

END OF WELL SCHEMATIC

Well Name: San Juan 32 Fed 24 # 2A
API #: 30-045-32405
Location: 1810' FNL & 1055' FWL
Sec. 24 - T32N - R9W
San Juan County, NM
Elevation: 6785' GL (above MSL)
Drl Rig RKB: 13' above Ground Level
Datum: Drl Rig RKB = 13' above GL

Note - this well is equipped with rods & pump
7-1/16" 3M x 2-3/8" EUE 8rd Bonnet
11" 3M x 7-1/16" 3M Tubing Head
9-5/8" 8 RD x 11" 3M Casing Head

Spud:	22-Jul-04
Release Dri Rig:	25-Jul-04
Move In Cav Rig	28-Aug-04
Release Cav Rig	18-Sep-04

<u>Surface Casing</u>		Date set: <u>22-Jul-04</u>	X
Size	<u>9 5/8</u>	in	
Set at	<u>235</u>	ft	# Jnts: <u>5</u>
Wt.	<u>32.3</u>	ppf	Grade <u>H-40</u>
Hole Size	<u>12 1/4</u>	in	Conn <u>STC</u>
Excess Cmt	<u>125</u>	%	
T.O.C.	<u>SURFACE</u>		
		Csg Shoe	<u>235</u> ft
		TD of 12-1/4" hole	<u>245</u> ft

Notified BLM @ 14:10 hrs on 20-Jul-04
Notified NMOCD @ 14:12 hrs on 20-Jul-04

Intermediate Casing		Date set:	25-Jul-04	☒ New	☐ Used
Size	7	in	78	its	
Set at	3355	ft	0	pups	
Wt.	20	ppf	Grade	J-55	
Hole Size	8 3/4	in	Conn	STC	
Excess Cmt	160	%	Top of Float Collar	3309	ft
T.O.C.	SURFACE		Bottom of Casing Shoe	3355	ft
Pup @		ft	TD of 8-3/4" Hole	3360	ft
Pup @		ft			
Notified BLM @	19:19	hrs on	23-Jul-04		
Notified NMOCD @	19:22	hrs on	23-Jul-04		

Production Liner Date set: 17-Sep-04

Size 5 1/2 in

Nominal Wt. 15.5 ppf

Grade J-55 Connections: LTC

Jnts: 9

Hole Size 6.25 / 9.5 inches

Underreamed 6-1/4" hole to 9.5" from 3360' to 3728'

Top of Liner 3319 ft

PBTD 3726 ft

Bottom of Liner 3728 ft



This well was cavitating.

SurfaceCement

Date cmt'd: 22-Jul-04

Lead : 150 sx Class G Cement

+ 2% BWOC S001 CaCl2

+ 0.25 lb/sx D029 Cellophane Flakes

1.16 cuft/sx, 174 cuft slurry at 15.8 ppg

Displacement: 15.2 bbls fresh wtr

Bumped Plug at: 10:20 hrs w/ 320 psi

Final Circ Press: 120 psi @ 0.5 bpm

Returns during job: YES

CMT Returns to surface: 15 bbls

Floats Held: No floats used

W.O.C. for 6.00 hrs (plug bump to start NU BOP)

W.O.C. for 9.50 hrs (plug bump to test csq)

Intermediate Cement

Date cmt'd: 25-Jul-04

Lead : 450 sx Class G Cement

+ 3% D079 Extender

+ 0.25 lb/sx D029 Cellophane Flakes

+ 0.2% D046 Antifoam

2.61cuft/sx, 1174.5 cuft slurry at 11.7 ppg

Tail : 100 sx 50/50 POZ : Class G cement

+ 2% D020 Bentonite

+ 2% S001 Calcium Chloride

+ 5 lb/sx D024 Gilsontite

+ 0.25 lb/sx D029 Cellophane Flakes

+ 0.2% D046 Antifoam

1.27 cuft/sx, 127 cuft slurry at 13.5 ppg

Displacement: 134 bbls

Bumped Plug at: 04:02 hrs w/ 1470 psi

Final Circ Press: 710 psi @ 2.0 bpm

Returns during job: YES

CMT Returns to surface: 34 bbls

Floats Held: X Yes No

UNCEMENTED LINER

Schematic prepared by:
Steven O. Moore, Drilling Engineer
21-Sept-2004

COMMENTS:

9-5/8" Surf:	No float equipment was run. Ran a guide shoe and an aluminum baffle plate 1 jt above the guide shoe @ 190'. Displaced top wiper plug with water. Shut in casing head and WOC before backing out landing jt. CENTRALIZERS @ 225', 146', 103', & 59'. Total: 4
7" Intermediate	DISPLACED W/20 BBLs. FRESH WATER & 114 BBLs. SLIGHTLY POLYMERIZED 8.4 PPG DRILLING MUD. CENTRALIZERS @ 3345', 3265', 3181', 3094', 3008', 2922', 212', 84', & 40'. TURBOLOGIZERS @ 2320', 2277', & 2234'. Total: 9 Total: 3
5.5" Liner	Ran 6-1/4" bit & sub with float on bottom of liner. Ran liner w/ TIW H-Latch Drop Off Tool (no liner hanger).
Perforations	Perforated 5-1/2" liner with guns on E-line at 4 spf, 0.75" diameter, 120 degree phased holes Perf. Intervals: 3384'-3392', 3420'-3429', 3432'-3441', 3444'-3452', 3534'-3538', 3558'-3564', 3576'-3586', 3588'-3592', 3666'-3670'. TOTAL SHOTS 248.
Tubing	30.54' x 2-7/8" OD Orange Peeled Mud Anchor with eight each 0.25" x 8" slots just below the upset, 2-7/8" x 2-3/8" EUE 8rd crossover collar, 2-3/8" OD (1.78" ID) F-Nipple 116 jts 2-3/8" 4.7# J-55 EUE 8rd tubing, 1 ea 12' and 1 ea 4' x 2-3/8" OD EUE pup jt Bottom of Mud Anchor at 3723'. F-Nipple at 3691' MD RKB.
Pump & Rods	12" long strainer attached below 1-1/4" RHAC insert pump, ostensibly with 1 ea 2' or 4' x 3/4" OD rod sub above pump 147 ea 25' x 3/4" OD rods, space out with 1 ea 6' X 3/4" rod sub & 1 ea 1-1/4" OD x 22' polished rod Set pump in F-Nipple at 3691' MD RKB