

30-005.63887 **Armstrong Energy Corporation**
Volleyball State #1
660' FSL & 660' FEL
Sec. 2-T12S-R26E
Chaves County, New Mexico



Hydrogen Sulfide Plan

Offset wells have not reported hydrogen sulfide in concentration in excess of 100 ppm. As per Rule 118.C.2, no further action is necessary.

As a precautionary measure, a H₂S monitor will be maintained on the rig floor to alert personnel to unanticipated H₂S buildup at the bell nipple and rig floor. Should H₂S be detected, a Hydrogen Sulfide Plan will be implemented.

There are no dwellings within a one-half mile radius of the well. The closest dwelling is an abandoned ranch house approximately one mile east of the location.

Should you have any questions concerning this well, please call me at 505-625-2222.

Sincerely,
Armstrong Energy Corporation

By: Bruce A. Stubbs
Vice President - Operations

ARMSTRONG ENERGY CORPORATION

DRILLING PROGNOSIS

WELL:	Volleyball State #1	API No:	30-005-
LOCATION:	660' FSL & 660' FEL Section 2-T12S-R26E Lat: 33.3049 N Long: 104.30423W (WGS84)		
DIRECTIONS:	Sotheast of Roswell, N.M. 13.5 miles - East of Roswell on HWY 380 10 miles to Bottomless Lake Road (Hwy 409) South 7 miles to Wichita Road (at Lea Lake Headquarters) south 2 1/4 miles, east 1 1/4 miles on caliche road, north 1 1/4 miles, west 1/2 mile to location.		
ELEVATION:	GL 3675'		
OBJECTIVE:	6500' Ordovician		
OPERATOR:	Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202	Office: FAX:	505-625-2222 505-623-1777

<u>CASING</u>	<u>DEPTH</u>	<u>CASING</u>	<u>TORQUE</u>	<u>BURST/COLLAPS</u>
CONDUCTOR:	0-40'	13 3/8"-48 #/ft., H-40, STC	3220	1730 / 770
	0-40'	17 1/2" hole		

SURFACE CASING:	0-1075'	8 5/8" - 24 #/ft., J-55, STC	2630	2950 / 1370
	40'-1075'	12 1/4" hole		

PRODUCTION CASING:	0-6500'	5 1/2" - 17.0 #/ft., J-55, STC	2280	4810 / 4040
	1075-6500'	7 7/8" hole		

<u>CEMENT</u>	<u>DEPTH</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>TOC</u>
CONDUCTOR:	0-40'	Redi-mix	5 cu. Yds.	Surface
SURFACE CASING:	0-900'	Interfill "C"	250 sx.	Surface
	900-1075'	Class "C" w/ 2% CaCl Texas pattern shoe, insert float, rubber plug, 6 centralizers	200 sx.	

PRODUCTION CASING:	1000-3500'	Interfill "C"	305 sx.	1000'
	3500-6500'	Super "H" w/ .5% LAP-1, .4% CFR-3, 3 lb/sx Salt, .25 lb/sx D-AIR Float collar, float shoe, rubber plug, 25 centralizers	355 sx.	

<u>MUD</u>	<u>FLUID</u>	<u>ADDITIVES</u>	<u>F.L.</u>	<u>VIS</u>
0-1075'	Fresh water	Gel, paper, LCM, lime for 10 ph	NC	28-30
	8.5-9.3 ppg			
1075-4300'	Cut Brine	9.7-10 ppg, caustic for 10 ph	50	30
	9.7-10.2 ppg			
4300'-6500'	Cut Brine	starch, salt gel, LCM, caustic for 10 ph	>6 cc	45-55
	9.7-10.2 ppg			

<u>FORMATION TOPS</u>	<u>FORMATION</u>	<u>DEPTH</u>	<u>SUBSEA</u>
K.B.		0	3700
Queen		370	3330
Penrose		570	3130
Grayburg		770	2930
San Andres		1010	2690
Glorieta		2200	1500
Yeso		2310	1390
Tubb		3660	40
Abo		4410	-710
Wolfcamp		5060	-1360
Wolfcamp "B"		5150	-1450
Zone			
Wolfcamp -		5240	-1540
Cisco			
Strawn		6110	-2410
Siluro-		6240	-2540
Devonian			

B.O.P. PROGRAM:

2000 PSI W.P. Nippled up on 8 5/8" casing

1000 PSI TEST PRESSURE

Maximum allowable shut-in pressure 300 psi. (8 5/8" shoe rating)

BHP 2500 psi

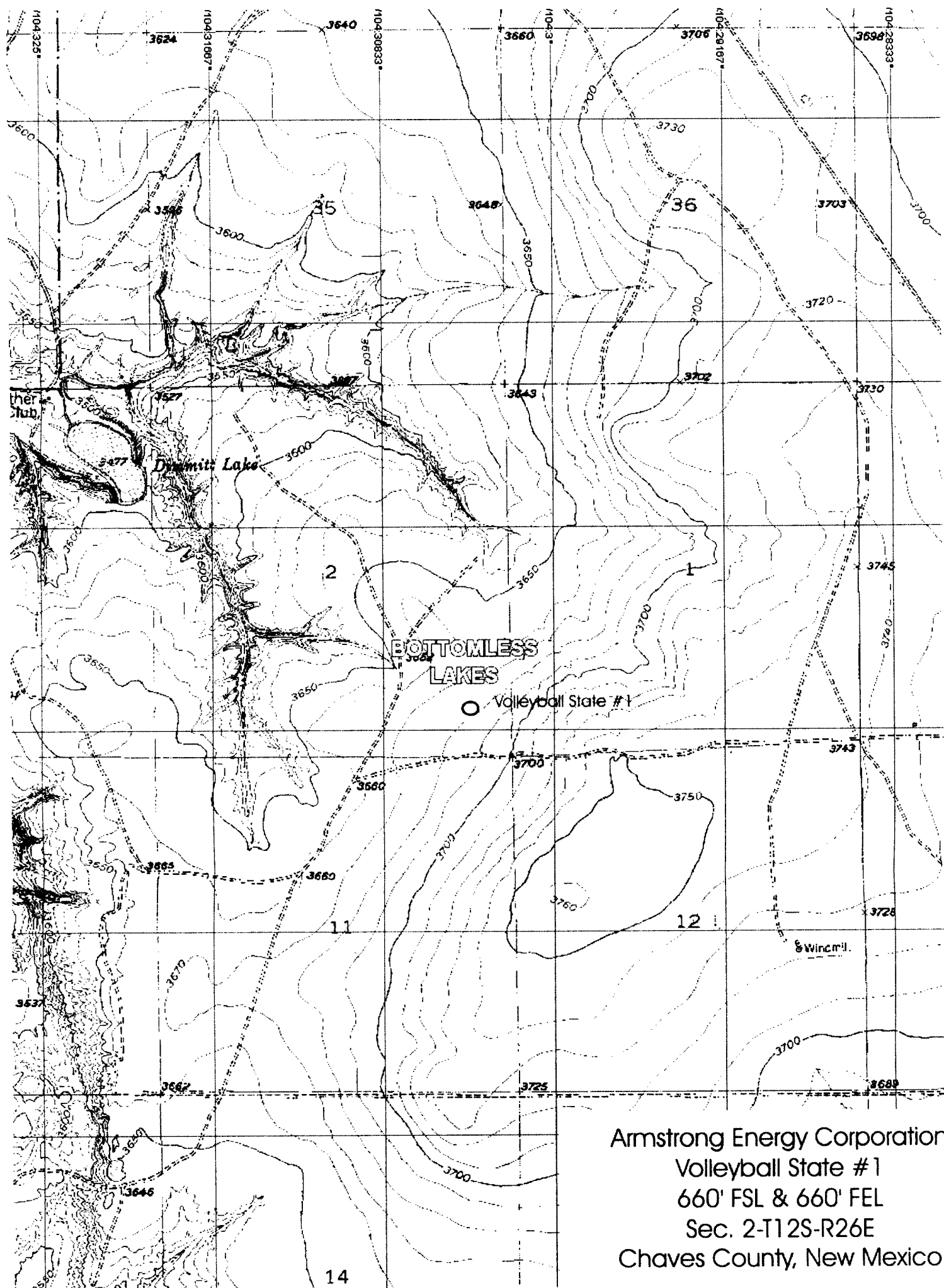
AT 6200 FT.

HYDOGEN SULPHIDE

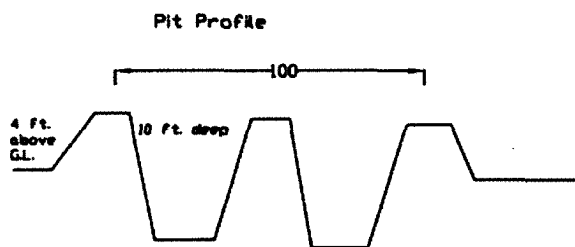
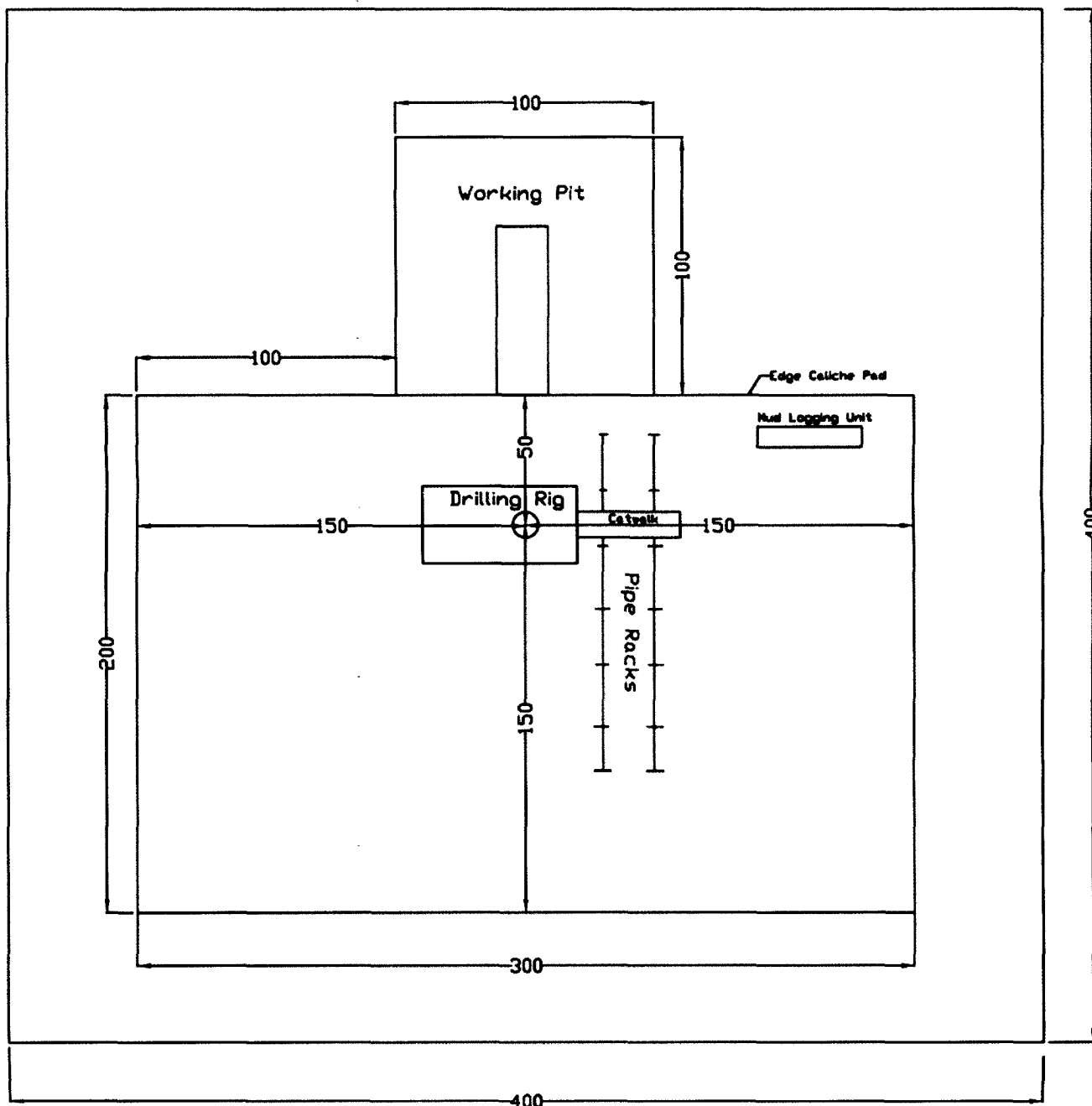
OFFSET WELLS HAVE NOT REPORTED
HYDROGEN SULPHIDE IN CONCENTRATIONS
IN EXCESS OF 100 PPM. AS PER RULE 118.C.2,
NO FURTHER ACTION IS NECESSARY.

AS A PRECAUTIONARY MEASURE, A H2S
MONITOR WILL BE INSTALLED ON THE RIG
FLOOR TO ALERT PERSONNEL TO
UNANTICIPATED H2S BUILD UP AT THE BELL
NIPPLE AND RIG FLOOR.
SHOULD H2S BE DETECTED A H2S PLAN WILL BE
IMPLEMENTED

BY: Bruce A. Stubbs
Engineer



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Drilling Rig Layout Plan

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25 Ft.

BAS 10-19-05