

STATE OF NEW MEXICO  
 DEPARTMENT OF MINES  
 HARPER OIL COMPANY  
 CANYON  
 6537

DRILLING PROGNOSIS  
(Preliminary)

State 17 No. 1  
 Wildcat  
 West Ranger Lake Unit  
 1980' FNL & 1980' FEL  
 Section 17, T-12-S, R-34-E  
 Lea County, New Mexico

OPERATOR: Harper Oil Company  
 PROPOSED DEPTH: 10,500'  
 ELEVATION: Grd. 4180' Est. - Actual \_\_\_\_\_  
 KB 4192' Est. - Actual \_\_\_\_\_  
 DRILLING CONTRACTOR: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

RIG COMMUNICATIONS:

TOOL PUSHER: : Phone:  
 GEOLOGIST : Phone:  
 ENGINEER: : Phone:  
 MUD SUPPLIER :

SURFACE CASING : 13-3/8" @ 360'  
 INTERMEDIATE CASING: 8-5/8" @ 4,200'  
 PRODUCTION CASING: 5-1/2" @ 10,400'

FORMATIONS & POSSIBLE PRODUCING HORIZONS:				<u>DST's</u>
Anhydrite	1920'	Wolfcamp	9120'	
Yates	2770'	Wolfcamp XX	9260'	
Queen	3620'	Three Bros.	9650'	
Grayburg	3800'	Bough A	9920'	
San Andres	4080'	Bough B	9960'	1
Glorieta	5530'	Bough C	9990'	1
Tubb	6975'	Ranger Lake	10280'	1
Abo	7740'			

SAMPLES: 10' samples caught from 4000' to TD

DRILLING MUD: 0' - 7500' - water  
 7500' - 9800' - adequate for hole control and samples  
 9800' - 10400' - adequate for good samples, hole control, drillstem testing, and electric logging at TD

MUD LOGGER: On site and set up to log cuttings and gas detection at 9100'

ELECTRICAL LOGS: Tentative: Dual Induction - Laterolog  
 BHC - Sonic and/or Density Log w/GR