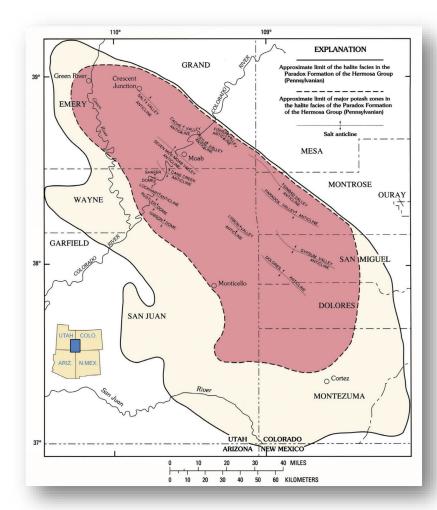
Other Business Arrangement Exploration Agreement with Option to Lease (ML 90039-OBA)

Northern Paradox Basin Brine Project Grand County, Utah Utah Energy Minerals LLC ("UEM")

Tyler Wiseman – Lease Manager / Geoscientist





Northern Paradox Basin Brine OBA Grand County

Geologic Overview

ster			Unit	Thickness (feet)	•	Lithology
		Hon-		0-100	DSS-53	Littlology
0	-	MUVI	um - dune sand Brushy Basin		1	purple, green, red, yellow, mostly mudstone
	Morrison Fm		Member	250-500	E23	mudstone contains dinosaur bone
			Salt Wash Mbr	200-400	***	mostly sandstone variadium-uranium ore
			Tidwell member	0-60	937	J-5 UNCONFORMITY Wanakah Mbr on some maps
JURASSIC	Summerville Formation		5-70	1000	Wanakah Mbr on some maps pinkish gray sandstone previously	
	Curtis Fm, Moab Member		80-110		pinking gray sandstone previously included in the upper Entrada Ss J-3 UNCONFORMITY	
	Entrada Ss, Slickrock Mbr			60-310		banded eolian sandstone with "stonepecker" holes; has arches locally
	Carmel Fm, Dewey Bridge M			20-80	III.	J-1 UNCONFORMITY
	Group		avajo Sandstone	80-500		rounded cliffs eolian sandstone
			Kayenta Fm	60-360	- 3	DEAD HORSE POINT bench-forming sandstone
	9	W	ingate Sandstone	220-420	ليا	vertical cliff face
	Chinle		Church Rock Member	240-310	- 1	
Ξ	Fn	n	Owl Rock M Petrified Forest M	70-120 50-100	E = 3	
RIASSIC			Moss Back Ss M	0-100	-	bentonitic bears uranium locally Tk-3 UNCONFORMITY
₹			Moody Canyon M	40-120		
2	Moenkopi Fm Hoskinnin		Torrey Member	100-200	555	ripple marks & mudcracks & thin veinlets of gypsum
Н			Sinbad Ls Mbr	0-20		a thin veinless of gypsum
			Black Dragon Mbr	0-230	133	Tk-1 UNCONFORMITY
			Sandstone Tongue	0-50	إستسا	
	Cutler Group		White Rim Ss	0-250	السنا	
			Organ Rock Fm	200-400	EET(
Z						surface rock in The Needles area
PERMIAN			Cedar Mesa Sandstone	200-1200		interfingers eastward with arkosic beds within the Park
8					P	
畐			Elephant Canyon		-	thickens and becomes
			and Halgaito Fms	0-1500		thickens and becomes less limy towards Uncompangre Uplift to the east
			(time equivalent)			
				_		UNCONFORMITY
	Hermosa Group		Honaker Trail	0-3000		fossiliferous limestone
					-	
					野翠	
			Formation		777	
PENNSYLVNIAN					===	
					111	
			Paradox Formation	500-9000	ES.	
					題.	Formation of Interes
					醬	
					20000000	
					10.5	salt & potash interbedded with black shale and anhydrite
						black shale and anhydrite
					TTT	
					100	
			P. L		933	
			Pinkerton Trail Formation	200-300	100	
	Molas Formation		0-100	555		
SS					ш	Pre-Paradox rocks are known from wells and from geophysical
MISS	- 1	.eadv	ille Limestone	400-600	7.7	measurements
-		Our	y Limestone	100	mm	
Ω	Elbert Formation			300	2.2	
z				500	222	
¥	Undivided Upper Cambrian dolomite, limestone, & shale "Bright Angel" Shale			800-900	1	
38				300-900	TT.	
Ξ						
CAMBRIAN				0-200		
ĕ			cio Quartzite	100-200	-	
ェ		Meta	morphic rocks		N5353	

Kowallis, 2009; used with permission)

- Northern Paradox Basin
- Thick Pennsylvanian salt deposits
- Supersaturated brines
- Commercial
 possibilities for the extraction of Mg, K, Br,
 B, Li, and other minerals

King Oil No. 2 Big Flat, section 11, T. 26 S., R. 19 E., Grand County. Paradox Formation, 6196-6220 feet. Analysis by Chemical and Geological Laboratories.

Ammonia Borate (B ₄ O ₇) Bromine Calcium Chloride Lithium Magnesium Potassium Sodium	1,330 ppm 2,922 1,150 40,742 259,106 173 47,789 41,957 25,966

Northern Paradox Basin Brine OBA **EXPLANATION** T22S, R16E, Section 2, SLB&M Approximate limit of the halite facies in the Paradox Formation of the Hermosa Group (Pennsylvanian) T24S, R19E, Section 2, SLB&M the halite facies of the Paradox Formation of the Hermosa Group (Pennsylvanian) T25S, R20E, Section 36, SLB&M Salt anticline MESA T26S, R19E, Section 32, SLB&M MONTROSE **OURAY** WAYNE GARFIELD WHOLE SAN MIGUEL Monticello DOLORES SAN JUAN ARIZ. N.MEX OCortez MONTEZUMA COLORADO School (100%) ~2,480 Total Acres

Northern Paradox Basin Brine OBA

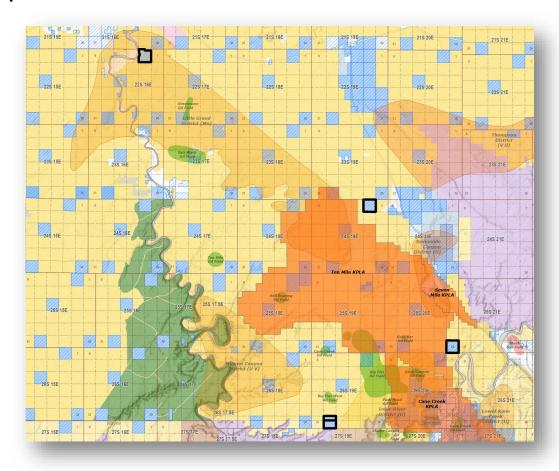
Proposal

5-Year Exploration Agreement

- ☐ Years 1-3
 - Drill new well or re-enter existing well in northern prospect area
 - Geochemical test formation of interest
 - Yearly technical report/update
- ☐ Years 4-5
 - Drill new well or re-enter existing well in southern prospect area
 - Geochemical test formation of interest
- □ \$11.00/acre while in exploration agreement period

Option to Lease All Commodities

- ☐ 10-year primary "Other" Minerals Lease
 - lithium-rich brines, potash, mineral salts, metalliferous minerals
 - \$8.00/acre per annum
 - 5% royalty
- 5-year primary Oil, Gas, & Assoc. Hydrocarbons Lease
 - · including helium
 - \$2.00/acre per annum
 - 1/6th (16 2/3%) royalty



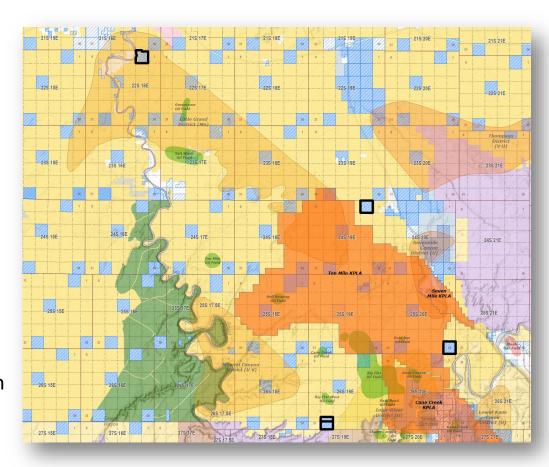
Northern Paradox Basin Brine OBA

Rationale & Recommendation

- Known (but unproven) brine resource
- 2,500-acre focused exploration
- 5-Year work commitment

This OBA proposal was reviewed by the Energy & Minerals Committee.

The Energy & Minerals group requests the Board approve the Northern Paradox Basin Brine OBA.



Questions?

Thank You

Tyler Wiseman – Lease Manager / Geoscientist

