

UNION OIL COMPANY OF CALIFORNIA
DISTRICT OFFICE - MIDLAND, TEXAS

DRILLING PROGRAM

Field: Quail Ridge (Morrow)

Location: 760' FNL & 2050' FEL, Section 18,
T-19-S, R-34-E, Lea County, New Mexico.

Well Name: PIPELINE DEEP UNIT FEDERAL WELL NO. 2

Estimated Total Depth: 13,700'

Drilling Data: 10' drlg time 1600'-TD

Samples: 10' from 300'-TD

Estimated Formation Tops:

Yates	3320'	Strawn	12160'
San Andres	5170'	Atoka	12430'
Bone Spring	7950'	Morrow	12940'
Wolfcamp	10750'	L. Morrow	13440'
Canyon	12070'	Chester	13600'

Logs: CNL - FDC w/GR @ TD. Dual Laterolog

DSTs: M. Morrow @ 13350'; L. Morrow @ 13500'

Corros: None

Deviation: 100°/100' maximum rate of change

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Casing & Mud Program:

Depth	Size Hole	Casing	Cement	W.O.C.	Mud		
					Wt.	Vis.	W.L.
0'-500'	17½"	13-3/8"	450*	24	As needed to spud		
500'-5200'	12¼"	8-5/8"	850**	24	10	Brine water	
5200'-9500'	7-7/8"	-	-	-	Water		
9500'-TD	7-7/8"	5½"	***	24	9-10.5	32-40	10

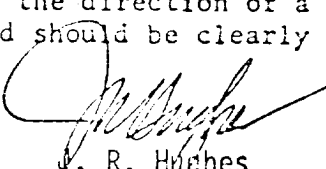
Rig to be released after nipping up 5½" casing.

* Cement w/Class "C" w/4% gel & 2% CaCl₂. ** Cement around shoe w/600 sxs lite wt

followed w/200 sxs Class "C" neat. Cement thru DV tool @ 1800' w/650 sxs lite wt &

200 sxs neat. *** Cement to 10,000' w/50/50 pozmix (calculate volume from log).

NOTE: Changes in the above program will be at the direction of a qualified Union Oil Company of California representative and should be clearly indicated on the program posted at the rig.


J. R. Hughes
District Drilling Superintendent