

dugan production corp.

1 6 6 6

December 8, 2000

Mr. David Catanach, Examiner New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, NM 87505

Re: Stella Needs A Com No. 1, SWD Well, Order No. R-11371-A

Dear Mr. Catanach:

Attached are some water analysis for both the Mesaverde in total and the Menefee member of the Mesaverde in specific. I have included an electric log with tops for one water source well in 28 of 26N, 13W. This well (West Bisti Unit No. 131) has a Menefee zone within the Cliffhouse member of the Mesaverde. Attached are some additional Mesaverde samples that came from Dresser Atlas Rw book. I feel that they demonstrate that water within the Menefee is of an unusable quality.

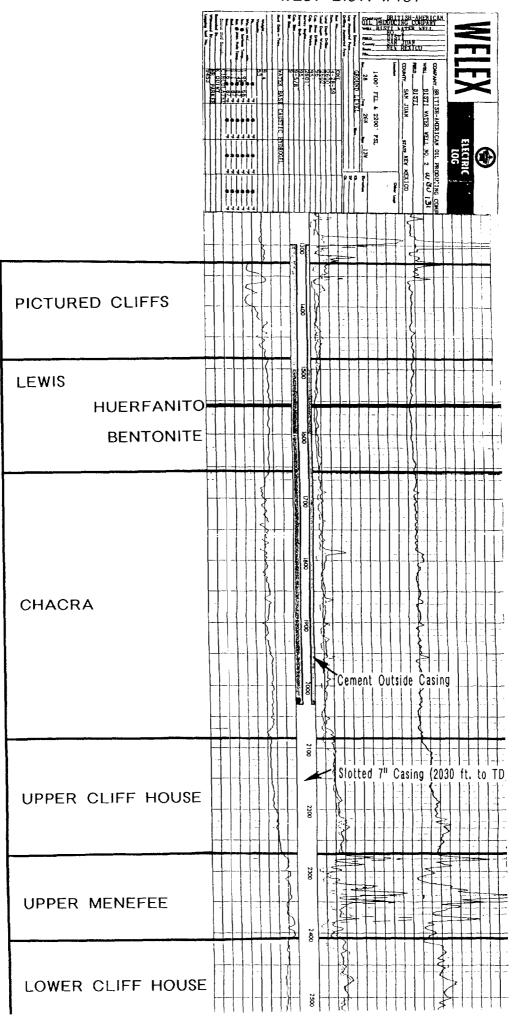
I will be able to run the tracer log by injecting a radioactive tracer down the injection tubing and then running a gamma-ray log. While this not a true injection conformance log, it will show the presence of any radioactive material migrating up the hole into zones which are not authorized to accept produced water.

Please let me know if I have your permission to commence injection so that I may conduct the tracer survey quickly.

Sincerely,

John Alexander Vice President

Attachments



Attachment E 2. Dugan Productio. Jorp. Application of Convert West Bisti Unit 153 to SWD

American Energy Services

Water Analysis Results Sheet

Operator:	Dugan Production Co.	Date:	12/17/1999
Well :	West Bisti #131	District:	Farmington
Formation:	Mesa verde	Requested by:	John Alexander
County:	San Juan	Technician:	Mike Brown
Depth:	N/A	Source:	Well (Swab Run)#4

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAV	ITY: 1	AT 75 Degrees F.		
pH:	8.72		SULFATES:	1290 ppm
			CALCIUM:	840.0 ppm
IRON:	0	ppm	BICARBONATES:	8418.0 ppm
			RESISTIVITY:	ohm/meter
H2S:	0	ppm	CHLORIDES:	6400.0 ppm
			SODIUM:	6010.6 ppm
		•	POTASSIUM:	11.0 ppm
MAGNESIUM:	510.3	ppm	TDS:	23479.86 ppm

CaCO3 Scale Tendency = Probable CaSO4 Scale Tendency = Remote

REMARKS:	Water Analysis:	Sample appears to be formation water.	

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

Formation	Laction	Depth	Ru	Salinity (PPM)
cliff House	27-301U-12W	3299-3318	0.155	47,000
Point Lookaut	23-30-16	2/86	0.124	58,000
meseverde	35-31-11	de generalista de la companya del companya del companya de la comp	0.280	23,500
Meseurde	2-31-13	i i i	0.280	23,500
Mesèverde	17-32-12		0.36	18,000
mesaverde	23-32-12		0.42	15,000
Messurede	33-32-77	. <u>.</u>	0.44	14,500
Cliff House	25-30-/2	3525-45	0.18	39,500
Meseurae	21-30-12	3525-3617	0.207	33,000
Cliff House	3/-30-//	37/0-3900	0.175	40,000

Reference: 1985 Bock, Mountain Formation water

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