

HOBBS OCD

NOV 01 2011

30-015-38593

RECEIVED

WELL NAME AND NUMBER. NB TWEEN STATE # 23

LOCATION. SEC. 35, TOWNSHIP 17S, RANGE 28E NMPM; EDDY COUNTY, NEW MEXICO
(New Mexico give U, S, T, & R)

OPERATOR APACHE CORPORATION

DRILLING CONTRACTOR: AZTEC WELL SERVICING COMPANY INC.

The undersigned hereby certifies that he is an authorized representative
of the drilling contractor who drilled the above described well and that the
deviation tests obtained the following results:

Degrees @ Depth

.75 ° @	400
.8 ° @	513
1.1 ° @	945
.4 ° @	1730
1.7 ° @	2961
.5 ° @	3118
.9 ° @	3844
1.1 ° @	4346
1.1 ° @	4599
1.6 ° @	4850
1.4 ° @	5008
2.4 ° @	5509
1.6 ° @	5698
° @	
° @	
° @	

Degrees @ Depth

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DRILLING CONTRACTOR AZTEC WELL SERVICING CO. INC.

BY Jessi Thompson

Subscribed and sworn to before me this 2ND day of AUGUST, 2011.

My Commission Expires:

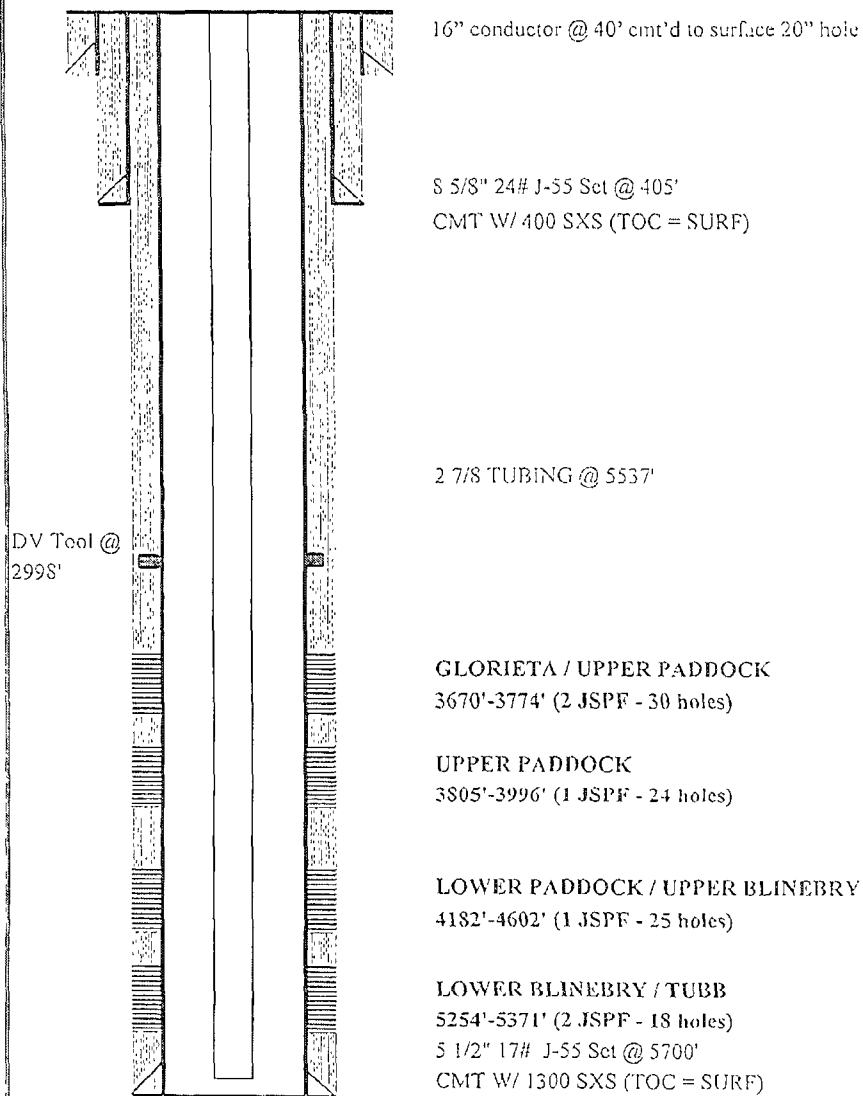
3-16-2013

[Signature]
Notary Public
San Juan County, New Mexico

30-015-38593
Apache Corp.

GROUP:	Permian North	DATE:	Aug. 26, 2011
FIELD:	Artesia (BP)	BY:	SNH
LEASE/UNIT:	N B Tween State	WELL:	#23
COUNTY:	Eddy	STATE:	New Mexico

KB = 12'
GI = 3689'



TD = 5700'
PBTD = 5650'

GL=3660'
KB=3671'
Spud: 5/18/60

Apache Corporation – Empire Abo Unit #F-31

Wellbore Diagram – Current Status

API: 30-015-01692

Date : 10/25/2011
S. Hardin



Surface Location

1980' FNL & 2130' FEL, Unit G
Sec 33, T17S, R28E, Eddy County, NM

Surface Casing

8-5/8" 24# K-55 @ 1000' w/650 sx to Surface

8/74: perf 1248'-1249'

TAC @ 5720'

SN @ 6040'

TUBING DETAIL

Qty	Description	Length	Depth
184	2-3/8" J-55 8rd EUE 4.7#	5984'	6040'

Hole Size
=11"

Hole Size
=7-7/8"

CTI in 74'

CTP in 96'

TA'D in 04'
RWTP in '11

6/97: Perf Abo @ 5734'-5796' w/ 2 JSPF 1500 gal 15% NEFE acid;
frac w/ 15,000 gal 20% Vis Pentol acid @ 12 BPM
9/11: Sqzd w/ 100 sx 2% calcium chloride & 100 sx Class C Neat

6/97: Perf Abo @ 5810'-5860' w/ 2 JSPF
1500 gal 15% NEFE acid

8/74: Perf Abo @ 5828'-5887' w/ 10 holes
440 gal 15% XW-35 acid; 4000 gal P121; 30,000 gal Super X acid
Sqzd in 90' w/ 600 sx

9/11: Perf Upper Abo @ 5906'-12', 5918'-26', 5932'-36', 5970'-75', 6006'-
28', 6028'-48' w/ 2 JSPF
Acidize w/ 5000 gals 15% HCL NEFE

CIBP @ 6080' in 97'

6/60: Perf Abo @ 6107'-6134' w/ 2 JSPF
6000 gal 15% LST acid
Restimulated in 90' w/ 4000 gal acid

Production Casing

4-1/2" 9.5# & 11.6# J-55 @ 6175' w/800 sx
CMT 3200' FS

PBTD = 6080'
TD = 6175'