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INDUSTRIAL MINERALS EXPLORATION, EVALUATION, FEASIBILITY MINE & PLANT DESIGN

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proven reserves of the Agua Fria Ranch, Brewster County, Texas mineral estate.

Inferred bentonite reserves, within this area, is 42,556,385 Tons.

This geologic report is an evaluation to establish proven and inferred bentonite reserves thus enabling

calculations of potential gross value based on present sales value through production life of the

April 26, 2006

LOCATION

118 in Brewster County then 10 miles west on county maintained Agua Fria Road. comprises 23,632 +/- acres. 11,200 acres are owned as surface and mineral estate with the balance of 12,432 acres owned as surface estate with the mineral estate retained by the State of Texas.

It is my opinion, based on all examined known geologic evidence, the resultant study produced a total proven bentonite reserve of 31,505,250 Tons within the surface and mineral estate of 11,200 acres.

The Agua Fria Ranch is located approximately 60 miles south of Alpine, Texas accessed by highway

RESERVE SUMMARY

The state controlled minerals within the 12,432 acres resulted in proven bentonite reserves of 38,511,375 Tons. Inferred bentonite reserves is 47,530,772 Tons. This geologic evaluation was generated by field examination of all known area bentonite occurrences,

arial stereoscopic photographic interpretation, geologic mapping, compilation and plotting of bentonite zone thickness and previous drill hole records. Plotting of all known data enabled measurement of proven and inferred bentonite reserves.

BENTONITE VALUE SUMMARY

Bentonite mining and processing results in finished products having an average FOB value of \$60.00 per ton based on present sales data provided by the Agua Fria Ranch bentonite producer, Texas Sodium Bentonite, Inc.

If all the bentonite is processed and sold at present FOB value, the Agua Fria Ranch would produce a potential gross operational value of \$1,890,315,000.00 through production life of the present proven bentonite reserves.

If the inferred reserves are converted by exploratory drilling to proven reserves resulting in an additional gain of only 40 % of the inferred reserves equaling 17,022,554 tons, an additional gross value of \$1,021,353,240.00 would be added to the above figure.

BENTONITE

water. Scientific studies have since recognized that bentonite is composed mainly of the clay mineral montmorillonite and the name bentonite has been extended to cover the entire family of clays that have montmorillonite as their chief constituent.

Bentonite is formed as an alteration product of pumaceous tuffs, andesite and rhyolitic tuffs, all being

The name Bentonite was originally applied to a particular clay of Wyoming and South Dakota, which was distinguished from other clays by its unctuous feel when wet and the property of swelling in

explosive volcanic in origin.

The bentonite deposits of the Agua Fria Ranch, located in Brewster County, Texas, and the surrounding area are partially comprised of Tertiary Age formations in an undifferentiated sequence

in the Oligocene I Eocene period. This occurrence is mapped as the Duff I Pruett Formation which

are chiefly rhyolitic tuffs with minor breccia and conglomerates. Fine grained tuffs, well indurated, massive, mostly white to light shades of red and yellow are commonly intermingled with the rhyolite tuffs and andesites.

Within the study area, the Duff I Pruett Formation basal unit overlies an older formation group of

Upper Cretaceous sedimentary formations known as the Pen and the Boquillas Formations. The contact between the Duff I Pruett Formations and the Pen I Boquillas Formations represent an erosional unconformity whereas significant groups of Tertiary rock formations were eroded from the area before the Duff I Pruett formations were deposited.

The Pen I Boquillas Formations are composed of clay, sandstones, calcareous clays and thin bedded

Field observations have initially indicated that the bentonite deposits are alteration of the tuffaceous portions of both the rhyolitic and andesite rock groups and the upper clay sediments of the Boquillas

Formation. The probable alteration mechanism, may be igneous hydrothermal waters from nearby intrusive volcanic activity.

BENTONITE DEPOSITS

limestones.

Evaluation of the bentonite occurrences, required a comprehensive study of the overall geologic environment of this area.

Historically, bentonite has been mined from this area in only minor amounts for specialty bentonite uses such as pond sealant and cat litter. Only recently has any attempt to extract significant volumes occurred. Numerous outcrops and trenches expose the bentonite deposits over a north - south strike line of nearly 30 miles. The Ague Fria Ranch Deposits are located approximately in the south central portion of the bentonite deposition adjacent to and extending northwest of the Agua Fria Mountain intrusive igneous complex.

All known occurrences appear to be within the basil unit of the Duff I Pruett Formation and extending into underlying Pen I Boquiflas Formation.

Agua Fria Mountain is formed by much younger Tertiary intrusive volcanic rocks. Exposures of numerous other similar volcanics extend east and north along the same north - south trend of the

bentonite deposits. They represent an extensive system of intrusive igneous rocks that probably underlie the bentonite deposits at depth. .

These much younger intrusive igneous rocks probably supplied the alteration mechanism of the basal Duff I Pruett Formation and the upper Pen I Boquillas Formation. Numerous northeast trending faults cross through the area. These faults were formed partially by these intrusives. The same faults thus provided the vertical access of hydrothermal fluids from the underlying intrusives to the contact zone of the two host formations.

The clays of the upper Pen I Boquillas Formation acted as a trap to these fluids, absorbing and concentrating them along the basal unit of the Duff I Pruett Formation. Concentration of these volcanic fluids along this zone, allowed a slow complete alteration to bentonite clay.

Dependent on the availability and volume of fluids from these source intrusives, the bentonite mineralization extends only a few miles east and west of the primary north - south trend with considerable concentration near the fault zones.

AGUA FRIA RANCH BENTONITE

The Agua Fria Ranch deposits are found along the northeast flanks of Agua Fria Mountain extending west, southwest and north. The area is crossed by four major fault zones striking northwest to west. The Duff I Pruett formation is highly eroded from the area exposing vast portions of the basal units containing the bentonite. The deposit comprises three distinct low lying mesas surrounded by gentle eroded and stream truncated flats.

Field observations indicate these deposits are between 20 to 60 feet thick dependent on erosional features. Present mining faces located north of the Agua Fria mountain system, indicate a bentonite thickness of 30 to 35 feet.

Detailed mapping off a U S Geologic Survey 7.5 minute quadrangle and aerial photos has defined extensive bentonite reserves.

Cross sectional east to west studies provides a view of the bentonite zone throughout this depositional environment. The area comprising the western portion of this property has been faulted downward with the bulk of the bentonite zone below mineable depths. The central and eastern portion of this ranch contains eroded sections which provide bentonite deposits at or near the surface.

The western sections of the Agua Fria Ranch exhibits the westerly tilted, down dropped western extension of the bentonite zone that are covered by 50 to 250 feet of overlying rock formations. These areas are not mineable

BENTONITE RESERVES

The Bentonite Deposits of the Agua Fria Ranch contains vast bentonite reserves. Evaluation of these reserves were accomplished by detailed mapping, vertical and horizontal outcrop measurements, stereoscopic aerial photographic analysis and previous drill hole information.

Areas surrounded by extensive measurable outcrops in conjunction with those outcrops being relatively consistent in thickness and composition from any other portion of that particular geologic structure can be classed as proven reserves. This is only valid for areas of this particular type

Proven reserves have been calculated by detailed mapping. In all cases outcrops are measured vertically and can be plotted to provide an absolute extension across surface area following the continuation from one point to the next. These calculations do not infer depth below the measurable outcrop surface.

deposition based on geologic evidence compiled from the regional area possessing similar deposition

characteristics.

19

S/2 1

15

13

11

5

9

7

3

1

15

15

G6

G6

G6

G6

G6

G6

G6

G5

Inferred reserves represent potential additional reserves within an area that should exist as postulated by the proven reserves. These reserves represent unmeasured section that extend between the measurable proven reserves. These are established by geologic interpretation that the area lying between two measurable outcrops will possess the same geologic deposition as the measured section due to previous observed geologic depositional environment found within the proximity of the study

area. Bentonite reserve calculations were accomplished with analysis of each ranch section. This study separated surface and mineral owned portions from surface ownership with the State of Texas retained minerals.

	MINERALS ESTATE				
Section	Block	Grantee	Acres	Proven Reserves	Inferred Reserves
33	204	T&ST L Ry.	640	0	0
35	204	T&ST L Ry.	640	5,890,500	7,952,175
1	15	CHECA D.	640	4 462 500	E 579 135

55	204	I wor in ity.	040	U	
35	204	T&ST L Ry.	640	5,890,500	
1	15	GH&SA Ry.	640	4,462,500	
2	15	CILCGAD	(40	0	

33	204	T&ST L Ry.	640	0	
35	204	T&ST L Ry.	640	5,890,500	
1	15	GH&SA Rv.	640	4.462.500	

GH&SA Ry.

GC&SF Rv.

GC&SF Rv.

GC&SF Rv.

GC&SF Ry.

GC&SF Rv.

GC&SF Ry.

GC&SF Ry.

GC&SF Rv.

E. Dawson

35	204	T&ST L Ry.	640	5,890,500	7,952,175
1	15	GH&SA Ry.	640	4,462,500	5,578,125
3	15	CH&SA Rv	640	0	0

1	15	GH&SA Ry.	640	4,462,500	5,578,125
3	15	GH&SA Ry.	640	0	0
5	15	GH&SA Rv.	640	3.123.750	4.217.062

3	15	GH&SA Ry.	640	0	0
5	15	GH&SA Ry.	640	3,123,750	4,217,06
7	15	GH&SA Rv	640	2.677.500	3 480 75

5	15	GH&SA Ry.	640	3,123,750	4,217,062
7	15	GH&SA Ry.	640	2,677,500	3,480,750
9	15	GH&SA Ry.	640	3,123,750	3,904,687

640

320

640

640

640

640

640

640

640

640

TOTAL TONS

0

4,284,000

0

0

4,105,500

5,399,625

31,505,250

0

3,915,844

0

5,569,200

0

0

5,131,875

7,019,125

42,556,385

0

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9	15	GH&SA Ry.	640	3,123,750	
17	15	GH&SA Ry.	640	2,900,625	

36 204 T&ST Rv. 650 4,373,250 5,247,900 2 SL J. M. Dewees 1300 4,685,625 5,857,312 Mrs. C. Tippet 6,693,750 6 SL 1209.4 5,355,000 1440 SL S. Claunch 180 892,500 1,071,000 14,782,030 4 SL B. F. Smith 1411.2 11,825,623 Vac. A SL 64.9 M. L. Hopson 0 0 Vac. B SL 0 0 M. L. Hopson 209 16 G6 GC&SF Rv. 648 0 0 8 G6 GC&SF Rv. 0 0 640 10 G6 GC&SF Ry. 665.3 0 0 6 G6 GC&SF Ry. 654.1 0 0 2

640

640

640

640

640

640

960

TOTAL TONS

AGUA FRIA RANCH SURFACE ESTATE / STATE MINERALS

Acres

Grantee

GH&SA Ry.

GH&SA Ry.

GH&SA Ry.

GH&SA Ry.

GH&SA Ry.

GH&SA Ry.

GC&SF Ry.

Block

15

15

15

15

15

15

G6

Section

4

6

8

16

18

14

Total Potential Operational Value

Proven Reserves

0

0

Inferred Reserves

0

3,625,780

3,190,688

2,510,562

2,231,250

2,320,500

0

47,530,772

bentonite reserves of 31,505,250 tons with an additional inferred reserve of 42,556,385 tons.

BENTONITE RESERVE VALUE

The Agua Fria Ranch surface estate with Texas State retained minerals is an additional 12,432 acres. The bentonite reserves controlled by the State is 38,511,375 proven tons with an additional inferred reserve of 47,530,772 tons. The surface estate has the representative rights for the State of Texas for disposition and / or management of these reserves.

The Agua Fria Ranch surface and mineral estate is 11,200 acres. This acreage contains proven

A royalty of \$5.00 to \$8.00 per ton is paid to the state for all bentonite sold. The value of the bentonite will vary between \$60.00 for pond seal, hole plug and raw sized cat litter to \$100.00 plus per

ton of oil well drilling grade bentonite.

Establishing a potential reserve value of the Agua Fria Ranch mineral estate would be based on present operational sales value of \$60.00 per ton multiplied by the proven bentonite reserves.

Present Selling Price \$60.00 / Ton **Total Proven Reserves** X 31,505,250 Tons

\$1,890,315,000.00

If the inferred reserves of 42,556,385 tons are converted through exploratory drilling with only 40 per cent converted to proven reserves, an additional 17,022,554 tons could be added resulting in an additional value of \$1,021,353,240.00 based on a selling price of \$60.00 per ton.

RESPECTFULLY SUBMITTED:

LLOYD W. KRUMREY, JR. CPG

April 24, 2006