }		
3313	-		
1			
j			
- 1			`
1	٠, _	6 7 6	SANTA ROSA FORMATION. SILTSTONE AND VERY FINE GRAINED SANDSTONE, SILT TO VERY FINE
3374	- 35	7 7 7 1	SAND-SIZED GRAINS, REDDISH-BROWN, CALCAREOUS, POORLY SORTED, CONTAINS PEBBLES OF
]			CHERT AND MAFIC CRAINS; UPPER 1.0' CONTAINS CALICHE IN SUBHORIZONTAL STRINGERS;
j	,		BASAL CONTACT DIFFUSE.
]			
3369	40		
2203	<del></del>	<u>n an antaranin</u>	the second secon

1	PRELIM	IINARY	STRATIGRAPHIC	
	ELEV. (FT. MSL)	DEPTH	COLUMN	REMARKS
	3369	40		AS ABOYE
	3364-	<del></del> 45		
	3359-	<b>-</b> 50	1	
	3354—	<b>~</b> 55	= = = = = = = = = = = = = = = = = = =	DEWEY LAKE REDBEDS  MUDSTONE INTERBEDDED WITH ARGILLACEOUS SILTSTONE, REDDISH-BROWN, THINLY LAMINATED TO THINLY BEDDED (1/8" TO 1"), BEDDING SLICHTLY UNDULATORY, HARD; SEDIMENTARY STRUC- TURES INCLUDE: SMALL TABULAR RIP-UP CLASTS (<1/4") ALICNED IN THIN BEDS, CROSS
, 	3349	-60		LAMINATIONS, LOAD STRUCTURES, FILLED DESICCATION CRACKS; OCCASIONAL 1-1/2" INTERSEDS  OF GRAY SILTSTONE; RARE GREENISH-GRAY REDUCTION SPOTS (<1/16" DIAMETER); BASAL  CONTACT GRADATIONAL.
	3344-	<del>-</del> 65		
	3339—	-70	- \	
	3334—	-75		
	3329—	-80	\\	
\	3324	85		

EXHAUL SHAFT
LITHOLOGIC LOG
SHEET 3 OF 49

PRELIM	HINARY		
ELEV.	DEPTH	STRATIGRAPHIC	REMARKS
(FT. MSL)	1	COLUMN	
3324	85		AS ABOYE .
		F-}	
		F	
			MUDSTONE, REDDISH-BROWN, THINLY LAMINATED TO THINLY BEDDED, HARD; CONTAINS THIN BEDS
3319	-90		(1/2" TO 1") OF GRAY SILTY MUDSTONE: FRACTURES PARALLEL TO BEDDING, SPACED 3": OCCA-
			SIONAL GREENISH-GRAY REDUCTION SPOTS (1/4" TO 1/2" DIAMETER); CONTAINS OCCASIONAL
		F	LOAD STRUCTURES; BASAL CONTACT DIFFUSE.
		L	
		<del></del>	
3314	<del></del> 95		SILTY MUDSTONE INTERBEDDED WITH ARCILLACEOUS SILTSTONE, REDDISH-BROWN, THINLY LAMI-
1		-7	NATED TO THINLY BEDDED (<1/32" TO 2-1/2"); OCCASIONAL GREENISH-GRAY SILTSTONE
1			INTERBEDS: OCCASIONAL LOAD STRUCTURES: SMALL OPEN FRACTURES PARALLEL TO BEDDING,
j i		<del> *</del>	SPACED 1" TO 2-1/2"; FEW SUBVERTICAL FRACTURES, SPACED 1' TO 2.5'; BASAL CONTACT
		<del> </del>	DIFFUSE.
) 1		<del>-</del>	ntrroge.
3309	100		
i l			
1 1			
j !			·
i I			THE PARTY OF THE P
3304-	-105		SANDSTONE, VERY FINE GRAINED, REDDISH-BROWN, THINLY LANINATED TO CROSS-LAMINATED,
1			HARD TO SOFT, RARE INTERBEDS OF SILTY MUDSTONE (1/2" TO 1" THICK); THIN (<1/32")
1			SUBBORIZONTAL FRACTURES PARALLEL TO BEDDING, SPACED 3" TO 9"; TWO 1/2" THICK
1 1			PARALLEL HORIZONTAL FRACTURES FILLED WITH CARBONATE OCCUR AT 108.0' AND 108.5':
1			OCCASIONAL GREENISH-GRAY REDUCTION SPOTS; BASAL CONTACT DIFFUSE.
1 5			
3299	-110		
<b> </b>			
1 1			
1 1			
1 [			
<b> </b>			·
3294	115		CILTY WINCTOW INTERCEDED UTTO WINCTONE REPORTS 2000 TITLEY INTULTED TO COOK
3294	143		SILTY MUDSTONE INTERBEDDED WITH MUDSTONE, REDDISH-BROWN, THINLY LAMINATED TO CROSS-
		[	LAMINATED, HARD; RARE GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1/2" DIAMETER);
	_		OCCASIONAL 1/4" TO 2" THICK GREENISH-GRAY INTERBEDS; OCCASIONAL SOFT SEDIMENT
			DEFORMATION FEATURES: HORIZONTAL FRACTURES PARALLEL TO BEDDING, SPACED 1" TO 4";
{ <b>I</b>			BASAL CONTACT SHARP.
ļ . <b>I</b>			
3289-	-120		SILISTONE, REDDISH-BROWN, THINLY LAMINATED TO CROSS-LAMINATED; OCCASIONAL INTERBEDS
1			OF SILTY MUDSTONE; LOAD STRUCTURES, MUDSTONE RIP-UP CLASTS; MODERATELY ABUNDANT
			GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1/4" DIAMETER); OCCASIONAL GREENISH-GRAY
			<u> </u>
	į		BEDS (1/2" TO 2" THICK); THIN HORIZONTAL FRACTURES (<1/32") WITH GYPSUM FILLING
			BELOW 121.5', SPACED 2" TO 1.5'; BASAL CONTACT SHARP.
,,,,	_ 10=		A 200
3284	-125		
1			$\langle \cdot \cdot \cdot \cdot \rangle$
1			
1 1			
3279	130		

I	PRELIM	INARY			٦
	ELEV.	DEPTH	STRATIGRAPHIC	REMARKS	
	(FT. MSL)		COLUMN		_
	3279 3274 —	130  135	<del></del>	SILTY MUDSTONE, REDDISH-BROWN, THINLY LAMINATED (<1/32"), LOCALLY INTERSEDDED WITH SILTSTONE; CONTAINS CROSS-LAMINATIONS, FILLED DESICCATION CRACKS; SUBVERTICAL CLAY-FILLED FRACTURES OCCUR NEAR TOP, SPACED 3" TO 4"; LOCALLY, BEDDING MAY BE GREENISH-GRAY IN COLOR; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER); SUBHORIZONTAL GYPSUM-FILLED FRACTURES, SPACED 3" TO 6"; SUBVERTICAL FRACTURES SPACED 3" TO 12"; IN LOWER 3', 1/8" TO 3" THICK HORIZONTAL GREENISH-GRAY REDUCTION ZONES OCCUR IN GROUPS, INDIVIDUAL ZONES SPACED 1/2", GROUPS SPACED 0.8" TO 1.5'; BASAL	
			<b>\}</b>	CONTACT SHARP, MARKED BY 2" BED OF WHITISH-GRAY SILTSTONE WITH A GREENISH-GRAY REDUCTION ZONE ABOVE AND BELOW.	
	3269	-140	<b></b>	MUDSTONE, DARK REDDISH-BROWN, INTERBEDDED WITH SILTY MUDSTONE, LIGHT REDDISH-BROWN, THINLY LAMINATED TO BEDDED (<1/32" TO 1/2"), LOCALLY FISSILE, OCCASIONALLY CROSS-LAMINATED, BEDDING MAY TERMINATE EROSIONALLY, STRUCTURES BECOMES LESS FINE BELOW 148.0'; RARE SUBVERTICAL TO HIGH ANGLE FRACTURES WITH GRANULAR GYPSUM FILLING (<1/8" THICK); FROM 132.5' TO 147.5', ABUNDANT SUBHORIZONTAL FRACTURES, SPACED 1'; ABUNDANT GREENISH-GRAY REDUCTION SPOTS (1/32" TO 2" DIAMETER); BASAL CONTACT GRADATIONAL.	
	3264	<b>−14</b> 5			
	3259	<b>-</b> 150	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SILTY MUDSTONE, DARK REDDISH-BROWN, INTERBEDDED WITH SILTSTONE, REDDISH-BROWN, THINLY LAMINATED TO BEDDED (1/32" TO 1-1/2"), SOFT; OCCASIONALLY CROSS-LAMINATED, CONTAINS LOAD STRUCTURES, OVERALL SEDIMENTARY STRUCTURES ARE LESS FINE THAN OVERLYING UNIT, GRAIN SIZE COARSENS DOWNWARD; 1" TO 2" THICK HORIZONTAL GREENISH-GRAY	7
	3254	<b>-</b> 155	- <b>,</b>	REDUCED ZONES, SPACED 3" TO 5"; FRACTURES OCCUR BELOW 154.5', 1/8" THICK, FILLED WITH GYPSUN; SUBVERTICAL FRACTURES SPACED 2' TO 3', SUBBORIZONTAL FRACTURES SPACED 0.5' TO 1.5'; BASAL 2' CONTAINS GREENISH-GRAY AND REDDISH-BROWN INTERBEDDED MUDSTONE; ABUNDANT GREENISH-GRAY REDUCTION SPOTS (1/32" TO 1" DIAMSTER); BASAL CONTACT SHARP.	
	3249-	-160		SILTSTONE, REDDISH-BROWN, THINLY LAMINATED TO STRUCTURELESS; BEDDING THICKENS AND THINS (1/2" TO 2"); OCCASIONAL GREENISH-GRAY BEDS 1/8" TO 1/2" THICK, SPACED 3.0'; ONLY A FEW HIGH ANGLE FRACTURES 1/8" FHICK, GYPSUM-FILLED, STRIKING N60"W; AT 167.5'	
	3244-	-165		CHANNEL LAG CONGLOMERATE OCCURS CONTAINING SILTSTONE PEBBLES; THINLY LAMINATED SILTY MUDSTONE FROM 170.5' TO 171.3' WITH GREENISH-GRAY REDUCTION ZONES 1" TO 3" THICK, SPACED 4"; NEAR 171.3' BECOMES POORLY SORTED; THINLY LAMINATED WITH CROSS-LAMINATIONS AND EROSIONAL TERMINATIONS NEAR BASE; CONTAINS GREENISH-GRAY REDUCTION SPOTS UP TO 2" DIAMETER; SASAL CONTACT GRADATIONAL.	
	3239	-170	\(\frac{1}{5}\)		
Į	3234	175			



PRELIM	INARY		
ELEV.		STRATIGRAPHIC	REMARKS
(FT. MSL)	DEPTH (FT.)	COLUMN	
3234	175		AS ABOVE
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		7 7	
		<del>- (  </del>	
3229	-180	<del>- (  </del>	
		<u> </u>	
		<del></del>	
3224	<b>−</b> 185		MUDSTONE, REDDISH-BROWN, THINLY LAMINATED TO BEDDED (1/32" TO 1/2" THICK), SOFT:
			BEDDING INDISTINCT; RARE GREENISH-GRAY REDUCTION SPOTS TO 1" DIAMETER, REDUCTION
			SPOTS CONCENTRATED AROUND REDUCED, GREENISH-GRAY, 1" WIDE HORIZONTAL BAND AT 191.7".
			VERY FEW FRACTURES; BASAL 1.5' BECOMES SILTY; BASAL CONTACT SHARP, SLIGHTLY
			UNDULATORY, OVERLYING BEDS DRAPE OVER CONTACT, EROSIONAL.
_			
3219	⊢۱90 ا		
			SANDSTONE, VERY FINE GRAINED, GRAYISH-WHITE, HARD TO SOFT; TROUGH CROSS-BEDDING
			BECOMES APPARENT NEAR BASE; CONTAINS FIBROUS CYPSUM-FILLED FRACTURES WITH VARIABLE
3214-	<del>-</del> 195		ORIENTATION, 1/4" TO 1" THICK; BASAL CONTACT SHARP.
,			SANDSTONE AT TOP GRADING TO SILTSTONE, REDDISH-MAROON, LAMINATED TO SEDDED, OCCA-
, i			SIGNALLY CROSS-LAMINATED, HARD; COLOR SECOMES WHITISH-MARGON TOWARD BASE; LOWER 1.3'
		· · · · · · · · · · · · · · · · · · ·	IS SANDSTONE, STRUCTURELESS EXCEPT FOR OCCASIONAL INTERBEDS OF REDDISH-BROWN
			SILTSTONE; ABUNDANT FRACTURES, MOST MORIZONTAL TO SUBMORIZONTAL AND SLIGHTLY UNDU-
	222	<del></del>	LATORY, FILLED WITH FIBROUS GYPSUM, THICKNESS 1/16" TO 2", SPACED 1/8" TO 6"; BASAL
3209	-200		CONTACT SHARP, SLIGHTLY UNDULATORY.
' I			CLAYSTONE, REDDISH-BROWN, THINLY LAMINATED; CROSS-LAMINATED, SETS 1/2" ACROSS.
ŀ			BEDDING EROSIONALLY TERMINATED, CONTAINS SOFT SEDIMENT DEFORMATION FEATURES; BECOMES
			SILTY TOWARD BASE; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS TO 1/2" DIAMETER, SPOTS
			OCCASIONALLY BROKEN BY GYPSUM-FILLED FRACTURES; SEE FIGURE 6 FOR FRACTURE NOTES;
,,,,	205		BASAL CONTACT CRADATIONAL.
3204-	-205		
	1		·
İ			
			MUDSTONE WITH INTERBEDDED SILISTONE, DARK REDDISH-SROWN, THINLY LAMINATED, ABUNDANT
3100	}	<del></del>	CROSS-LAMINATIONS, BEDDING OFTEN TERMINATED EROSIONALLY; ABUNDANT SUBHORIZONTAL
3199	-210	)	CYPSUM-FILLED FRACTURES. SPACED 6", 1/8" TO 3" THICK; VERTICAL AND SUBVERTICAL
			FRACTURES RARE; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS; BASAL CONTACT GRADATIONAL.
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3194	-215	7 \ 7	
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3189	220		

PRELIM	IINARY	STRATIGRAPHIC	
ELEV.	DEPTH	1	REMARKS
3189	(FT.) 220	<b>-</b>	SILISTONE INTERBEDDED WITH VERY FINE SANDSTONE, REDDISH-BROWN, THINLY LAMINATED TO BEDDED, CROSS-LAMINATED, BEDS OFTEN EROSIONALLY TERMINATED, HARD; CROSS-LAMINATIONS INCPEASE BELOW 223.0°, HORIZONTAL EROSIONAL PLANES OCCUR BELOW 223.0°, SPACED 1.0° TO 7.0°; SUBHORIZONTAL GYPSUM-FILLED FRACTURES ABUNDANT, 1/16" TO 1/4" THICK; RARE SUBVERTICAL FRACTURES; BASAL CONTACT GRADATIONAL.
3184-	<b>—</b> 225	<del></del>	
3179—	—230	<del>} }</del>	
3174	-235	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SANDSTONE, REDDISH-BROWN, SILTY, THINLY LAMINATED TO BEDDED, OCCASIONALLY CROSS- LAMINATED; ABUNDANT SUBHORIZONTAL GYPSUM-FILLED FRACTURES, :/16" TO 1" THICK, SPACED 2" TO 1.0', FRACTURES BIFURCATE LOCALLY; RARE SUBVERTICAL GYPSUM-FILLED FRACTURES; BASAL CONTACT SHARP.
3169	-240	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
3164 <del></del>	<del>-</del> 245	\$ \$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	SANDSTONE, REDDISH-BROWN, SILTY, STRUCTURELESS EXCEPT RARE CROSS-LAMINATIONS AND HORIZONTAL LAMINATIONS; FEWER GYPSUM-FILLED FRACTURES THAN OVERLYING UNIT, FRACTURES TO 2" THICK; BASAL CONTACT GRADATIONAL.
3159—	~250 ·		
3154	-255	5 5 1	
3149	-260	)	SANDSTONE, REDDISH-BROWN, SILTY, LOCALLY LAMINATED AND CROSS-LAMINATED; OCCASIONAL SUBHORIZONTAL GYPSUM-FILLED FRACTURES, 1/4" TO 1/2" THICK, SPACED 2.8' TO 3.4'.  FRACTURES BIFURCATE LOCALLY: SUBVERTICAL FRACTURES RARE; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS TO 1" DIAMETER; BASAL 1.0' CONSISTS OF REDDISH-BROWN SILTSTONE; BASAL CONTACT GRADATIONAL.
3144	265		,

2051 13	INARY	T	
	·	STRATIGRAPHIC	REMARKS
ELEV.	DEPTH	COLUMN	TEWARKS .
3144	265	· · · · · · · · · · · · · · · · · · ·	AS ABOYE
			CAMPARANT DEPOT OF A PARTY STATE A PARTY AND A PARTY A
			SANDSTONE, REDDISH-BROWN, SILTY, MOSTLY MASSIVE WITH SOME LOCAL LAMINATIONS AND
1	1	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CROSS-BEDDING: SUBHORIZONTAL AND SUBVERTICAL GYPSUM-FILLED FRACTURES, SUBHORIZONTAL
			MORE ABUNDANI, SEE FIGURE 7: BASAL CONTACT GRADATIONAL.
		\\\	
3139	<b>-270</b>		
]		<b>1</b>	
1 1		) )	
3134-	<b>-275</b>		·
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1		( · · · · · · · · · · · · · · · · · · ·	
3129-	-200		
3123-	~200		
		_ \ _	ARGILLACEOUS SILTSTONE, REDDISH-BROWN, THINLY LAMINATED TO LAMINATED (1/16" TO 1/4"
			THICK); ABUNDANT SEDIMENTARY STRUCTURES INCLUDING: TROUGH CROSS-LAMINATIONS,
]		<del>- ( -   -   -   -   -   -   -   -   -   </del>	EROSIONAL SURFACES TRACEABLE AROUND CIRCUMFERENCE OF SHAFT, SOFT SEDIMENT DEFOR-
		<del>)</del> , ,	MATION FEATURES; CROSS-LAMINATION SETS ARE 1" TO 4" ACROSS, INCREASING TO 2.0' TO
3124	-285	\	3.0' ACROSS NEAR BASE; LOWER 1.0' CONTAINS 1/4" THICK BEDS OF CLAYSTONE; HORIZONTAL
0,2	200		AND SUBBORIZONTAL GYPSUM-FILLED FRACTURES 1/4" TO 1" THICK, SPACED 0.5' TO 2.3';
		(	VERTICAL AND SUBVERTICAL GYPSUM-FILLED FRACTURES 1/8" TO 1/4" THICK, SPACED 3.0' TO
l i		<del></del>	5.0'; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS TO 1" DIAMETER; BASAL CONTACT SHARP,
		_ ( _	MARKED BY OCCURRENCE OF A MUDSTONE BED.
1			
3119	-290		·
		<del>- ( -  </del>	
<b>[</b>			
İ			MUDSTONE INTERBEDDED WITH SILTY CLAYSTONE, REDDISH-BROWN, THINLY LAMINATED TO VERY
1			THINLY BEDDED (<1/16" TO 1/2" THICK); ABUNDANT SETS OF TROUGH CROSS-LAMINATIONS 1"
1			TO 4" ACROSS, CLAY DRAPE OVER RIPPLE CROSS-LAMINATIONS; OCCASIONAL SOFT SEDIMENT
3114	295		DEFORMATION; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1/2" DIAMETER); UNIT
J			BOUNDED BY HORIZONTAL GYPSUM-FILLED FRACTURES, 1" THICK AT TOP GRADING TO 1/2" THICK
j l			AT BASE: BASAL CONTACT SHARP.
1	Ì		MUDSTONE AT TOP GRADING TO SILTSTONE AT BASE, REDDISH-BROWN, THINLY LAMINATED TO
			THINLY BEDDED (1/6" TO 1" THICK); ABUNDANT FINE STRUCTURES INCLUDING: FLASER
			BEDDING, CROSS-LAMINATIONS, TROUGH CROSS-LAMINATIONS, FILLED DESICCATION CRACKS,
3100-	_300		LOAD STRUCTURES, ABUNDANT EROSIONAL CONTACTS; CYPSUM-FILLED FRACTURES ARE MODERATELY
3109	-300		ABUNDANT, 1/16" TO 1-1/2" THICK, HORIZONTAL AND SUBHORIZONTAL FRACTURES SPACED 1.0'
			· · · · · · · · · · · · · · · · · · ·
! <b>!</b>			TO 4.0', VERTICAL AND SUBVERTICAL FRACTURES SPACED 3.0' TO 5.0'; OCCASIONAL
<b>i</b>			CREENISH-GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER); RARE 2" THICK, SUSHORIZONTAL,
			CREENISH-GRAY REDUCED ZONES; BASAL CONTACT SHARP.
3104	<del>-</del> 305		$( \langle \cdot \rangle_{\mathcal{A}})$
	}	<del>-)</del>	/ // /
[	1		
ļ <b>i</b>		<del></del>	ac aci Au
	ŀ		AS BELOW
3099	310		
	J. V }	·	

PF	SELIM	INARY	STRATIGRAPHIC	BENARUA
	EV.	DEPTH	COLUMN	REMARKS
(FT	MSL)	(FT.)		<u></u>
30	099	310		MUDSTONE AT TOP, GRADING TO SILTSTONE, DARK REDDISH-BROWN TO REDDISH-BROWN, WITH
1				MINOR INTERBEDDED MUDSTONE, THINLY LAMINATED TO LAMINATED (<1/32" TO 1/8"), MARD;
	ı		(	CROSS-LAMINATED, BECOMING MORE ABUNDANT WITH DEPTH; OCCASIONAL GREENISH-GRAY
- 1	1		<del></del>	REDUCTION SPOTS (1/16" TO 1/4" DIAMETER); FIBROUS GYPSUM-FILLED FRACTURES BECOME
l			(	·
-	- 1		<del></del>	LESS ABUNDANT WITH DEPTH; HORIZONTAL AND SUBHORIZONTAL FRACTURES 1/16" TO 1" THICK.
30	94-	315		SPACED 2" TO 2.0"; VERTICAL AND SUBVERTICAL FRACTURES 1/16" TO 1/4" THICK, SPACED 2"
1				TO 2.0'; SASAL CONTACT SHARP.
1	- 1			MUDSTONE AT TOP, GRADING TO SILTSTONE WITH DEPTH, DARK REDDISH-BROWN TO REDDISH-
			,	BROWN, UNIT SIMILAR TO ABOVE EXCEPT FOR A 3" THICK BED OF MUDSTONE WHICH OCCURS AT
	ŀ	j	<del></del>	316.2' AND HAS A SHARP UPPER CONTACT AND GRADES TO SILISTONE WITH DEPTH, HARD;
	1	j		The state of the s
	- 1			MUDSTONE: STRUCTURELESS; SILISTONE: FINELY LAMINATED TO CROSS-LAMINATED; FRACTURES
30	089 <del>-  </del>	-320		SIMILAR TO OVERLYING UNIT; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS TO 1" DIAMETER;
-	1			BASAL CONTACT MARKED BY 3" THICK SUBHORIZONTAL GREENISH-CRAY ZONE AND DARK REDDISH-
- 1	- 1	Ì		BROWN MUDSTONE, SHARP.
	1	-	<del></del>	MUDSTONE, REDDISH-BROWN, STRUCTURELESS: FRACTURES SIMILAR TO OVERLYING UNIT; BASAL
	1			CONTACT GRADATIONAL.
	J			
	ا ہی	705		CLAYSTONE, DARK REDDISH-BROWN, INTERBEDDED WITH SILTSTONE, LIGHT REDDISH-BROWN,
30	84-	-325		MICRO-LAMINATED TO VERY THINLY BEDDED (<1/32" TO 1/2"); SILTSTONE: CROSS-LAMINATED;
1	1	Ţ		CLAYSTONE: STRUCTURELESS; ABUNDANT GREENISH-GRAY REDUCTION SPOTS; GRADES TO
1	ŀ			SILTSTONE AT BASE: ALL FRACTURES FILLED WITH FIBROUS GYPSUM; HORIZONTAL AND
1	1	}		SUBHORIZONTAL FRACTURES 1/8" TO 1" THICK, SPACED 3" TO 2.0'; VERTICAL AND SUB-
	1	Ĺ	)	VERTICAL FRACTURES 1/16" TO 1/4" THICK, SPACED 2.0' TO 3.0'; BASAL CONTACT SHARP.
1	- 1	ļ		TEATTERS . AND LORES THE LOT TO THE CONTROL SHOWS
30	779-	-330		
	,,,	330		
1.	1			CLAYSTONE, DARK REDDISH-BROWN, MICRO-LAMINATED TO THINLY LAMINATED (<1/32" TO
1	- 1	-		1/16"), STRUCTURE POORLY DEFINED DUE TO ABUNDANT FRACTURING, OCCASIONAL CROSS-
1	- 1	Ì		LAMINATIONS, BEDDING OFTER CONVOLUTED AND EROSIONALLY TERMINATED; ABUNDANT CREENISH-
1	- 1	. [		GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER); ABUNDANT GYPSUM-FILLED FRACTURES, -901
	i			HORIZONTAL AND SUBHORIZONTAL; TWO SCALES OF SPACING: MINOR - 1/8" TO 2", MAJOR - 2"
30	74-	-335		TO 6" FRACTURE DENSITY INCREASES IOWARD BASE, THICKNESS VARIES FROM 1/16" TO 1.0';
1	- 1	ŀ		
- 1	- 1	į		REMAINING -101 VERTICAL AND SUBVERTICAL FRACTURES, SPACED 2" TO 2.5', THICKNESS
	- 1	[		1/16" TO 1/4"; BASAL CONTACT SHARP.
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-	. [	}		
		<b>}</b>		
30	69-	-340		
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1		}		
	- 1	};		
		1		STITETAND ACRES SAME LANGUAGE TO BERNEY CRASS LANGUAGE SAME
30	064	-345	(	SILTSTONE, REDDISH-BROWN, LAMINATED TO BEDDED, CROSS-LAMINATED, SOFT SEDIMENT
	′~~	J-J }	$\rightarrow$	DEFORMATION FEATURES, MARD; ALL FRACTURES FILLED WITH FIBROUS GYPSUM; SUBHORIZONTAL
1	ļ	+	<del></del>	AND HORIZONTAL FRACTURES 1/16" TO 1" THICK, SPACED 1" TO 1.0"; VERTICAL AND
j .	ļ	ŀ		SUBVERTICAL FRACTURES 1/8" TO 1/2" THICK, SPACED 6" TO 2.0"; ABUNDANT GREENISH-GRAY
	1			REDUCTION SPOTS 1/16" TO 1" DIAMETER; BASAL CONTACT SHARP.
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30	)59 <del>-</del>	-350 <b> </b>	<del></del>	$/:\mathbb{N}$
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30	54	355		
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PRELIM	IINARY	STRATIGRAPHIC	
ELEV.	DEPTH	COLUMN	REMARKS
3054	355		
3049~	-360		MUDSTONE GRADING TO SILTSTONE IN VERTICAL GRADATIONAL SEQUENCES 1.0' TO 3.0' THICK, REDDISH-BROWN (SILTSTONE) AND DARK REDDISH-BROWN (MUDSTONE), EACH SEQUENCE CONSISTS OF STRUCTURELESS MUDSTONE AT TOP GRADING TO THINLY LAMINATED TO BEDDED SILTSTONE AT BASE; AMOUNT OF SEDIMENTARY STRUCTURES INCREASE TO BASE OF EACH SEQUENCE, THESE STRUCTURES INCLUDE: CROSS-LAMINATIONS, TROUGH CROSS-LAMINATIONS, EROSIONAL SUR- FACES, OCCASIONAL SOFT SEDIMENT DEFORMATION FEATURES; UPPER CONTACT OF EACH SEQUENCE IS EROSIONAL; OCCASIONAL GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER); ALL FRACTURES GYPSUM-FILLED; VERTICAL AND HIGH ANGLE FRACTURES APPEAR YOUNGER THAN HORI- ZONTAL AND SUBHORIZONTAL FRACTURES; SUBHORIZONTAL FRACTURE FILLING OCCASIONALLY
3044—	<b>—</b> 365		SIGMOIDAL AND/OR TILTED; FILLING IN VERTICAL AND HIGH ANGLE FRACTURES HAVE A COMPONENT OF THRUST; THREE TYPES OF HORIZONTAL AND SUBHORIZONTAL FRACTURES; THICK - 1/2"  TO 1", SPACED 1.0' TO 2.0'; MODERATELY THIN - 1/8" TO 1/2:, SPACED 1" TO 1.5'; THIN - <1/8", SPACED 1/4" TO 1"; BASAL CONTACT SHARP.
3039—	-370	) - }= }= = }=	
3034-	-375	- \ - \ - \ - \ - \ - \ - \ - \ - \ - \	
3029-	-380	) , ,   -> ->	SILTSTONE, REDDISH-BROWN, WITH INTERBEDDED CLAYSTONE, DARK REDDISH-BROWN, 1" TO 4" THICK FINING UPWARD SEQUENCES, THINLY LAMINATED TO THINLY BEDDED (1/16" TO 2" THICK), HARD; SEDIMENTARY STRUCTURES INCLUDE: CROSS-LAMINATIONS, SOFT SEDIMENT LOAD STRUCTURES, EROSIONAL CONTACTS AT TOP OF EACH FINING UPWARD SEQUENCE; LOCALLY ABUNDANT GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER), SOME OCCUR IN ALIGNED
3024	-385	) - - - - - - - - - - - - -	ZONES; OVERALL GRAIN SIZE INCREASES TO BASE; ABUNDANT HORIZONTAL, FIBROUS GYPSUM- FILLED FRACTURES OCCUR IN TWO SIZE GROUPS: 0" TO 1/4" THICK, SPACED 1/4" TO 1"; 1/4" TO 1/2" THICK, SPACED 0.5' TO 2.0'; VERTICAL AND HICH ANGLE FIBROUS GYPSUM-FILLED FRACTURES ARE MODERATELY ABUNDANT, 1/16" TO 1/2" THICK, SPACED 2.5' TO 5'; BASAL CONTACT SHARP, UNDULATORY, POSSIBLY EROSIONAL.
3019-	-390	-) ) 	
3014-	<del>-</del> 395	) <u> </u>	
3009	400	$\rightarrow \rightarrow \rightarrow$	,

PRELIM	IINARY		
ELEV.	DEPTH	STRATIGRAPHIC COLUMN	REMARKS
(FT. MSL)	(FT.)	COLUMN	
3009 3004-	-400 405		SILTSTONE, REDDISH-BROWN, WITH INTERSEDDED CLAYSTONE, DARK REDDISH-BROWN, 1" TO 4" THICK FINING UPWARD SEQUENCES, THINLY LAMINATED TO THINLY BEDDED (1/16" TO 2" THICK), HARD; SEDIMENTARY STRUCTURES INCLUDE: CROSS-LAMINATIONS, SOFT SEDIMENT LOAD STRUCTURES, EROSIONAL CONTACTS AT TOP OF EACH FINING UPWARD SEQUENCE: LOCALLY ABUNDANT GREENISH-GRAY REDUCTION SPOTS (1/16" TO 1" DIAMETER), SOME OCCUR IN ALIGNED ZONES; OVERALL GRAIN SIZE INCREASES TO BASE; ABUNDANT HORIZONTAL, FIBROUS GYPSUM- FILLED FRACTURES OCCUR IN TWO SIZE GROUPS: 0" TO 1/4" THICK, SPACED 1/4" TO 1"; 1/4" TO 1/2" THICK, SPACED 0.5' TO 2.0'; VERTICAL AND HIGH ANGLE FIBROUS GYPSUM-FILLED FRACTURES ARE MODERATELY ABUNDANT, 1/16" TO 1/2" THICK, SPACED 2.5' TO 5'; BASAL CONTACT SHARP, UNDULATORY, POSSIBLY EROSIONAL.
2999-	<b>-410</b>	\ -\ -\	
2994—	-415		
2989—	-420	<b>\( \)</b>	
2984—	—425		
2979—	<b>-430</b>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SILISTONE AT TOP, GRADING TO CLAYSTONE AT BASE, REDDISH-BROWN TO DARK REDDISH-BROWN, TRACE OF BEDDING AT TOP GRADING TO STRUCTURELESS AT BASE, HARD; CONTAINS OCCASIONAL CLAYSTONE CLASTS <1/8" DIAMETER; RARE INTERBEDS OF CLAYSTONE, 1/16" THICK; ABUNDANT GREENISH-GRAY REDUCTION SPOTS (1/16" TO 2" DIAMETER) OCCUR IN ZONES; ABUNDANT HORIZONTAL AND SUBHORIZONTAL FIBROUS GYPSUM-FILLED FRACTURES, MAJORITY 1/16" THICK, SPACED 1" TO 2"; MODERATELY ABUNDANT VERTICAL AND SUBVERTICAL FIBROUS GYPSUM-FILLED
2974-	<b>-43</b> 5	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	FRACTURES UP TO 1/4" THICK, SPACED 1.0' TO 3.0'; BASAL CONTACT OBSCURED.
2969—	-440	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
2964	445		

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ļ		STRATIGRAPHIC	REMARKS
ELEV.	DEPTH	COLUMN	
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2959	<b>-450</b>		·
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2954	_ 155		
2954-	455 I		
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		OBSCURED	SLIGHTLY SANDY SILTSTONE, REDDISH-BROWN, INTERBEDDED WITH SILTY-MUDSTONE, DARK
		<u> </u>	REDDISH-BROWN, 1" THICK FINING UPWARDS SEQUENCES, THINLY BEDDED (1"); MINOR ERO-
2949	<del>-46</del> 0		SIONAL CONTACTS AT TOP OF EACH FINING UPWARD SEQUENCE; HORIZONTAL AND SUBHORIZONTAL
			FIBROUS GYPSUM-FILLED FRACTURES <1/8" THICK, SPACED 0" TO 6"; SUBVERTICAL AND
i		<u> </u>	·
			VERTICAL FIBROUS GYPSUM-FILLED FRACTURES ARE LESS ABUNDANT AND CROSS-CUT HORIZONTAL
		1. (1.1)	AND SUBHORIZONTAL FRACTURES; BASAL CONTACT SHARP.
i i			
2944-	<b>-</b> 465	<del></del>	SILTSTONE AT TOP GRADING TO CLAYSTONE AT BASE, REDDISH-BROWN TO DARK REDDISH-BROWN,
			TRACE OF BEDDING AT TOP GRADING TO STRUCTURELESS AT BASE, HARD; ABUNDANT GREENISH-
			CRAY REDUCTION SPOTS (1/16" TO 2" DIAMETER); HORIZONTAL AND SUBHORIZONTAL FIBROUS
		<del>  </del>	CYPSUM-FILLED FRACTURES <1/8" THICK; SUBVERTICAL AND VERTICAL GYPSUM-FILLED
			FRACTURES ARE LESS ABUNDANT AND CROSS-CUT HORIZONTAL AND SUBHORIZONTAL FRACTURES;
			BASAL CONTACT SHARP.
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2929-	-480		
		<u> </u>	MUDSTONE, SILTY, DARK REDDISH-BROWN, STRUCTURELESS; NO HORIZONTAL OR SUBHORIZONTAL
		<u></u>	CYPSUM-FILLED FRACTURES: RARE SUBVERTICAL AND VERTICAL FRACTURES PRESENT, 0" TO 1/2"
			THICK; BASAL CONTACT GRADATIONAL.
2924-	<b>-485</b>		
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2919	490	<u>-</u>	

EXHAUST SHAFT LITHOLOGIC LOG SHEET 12 OF 49

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	ELEV.	DEPTH	COLUMN	REMARKS
	(FT. MSL) 2919	(FT.) 490	COLUMN	
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1	2914	<b>495</b>		
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ı	2909	500		CLAYSTONE CRADING TO SILISTONE WITH DEPTH, REDDISH-BROWN TO DARK REDDISH-BROWN, THIN
	- 1			
	1			1" TO 3" THICK FINING UPWARDS SEQUENCES, THINLY BEDDED; CONTAINS MINOR EROSIONAL
1	1	}		CONTACTS AT TOP OF EACH FINING UPWARDS SEQUENCE: ABUNDANT BORIZONTAL AND
I	ŀ			SUBHORIZONTAL FIBROUS CYPSUM-FILLED FRACTURES 0" TO 1/8" THICK, SPACED 0" TO 6";
ı				MODERATELY ABUNDANT VERTICAL AND SUBVERTICAL FIBROUS GYPSUM-FILLED FRACTURES 1/8" TO
1	2904	-505		1/2" THICK: BASAL CONTACT SHARP.
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	i	}		
1		[		SILTSTONE, (FIGURE 9).
12	2884	-525		SILTSTONE, (FIGURE 9).
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2	2879	-530 F		
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[2	2874	535		

PRELIM	INARY	STRATIGRAPHIC	
ELEV.	DEPTH		REMARKS
(FT. MSL) 2874	(FT.) 535		
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2869-	5.40	( (	
20037	540	<del>-}</del>	
1			
] ]		<u> </u>	
2864	-545	<u> </u>	SILTSTONE
			RUSTLER FORMATION FORTY-NINER MEMBER
			ANHYDRITE, FINELY CRYSTALLINE, GRAY TO GRAYISH-BROWN, WHITE AT UPPER CONTACT, SANDED
2859	550		TO OCCASIONALLY LAMINATED, SPACED 1/16" TO 1"; BANDS AND LAMINAE UNDULATORY UP TO
2003	- 550		1/4" AND OCCASIONALLY TERMINATE ABRUPTLY, GRAY BANDS USUALLY THICKEST, BECOME STRUC- TURELESS WITH DEPTH, LOCALLY MODULAR: UPPER 3.0' CONTAINS INTERBEDDED CLAY LAMINAE,
			CONTENT DECREASING WITH DEPTH: LOCALLY GYPSIFEROUS IN UPPER 6"; MEAR TOP, MORIZONTAL
]			AND SUBHORIZONTAL GYPSUM-FILLED FRACTURES ARE ABUNDANT, 1/8" TO 1/2" THICK, SPACED
		///////	1" TO 3"; BEDDING TERMINATED ERGSIONALLY AT UPPER CONTACT: HORIZONTAL AND SUBHORI- ZONTAL GYPSUM-FILLED FRACTURES SPACED 1" TO 2.0', 1/16" TO 1/4" THICK; RARE VERTICAL
2854	- 555		AND SUBVERTICAL GYPSUM-FILLED FRACTURES, 1/8" TO 1/4" THICK, SPACED 2.0' TO 6.0';
			BASAL CONTACT SHARP.
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2849 -	-560		
2043	300		
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2844 -	-565	///////	
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2839 -	-570		
	ļ		ANHYDRITE
[ [	}	///////	į daras ir d
	-		,
2834 -	-575	7777777	
	į		SILTY CLAYSTONE
	Į.		$\langle \gamma_1 \rangle$
2829	580	->	

EXHAUST SHAFT LITHOLOGIC LOG SHEET 14 OF 49

	PRELIM	INARY	STRATIGRAPHIC	
	[ E L E V . :	UEFIM	COLUMN	REMARKS
	(FT. MSL) 2829	(FT.) 580		
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	2819 —	-590		
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	2814 -	-595		
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	2809 -	-600		
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				DOLOMITE, CYPSIFEROUS
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	2784	625		

EXHAUST SHAFT LITHOLOGIC LOG SHEET 15 OF 49

PRELIM	INARY	STRATIGRAPHIC	
ELEV.	DEPTH	COLUMN	REMARKS
2784	625	<del>\ \ \ \ \</del>	
2779	- 630		TAMARISK MEMBER  ANHYDRITE, FINELY CRYSTALLINE, CRAY TO LIGHT BROWNISH-GRAY TO TAN WITH DEPTH, LAMINATED TO NODULAR, HARD; LOCALLY GYPSIFEROUS AT UPPER CONTACT; CONTAINS INTERBEDS OF LAMINATED CARBONATE LOCALLY AND NEAR BASE; LAMINAE MAY LOCALLY BE TERMINATED EROSIONALLY; 1" TO 2" THICK ORGANIC (?) BLACK CLAYSTONE AT 665.9', CONTAINS FIBROUS CYPSUM-FILLED FRACTURES, FIBERS ORIENTED VERTICALLY, 1/32" TO 1" THICK, DISCONTINUOUS, LOCALLY BIFURCATING; BORIZONTAL FIBROUS GYPSUM-FILLED FRACTURES THROUGHOUT WITH SPACING 0.5' TO 1.5', 1/32" TO 1/16" THICK; RARE SUBVERTICAL FRACTURES; BASAL
2774	<b>–</b> 635		CONTACT GRADATIONAL.
2769	- 640		
2764	- 645		
2759 —	- 650		
2754 -	- 655		
2749	- 660		
2744 —	- 665		
2739	670		

	PRELIM	IINARY	STRATIGRAPHIC	
	ELEV.	DEPTH	COLUMN	REMARKS .
_	2739	670		AS ABOVE
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-	2734 -	<del>-</del> 675		
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İ	2729 —	- 680		
	2,23	000		
				ANHYDRITE
				ANHYDRITE
	2724 —	- 685		
				CLAYSTONE
			47777	ANHYDRITE, ARGILLACEOUS
			7777777	SILTY CLAYSTONE
	2719 -	- eao		
				·
	2714 -	- 695		·
				ANHYDRITE
		700		
i	2709-			
	2103	700		
			77777777	CLAYSTONE
				ANHYDRITE
	2704-	705		
	2699-	- 710		··· · ·
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			<u> </u>	CULEBRA DOLONITE MEMBER
•	2694	715		DOLOMITE, CYPSIFEROUS

EXHAUST SHAFT LITHOLOGIC LOG SHEET 17 OF 49

PRELIMINARY	GTD 4T100 40000		<del></del>
ELEV. DEPTI	- STRAFIGRAPHIC	REMA	ARKS
(FT. MSL) (FT.)	COLUMN		
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2684 725	- / - / -		
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2674 735	<del> -/`=./- </del>	·	
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		UNNAMED LOWER MEMBER	
	<u> </u>	SILTY CLAYSTONE	
2669 740	=======================================		
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2664 745	7777777	ANHYDRITE	
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2659 750			
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2654 - 755		SANDY MUDSTONE	
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		HALITIC MUDSTONE OR ARGILLACEOUS HALITE	
		STITES CONSUMENTED BY SECTION STITUNG	}
2649 760	1		

EXHAUST SHAFT LITHOLOGIC LOG SHEET 18 OF 49

	PRELIM	IINARY	STRATIGRAPHIC	
	ELEV.	DEPTH	COLUMN	REMARKS
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·				HALITE
	2644 —	<del>-</del> 765		
				ANHYDRITE
			\	HALITE, ARGILLACEOUS HALITE
	2639-	770		
	2039-	- //0		ARGILLACEOUS HALITE AND HALITIC MUDSTONE
				ARCILIACEOUS MALITE AND MALITIC HUBSIONE
1	2634	- 775		•
}		, ,		
				ARGILLACEOUS HALITE AND HALITIC MUDSTONE
		<b>–</b> 780		
	2629			
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1				
Ì	2624	- 785		
	:			
			1 ( ) ( !	SANDY HALITIC SILTSTONE
	2619	- 790	-	SILTSTONE AND SANDY SILTSTONE, LIGHT BROWN TO REDDISH-BROWN WITH THIN LAYERS OF
			5	MEDIUM GRAY CLAYSTONE AND MUDSTONE, THINLY SEDDED TO LAMINATED, DIVISIBLE INTO UNITS
				8" TO 20" THICK; BEDDING AND LAMINATIONS GENERALLY HORIZONTAL TO SUBHORIZONTAL, SOME WAVY BEDDING, SOME MICRO CROSS-LAMINATIONS; FROM 792.0" TO 795.0' LARGER CROSS-
			\$	CUTTING RELATIONSHIPS WITH SOME UNITS PARTIALLY TO WHOLLY EROSIONALLY REMOVED, UNITS
	2614	- 795		GENERALLY DOWN-CUT TO EAST AND SOUTHEAST; SMALL-SCALE CROSS-BEDDING HAS VARIABLE CURRENT DIRECTIONS WITH DEPTH, MOST SOUTH; AT 794.0' SYMMETRICAL RIPPLES WITH CLAY
				DRAPE; RIPPLE SETS 1/4" TO 1/2" THICK; MINOR SOFT SEDIMENT DEFORMATION, LOCAL FINING
				UPWARDS SEQUENCES; BASAL CONTACT GRADATIONAL.
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ELEV.	DEPTH	STRATIGRAPHIC COLUMN	REMARKS
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2604 2599 —		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SILISTONE AND ARGILLACEOUS SILISTONE INTERBEDDED WITH CLAYSTONE, GRAY AND DARK GRAY, THINLY LAMINATED (1/32" TO 1/8"); ABUNDANT FINE STRUCTURES INCLUDING HORIZONTAL LAMINATIONS, LOW-ANGLE CROSS-LAMINATION SETS OF VARYING SIZE (2" TO 3.0'); CURRENT DIRECTIONS IN SMALLER SETS VARY, CURRENT DIRECTIONS IN LARGER SETS MOSTLY NORTHEAST; RARE LOAD STRUCTURES, EBOSIONAL SCOUR AND FILL; RARE HIGH-ANGLE HALITE-FILLED FRACTURES; FRACTURE OCCURRENCE INCREASES WITH DEPTH, NEAR BASE RARE HORIZONTAL AND SUBVERTICAL HALITE-FILLED FRACTURES 1/8" TO 3" THICK, SPACED 3.0' TO 8.0'; SOME
2594—	<del></del> 815		LARGER SUBHORIZONTAL FRACTURES EXHIBIT AN EAST (TOP) WEST (BOTTOM) SHEAR; CONTAINS  DARK GRAY SPOTS AND BLEBS (BIOTURBATION), CONTENT INCREASING WITH DEPTH; BECOMES  ARGILLACEOUS SILTSTONE WITH DEPTH; GRAY WITH LOCAL REDDISH-BROWN AREAS, THINLY  LAMINATED AND CONTAINS BROWNISH CLASTS OF ANHYDRITE (1/8" TO 1-1/2" DIAMETER)  ROUNDED AND OCCASIONALLY FLATTENED PARALLEL TO BEDDING; CLASTS RANDOMLY SCATTERED  THROUGHOUT; RARE LOW-ANGLE CROSS-LAMINATION SETS; BASAL CONTACT GRADATIONAL OVER
2589-	<del>-</del> 820		1/2", IRREGULAR, MAPPED AS DIFFUSE DUE TO EXTREME CONTACT UNDULATIONS.
2584~	- 825	\$ - \ - \ - \ - \ - \ - \ - \ - \ - \ -	
2579 <del>-</del>	<del>-</del> 830		
2574—	<b>-</b> ∵835	}	
2569—	- 840	} = \{ = \} = \} = \	
256 <del>4</del>	845	\	SANDY SILTSTONE
		· · · · · · · · · · · · · · · · · · ·	SILTSTONE
2559	850	XXXXXXX	POLYHALITE, ANHYDRITE, AND ARGILLACEOUS ANHYDRITE

EXHAUST SHAFT LITHOLOGIC LOG SHEET 20 OF 49

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	ELEV.	DEPTH	STRATIGRAPHIC	REMARKS
i	(FT. MSL)		COLUMN	
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				MALITIC MUDSTONE
			×	HALITE
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	2524-	- 885		ARGILLACEOUS HALITE
				CLAYSTONE, SLIGHTLY HALITIC
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			— —	. HALITE, ARGILLACEOUS
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i	2514	895		

EXHAUST SHAFT LITHOLOGIC LOG SHEET 21 OF 49

PRELIM	INARY		
ELEV.	DEPTH	STRATIGRAPHIC	REMARKS
(FT. MSL)	(FT.)	COLUMN	
2514	895		
			ARGILLACEOUS HALITE
İ			HALITE
		X	
2509	- 900	X	
	'		ARGILLACEOUS HALITE
ļ <b>[</b>		<del></del>	
2504	- 905	_	HALITE, SLIGHTLY ARGILLACEOUS
			,
<b>[</b>			
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2499	- 910	- x	
		x ^	
		_ \	HALITE, COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE, THINLY BEDDED WITH THIN
ľ	j		SUBHORIZONTAL STRINGERS OF AMHYDRITE AND POLYHALITE; SLICHTLY ARGILLACEOUS IN UPPER
		`	0.5'; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
0.46.5		x \	·
2494	- 915		SILTY CLAYSTONE, BROWNISH-RED, VERY SOFT; HALITIC, HALITE OCCURS AS 1/4" TO 1" DIS-
1		<del></del>	PLACIVE CRYSTALS; CONTAINS LOCALLY REDUCED CLAYSTONE; BASAL CONTACT DIFFUSE, GENE-
Ì	ŀ		TICALLY GRADATIONAL.
Ī		$\langle - \rangle - \langle - \rangle - \langle - \rangle$	
	ļ	<u> </u>	
2489	- 920	<b>-</b> . <b>-</b>	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS INTERSTITIAL RED
			CLAY IN UPPER 3.0', CONTENT DECREASES WITH DEPTH; TRACE RANDOMLY ORIENTED STRINGERS
			OF POLYHALITE IN REMAINDER OF UNIT; BASAL CONTACT DIFFUSE.
		x	
		X	
2484-	- 925	×	HALITE MIXED WITH POLYHALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR:
		×	POLYHALITE CONTENT DECREASES WITH DEPTH, CONTENT GREATEST IN UPPER 0.5', OCCURS AS
		<del>_</del> [	GROUPS OF SUBHORIZONTAL STRINGERS, SECOMING LESS ABUNDANT WITH DEPTH; SUBHORIZONTAL
1		xx	STRINGERS OF ANHYDRITE OCCUR WITH DEPTH, STRINGERS OF POLYHALITE AND ANHYDRITE
Ì		^ ×	BECOME RANDOMLY ORIENTED WITH DEPTH; BASAL CONTACT GRADATIONAL.
2472	- 07.0	,x x x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO ORANGE TO CLEAR; ABUNDANT POLY-
2479	- 930	x \	HALITE IN UPPER 3" TINTS HALITE ORANGE; SUBHORIZONTAL STRINGERS OF POLYHALITE AND
1	İ	· x	ANHYDRITE SPACED 1" TO 3"; BED OF VERY POLYHALITIC HALITE OCCURS BETWEEN 729.4' AND
. <b>i</b>	Ì	• • • • • • • • •	730.0', UNIDENTIFIED GAS ORIGINATES FROM THIS AREA ALONG FRACTURES; BASAL CONTACT
			DIFFUSE.  ARGILLACEOUS HALITE, ARGILLACEOUS MATERIAL REDDISH-BROWN, HALITE WHITISH-GRAY TO
į	[		CLEAR; HALITE OCCURS AS DISPLACIVE CRYSTALS AND ACCRECATES OF CRYSTALS; UNIT CON-
2474	935		TAINS LOCAL GREENISH-GRAY REDUCTION ZONES; CLAY CONTENT DECREASES WITH DEPTH,
İ			DECREASES ABRUPTLY BELOW 937.0'; ROCK BELOW 937.0' CLASSIFIED AS: HALITE, WHITE,
Ì			MEDIUM TO COARSELY CRYSTALLINE, SLIGHTLY ARGILLACEOUS, CLAY CONTENT DECREASING WITH
1		. —	DEPTH, TRACE POLYHALITE AND ANHYDRITE STRINGERS CONTENT INCREASING WITH DEPTH.
Į			STRINGERS RANDOMLY ORIENTED AT TOP, BECOMING SUBHORIZONTAL WITH DEPTH, SPACED 1" TO
2469	940		3"; BASAL CONTACT GRADATIONAL, MARKED BY 1" THICK ZONE OF GRAYISH-WHITE HALITE.



PRELIN	IINARY	STRATIGRAPHIC	
ELEV.	DEPTH		REMARKS
2469	940	_ \	3VD8A ZA
2464—	— 945	x - x - x x	ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, WHITISH-GRAY TO CLEAR, MASSIVE;
2459-	<b>–</b> 950	x x	HALITE OCCURS AS CRYSTAL AGGREGATES IN ZONES OR PODS; CLAY CONTENT DECREASES ABRUPTLY BELOW 949.0'; TRACE DISSEMINATED POLYHALITE BLEBS, CONTENT INCREASES WITH DEPTH; BECOMES BEDDED IN LOWER 2.0' WITH ALTERNATING POLYHALITIC HALITE AND CLEAR HALITE BEDS 2" TO 3" THICK; BASAL CONTACT SHARP, DISCONFORMABLE.
2454-	- - 955	x x x x x x x	ARGILLACEOUS HALITE IN UPPER 2.0', REDDISH-BROWN, CLAY CONTENT DECREASES WITH DEPTH.
2449-		x xxxxxxxxxx x	GRADES INTO POLYMALITIC HALITE; HALITE IS WHITE TO TINTED ORANGE TO CLEAR, MEDIUM TO COARSELY CRYSTALLINE; POLYMALITE OCCURS AS BLEBS AND STRINGERS, POLYMALITE BED AT 961.5'; CONTAINS LOCAL GREENISH-GRAY REDUCTION SPOTS IN ARGILLACEOUS MATERIAL NEAR THE BASE; BASAL CONTACT SHARP, MARKED BY 3" THICK HORIZONTAL FIBROUS HALITE-FILLED FRACTURE.
2444	<b>-</b> 965	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	SILTSTONE, REDDISH-BROWN, TRACE OF BEDDING; CONTAINS SMALL 1/4" IMBAYED DISPLACIVE HALITE CRYSTALS NEAR TOP; CONTAINS RARE SUBVERTICAL HALITE-FILLED FRACTURES; BECOMES ANHYDRITIC (GRAY) IN LOWER 2.0'; CONTAINS DISPLACIVE HALITE CRYSTALS <1/8"; BASAL CONTACT SHARP.
2439-	<b>–</b> 970	- x x_ x-	ARGILLACEOUS HALITE, ARGILLACEOUS MATERIAL REDDISH-BROWN, HALITE CLEAR; BELOW 969.0° CLAY CONTENT DECREASES ABRUPTLY, UNIT BECOMES SLIGHTLY ARGILLACEOUS AND POLYHALITIC, CLAY AND POLYHALITE OCCUR AS RANDOMLY ORIENTED STRINGERS; GVERALL CLAY CONTENT DECREASES WITH DEPTH; POLYHALITE CONTENT INCREASES WITH DEPTH; BASAL CONTACT GRADATIONAL.
2434—	- 975	x x x	POLYHALITE, ANHYDRITIC, FINELY CRYSTALLINE, ORANGE, HARD; HALITIC, HALITE WHITE;  ANHYDRITE GRAY; DISCONTINUOUS BEDS OF WHITE FINELY CRYSTALLINE HALITE NEAR TOP; AT  975.0', 1" THICK BED OF THINLY LAMINATED ANHYDRITE OCCURS; UNIT CONTAINS CLEAR DIS-  PLAGIVE HALITE CRYSTALS NEAR BASE; BASAL CONTACT SHARP.  HALITE, POLYHALITIC, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE, THIN TO  MEDIUM BEDDED BY SUBHORIZONTAL STRINGERS OF POLYHALITE; BASAL CONTACT SHARP, MARKED
2429	- 980	-\ ×\	BY A 2" THICK BED OF POLYHALITE.  ARGILLACEOUS HALITE, REDDISH-BROWN, SLICHTLY ANHYDRITIC, CLAY CONTENT DECREASES WITH DEPTH; NEAR TOP, HALITE OCCURS AS DISPLACIVE CRYSTALS; BECOMES THE DOMINANT MINERAL TYPE WITH DEPTH, BECOMES MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR, THINLY BEDDED IN LOWER 2.0' WITH STRINGERS OF POLYHALITE SEPARATING BEDS; ARGILLACEOUS MATERIAL OCCURS AS MATRIX IN UPPER PART, STRINGERS IN LOWER PART; SOME GREENISH-GRAY
2424	985	x _ x	REDUCTION SPOTS OCCUR NEAR TOP: TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH;  BASAL CONTACT SHARP, DISCONFORMABLE.

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	STRATIGRAPHIC	REMARKS
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		ARGILLACEOUS HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE;
2419 990	$ x - \overline{x} $	REDDISH-BROWN CLAY MATRIX IN UPPER 4"; POLYHALITIC; CLAY AND POLYHALITE OCCUR AS
	x	SUBHORIZONTAL STRINGERS SPACED 1" TO 4"; BASAL CONTACT SHARP.
	<u>x - x </u>	
		ARGILLACEOUS HALITE GRADING TO HALITE WITH DEPTH; CLAY OCCURS AS REDDISH-BROWN
		MATRIX AT TOP, HALITE OCCURS AS DISPLACIVE CRYSTALS AND CRYSTAL AGGREGATES ALIGNED
		IN ZONES, CLAY IN UPPER I" GREENISH GRAY; CLAY CONTENT DECREASES WITH DEPTH, OCCURS
2414 995		AS SUBHORIZONTAL STRINGERS; HALITE BECOMES DOMINANT ROCK TYPE WITH DEPTH, MEDIUM TO
		COARSELY CRYSTALLINE, WHITE TO CLEAR: TRACE POLYHALITE BLEBS AND RANDOMLY ORIENTED
		TO SUBHORIZONTAL STRINGERS; RARE ANHYDRITE STRINGERS; LOWER 3.0' TINTED ORANGE:
		BASAL CONTACT SHARP.
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2394-1015	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	POLYHALITE, FINELY CRYSTALLINE, REDDISH-GRANGE; 1" THICK GRAY CLAYSTONE BEDS 3"
		ABOVE AND AT BASAL CONTACT: BASAL CONTACT SHARP. HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO GRANGE: TRACE POLYHALITE STRINGERS
1 1	××	AND DISSEMINATED BLEBS; AT 1017.8', 1" THICK BED OF POLYHALITE OCCURS UNDERLAIN BY A
1	XXXXXXXXXXX	1/4" THICK BED OF GRAY CLAYSTONE; BASAL CONTACT SHARP, MARKED BY DISSOLUTION
1	X X	TROUGHS.
0700	<u> </u>	ARGILLACEOUS HALITE, WHITE TO CLEAR, MEDIUM TO COARSELY CRYSTALLINE; CLAY OCCURS AS
2389 1020		BROWN SUBBORIZONTAL STRINGERS, SPACED 1" TO 2"; STRINGERS ARE TERMINATED EROSIONALLY
		AT UPPER CONTACT. CLAY CONTENT DECREASES WITH DEPTH; TRACE POLYHALITE STRINGERS AND
		DISSEMINATED BLEBS, CONTENT INCREASES IN LOWER 1.0'; SASAL CONTACT SHARP, EROSIONAL,
<b>[</b>	x	UNDULATORY UP TO 1.0'.
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2384-1025	×	
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2379 1030	1111111	AS BELOW

	PRELIMINARY		STRATIGRAPHIC	
:	ELEV. (FT. MSL)	DEPTH	COLUMN	REMARKS
	2379	- 1035	MB 103	ANHYDRITE, FIMELY CRYSTALLINE, ALTERNATING LIGHT AND DARK GRAY, LAMINATED TO VERY THINLY BEDDED; BEDDING UNDULATES SLIGHTLY, BEDS OFTEN CONTAIN ENTROLITHIC STRUC- TURES; LOCAL <1/4" CRYSTALS OF HALITE; LIGHT BROWN CARBONATE (?) INTERBEDS; BASAL CONTACT GRADATIONAL.  CARBONATE (DOLOMITE?), FINELY CRYSTALLINE OR GRAINED, LIGHT BROWN WITH GRAYISH-BROWN
	2369	<b>-</b> 1040	MB 103	LAMINAE, THINLY LAMINATED. LAMINAE OCCUR AS CONCAVE DOWNWARD SETS AVERAGING 4" TO 7"  ACROSS: PROBABLE ALGAL STROMATOLITES; DARKER LAMINAE ORGANIC (?); BASAL CONTACT  MARKED BY SUBBORIZONTAL GRAYISH-BROWN LAMINAE, GRADATIONAL.  DOLOMITE, FINELY CRYSTALLINE, LIGHT BROWN, HINT OF BEDDING; BASAL CONTACT SHARP,  EROSIONAL.  ANHYDRITE, CARBONATE-RICH. FINELY CRYSTALLINE, ALTERNATING LIGHT GRAY AND GRAY.
	2364—	- 1045	  x x	THINLY LAMINATED IN UPPER 0.9', REMAINDER STRUCTURELESS: BASAL CONTACT SHARP, ERO- SIONAL.  SILTY CLAYSTONE, GRAY, LOCALLY THINLY LAMINATED; CONTAINS DISPLACIVE HALITE CRYSTALS; BASAL CONTACT SHARP.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO ORANGE; CLAY MATRIX IN UPPER 1.0', HALITE OCCURS AS DISPLACIVE CRYSTALS, CLAY CONTENT DECREASES WITH DEPTH; CLAY MORPHOLOGY CHANCES FROM MATRIX TO SUBBORIZONTAL STRINGERS SPACED !" TO 2",
	2359 —	-1050	× - × \ <b>MB</b> \\ <b>10</b> 本\ × \	BELOW 1047.0' ARGILLACEOUS STRINGERS BECOME DISCONTINUOUS AND ORIENTED RANDOMLY;  TRACE DISCONTINUOUS SUBHORIZONTAL STRINGERS AND PODS OF POLYHALITE, CONTENT  INCREASES WITH DEPTH; AT 1050.0' A 0.3' THICK LAMINATED BED OF ANHYDRITE OCCURS,  BELOW THIS BED CLAY CONTENT DECREASES MARKEDLY AND TRACE AMOUNTS OF POLYHALITE AND  ANHYDRITE OCCUR IN DISCONTINUOUS STRINGERS; 2" THICK BED OF ANHYDRITE OCCURS AT  1055.0'; LOWER 1.0' IS VERY POLYHALITIC; BASAL CONTACT SHARP.
	2354-	- 1055	× × ×	1033.0 ; EGACK 1.0 13 VCK1 FORTABLITIC, SAGAL CONTACT SAKE.
	2349-		x x x x x	ARCILLACEOUS HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR, CLAY OCCURS IN RANDOMLY-ORIENTED STRINGERS: STRINGERS AND BLEBS OF POLYHALITE; BASAL CONTACT SHARP, UNDULATORY UP TO 1.0'.
	2344	~1065 -	* ×	POLYHALITE, FINELY CRYSTALLINE, ORANGE, STRUCTURELESS EXCEPT NEAR BASE; LOCALLY HALITIC; THIN GRAY ANHYDRITE BED OCCURS AT BASE; BASAL CONTACT SHARP, MARKED BY A
	2339-		x x xxxxxxxxxxxxxxxxxxxxxxxxx	THIN BED OF CRAY CLAYSTONE.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARGILLACEOUS AT TOP,  REDDISH-BROWN, CONTENT DECREASES WITH DEPTH, CLAY OCCURS IN STRINGERS; TRACE POLY-  HALITE AS RANDOMLY-ORIENTED STRINGERS WHICH GRADE TO SUBHORIZONTAL WITH DEPTH,  CONTENT INCREASES WITH DEPTH; AT 1071.6, 1" THICK BED OF POLYHALITE OCCURS UNDERLAIN  BY 1" THICK GRAY CLAYSTONE BED; CLAY CONTENT INCREASES SLIGHTLY BELOW 1071.6', COLOR
_	2334	1075	x x	REDDISH-BROWN TO CRAY; BECOMES VERY POLYHALITIC IN LOWER 1.0'; BASAL CONTACT SHARP.



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		STRATIGRAPHIC	REMARKS
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2329 -	-1080	x	
			·
		x  x  x  x	POLYMALITE, FINELY CRYSTALLINE, ORANGE: UNDERLAIN BY 1/2" THICK GRAY CLAYSTONE BED;
			BASAL CONTACT SHARP.
			HALITE, MEDIUM TO COARSELY CRYSTALLINE, CLEAR TO WHITE: UPPER 1.0 ARGILLACEOUS STRINGERS, CONTENT DECREASES WITH DEPTH: POLYHALITE STRINGERS, CONTENT INCREASES
2324	-1085	x x	WITH DEPTH; BASAL CONTACT SHARP.
		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	POLYHALITE, FINELY CRYSTALLINE, ORANGE, STRUCTURELESS; UNDERLAIN BY 1" THICK GRAY
			CLAYSTONE BED; BASAL CONTACT SHARP.
			HALITE, MODERATELY ARGILLACEOUS AND POLYMALITIC, MEDIUM TO COARSELY CRYSTALLINE,
2319	-1090 <sup> </sup>		WHITE TO CLEAR TO TINTED ORANGE; LOCAL REDDISH-BROWN CLAY MATRIX, HALITE OCCURS AS
/-			DISPLACIVE CRYSTALS, LOCAL GREENISH-GRAY REDUCTION ZONES; ARGILLACEOUS STRINGERS ABUNDANT IN UPPER 3.0', CONTENT DECREASES WITH DEPTH, ABSENT BELOW 1103.0';
			POLYHALITE OCCURS AS DISSEMINATED BLEBS AND STRINGERS, CONTENT INCREASING WITH
1		,	DEPTH, 1" THICK POLYHALITE BED AT 1105.2'; BASAL CONTACT SHARP.
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2314 -	- 1005	×	·
2314	- 1095	. — —	
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2299	-1110	^ <u> </u>	HALITE, ARGILLACEOUS AND POLYHALITIC, COARSELY CRYSTALLINE, WHITE TO CLEAR: CLAY
			OCCURS AS STRINGERS; POLYHALITE OCCURS AS DISSEMINATED BLEBS AND STRINGERS, 6" THICK
			IRREGULAR SED OF POLYHALITE AT 1120.5', LOWER 6" VERY POLYHALITIC; SASAL CONTACT
		x _	SHARP.
		x —	`
2294	-1115	,	
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2289	1120		

PRELIN	MINARY	STRATIGRAPHIC	
ELEV.			REMARKS
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7 2203	1120	-X X	AS ABOVE
2284-	1125	_ x x _ x	POLYHALITE, FINELY CRYSTALLINE, ORANGE, STRUCTURELESS; UNDERLAIN BY 2" THICK GRAY CLAYSTONE BED; BASAL CONTACT SHARP.
2279	— II30	× × × − × × × ×	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; UPPER 4"  VERY ARGILLACEOUS, CLAY OCCURS AS REDDISH-BROWN DISCONTINUOUS RANDOMLY-ORIENTED  STRINGERS: REMAINDER CONTAINS TRACE CLAY STRINGERS, LOCALLY STRINGERS BECOME  SUBHORIZONTAL AND DENSITY MAY INCREASE; CONTAINS TRACE POLYMALITE WITH DEPTH; BASAL
			CONTACT SHARP, DISCONFORMABLE.  HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO ORANGE; UPPER 1" VERY ARGILLACEOUS,  SLIGHTLY ARGILLACEOUS TO 1146.0'; MODERATELY ABUNDANT RANDOMLY-ORIENTED STRINGERS  AND LARGE BLEBS OF POLYHALITE, CONTENT INCREASING WITH DEPTH, LOWER 1.5' VERY POLY-
2274 —	— II35	_	HALITIC; BASAL CONTACT SHARP, DISCONFORMABLE.  ARGILLACEOUS HALITE. FINELY TO COARSELY CRYSTALLINE; LOCALLY INTERREDDED WITH HALITIC MUDSTONE CONTAINING DISPLACIVE HALITE CRYSTALS; REDDISH-SROWN CLAY DISSEMI-
		_ _ _	NATED THROUGHOUT AS MATRIX, CONTENT INCREASES WITH DEPTH; IRREGULARLY SHAPED JONES  (1.0' x 2.0') OF PURE HALITE RANDOMLY SCATTERED THROUGHOUT UNIT; LOCAL SMALL ZONES  OF REDUCED GREENISH-GRAY CLAY; DISSOLUTION PITS THROUGH UNIT FILLED WITH ARGILLA-
2269	- 1140	_ x	CEOUS HALITE: POLYHALITIC, CONTENT INCREASES WITH DEPTH, DISCONTINUOUS 1" THICK POLYHALITE BED AT BASAL CONTACT; BASAL CONTACT GRADATIONAL, IRREGULAR WITH UP TO  1.0' OF RELIEF, LOCALLY SHARP, EROSIONAL.
· ·		_	ANHYDRITE, FINELY CRYSTALLINE, LIGHT GRAY TO LIGHT TANNISH-GRAY, THINLY LAMINATED TO THINLY BEDDED, BEDS SEPARATED BY DARK GRAY THIN LAMINAE; HALITE PSEUDOMORPHS AFTER
2264-	1145	<u>x -</u> - x	GYPSUM SWALLOWTAIL CRYSTALS BECOME ABUNDANT BELOW 1155.0', 1/16" TO 2" HIGH, BECOME MORE ABUNDANT AND LARGER WITH DEPTH, MOST OCCUR ALONG SUBBORIZONTAL BEDDING PLANES, OCCASIONALLY PSEUDOMORPHS LIE PARALLEL TO BEDDING; AT UPPER CONTACT DISSOLUTION PITS
2259-	— 11 <b>5</b> 0	x x x x x x x x x x x x x x x x x x x	INTO ANHYDRITE OCCUR, FILLED WITH CRAY ARGILLACEOUS HALITE AND HALITIC MUDSTONE,  0.5' TO 2.0' DEEP INTO ANHYDRITE, SEDDING TERMINATED EROSIONALLY AT SIDES OF  DISSOLUTION PITS; LOCALLY, POLYHALITE IS INCLUDED IN HALITE FILLING OF HALITE  PSEUDOMORPHS AFTER CYPSUM SWALLOWTAIL CRYSTALS, POLYHALITE ALSO OCCURS IN  IRREGULARLY-SHAPED ZONES (2" x 3") AS REPLACEMENT OF ANHYDRITE; HALITE OCCURS ALONG  BEDDING PLANES BELOW 1157.0'; LOWER 1" CONTAINS INTERSEDS OF POLYHALITE; BASAL  CONTACT SHARP.
2254—	-1155	XXXXX	POLYHALITE, SLIGHTLY HALITIC, FINELY CRYSTALLINE, REDDISH-ORANGE, HINT OF BEDDING IN UPPER 4", REMAINDER STBUCTURELESS EXCEPT FOR RARE HALITE PSEUDOMORPHS AFTER SWALLOW-TAIL GYPSUM CRYSTALS; CONTAINS ABUNDANT IRREGULARLY-SHAPED CRYSTALS OF HALITE (1/32" TO 1/2"); LOWER 3" IS ANHYDRITIC OR CARBONATE-RICH, COLOR GRADES TO BROWN AT BASE; BASAL CONTACT SHARP, UNDULATORY ON TWO SCALES: MINOR - UP TO 3", MAJOR - UP TO 2.5', EXHIBITS SOFT SEDIMENT DEFORMATION DUE TO LOADING.
2249-	-1160	MB 109	CLAYSTONE, LIGHT GRAY AT TOP TO GRAY AT BASE, STRUCTURELESS EXCEPT FOR FLOWAGE  STRUCTURES; THICKNESS RANGES FROM 0.2' TO 1.0'; LOCALLY BROKEN BY 0" TO 2" THICK  FRACTURES FILLED WITH CLEAR TO GRANGE HALITE; BASAL CONTACT SHARP, UNDULATORY UP TO  2.0', DISCONFORMABLE.  HALITE, COARSELY CRYSTALLINE, CLEAR TO WHITE; CONTAINS GRAY CLAY STRINGERS IN UPPER  2.0', CONTENT DECREASES WITH DEPTH; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH,  OCCURS AS BLEBS, BANDONLY-ORIENTED STRINGERS, AND AS THICK SUBBORIZONTAL STRINGERS
2244	1165	x \ x	1/4" THICK; ANHYDRITE OCCURS WITH POLYHALITE STRINGERS, CONTENT INCREASES WITH DEPTH; BASAL CONTACT SHARP, UNDULATORY UP TO 1.0'.



PRELIMINAR	Y STRATIGRAPHIC	
ELEV. DEPT	COLUMN	REMARKS
(FT. MSL) (FT.) 2244   1165		
]	ZMB Z10.9.2	AMBYDRITE, FINELY CRYSTALLINE, GRAY TO LIGHT GRAY, HINT OF THIN LAMINATIONS; CON-
] ]	Museum	TAINS 1" THICK ANHYDRITE LOCAL ZONES OF MIXED HALITE AND FINELY CRYSTALLINE; BASAL CONTACT SHARP.
1	1111111111	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS HORIZONTAL STRINGERS OF
		ANHYDRITE, 1" TO 3" THICK BEDS OF FINELY CRYSTALLINE ANHYDRITE WITH HALITE
2239-1170		PSEUDOMORPHS AFTER GYPSUM SWALLOWTAIL CRYSTALS AT 1167.3', 1168.4', 1169.4';
<b>j</b>	*****	BASAL CONTACT SHARP.
	TAR THAT	ANHYDRITE, FINELY CRYSTALLINE, LICHT GRAY TO GRAY, FINELY LAMINATED; CONTAINS HALITE
ł I	XXXXXXXXXX	PSEUDOMORPHS AFTER CYPSUM SWALLOWTAIL CRYSTALS, 1/4" TO 1-1/2" HIGH, OCCURRING
	x x	PARALLEL TO BEDDING PLANES: BASAL CONTACT UNDULATORY DUE TO INFILLING OF SHALLOW CHANNEL FORMS IN UNDERLYING UNIT, SHARP, DISCONFORMABLE.
2234-1175	, x	ANHYDRITE AND CLAYSTONE; ANHYDRITE OCCURS AS ISOLATED GRAY NODULES IN A POORLY
	XXXXXXXX	INDURATED GRAY CLAYSTONE MATRIX; SIZE OF NODULES INCREASES WITH DEPTH; TEXTURE OF
		BASAL 1.0' DEFINED AS NODULAR; BASAL CONTACT SHARP, DISCONFORMABLE.
		ANHYDRITE, HALITIC, FINELY CRYSTALLINE, GRAY TO BROWNISH-GRAY, MICRO TO THINLY LAMI-
	x -	NATED, LAMINAE ALTERNATE LIGHT TO DARK; CONTAINS LOCAL HALITE PSEUDONORPHS AFTER
2229 1180	'   ^ ×	GYPSUM SWALLOWTAIL CRYSTALS, < 1/8" HIGH: BASAL CONTACT SHARP, UNDULATORY, LOCALLY DISCOMFORMABLE, MARKED BY DISCONTINUOUS 1" THICK POLYHALITE BED.
		HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; POLYHALITIC AT TOP,
	x   x	CONTENT DECREASES WITH DEPTH; BASAL CONTACT SHARP, DISCONFORMABLE.
	-	POLYHALITE, FINELY CRYSTALLINE, PALE ORANGISH-BROWN, LOCALLY MICROLAMINATED TO
	× _	BANDED (< 1/32" TO 1" THICK); LOCALLY 1/2" TO 1" THICK UNALTERED ANHYDRITE BEDS,
2224-1185	×	NEAR TOP BEDS CONTAIN HALITE PSEUDOMORPHS AFTER GYPSUM SWALLOWTAIL CRYSTALS 1/4" TO
		1/2" HIGH: BASAL CONTACT SHARP, UNDULATORY UP TO 0.5', DISCONFORMABLE, MARKED BY THE OCCURRENCE OF 1" TO 2" THICK BED OF GRAY CLAYSTONE.
1	_^	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; BLEBS AND SUBHORI-
<u> </u>		ZONTAL STRINGERS OF POLYHALITE TO 1/2" THICK; LOCAL GRAY SUBHORIZONTAL STRINGERS OF
	X	CLAY TERMINATED AT PENECONTEMPORANEOUS DISSOLUTION PITS; BASAL CONTACT SHARP,
2219-1190	l l	DISCONFORMABLE, UNDULATORY UP TO 0.4'.
	×	HALITE AND ARGILLACEOUS HALITE; HALITE: WHITE TO CLEAR TO TINTED ORANGE; CLAY:
	x	REDDISH-BROWN; UPPER 0.5' VERY ARGILLACEOUS, CONTAINS DISPLACIVE HALITE CRYSTALS
	x ^	(< 1/4") IN MUDSTONE MATRIX, UPPER 3" GREENISH-GRAY IN COLOR, CLAY CONTENT DECREASES WITH DEPTH TO 1189.0', 0.5' THICK REDDISH-BROWN ARGILLACEOUS HALITE BED OCCURS BELOW
	-	1189.0', CLAY CONTENT INCREASES ABRUPTLY, THEN DECREASES WITH DEPTH, CLAY MATERIAL
2214 1195	_	OCCURS AS MATRIX MATERIAL OR AS RANDOMLY-ORIENTED STRINGERS, CLAY CONTENT LOCALLY
	×	INCREASES BELOW 1200.0'; TRACE POLYHALITE AT TOP, CONTENT INCREASING WITH DEPTH. AS
	_	DISSEMINATED BLEBS AND RANDOMLY-ORIENTED DISCONTINUOUS STRINGERS; BASAL CONTACT
	<del>-</del>	SHARP, SLIGHTLY UNDULATORY, DISCONFORMABLE.
	x	
2209-1200		
i		_
	-	
	X	
2204-1205	-x-x	
	_	
	x x	
	[	
2199 1210	x x	

EXHAUST SHAFT LITHOLOGIC LOG SHEET 28 OF 49

1				*** <u>*</u>
	PRELIM	IINARY	STRATIGRAPH	uc l
	ELEV. (FT. MSL)	DEPTH	COLUMN	REMARKS
_	2199	1210	x x	<
	2194 —	<del>-</del> 1215	××××××××××××××××××××××××××××××××××××××	HALITE, NEDIUM TO COARSELY CRYSTALLINE, WHITE TO ORANGISH-WHITE; UPPER 2.0' REDDISH- BROWN HALITIC MUDTONE CONTAINING DISPLACIVE HALITE CRYSTALS, GRADES INTO SLIGHTLY ARGILLACEOUS HALITE; REMAINDER CONTAINS GRAY CLAY DISSEMINATED THROUGHOUT AS INTER- CRYSTALLINE MATERIAL; POLYHALITE OCCURS AS RANDONLY-ORIENTED STRINGERS AND DISSEMI- NATED BLEBS, BETWEEN 1217.0' AND 1219.0', 2" THICK POLYHALITE BEDS SPACED 0.5' TO 1.0' OCCUR, 3" THICK DISCONTINUOUS BED OF POLYHALITE UNDERLAIN BY A THIN BED OF GRAY CLAYSTONE OCCURS AT 1219.0', BED OF FINELY CRYSTALLINE ORANGISH-WHITE POLYHALITE OCCURS BETWEEN 1227.1' TO 1227.5'; 1/8" TO 1/4" THICK SUBHORIZONTAL STRINGERS OF POLYHALITE OCCUR IN THE INTERVALS FROM 1225.1' TO 1227.1' AND 1227.5' TO 1229.5'; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY, DISCONFORMABLE.
	2189 —	-1220	,	SASAL CONTACT SHARE, SETCHELL UNDULATORI, DISCONFORMADES.
	2184-		× - × × × - × × <b>xk/kB</b> ××k/k/	×
	2179	- 1230	x x x x x x	
	2174 -	-1235	 	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; CLAY AND POLYHALITE OCCUR AS RANDOMLY- ORIENTED DISCONTINUOUS STRINGERS; UPPER 2.0 ARGILLACEOUS HALITE, HALITE OCCURS IN DISCONTINUOUS ZONES AND PODS OF CRYSTALS IN CLAY AND HALITE MATRIX, CLAY CONTENT DECREASES WITH DEPTH; BASAL CONTACT SHARP, UNDULATORY.
	2169	- 1240	x -	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR: POLYHALITIC AND ARGILLACEOUS; ARGIL- LACEOUS HALITE OCCURS IN UPPER 0.5', CONTENT DECREASES WITH DEPTH; POLYHALITE OCCURS AS DISCONTINUOUS STRINGERS, BELOW 1243.0' POLYHALITE DECOMES ABUNDANT; BASAL CONTACT SHARP, UNDULATORY UP TO 1.0'.
	2164 —		× × × × × ×	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE, CONTAINS ZONES OF LIGHT ORANGE; APPEARS TO HAVE MOUND FORMS AT UPPER CONTACT: CONTAINS IRREGULARLY-SHAPED CRYSTALS OF HALITE (1/16" TO 3/4") DISSEMINATED THROUGHOUT; BASAL CONTACT SHARP, MARKED BY 1"
	2159 —	-1250	x - x	TO 2-1/2" THICK GRAY CLAYSTONE CONTAINING HALITE.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; TRACE GRAY CLAY, CONTENT DECREASES WITH DEPTH, BETWEEN 1255.8' AND 1257.0' SUBHORIZONTAL STRINGERS OF REDDISH-BROWN CLAY ARE CONTINUOUS AROUND THE CIRCUMFERENCE OF THE SHAFT; DISSEMINATED POLYHALITE BLEBS, CONTENT INCREASES WITH DEPTH; BASAL CONTACT SHARP.
	2154	1255	×	

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PRELIMINARY	T	
ELEV. DEPTH	STRATIGRAPHIC	REMARKS
(FT. MSL) (FT.)	COLUMN	·
2154 1255	_	AS ABOYE
	X	
	1	
	-x-x	
2149 - 1260		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 0.5' ARGILLACEOUS.
]		CLAY OCCURS WITH HALITE AS MATRIX, BELOW 1260.7' CLAY OCCURS AS STRINGERS, CONTENT
		DECREASES WITH DEPTH; DISSEMINATED POLYHALITE BLEBS; BASAL CONTACT SHARP.
	× × ×	POLYHALITE, FINELY CRYSTALLINE, ORANGISH-RED, STRUCTURELESS; UNDERLAIN BY 1" THICK
1 1	XXXXXXX	CRAY CLAYSTOME BED; BASAL CONTACT SHARP.
2144-1265	- x	HALITE, WHITE TO CLEAR, COARSELY CRYSTALLINE, SLIGHTLY ARGILLACEOUS: CLAY OCCURS IN
]		STRINGERS, CONTENT DECREASES WITH DEPTH, ABSENT BELOW 1268.0'; TRACE POLYHALITE
		BLEBS: BASAL CONTACT SHARP.
	×	
2139 - 1270	x	
]		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	POLYHALITE, FINELY CEYSTALLINE, REDDISH-DRANGE, STRUCTURELESS; UNIT SPLIT SY 4"
	V	THICK CLEAR HALITE BED, OCCURS 3" BELOW UPPER CONTACT; BASAL CONTACT SHARP, MARKED
	X xxxxx	BY 2" THICK GRAY CLAYSTONE BED.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO ORANGE TO CLEAR; TRACE POLYHALITE,
2134 1275	_	OCCURS AS DISCONTINOUS RANDONLY-ORIENTED STRINGERS AND AS DISSEMINATED BLEBS;
<b>[</b>	xxxxx X	SLIGHTLY ARGILLACEOUS, GRAY CLAY STRINGERS TO 1276.0', ABSENT BETWEEN 1276.0' AND
		1280.0', CLAY STRINGERS IN 1.0' THICK BAND SELOW 1280.0', BELOW 1284.0' CLAY CONTENT
	XXXXX	INCREASES AS SUBBORIZONTAL STRINGERS; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
1		
2129 1280	×	
1	_	
	_	
1		
2124 - 1285		
5127-1205		
		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARGILLACEOUS, USPER 1.5' TO
	×	2.0' ARGILLACEOUS HALITE WITH CLAY AND HALITE MATRIX, HALITE OCCURS AS ZONES AND
	— x	PODS OF CRYSTALS AND DISPLACIVE CRYSTALS TO 1/2" ACROSS, CLAY CONTENT DECREASES WITH
2119 1290	]	DEPTH: POLYHALITE OCCURS AS SUBHORIZONTAL STRINGERS AND DISSEMINATED BLEBS, CONTENT INCREASES WITH DEPTH; BASAL CONTACT SHARP, UNDULATORY.
	xxxxx X	AND THE PROPERTY OF THE PROPER
	ſ	POLYHALITE, FINELY CRYSTALLINE, ORANGISH-RED, STRUCTURELESS EXCEPT FOR 1" TYICK
	X	INTERBEDS OF HALITE; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
2114 - 1295	XM/BXXXXX	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS SUBHORIZONTAL CONTINUOUS
	x	STRINGERS OF POLYHALITE IN UPPER 0.5', IN THE REMAINDER OF THE UNIT POLYHALITE
		OCCURS AS RARE DISSEMINATED BLEBS; BASAL CONTACT SHARP.
		HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; ARGILLACEOUS AT TOP, CLAY OCCURS AS
	_	RANDONLY-ORIENTED STRINGERS, CONTENT DECREASES WITH DEPTH; BASAL CONTACT  GRADATIONAL.
2109   1300		

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PRELIMINA	ARY	STRATIGRAPHIC	
1	EPTH	COLUMN	REMARKS.
	300		AS ABOVE
210413	305	- ×  x	POLYHALITE, PINELY CRYSTALLINE, REDDISH-ORANGE; CONTAINS IRREGULAR CRYSTALS AND BEDS OF HALITE; BASAL CONTACT SHARP, EXTREMELY IRREGULAR.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; POLYHALITE OCCURS AS IRREGULAR RANDOMLY-ORIENTED AND SUBHORIZONTAL STRINGERS AND AS
2099—13	310	x x	DISSEMINATED BLEBS, CONTENT INCREASES WITH DEPTH; BETWEEN 1307.0' AND 1308.0' HORIZONTAL AND SUBHORIZONTAL STRINGERS OF CLAY OCCUR; BASAL CONTACT DIFFUSE.
2094—13	315	× ×	ARGILLACEOUS HALITE, REDDISH-BROWN CLAY, HALITE WHITE TO CLEAR; MALITE OCCURS IN PODS AND IRREGULARLY-SHAPED ZONES AND AS GROUPS OF CRYSTALS DISPERSED THROUGHOUT, BOTH CLAY AND HALITE OCCUR AS MATRIX; BASAL CONTACT GRADATIONAL.
2089—13	520	X ************************************	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; SLIGHTLY ARGILLACEOUS, REDDISH-BROWN, CLAY CONTENT DECREASES WITH DEPTH; TRACE DISSEMINATED POLYHALITE BLEBS, CONTENT INCREASES WITH DEPTH, FROM 1320.4° TO 1320.9° A REDDISH-ORANGE, FINELY CRYSTALLINE POLYHALITE BED OCCURS; BASAL CONTACT SHARP. HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 4" ARGILLACEOUS, CLAY OCCURS AS
2084—13	525	x x	FINE DISCONTINUOUS STRINGERS, CONTENT DECREASES WITH DEPTH, ABSENT BELOW 1326.0'; BECOMES POLYHALITIC BELOW 1326.0', CONTENT INCREASES WITH DEPTH; BASAL CONTACT GRADATIONAL.
207913:	30	x x	ANHYDRITE, FINELY CRYSTALLINE, LIGHT AND MEDIUM GRAY; INTERBEDS OF HALITE IN UPPER PART, CONTENT DECREASES WITH DEPTH; LOWER 1" CONTAINS NO INTERBEDS OF HALITE; BASAL CONTACT SHARP.  POLYHALITE, HALITIC, FINELY CRYSTALLINE, REDDISH-ORANGE; CONTAINS IRREGULAR DISCONTINUOUS BEDS OF CLEAR HALITE AND IRREGULARLY-SHAPED CRYSTALS OF HALITE 1/32" TO 1/8"
2074—13		x	ACROSS; OCCASIONAL HALITE PSEUDOMORPHS AFTER GYPSUM SWALLOWTAIL CRYSTALS IN UPPER 1"; FROM 1331.5' TO 1331.8' OF GRAY FINELY CRYSTALLINE ANHYDRITE BED OCCURS; BASAL CONTACT SHARP, MARKED BY 1" THICK BED OF GRAY CLAYSTONE.  HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; VERY SLIGHTLY ARGILLACEOUS; TRACE POLYHALITE AND ANHYDRITE, IRREGULAR BLEBS OF POLYHALITE OCCURS ABOVE 1335.0',
206913		, , , , , , , , , , , , , , , , , , ,	ANHYDRITE OCCURS AS CONTINUOUS AND DISCONTINUOUS STRINGERS BELOW 1335.0', BASAL 2.0' CONTAINS 1/4" THICK SUBBORIZONTAL STRINGERS OF ANHYDRITE; BASAL CONTACT SHARP.
2064 134	45	MENTE	POLYHALITE INTERBEDDED WITH ANHYDRITE, FINELY CRYSTALLINE, LIGHT GRAY TO LIGHT GRAYISH-ORANGE, THINLY LAMINATED TO STRUCTURELESS; HALITE BED BETWEEN 1343.1' AND 1343.4'; BASAL CONTACT SHARP, MARKED BY 1" THICK GRAY CLAYSTONE BED.

EXHAUST SHAFT LITHOLOGIC LOG SHEET 31 OF 49

PRELIM	IINARY	070471674	
ELEV.	DEPTH	STRATIGRAPHIC COLUMN	REMARKS
(FT. MSL) 2064	(FT.) 1345	×	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR; POLYHALITE OCCURS AS CONTINUOUS HORIZONTAL AND SUBHORIZONTAL STRINGERS AND AS IRREGULARLY-SHAPED BLEBS, CONTENT
		x x	INCREASES WITH DEPTH; BASAL CONTACT SHARP.
2059 -	<del>-</del> 1350	x x x	ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, REDDISH-BROWN HALITIC CLAYSTONE MATRIX, HALITE CLEAR TO WHITE; HALITE OCCURS AS IRREGULARLY-SHAPED AGGREGATES OF CRYSTALS; CONTAINS 1/4" TO 2" THICK SUBHORIZONTAL HALITE-FILLED FRACTURES; BASAL CONTACT UNDULATORY UP TO 2.0', GRADATIONAL TO SHARP, DISCONFORMABLE.
2054	—ı355		MCNUTT POTASH ZONE  VACA TRISTA MARKER SED  HALITIC SILTSTONE, REDDISH-BROWN, THINLY LAMINATED TO STRUCTURELESS; HALITE OCCURS AS ISOLATED DISPLACIVE CRYSTALS UP TO 1-1/2" ACROSS; LOCAL CHANNEL FILL STRUCTURES PRESENT; CONTAINS BOTH SUBVERTICAL AND SUBHORIZONTAL HALITE-FILLED FRACTURES 1/8" TO
2049~	-1360	- x	2" THICK; CHANNEL INTO UNDERLYING UNIT 3.0' DEEP (EAST SIDE OF SHAFT); NUMEROUS FILLED CHANNELS THROUGHOUT UNIT; OCCASIONAL CROSS-LAMINATIONS; BASAL CONTACT GRADATIONAL TO LOCALLY SHARP, UNDULATORY UP TO 3.0'.  HALITE, HEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARCILLACEOUS TO 1363.0', CLAY OCCURS AS REDDISH-BROWN MATRIX, CONTENT DECREASES WITH DEPTH, HALITE OCCURS AS
2044~	— 1365 	— х — <sub>хххххх</sub> —	IRREGULARLY-SHAPED CRYSTAL MASSES; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH AS SUBHORIZONTAL CONTINUOUS AND DISCONTINUOUS STRINGERS AND THIN BEDS, ALSO AS DISSEMINATED BLEBS; BELOW 1363.0° ARGILLACEOUS MATERIAL OCCURS AS LOCAL SUBHORIZONTAL STRINGERS; 1" THICK 2ED OF POLYHALITE OCCURS AT 1365.6°; FROM 1373.4° TO 1373.9° ARGILLACEOUS HALITE OCCURS; BASAL CONTACT SHARP, DISCONFORMABLE.
. 2039~		XXXXXXXX X	
2034	- 80	x x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE, CRUDELY THIN TO MEDIUM BEDDED; POLYHALITE OCCURS AS SUBHORIZONTAL PARALLEL STRINGERS GROUPED IN UPPER 2.0', RANDOMLY-ORIENTED STRINGERS SELOW 1380.4', DISSEMINATED BLEBS, CON- TENT DECREASES WITH DEPTH; LOCALLY SLICHTLY ARGILLACEOUS, COLOR WHITISH-GRAY, SUB- HORIZONTAL STRINGERS AND LOCAL IRREGULARLY-SHAPED ZONES OF CLAY, CONTENT DECREASES WITH DEPTH; 1/4" TO 1/2" THICK CLAYSTONE BED AT 1383.8'; BASAL CONTACT SHARP, SLICHTLY UNDULATORY, DISCONFORMABLE.
2029	-1380	- x	HALITIC CLAYSTONE AND ARGILLACEOUS HALITE, CLAY REDDISH-BROWN, HALITE WHITE TO CLEAR AND FINELY CRYSTALLINE; HALITE CONTENT INCREASES WITH DEPTH, OCCURS AS DISPLACIVE CRYSTALS (1/8" TO 1/2" ACROSS) AND PODS OF RELATIVELY PURE HALITE; LOCAL PODS OF POLYHALITE: BASAL CONTACT GRADATIONAL
2024-	-1385	– x	POLYHALITE; BASAL CONTACT GRADATIONAL.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; LOCALLY ARGILLACEOUS,  REDDISH-SROWN CLAY OCCURS AS RANDOMLY-ORIENTED STRINGERS IN SUBHORIZONTAL ZONES,  CONTENT DECREASES WITH DEPTH, DECREASES ABRUPTLY BELOW 1390.1'; TRACE POLYHALITE AS  RARE DISSEMINATED RANDOMLY-ORIENTED STRINGERS AND BLEBS, CONTENT INCREASES WITH  DEPTH, POLYHALITE BED OCCURS BETWEEN 1390.9' AND 1391.1', CONTENT INCREASES ABRUPTLY
2019	1390		NEAR BASE; LOCAL ZONES AND STRINGERS OF ARGILLACEOUS HALITE CONTAINING GRAY CLAY; BASAL CONTACT SHARP, DISCONFORMABLE.

EXHAUST SHAFT LITHOLOGIC LOG SHEET 32 OF 49

PRELIMIN	NARY	STRATIGRAPHIC COLUMN	REMARKS
	(FT.) 1390	COLUMN	AS ABOYE
2014		x x x	HALITIC CLAYSTONE, UPPER 2" GRAY, REMAINDER REDDISH-BROWN, STRUCTURELESS EXCEPT FOR DISPLACIVE CRYSTALS (1/8" TO 1/2"); LOCAL GREENISH-GRAY REDUCTION SPOTS; HINT OF RELICT BEDDING; BASAL CONTACT GRADATIONAL, UNDULATORY.
2009	1400	x x x x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; VERY POLY- HALITIC TO 1400.0°, OCCURRING AS ABUNDANT RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS AND ZONES; BELOW 1400.0° RARE POLYHALITE AND SUBHORIZONTAL GRAY STRINGERS OF CLAY; BASAL CONTACT SHARP, DISCONFORMABLE.
2004	1405	x 	ARGILLACEOUS HALITE; GRAY CLAY IN UPPER 1.0', REMAINDER REDDISH-BROWN; HALITE OCCURS AS WELL-BOUNDED PODS OR COBBLES (?) 1" TO 4" DIAMETER, FINE GRAINED OR CRYSTALLINE COARSENING TOWARD CENTER, WHITE TO CLEAR WITH RARE GRANGE TINT, PODS BREAK IN SPHER-
1999	1410		ICAL PATTERN; LOCALLY HALITE OCCURS AS CLEAR TO WHITE IRREGULARLY SHAPED ZONES, HALITE ALSO OCCURS AS SMALL DISPLACIVE CRYSTALS <1/32" TO 1/8" ACROSS: LOCAL 1/8" TO 1/4" DISCONTINUOUS HALITE-FILLED (FIBROUS) FRACTURES; CONTAINS LOCAL POLYHALITE ZONES; BASAL CONTACT SHARP.
1994	1415	X X X	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; ARCILLA- CEOUS AT TOP, CONTENT DECREASES WITH DEPTH, LOCAL DISCONTINUOUS IRREGULARLY-SHAPED ZONES OF CLAYSTONE, CLAY ALSO OCCURS AS RANDONLY-ORIENTED AND SUBHORIZONTAL STRINGERS; MODERATELY ABUNDANT POLYHALITE, OCCURS AS DISSEMINATED BLEES AND SUBHORIZONTAL DISCONTINUOUS STRINGERS; CLAY ABSENT BELOW 1415.0°; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY UP TO 4".
1989	1420	× × × × × × × × × × × × × × × × × × ×	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE; THIN SUBHORIZONTAL HALITE-FILLED FRACTURES <1/16" THICK; CONTAINS RARE CRYSTALS OF HALITE 1/16" TO 1/4" ACROSS; LOWER 4" CONTAINS BLACK LAMINAE PARALLEL TO LOWER CONTACT; BASAL CONTACT SHARP, UNDULATORY ON TWO SCALES: MAJOR - 0.8', MINOR - 0.1', MARKED BY 1" THICK GREENISH- GRAY CLAYSTUNE BED.
1984	1425	x _ x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; RARE IRREGULAR DISCONTIN- UOUS STRINGERS AND BLEBS OF POLYHALITE; LOCAL TRACE AMOUNTS OF GRAY SUBHORIZONTAL STRINGERS OF CLAY; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY, DISCONFORMABLE.
1979	1430	_	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; MODERATELY ARGILLACEOUS, CLAY REDDISH-BROWN TO CRAY WITH DEPTH, OCCURS AS INTER-CRYSTALLINE MATERIAL AND SUBHORIZONTAL TO RANDOMLY-ORIENTED STRINGERS, CONTENT DECREASES WITH DEPTH; TRACE
1974 1	1435	-	POLYHALITE BLEBS, CONTENT INCREASES WITH DEPTH, AT 1437.5' A 0.1' THICK BED OF REDDISH-ORANGE POLYHALITE OCCURS: BELOW POLYHALITE BED CLAY CONTENT INCREASES SLIGHTLY THEN DECREASES WITH DEPTH; BASAL CONTACT DIFFUSE, CONFORMABLE.

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PRELIMIN	IARY		
ELEV. D	EPTH	STRATIGRAPHIC	REMARKS
	(FT.)	COLUMN	
1974 1	435		AS ABOYE
1		****	
1		-	
1969!	440	_	
	:	<u> </u>	
		ļ	
		Ì	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE, STRUCTURELESS: HALITIC IN UPPER
1			1.5', HALITE OCCURS AS DISCONTINUOUS THIN BEDS AND IRREGULARLY-SHAPED ZONES, WHITE
1964-1	445	XXXXXXXX	TO CLEAR; REMAINDER HALITE-FREE; BASAL CONTACT SHARP, MARKED BY 1" TO 2" THICK
1 1	į	XXXXXXX	CREENISH-CRAY CLAYSTONE BED, DISCONFORMABLE.
		×	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; TRACE POLYHALITE, CONTENT
			INCREASES WITH DEPTH, OCCURS AS RARE DISSEMINATED BLEBS AND SUBHORIZONTAL
1		x	STRINGERS; TWO 3/4" THICK BEDS OF POLYHALITE NEAR 1450'; BASAL CONTACT SHARP.
1959-1	450	XXXXXXXXXXXXXX	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE, STRUCTURELESS EXCEPT FOR RARE SUB-
		x	HORIZONTAL AND SUBVERTICAL HALITE-FILLED FRACTURES < 1/8" THICK: BASAL CONTACT
ļ-		××××××××××××××××××××××××××××××××××××××	SHARP.
		www.xx	
1 1		- x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE; TRACE SUBHORIZONTAL GRAY CLAY
			STRINGERS; RARE DISSEMINATED BLEBS AND SUBBORIZONTAL STRINGERS OF POLYHALITE, CON-
19541	455	X X	TENT INCREASES WITH DEPTH, INCREASES ABRUPTLY IN LOVER 4"; BASAL CONTACT SHARP.
			ARGILLACEOUS HALITE AND HALITIC CLAYSTONE; UPPER 0.5' TO 1.0' CRAY, REMAINDER
			REDDISH-BROWN; HALITE OCCURS AS IRREGULARLY-SHAPED ZONES, DISCONTINUOUS SEDS, DIS-
			PLACIVE CRYSTALS < 1/8" ACROSS; BASAL CONTACT DIFFUSE.
1			HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE: VERY ARGILLACEOUS TO 1459.0°, CLAY CONTENT DECREASES WITH DEPTH, OCCURS AS IRREGULARLY-
1949-14	460	×	SHAPED ZONES OF HALITIC CLAYSTONE WITH DISPLACIVE HALITE CRYSTALS AND AS MATRIX AND
·			RANDOMLY-ORIENTED STRINGERS OF CLAY IN ARGILLACEOUS HALITE, BELOW 1459.0' CLAY CON-
	1	_	TENT DECREASES ABRUPTLY; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS
		1	DISSEMINATED BLEBS AND RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS, STRINGERS
1		_	BECOME HORIZONTAL AND 1/4" THICK SPACED 2" TO 4" IN LOWER 5.0', 0.5' THICK BED OF
1044	100		POLYHALITE OCCURS AT 1469.0°; BASAL CONTACT GRADATIONAL.
1944-14		xxxxxx	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE TO ORANGISH-RED; UPPER 0.5' CONTAINS
] ]			DISCONTINUOUS BEDS OF IRREGULARLY-SHAPED PODS OF HALITE; BECOMES LAMINATED WITH
		-	CLAY PARTINGS BELOW 1470.0'; BASAL CONTACT SHARP, MARKED BY 1" TO 4" THICK BED OF
		xxxxxx	GRAY CLAYSTONE SPLIT BY BIFURCATING HALITE-PILLED SUBHORIZONTAL FRACTURE,
			UNDULATORY UP TO 0.5'.  HALITE, COARSELY CRYSTALLINE, WHITE, BEDDED WITH SUBHORIZONTAL CONTINUOUS STRINGERS
1939—14	470	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	AND BEDS OF POLYHALITE 1/4" TO 3/4" THICK: POLYHALITE CONTENT DECREASES WITH DEPTH,
		XXXXXXXXX	ABSENT BELOW 1475.0'; BEDDED WITH SUBBORIZONTAL STRINGERS OF GRAY CLAY BELOW
1 1			1475.0'; BASAL CONTACT SHARP.
		×	HALITE, FINELY TO MEDIUM CRYSTALLINE, WHITE TO CLEAR: GRAYISH-BLACK CLAY OCCURS AS
			INTERSTITIAL FILLING AND AS DISCONTINUOUS SUBHORIZONTAL STRINGERS; BASAL CONTACT
0.74	<u>,,,  </u>	_ ×	SHARP.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE, BANDED BY
1934-1-14	475		ORANGE-TINTED HALITE SPACED 1" TO 2"; 1" THICK BED OF GREENISH-GRAY CLAYSTONE
	ł	_	OCCURS 2" ABOVE LOWER CONTACT: BASAL CONTACT SHARP, IRREGULAR, SLIGHTLY UNDULATORY.
	}		HALITIC CLAYSTONE AND ARGILLACEOUS HALITE, REDDISH-BROWN; HALITE OCCURS AS DISPLA-
<b>j</b>	}	ļ	CIVE CRYSTALS AND SUBHORIZONTAL FRACTURE FILLINGS 1/4" THICK; UPPER 4" GREENISH-
			GRAY; BASAL CONTACT DIFFUSE.
1929 14	480		

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PRELIM	INARY	0.70	
ELEV.	DEPTH	STRATIGRAPHIC COLUMN	REMARKS
(FT. MSL)		COLUMN	
1929	1480		AS ABOYE
			MONTH TO COLUMN TO COLUMN THE COLUMN TO A STATE OF THE COLUMN THE
1 1		_	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE: SLIGHTLY ARGILLACEOUS IN UPPER 2.0' AS DISCONTINUOUS RANDOMLY-ORIENTED STRINGERS: TRACE
	'		POLYHALITE AT TOP. CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND
1924-	_1405	X	STRINGERS; BASAL CONTACT SHARP.
19247	-1485		
1		x	
[ [			
]		1	POLYHALITS, FINELY CRYSTALLINE, REDDISH-ORANGE, STRUCTURELESS; BASAL CONTACT SHARP,
1919	-1490	XM05X7270X	MARKED BY 1/2" TO 1" THICK GRAY CLAYSTONE BED.
	_		HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS SUBHORIZONTAL
	-		STRINGERS OF BLACKISH-GRAY CLAY SPACED 2" TO 4": BASAL CONTACT SHARP.
		×	HALITE, COARSELY CRYSTALLINE, UNITE TO CLEAR TO TINTED ORANGE, BANDED WHITE AND ORANGE, SPACED 1" TO 2", TRACE POLYHALITE; BASAL CONTACT GRADATIONAL.
	j	×	ORANGE, STACED L 10 2 , IEACE FULLELLIE; BASAL CUMIACI GRADALIUMAL.
1914	-1495		
			ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR; HALITE OCCURS
	ļ		AS PODS AND IRREGULARLY-SHAPED ZONES OF CRYSTALS SURROUNDED BY REDDISH-BROWN CLAY
	ļ		MATRIX; CLAY CONTENT DECREASES WITH DEPTH; UPPER 4" CONTAINS SUBHORIZONTAL
			STRINGERS OF BLACKISH-GRAY CLAY SPACED 1"; BASAL CONTACT DIFFUSE.
1909-	-1500		
		×	HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO ORANGE; TRACE POLYHALITE, CONTENT
l		x x	INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-ORIENTED STRINGERS:
	_		BASAL CONTACT SHARP, IRREGULAR, UNDULATORY UP TO 1", DISCONFORMABLE.
, ,	•		POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE; HALITIC, CONTAINS IRREGULARLY-
1904	-1505	<b>XXXXXXXX</b>	SHAPED PODS OF HALITE TO 4" ACROSS; CONTAINS LOCAL ZONES RICH IN AMHYDRITE OR
.504	,500	$\times\!\!\times\!\!\times\!\!\times\!\!\times$	LANGBENITE (?); BASAL CONTACT SHARP, UNDULATORY, SLIGHTLY IRREGULAR.
		×	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRANCE; TRACE
			POLYMALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND
1	į	×	RANDOMLY-ORIENTED STRINGERS; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
1800	.,,,,		
1899	1510	×	
		x ^ ·	
		MEXX22X	POLYHALITE, FINELY CRYSTALLINE, BROWN TO TAN, STRUCTURELESS; BASAL CONTACT SHARP.
		cxxxxx —	HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS STRINGERS OF
1004	ļ		POLYHALITE AND GRAY CLAY SPACED 1" TO 2"; BASAL CONTACT SHARP.
1894	-1515	<del></del>	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE; UPPER 0.5' ARGIL-
			LACEOUS, REDDISH-BROWN, CONTENT DECREASES WITH DEPTH; TWO 3" THICK BEDS OF REDDISH-
Ì	į	x -	BROWN ARGILLACEOUS HALITE OCCUR AT 1519.8' AND 1520.2'; BASAL 0.5' CONTAINS SUB-
	ļ	ļ	HORIZONTAL GRAY CLAY STRINGERS, SPACED 1" TO 3"; TRACE POLYHALITE, OCCURS AS DIS-
j		_	SEMINATED BLEBS AND RANDOMLY-ORIENTED TO SUBBORIZONTAL STRINGERS; BASAL CONTACT
1889-	-1520	ļ	SHARP, SLIGHTLY UNDULATORY, DISCONFORMABLE.
1	ļ	×	<u> </u>
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]	}	_	
		1	
1884	1525	<u></u>	

225111	UNA SY	T	
PRELIN	IINARY	STRATIGRAPHIC	
ELEV.	DEPTH	COLUMN	REMARKS
(FT. MSL)			
1884	1525	1 x —	AS ABOYE
	-		
1		l	ARGILLACEOUS HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED
			ORANGE: CLAY REDDISH-BROWN, UPPER 1.0° TO 3.0° GRAY ARGILLACEOUS HALITE WITH RARE
		<b> </b>	SMALL DISPLACIVE HALITE CRYSTALS < 1/16" ACROSS; HALITE OCCURS AS ACCREGATES OF
1			CAYSTALS IN PODS OR ZONES; CLAY OCCURS AS MATRIX IN UPPER PART, OCCURS AS DISSEMI-
1879	<b>–</b> 1530	— —	NATED IRREGULARLY-SHAPED ZONES AND RANDOMLY-ORIENTED STRINGERS WITH DEPTH, CONTENT
1		1	DECREASES WITH DEPTH; BASAL CONTACT SHARP.
			Deckers Till Strik, Sask Conner Sakar.
{ <b>!</b>			
1			
) j			}
1874	<del>-</del> 1535		UNION ANHYDRITE
1 1	'		ANHYDRITE, ALTERNATES WHITISH-GRAY TO DARK GRAY, FINELY CRYSTALLINE, THINLY LAMI-
			NATED TO THINLY SEDDED; HALLTIC, CONTAINS RARE 1/16" CRYSTALS OF HALLTE; UPPER 2" TO
} <b>!</b>	ļ	11114111	5" POLYHALITIC, DISCONTINUOUS POLYHALITE LEMS OCCURS ON MORTHWEST SIDE OF SHAFT
			BETWEEN 1539.5' AND 1541.6'; LOWER 1.0' TO 2.0' CONTAINS WHITE LAMINAE INTERBEDDED
ļ <b>i</b>		////////	WITH ANHYDRITE, POSSIBLY CARBONATE; BASAL CONTACT GRADATIONAL, ALTERNATION CONTACT,
1869	-1640		CONFORMABLE.
'009-1	1240		
		(*///////	POLYHALITE, FINELY CRYSTALLINE, ORANGISH-RED TO REDDISH-ORANGE, THINLY LANIMATED TO
; <u> </u>		///////////////////////////////////////	THINLY BEDDED, LOCALLY STRUCTURELESS, LAMINAE OFTEN SLIGHTLY CONTORTED; LOCALLY
{ <b>i</b>		777777	ANHYDRITIC, OCCURS AS UNALTERED LAMINAE AND ZONES: BASAL CONTACT SHARP, MARKED BY
			LOAD CASTS INTO UNDERLYING UNIT (2" DEEP BY 1" TO 3" ACROSS) AND FLAME STRUCTURES.
, <u>,</u>			ANHYDRITIC CLAYSTONE, FINELY LAMINATED, GRAY TO WHITISH-GRAY; CONTAINS LOCAL, SMALL
1864	1545		ENTROLITHIC STRUCTURES: BASAL CONTACT GRADATIONAL TO DIFFUSE.
1 1		xxxxx	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRANGE, SLIGHTLY
1 1			BEDDED BY DISCONTINUOUS SUBMORIZONTAL STRINGERS OF POLYHALITE AND BANDS OF POLY-
		XXXXXX	HALITIC HALITE; BASAL CONTACT SHARP, DISCONFORMABLE.
1	i		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE, STRUCTURELESS;
]			SLIGHTLY ARGILLACEOUS, MODERATELY ABUNDANT IN UPPER 1.0°, CONTENT DECREASES WITH
1859	-1550		l i de la companya de la companya de la companya de la companya de la companya de la companya de la companya d
1005	1550		DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-ORIENTED STRINGERS; BASAL CONTACT
]			GRADATIONAL.
<sup>)</sup>		<del></del>	
·-			
			<b> </b>
1854	-1555		
	ļ		
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	1		
	: ,		
[ [			HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARGILLACEOUS IN UPPER 1.5',
1849-	- 1560		GRAY, AS SUBHORIZONTAL STRINGERS AND BEDS, CONTENT DECREASES WITH DEPTH, 1.0' TO
1343		x x	2.0' THICK BED OF GRAY ARGILLACEOUS HALITE AT 1560.2'; BELOW 1560.2' CLAY CONTENT
			INCREASES AND BECOMES REDDISH-BROWN, OCCURS AS STRINGERS AND DISCONTINUOUS BEDS OF
1	1		·
1	1		ARGILLACEOUS HALITE, CONTENT DECREASES WITH DEPTH, LOCALLY GRAY, CONTENT DROPS TO
	İ		TRACE NEAR BASE; SOME POLYHALITE, CONTENT INCREASES TO 1560.2', SELOW WHICH IT
	[		DECREASES WITH DEPTH) OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-GRIENTED TO
1844-	~1565		SUBHORIZONTAL STRINGERS; BASAL CONTACT SHARP, DISCONFORMABLE.
	1	X	
	ļ		
1	}		$f \leftarrow f$
1			1
j	}		
1839	1570		

	PRELIM	IINARY		
		DEPTH	STRATIGRAPHIC COLUMN	REMARKS
	(FT, MSL)	(FT.)	COLUMN	
	1839	1570	x	AS ABOVE
	1			
	1834-	-1575		
			×	
	1829	   580		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED GRANGE, STRUCTURELESS;
			<del></del>	UPPER 0.5' SLIGHTLY ARGILLACEOUS, REDDISH-BROWN, CONTENT DECREASES WITH DEPTH, ABSENT BELOW 1582.0', OCCURS AS DISCONTINUOUS STRINGERS AND AS INTERCRYSTALLINE
			×	MATRIX; TRACE DISSEMINATED POLYHALITE BLEBS; BASAL CONTACT GRADATIONAL, BIGHLY
			•	IRREGULAR, MARKED BY THE OCCURRENCE OF ARGILLACEOUS HALITE.
	1824	_1585	x	
	1824	-1365		
			<del></del>	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 0.5' HAS REDDISH- BROWN CLAY MATRIX, CONTENT DECREASES SLIGHTLY WITH DEPTH, CLAY BECOMES BOTH GRAY
			•	AND REDDISH-BROWN, OCCURS AS RANDOMLY-ORIENTED STRINGERS; TRACE POLYHALITE, CONTENT
	1	}	<del></del>	INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND AS STRINGERS WITH DEPTH;
	1819	-1590		BASAL CONTACT GRADATIONAL, DISCONFORMABLE.
			x —	
1	ł	·		
	1814	-1595	x	
		ļ	^	
	- 1		X	
	1809	-1600	×	
	- 1		xxxxxx	
			– x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; SLIGHTLY ARGILLACEOUS, CON- TENT DECREASES WITH DEPTH, REDDISH-BROWN, OCCURS AS INTERCRYSTALLINE MATERIAL AND
	l			RANDOMLY-ORIENTED STRINGERS, LOCALLY OCCURS IN GREATER CONCENTRATIONS; TRACE POLY-
	1804	-1605	_	HALITE, CONTENT INCREASES SLICHTLY WITH DEPTH, OCCURS AS DISSEMINATED BLEBS, BLEBS
			x —	BECOME LARGER WITH DEPTH (UP TO 2" x 1"); BASAL CONTACT SHARP.
ł	ĺ		х	
	1799	-1610		
			_	
			x	
_ '	İ	ĺ	x	
	1794	1615		

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PRELIMINARY		CTRATICRADUIC	
ELEV.	DEPTH	STRATIGRAPHIC	REMARKS `
(FT. MSL) 1794		_ x	
	1615 -1620	MB 723	ANHYDRITE, FINELY CRYSTALLINE, BROWNISH-GRAY TO ORANGISH-TAN, THINLY LAMINATED; LOCALLY ALTERED TO POLYHALITE; LAMINAE OFTEN CONTORTED AND SLIGHTLY HALITIC, LOCALLY NODULAR, STRUCTURE OFTEN ENTROLITHIC; BASAL CONTACT GRADATIONAL.
1784—		×××××××××××××××××××××××××××××××××××××××	HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE; 3" THICK BED OF ORANGISH-RED POLYHALITE AT 1628.2'; TRACE POLYHALITE, OCCURS AS RANDOMLY-ORIENTED TO SUBBORIZONTAL STRINGERS AND AS DISSEMINATED BLEBS; THIN 1" THICK IRREGULAR BED OF ANHYDRITE AT 1628.3'; BASAL CONTACT SHARP, DISCONFORMABLE (?).
1779—			ANHYDRITE, FINELY CRYSTALLINE, BROWNISH-GRAY TO TANNISH-GRAY, ENTROLITHIC TO NODULAR TO 1633.0°, BELOW 1633.0°, BECOMES LAMINATED TO THINLY BEDDED, LOCALLY CONTAINS ANHYDRITE PSEUDOMORPHS AFTER GYPSUM SWALLOWTAIL CRYSTALS; LOCALLY POLY-
1774 —	1635	MB 124	HALITIC: BASAL CONTACT SHARP, MARKED BY 2.0" TO 4.0" THICK GRAY THINLY LAMINATED CLAYSTONE BED CONTAINING SEVERAL SUBHORIZONTAL FIBROUS HALITE-FILLED FRACTURES 1/8" TO 1/4" THICK, SPACED 1" TO 2"; BASAL CONTACT GRADATIONAL.
1769—	-1640	x x	ARGILLACEOUS POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE; POLYHALITE OCCURS AS REPLACEMENT OF ANHYDRITE OR GYPSUM NODULES IN GRAY CLAYSTONE MATRIX; NODULE CONCEN- TRATION INCREASES WITH DEPTH UNTIL MATRIX IS POLYHALITE; NODULE DIAMETER 1/8" TO 1/2"; UNDERLAIN BY 1" TO 2" GRAY CLAYSTONE BED; BASAL CONTACT SHARP, UNDULATORY, IRREGULAR. HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TIMTED ORANGE; POLYHALITIC, OCCURS AS DISSEMINATED BLEBS AND AS RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS; GRAY
1764 —	-1645	x x	CLAYSTONE BED OCCURS AT 1644.0°; POLYHALITE CONTENT TRACE BELOW 1644.0°; LOWER 1.5° CONTAINS TRACE AMOUNT OF CLAY STRINGERS; BASAL CONTACT SHARP, IRREGULAR WITH DISSOLUTION PITS 0.3° DEEP, MARKED BY 2" TO 3" THICK GRAY CLAYSTONE BED.
1759—	—1650		
1754—	-1655	x x	HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO ORANGE; POLYHALITIC, OCCURS AS DISSEMINATED, BLEBS AND RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS; TRACE DISSEMINATED GRAY CLAY; BASAL CONTACT SHARP.
1749	1660	- x	AS BELOY

	PRELIM	IINARY	STRATIGRAPHIC	
	ELEV. (FT. MSL)	DEPTH (FT.)	COLUMN	REMARKS
	1749	1660	x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; TRACE REDDISH-BROWN AND GRAY CLAY, OCCURRING AS STRINGERS AND AS LOCALLY DISSEMINATED MATRIX, CLAY CONTENT INCREASES ABRUPTLY BELOW 1662.0' AS REDDISH-BROWN STRINGERS, CONTENT DECREASES WITH DEPTH, ARGILLACEOUS HALITE BED OCCURS WITH CLAY AS STRINGERS AND MATRIX BETWEEN 1673.0' AND 1673.8', LOWER 2.5' CONTAINS DISCONTINUOUS HORIZONTAL AND SUBHORIZONTAL
	1744 —	1665	×	STRINGERS OF GRAY CLAY; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED SLEBS WITH SIZE INCREASING WITH DEPTH (1" DIAMETER); BASAL CONTACT SHARP, IRREGULAR, UNDULATORY TO 0.5'.
	1739 —	1670	Military	
	1734	- 1675	×	
	1729 —	- 1680	× 	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE:
	1724 <del></del>	- 1685		ARGILLACEOUS HALITE OCCURS BETWEEN 1681.4° AND 1682.6°, GRAY CLAY; REDDISH-BROWN ARGILLACEOUS HALITE OCCURS BETWEEN 1682.6° AND 1684.1°, CLAY OCCURS AS RANDOMLY-ORIENTED STRINGERS AND AS MATRIX; CLAY CONTENT DECREASES ABRUPTLY BELOW 1684.1°; TRACE POLYHALITE BELOW 1686.4°, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND AS RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS; BASAL CONTACT SHARP.
	1719 -	- 1690	× x	
	1714 —	- - 1695	x - x -	ARGILLACEOUS HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED  ORANGE; VERY ARGILLACEOUS IN UPPER 0.5', CLAY REDDISH-BROWN, CONTENT DECREASES WITH  DEPTH, OCCURS AS INTERCRYSTALLINE MATRIX AND RARE STRINGERS, CONTENT DECREASES  ABRUFTLY BELOW 1704.0'; TRACE POLYHALITE, OCCURS AS DISSENIMATED BLEBS; BASAL
	1709	- 1700	-	CONTACT SHARP, IRRECULAR, DISCONFORMABLE.
I	1704	1705	X	

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PRELIMINARY	STRATIGRAPHIC	
ELEV. DEPTH		REMARKS
1704   1705		AS ABOYE
	×	
1699 — 1710	-	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 0.3' TO 0.4' AND LOWER 0.7' PURE HALITE, REMAINDER SLIGHTLY ARGILLACEOUS, CLAY REDDISH-BROWN, BECOMING GRAY WITH DEPTH; BASAL CONTACT SHARP, IRREGULAR, DISCONFORMABLE.
1694 — 1715	<b>-</b> .	
1689 — 1720	 x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; UPPER 1.0' ARGILLACEOUS, CONTENT DECREASES WITH DEPTH; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-ORIENTED STRINGERS. LOWER 1.0' VERY POLYHALITIC; BASAL CONTACT SHARP, IRREGULAR, UNDULATORY.
1684 1725	× - × × × × × × × × × × × × × × × × × ×	POLYHALITE, FINELY CRYSTALLINE, ORANGISH-RED, STRUCTURELESS; UNIT VERY UNDULATORY; BASAL 0.4' CONSISTS OF CREENISH-GRAY CLAYSTONE; BASAL CONTACT SHARP, UNDULATORY,
1679 1730	- x x -	DISCONFORMABLE.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; LOCALLY AROILLACEOUS, CLAY REDDISH-BROWN, CONTENT DECREASES WITH DEPTH; TRACE POLYHALITE, OCCURS AS DISSEMI- NATED BLEBS; BASAL CONTACT SHARP, IRREGULAR WITH DISSOLUTION PITS 1.0' DEEP INTO UNDERLYING UNIT.
1674 — 1735	- x x -	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 2.0' SLIGHTLY ARGIL- LACEOUS, CLAY REDDISH-BROWN, OCCURS AS RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS AND DISSEMINATED INTERCRYSTALLINE MATERIAL; TRACE POLYHALITE AT TOP, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-ORIENTED STRINGERS; BASAL CONTACT GRADATIONAL.
1669 1740	- ×	
1664 1745		
1659 1750	x -	

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	PRELIM	INARY	27247/2242/	
	ELEV.	DEPTH	STRATIGRAPHIC COLUMN	REMARKS .
	1659	1750	x	AS ABOYE
	1654 —	— 1755	<b>₩B 127</b> <b>M</b> B • <b>127</b> ×	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE, TRACE THIN LANINATIONS; LOCALLY  ANHYDRITIC; BASAL CONTACT SHARP.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE OCCASIONALLY TINTED ORANGE; SUBHORI-  ZONTAL POLYHALITE STRINGERS, 1/8" THICK; BASAL CONTACT SHARP, IRREGULAR.  POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE; BASAL CONTACT SHARP, MARKED BY I"  THICK GRAY CLAYSTONE BED.  HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; POLYHALITIC, CONTENT
	1649 —		×	DECREASES WITH DEPIH, OCCURS AS STRINGERS AND BLEBS; 0.1' TO 0.4' THICK ANHYDRITE SED OCCURS AT 1761.9'; BASAL CONTACT SHARP.
	1644	<b>–</b> 1765	<b>MB 128</b>	POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE, THINLY LAMINATED; 0.3' THICK HALITE  3ED AT 1763.9', LOWER 0.1' TO 0.2' HALITIC GRAY CLAYSTONE; BASAL CONTACT SHARP.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE OCCASIONALLY TINTED ORANGE, HINT 3°  BEDDING FROM SUBHORIZONTAL STRINGERS OP POLYHALITE SPACED 0.2'; 0.1' THICK BED OF  ARGILLACEOUS HALITE OCCURS AT 1767.3'; POLYHALITE CONTENT INCREASES ABRUPTLY NEAR  BASE; BASAL CONTACT SHARP, DISCONFORMABLE.
	1639 <del>-</del>	- 1770	x x	ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE: GRAY CLAY OCCURS AS MATRIX AND INTERCRYSTALLINE MATERIAL, CLAY BECOMES
	1634 —	<b>-</b> 1775	× × ×	REDDISH-BROWN BELOW 1773.8', CLAY CONTENT DECREASES WITH DEPTH; CLAY-FREE POLYHALITIC HALITE OCCURS BETWEEN 1773.3' AND 1773.8'; POLYHALITE CONTENT INCREASES WITH DEPTH; BASAL CONTACT SHARP, IRREGULAR.
	1629	-1780		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; ARGILLA- CEOUS TO 1782.4', CONTENT DECREASES ABRUPTLY BELOW, CLAY OCCURS AS MATRIX; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND
*	1624	- 1785	x	RANDOMLY-ORIENTED STRINGERS; BASAL CONTACT GRADATIONAL.
	1619 —	- 1790	 ×	POLYHALITE, FINELY CRYSTALLINE, DARK REDDISH-ORANGE, HINT OF THIN LAMINATIONS;  TRACE HALITE; BASAL CONTACT SHARP, MARKED BY 1" THICK GRAY CLAYSTONE BED, SLICHTLY UNDULATORY, DISCONFORMABLE.  ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, CLEAR; GRAY CLAY AT TOP,  GRADING TO REDDISH-BROWN WITH DEPTH, CONTENT DECREASES WITH DEPTH UNTIL ABSENT AT 1792.3'; CLAY CONTENT INCREASES AS INTERCRYSTALLINE MATERIAL AND STRINGERS BELOW 1792.3', CONTENT DECREASES WITH DEPTH, ABSENT BELOW 1794.0'; TRACE POLYHALITE,  CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDONLY-ORIENTED TO SUBHORIZONTAL STRINGERS; BASAL CONTACT SHARP, MARKED BY 0.1' THICK BED OF
L	1614	1795		POLYHALITE UNDERLAIN BY 1/4" THICK GRAY CLAYSTONE BED.



PRELIM	INARY	STRATIGRAPHIC	
ELEV.	DEPTH	I I	REMARKS
(FT. MSL)		002011111	
1614	1795		AS ABOVE
		x	
1609 -	1800	_ x	
1609.	1800	×MB×M308×	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; CONTAINS SUBHORIZONTAL GRAY
		-	CLAY STRINGERS TO 1804.3', ABSENT BELOW 1804.3'; TRACE POLYHALITE, CONTENT
			INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND SUBBORIZONTAL STRINGERS;
		·	BASAL CONTACT SHARP, MARKED BY 3" ZONE OF GRAYISH HALITE UNDERLAIN BY 1" THICK GRAY CLAYSTONE.
1604-	-1805		
ł		×	
		×	
1599 -	- 1810		
'333 -	1510	×	
			HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; UPPER 1.8' ARGILLACEOUS,
			REDDISH-BROWN, CONTENT DECREASES WITH DEPTH; TRACE POLYHALITE, CONTENT INCREASES
		×	WITH DEPTH, OCCURS AS DISSEMINATED BLEBS, BLEBS ALIGNED IN ZONES AND STRINGERS OCCUR BELOW 1817.6'; CONTAINS GRAY CLAY AS STRINGERS AND DISSEMINATED INTER-
1594	- 1815	}	CRYSTALLING MATERIAL BETWEEN 1819.2' AND 1819.9'; BASAL CONTACT SHARP, IRREGULAR,
		×	DISCONFORMABLE.
		×	
}		x	
1589 -	- 1820		
			HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; ARCILLA-
		-	CEOUS, REDDISH-BROWN, CLAY OCCURS AS INTERCRYSTALLINE MATRIX AND STRINGERS, CONTENT DECREASES WITH DEPTH, CONTENT DECREASES ABRUPTLY BELOW 1823.0'; TRACE POLYHALITE,
			OCCURS AS DISSEMINATED BLEBS; BASAL CONTACT GRADATIONAL.
		_	
1584 -	H- 1825		
	:	×	
i	, ·	· _	
1579 —	<b>–</b> 1830		HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE; SLICHTLY
		_	ARGILLACEOUS IN UPPER 4.0', CONTENT DECREASES WITH DEPTH, CLAY OCCURS AS STRINGERS
		_	· AND INTERCRYSTALLINE MATRIX, CONTAINS RARE SMALL (<1/16") DISPLACIVE HALITE
		_ [	CRYSTALS; TRACE POLYMALITE, OCCURS AS DISSEMINATED BLEBS; BASAL CONTACT SHARP, MARKED BY DISSOLUTION PAIS 6" TO 8" DEEP INTO UNDERLYING UNIT, IRREGULAR, UNDU-
),=-,	_ 1076	×	LATORY.
1574 -	— 1033		
			HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARCILLACEOUS TO 1839.8',
) <b>j</b>			OCCURS AS GRAY STRINGERS; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH. OCCURS AS
		— х	BLEBS AND RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS: BASAL CONTACT GRADATIONAL,
1569	1840		HIGHLY IRREGULAR, SLIGHTLY UNDULATORY.

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ł	PRELIM	INARY		
	ELEV.	DEPTH	STRATIGRAPHIC	REMARKS
	(FT. MSL)	(FT.)	COLUMN	·
	1569	1840		AS ABOYE
- {	1			
- [			x	
	1564 -	- 1945		
i	1364	- 1043	×	
-				POLYHALITE, FINELY CRYSTALLINE, REDDISH-ORANGE; HALITIC; BASAL CONTACT GRADATIONAL,
İ			×	VERY IRREGULAR, UNDULATORY.
			××××××××	HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRANGE; ARGILLA- CEOUS. GRAY AT TOP GRADING TO REDDISH-BROWN WITH DEPTH, CONTENT DECREASES WITH
			***************************************	DEPTH. CLAY OCCURS AS SUBHORIZONTAL STRINGERS AND AS MATRIX MATERIAL IN
į	1559 -	-1850	– x	IRREGULARLY-SHAPED ZONES OF ARGILLACEOUS HALITE; POLYHALITIC, CONTENT INCREASES
- {				WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND RANDOMLY-ORIENTED DISCONTINUOUS
			× –	STRINGERS: CONTAINS LARGE IRREGULAR ZONES (SEVERAL SQUARE FOOT AREA) OF PURE WHITE
				HALITE WEICH ARE CONTINUOUS INTO UNDERLYING UNIT (DISSOLUTION PITS ?); BASAL
- }	Į		×	CONTACT SHARP, IRREGULAR, DISCONFORMABLE.
	1554	- 1855		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; ARGILLACEOUS AT TOP, COM-
-			x	TENT DECREASES WITH DEPTH, OCCURS AS RANDOMLY-ORIENTED STRINGERS; TRACE POLYMALITE,
ļ			·· —	OCCURS AS DISSEMINATED BLEBS; CONTAINS DISSOLUTION PITS 2.0' TO 3.0' DEEP, FILLED
	j	}	, ,	WITH WHITE COARSELY CRYSTALLINE HALITE: BASAL CONTACT SHARP TO ARSENT, MARKED BY I" THICK GRAY CLAYSTONE BED.
	l		×	THICK GART CENTSTONE SERV
	1540			HALITE, COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE; POLYHALITIC, CONTENT
l	1549	- 1860	X	INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND SUBHORIZONTAL 1/4" THICK
			_	STRINGERS; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
			·	
1			×	
	1			1
	1544	-1865	<b>x</b> .	·
- {	ſ			
- {	1		X	POLYHALITE, FINELY CRYSTALLINE, DARK REDDISH-GRANGE, STRUCTURELESS; HALITIC;
			$\times$ 1448 $\times$ 1334 $\times$ 1	UNDERS AIN BY 4" TRICK BED OF GRAY HALITIC CLAYSTONE: BASAL CONTACT GRADATIONAL.
		•	· · · · · · · · · · · · · · · · · · ·	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; SLIGHTLY ARGILLACEOUS,
	1539 -	-1870	_ ×	CONTENT DECREASES WITH DEPTH, OCCURS AS SUBHORIZONTAL STRINGERS; POLYHALITIC, CON-
			x –	TENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS AND SUBHORIZONTAL
	1		• •	STRINGERS, POLYHALITE BED 0.1' THICK AT 1875.7'; BASAL CONTACT SHARP, IRRECULAR,
				SLICHTLY UNDULATORY.
- {			<b>x</b> .	
	1534	- 1875		
1			_	ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR; CLAY REDDISH-
- 1			×	BROWN TO GRAY, OCCURS AS IRREGULAR SUBHORIZONTAL STRINGERS; HALITE OCCURS IN PODS OR ZONES OF CRYSTALS; TRACE POLYHALITE; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
	1		_	HALITE, COARSELY CRYSTALLINE, WHITE; SECOMES SLIGHTLY ARGILLACEOUS WITH DEPTH:
	1		-	POLYHALITIC, OCCURS AS BLEBS AND SUBBORIZONTAL STRINGERS; BASAL CONTACT SHARP,
			×	IRREGULAR, SLIGHTLY UNDULATORY.
-	1529	-1880		ARCILLACEOUS HALITE, REDDISH-BROWN WITH TRACE OF GRAY; HALITE, FINELY TO COARSELY
	}		_	CRYSTALLINE, WHITE TO CLEAR, OCCURS AS IRREGULARLY-SHAPED BEDS AND PODS, LOCALLY
-	ŀ		~	POLYHALITIC AND FREE OF CLAY; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH,
	1	}	×	OCCURS AS DISSEMINATED BLEBS AND IRRECULAR RANDOMLY-ORIENTED STRINGERS; 1/4" THICK
		1005	_	BED OF POLYHALITE UNDERLAIN BY 1/4" THICK DISCONTINUOUS BED OF GRAY CLAYSTONE
Ĺ	1524	1885_		OCCURS AT 1898.2'; BASAL CONTACT SHARP, IRREGULAR, SLIGHTLY UNDULATORY.



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PRELIMI	INARY		
<del></del>	DEPTH	STRATIGRAPHIC	REMARKS
(FT MSL)	(FT_)	COLUMN	
1524	1885	_	AS ABOVE
1519	- 1890	-	
1514 —	- 1895	-	
1509	<u> </u>		POLYHALITE, FINELY CRYSTALLINE, DARK REDDISH-GRANGE, STRUCTURELESS; UNDERLAIN BY 1" THICK CREENISH-GRAY CLAYSTONE; BASAL CONTACT SHARP.  HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRANGE; TRACE ARGILLACEOUS MATERIAL BELOW 1901.0', CONTENT DECREASES WITH DEPTH, TOTALLY ABSENT BELOW 1904.8', OCCURS AS RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS BECONING
1504	-1905		BLEBS WITH DEPTH; 1/4" THICK SUBHORIZONTAL STRINGERS OF ANHYDRITE OCCUR BELOW 1914.0'; AT 1916.5', A 0.2' THICK PINKISH-RED POLYHALITE BED OCCURS; BASAL CONTACT SHARP, SLIGHTLY TRREGULAR AND UNDULATORY.
!499	1910		
1494 —	1915	××××××××××××××××××××××××××××××××××××××	
1489	1920	- x x x .	POLYHALITE, FINELY CRYSTALLINE, DARK RED, STRUCTURELESS AT TOP GRADING TO LAMINATED AT BASE; HALITIC, BASAL CONTACT SHARP TO GRADATIONAL, MARKED BY 0.1' TO 0.2' THICK GRAY CLAYSTONE BED. HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR, SLIGHTLY ARGILLACEOUS, OCCURS AS RANDONLY-ORIENTED STRINGERS; ABUNDANT POLYHALITE, OCCURS AS DISSEMINATED BLEBS; CONTAINS LOCAL ZONES OF PURE HALITE; BASAL CONTACT GRADATIONAL, IRREGULAR.
(484	1925	x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, CLEAR TO WHITE; BANDOMLY-ORIENTED TO SUBBORIZONTAL STRINGERS OF BLACK CLAY OCCUR BETWEEN 1923.5' AND 1926.4'; POLYHALITIC, CONTENT INCREASES ABRUPTLY BELOW 1926.8', THEN DECREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS; BASAL CONTACT DIFFUSE.
1479	1930		

<b>}</b>	MINARY	STRATIGRAPHIC	REMARKS
ELEV.	.) (FT.)	COLUMN	namanao
1479	1930	x	HALITE, FINELY TO COARSELY CRYSTALLINE, CLEAR TO WHITE; MODERATELY ARGILLACEOUS, CONTENT DECREASES WITH DEPTH, OCCURS AS BLACK BLEBS AND STRINGERS; TRACE POLY-HALITE, CONTENT INCREASES WITH DEPTH, OCCURS AS DISCONTINUOUS IRREGULAR RANDOMLY-ORIENTED TO SUBHORIZONTAL STRINGERS AND DISSEMINATED BLEBS; CONTAINS LOCAL BEDS AND ZONES OF CLAY-FREE HALITE; POLYHALITE CONTENT INCREASES ABRUPTLY NEAR BASE; BASAL CONTACT SHARP.
1469-	1940	x	
1464-	1945	x - x	ANHYDRITE, FINELY CRYSTALLINE, LIGHT TO DARK GRAY, THINLY LAMINATED TO LAMINATED;  UPPER 0 TO 0.5' POLYHALITIC; LOCALLY MALITIC, OCCURS AS DISCONTINUOUS BEDS AND  PODS; SOME LAMINAE ORGANIC-RICH (?); LAMINAE UNDULATE SLICHTLY; UNDERLAIN BY 0.1'  TO 0.3' THICK GRAY MALITIC CLAYSTONE; BASAL CONTACT SHARP, IRREGULAR, SLICHTLY  UNDULATORY.  HALITE, COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED ORANGE, STRUCTURELESS;
1459 -	1950		SLIGHTLY ARGILLACEOUS IN UPPER 5.0', OCCURS AS GRAY DISCONTINUOUS SUBHORIZONTAL STRINGERS, BELOW 1952.3' CONTENT INCREASES SHARPLY, THEN DECREASES WITH DEPTH. DISCONTINUOUS 1" TO 2" THICK IRREGULAR GRAY CLAYSTONE BED OCCURS AT 1952.3'; TRACE POLYHALITE, OCCURS AS LICHT GRANGISH-WHITE DISSEMINATED BLEBS; IN BASAL 1.0' POLYHALITE AND ANHYDRITE OCCUR AS DISCONTINUOUS SUBHORIZONTAL STRINGERS; BASAL CONTACT SHARP, IRREGULAR.
1454-	1955	- x	
(449 -	1960	×	
1444-	-1965	MB 134	AMHYDRITE, FINELY CRYSTALLINE, GRAY ALTERNATING WITH DARK GRAY, THINLY LAMINATED;  LOCALLY CONTAINS PODS OF HALITE AND HALITE-RICH LAMINAE; SASAL CONTACT SHARP,  CONFORMABLE.  AMHYDRITE, FINELY CRYSTALLINE, GRAY; HALITIC, OCCURS AS ABUNDANT HALITE ?SEUDO-  MORPHS AFTER GYPSUN SWALLOWTAIL CRYSTALS ALIGNED PARALLEL TO BEDDING, 1/8" TO 2"  HIGH, MAJORITY ORIENTED VERTICALLY; LOCALLY, ANHYDRITE IS FREE OF PSEUDOMORPHS AND  THINLY LAMINATED, LAMINAE ALTERNATE FROM LIGHT TO DARK GRAY; HALITE PSEUDOMORPHS
1439 -	— 1970 1975	MB 134	ABSENT BETWEEN 1966.6' AND 1967.5'; BASAL CONTACT GRADATIONAL TO DIFFUSE.  ANHYDRITE, FINELY CRYSTALLINE, ALTERNATING LIGHT AND DARK GRAY, THINLY LAMINATED TO LAMINATED; LAMINAE OFTEN CONTAIN INSIPIENT ENTROLITHIC STRUCTURES AND ANHYDRITE PSEUDOMORPHS AFTER GYPSUN SWALLOWTAIL CRYSTALS; UNDERLAIN 8Y 0.4' TO 0.5' THICK BED OF MICROLAMINATED TO THINLY LAMINATED GRAY CLAYSTONE CONTAINING SUBHORIZONTAL BIFURCATING 0 TO 1" THICK HALITE-FILLED FRACTURES; BASAL CONTACT SHARP, IRREGULAR, UNDULATORY, DISCONFORMABLE.

PRELIMINARY		
ELEV. DEPTH	LISTRATIGRAPHICI	REMARKS
(FT MSL) (FT.)	COLUMN	
1434 1975	- x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR, STRUCTURELESS; MODERATELY ARGILLACEOUS, GRAY, CONTENT DECREASES WITH DEPTH, OCCURS AS DISSEMINATED RANDOMLY— ORIENTED DISCONTINUOUS STRINGERS AND BLEBS; TRACE POLYHALITE BLEBS; CONTAINS INTER— UNIT DISSOLUTION PITS FILLED WITH RELATIVELY PURE HALITE; FREE OF GRAY CLAY FROM 1985.0' TO 1989.0'; THIN (<1/8") SUBHORIZONTAL STRINGERS OF ANHYDRITE OCCUR BELOW 1986.0'; IRREGULAR BED OF HALITIC ANHYDRITE IN LOWER 1" TO 3" OVERLIES HICHLY UNDU-
1423	- x	LATORY BASAL CONTACT, CONTACT MARKED BY GRAY CLAYSTONE IN CHANNEL TROUGHS, CONTACT EROSIONALLY TERMINATES UNDERLYING UNIT AT THE WEST SIDE OF SHAFT; BASAL CONTACT SHARP.
1424 - 1985		
		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE; CONTAINS DISCONTINUOUS SUBHORIZONTAL STRINGERS OF AMMYDRITE, <1/4" THICK: UNIT THICKNESS VARIES FROM 0 TO 1.5' AS IT IS EROSIONALLY TERMINATED AT UPPER CONTACT; SHAPE LENTICULAR (0 TO 1.5' X 6'); BASAL CONTACT SHARP.
1419 - 1990	MB 135	DANT HALITE PSEUDOMORPHS AFTER GYPSUM SWALLOWTAIL CRYSTALS; BASAL CONTACT SHARP,
	TAIN THUS	MARKED BY 1/4" TO 1/2" THICK GRAY CLAYSTONE BED.
1414 — 1995	- x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRAY, BANDED, SPACED 1/2" TO 4", TRACE GRAY CLAY; CONTAINS CONTINUOUS IRREGULAR SUBHORIZONTAL STRINGERS OF GRAY CLAY; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY UP TO 4".  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR TO TINTED GRAY, BANDED ON 1/2" TO 2" SCALE, SLIGHTLY ARGILLACEOUS, OCCURS AS SUBHORIZONTAL STRINGERS AND LOCAL RANDOMLY-ORIENTED STRINGERS; TRACE POLYHALITE, OCCURS AS DISSEMINATED BLEBS, CONTENT INCREASES WITH DEPTH; BASAL CONTACT SHARP.
1409 2000	×	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR, STRUCTURELESS: SLICHTLY  ARGILLACEOUS IN UPPER PART, CONTENT DECREASES WITH DEPTH, OCCURS AS REDDISH-BROWN  RANDOMLY-ORIENTED STRINGERS; TRACE POLYHALITE, CONTENT INCREASES WITH DEPTH; BASAL  CONTACT SHARP, SLICHTLY IRREGULAR, SLIGHTLY UNDULATORY (3").  ARGILLACEOUS HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE; CLAY
1404 2005	- -	REDDISH-BROWN, CONTENT DECREASES WITH DEPTH, OCCURS AS INTERCRYSTALLINE MATRIX, GRADES TO SUBHORIZONTAL STRINGERS WITH DEPTH; HALITE OCCURS AS DISCONTINUOUS BEDS AND ALIGNED PODS; BASAL CONTACT SHARP, IRREGULAR, UNDULATORY.
	_	
1399 — 2010		
1394 — 2015		
1389 2020		

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PRELIMINARY	1	
<u></u>	STRATIGRAPHIC	REMARKS
ELEV. DEPTH	COLUMN	
1389 2020		AS ABOVE
	-x-x- 	HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO TINTED GRANGE, OCCURS AS IRREGULAR DISCONTINUOUS BEDS 1/2" TO 2" THICK AT TOP, BECOMES MASSIVE WITH DEPTH; VERY ARGILLACEOUS AT TOP, CONTENT DECREASES WITH DEPTH, OCCURS AS INTERCRYSTALLINE MATRIX; ABUNDANT POLYHALITE AT TOP, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED
1384 2025	_ x	BLEES AND RARE SUBHORIZONTAL STRINGERS; CONTAINS ABUNDANT VERTICALLY-ORIENTED ELONGATE ZONES OF PURE AND POLYHALITIC HALITE WITH IRREGULAR EDGES, 1.0' TO 2.0' ACROSS, UP TO 3.0' DEEP; BASAL CONTACT EXHIBITS CHANNEL FORM, WITH HIGH SIDE
	× -	OCCURRING ON WEST SIDE OF SHAFT AT 2032.0' AND LOW POINT OCCURRING ON EAST SIDE OF SHAFT AT 2036.3'; CHANNEL FILL CONSISTS OF HALITE AND POLYHALITIC HALITE BELOW 2032.0', A 0.5' THICK BED OF FINELY CRYSTALLINE ANHYDRITE OCCURS AT 2032.3' AND
1379 — 2030	×	TERMINATES AGAINST UNDERLYING UNIT AT WEST SIDE OF SHAFT, FILL CONTAINS ABUNDANT SUBHORIZONTAL STRINGERS OF ANHYDRITE THAT TERMINATE AGAINST UNDERLYING UNIT AT WEST SIDE OF SHAFT; BASAL CONTACT SHARP.
1374 — 2035		POLYHALITE, PINELY CRYSTALLINE, REDDISH-ORANGE, STRUCTURELESS EXCEPT FOR LOCAL
1369 2040	Me 13.6	ZONES CONTAINING HALITE PSEUDOHORPHS AFTER GYPSUN SWALLOWTAIL CRYSTALS AND LOCAL ZONES WITH MODULAR STRUCTURE, LOCALLY THINLY LAMINATED NEAR BASE; UPPER 2.0° ON WEST SIDE OF SHAFT CONSISTS OF THINLY LAMINATED ANHYDRITE; BASAL CONTACT GRADATIONAL, UNDULATORY.
1364 2045	MB 136	ANHYDRITE, FINELY CRYSTALLINE, ALTERNATING LIGHT AND DARK GRAY, THINLY LAMINATED,  LAMINAE UNDULATE SLIGHTLY; 0.3' ABOVE LOWER CONTACT, 0 TO 1" THICK DISCONTINUOUS  PURE HALITE BED OCCURS, CONTAINS ONE DISCONTINUOUS STRINGER OF POLYHALITE; BASAL  CONTACT SHARP.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; SLIGHTLY ARGILLACEOUS,
1359 2050	- × -	CONTENT DECREASES WITH DEPTH, OCCURS AS REDDISH-BROWN TO GRAY RANDOMLY-ORIENTED TO SUBMORIZONTAL STRINGERS WHICH BECOME SUBMORIZONTAL WITH DEPTH; TRACE POLYHALITE, OCCURS AS DISSEMINATED BLEBS AND SUBMORIZONTAL STRINGERS NEAR BASE; 1" TO 2" THICK BED OF ANHYDRITE (NORTHWEST SIDE OF SHAFT) AND POLYHALITE (SOUTHEAST SIDE OF SHAFT) AT 2059.3'; SUBMORIZONTAL STRINGERS OF ANHYDRITE IN LOWER 5.0'; NO CLAY OCCURS BELOW 2059.3'; BASAL CONTACT SHARP, UNDULATORY TO 0.4', DISCONFORMABLE.
1354 2055	_ :	
1349 2060	\ — \ \\ <b>M\B</b> .\\ <b>1\3\</b> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	HALITE, MEDIUM TO COARSELY CRYSTALLINE. WHITE TO CLEAR TO TINTED ORANGE AND GRAY, THINLY BEDDED TO GRAY ARGILLACEOUS HALITE WITH CLAY-FREE HALITE, BEDDING TERMINATED AT UPPER CONTACT; TRACE POLYHALITE AT TOP, CONTENT INCREASES WITH DEPTH, OCCURS AS DISSEMINATED BLEBS; ARGILLACEOUS, CONTENT DECREASES WITH DEPTH, GRAY AT TOP GRADING TO GRAYISH-BROWN WITH DEPTH, OCCURS AS DISCONTINUOUS RANDOMLY-ORIENTED STRINGERS AND LOCAL ZONES OF INTERCRYSTALLINE MATERIAL, BECOMES REDDISH-BROWN BELOW 2070.2', CONTENT DECREASES ABRUPTLY BELOW 2079.0', BASAL 2.0' SLIGHTLY ARGILLACEOUS; BASAL
1344 2065	x	CONTACT SHARP, SLIGHTLY UNDULATORY, IRREGULAR, MARKED BY DISCONTINUOUS IRREGULAR 2" THICK BED OF BALITIC ANHYDRITE.

PRELIMINARY	CTD ATION AS:	
ELEV. DEPT	STRATIGRAPHIC	REMARKS
(FT MSL) (FT.)		
1344 2065	x	3YOSA 2A
	_	
1339 2070	×	
	×	-
1334 2075	×	
	x	
1329 - 2080	x -	
1324 2085	- x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; TRACE POLYHALITE, OCCURS AS DISSEMINATED BLEBS; ARGILLACEOUS IN UPPER 1.2', OCCURS AS REDDISH-BROWN DISCONTINU- OUS SUBBORIZONTAL STRINGERS AND MASSES OF HALITIC MUDSTONE, CONTENT DECREASES WITH DEPTH; BASAL CONTACT SHARP. HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; TRACE DISSEMINATED BLEBS
1319 2090	x . x	AND RANDOMLY-ORIENTED STRINGERS OF POLYHALITE; ARGILLACEOUS IN UPPER 1.0°, CONTENT  DECREASES WITH DEPTH; LOCAL ANHYDRITE STRINGERS OCCUR NEAR BASAL CONTACT; BASAL  CONTACT SHARP, SLIGHTLY IRREGULAR AND UNDULATORY.
1314 2095		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; RARE DISSEMINATED  POLYHALITE BLEBS; ARGILLACEOUS AT TOP, CONTENT DECREASES WITH DEPTH EXCEPT FOR  LOCAL INCREASES, CONTENT DECREASES ABRUPTLY BELOW 2101.5', OCCURS AS DISCONTINUOUS  SUBHORIZONTAL STRINGERS; THIN DISCONTINUOUS STRINGERS OF ANHYDRITE AND POLYHALITE
1309 2100	x x	OCCUR IN LOWER 2.0'; BASAL CONTACT SHARP, SLIGHTLY UNDULATORY.
1304 — 2105	XXXXXXX	AMMYDRITE, FINELY CRYSTALLINE, ALTERNATING LICHT AND DARK CRAY, THINLY LAMINATED;  UNDERLAIN BY 1/2" THICK GRAYISH-BROWN CLAYSTONE BED; BASAL CONTACT SHARP.  HALITE, FINELY TO COARSELY CRYSTALLINE, WHITE TO TIMTED ORANGE, BEDDED AT TOP WITH  REDDISH-BROWN ARGILLACEOUS HALITE, SPACED 1" TO 2"; ARGILLACEOUS, CONTENT DECREASES
1299 2110		WITH DEPTH, OCCURS AS INTERCRYSTALLINE MATRIX IN ARGILLACEOUS HALITE BANDS AT TOP AND RANDONLY-ORIENTED STRINGERS WITH DEPTH, CONTENT DECREASES ABRUPTLY BELOW 2111.3'; RARE DISSEMINATED BLEBS OF POLYHALITE; BASAL CONTACT DIFFUSE.

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PRELIM	UNARY DEPTH	STRATIGRAPHIC COLUMN	REMARKS
(FT MSL) 1299		COCOMN	AS ABOYE
		x	HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; RARE STRINGERS OF CLAY IN
1294	— 2115	_	UPPER 1.7'; TRACE SUBHORIZONTAL TO HORIZONTAL CONTINUOUS STRINGERS OF ANHYDRITE BELOW 2117.0'; BASAL CONTACT SHARP.
1289—	2120		HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO TINTED ORANGE, RARE RANDOMLY- ORIENTED CLAY STRINGERS TO 2125.2'; UPPER CONTACT MARKED BY ANHYDRITIC CLAYSTONE CONTAINING DISPLACIVE HALITE CRYSTALS (<1/4"); TRACE POLYHALITE BLEBS; ANHYDRITE STRINGERS OCCUR BETWEEN 2128.1' AND 2123.5'; BASAL CONTACT SHARP, SLIGHTLY UNDU- LATORY, IRRECULAR.
1284-	- 2125	 x	
1279 —	- 2130		ANHYDRITE (A), FINELY CRYSTALLINE, LIGHT GRAY, THINLY LAMINATED, LAMINAE SLIGHTLY CONTORTED; LOCALLY CONTAINS SMALL HALITE CRYSTALS (<1/16"); BASAL CONTACT SHARP.  SLIGHTLY UNDULATORY.  HALITE, MEDIUM TO COARSELY CRYSTALLINE, WHITE TO CLEAR; RARE CLAY STRINGERS TO 2131.5'; SUBHORIZONTAL STRINGERS OF ANHYDRITE SPACED 2" TO 4" OCCUR BELOW 2134.0'; BASAL CONTACT SHARP.
1274 —	- 2:35	\ _	ANHYDRITE (B). FINELY CRYSTALLINE, LIGHT GRAY, HINT OF THIN LAMINATIONS; HALITIC,  BASAL CONTACT SHARP, IRREGULAR, SLIGHTLY UNDULATORY.  HALITE, MEDIUM TO COARSELY SRYSTALLINE, WHITE TO CLEAR; RARE SUBHORIZONTAL CLAY
1269-	- 2140	x -	STRINGERS AT TOP, CONTENT DECREASES WITH DEPTH; VERY RARE BLEBS OF POLYHALITE; BASAL CONTACT NOT OBSERVED.
1264-	- 1	FACILITY LEVEL	