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YATES PETROLEUM CORPORATION
CHRONOLOGICAL DRILLING REPORT 03 1989

Harding #1

Unit A

35-17S-42W

Kiowa County, Colorado

COLO. OIL & GAS CONS. COMM.

NEVE ✓

- 6-19-89 Location: 860' FNL & 660' FEL of Section: 35-17S-42W
Kiowa County, Colorado. Elevation: 3951'. PTD:
5500' Morrow. Drilling Contractor: _____
TD 20'. Spudded 26" hole 12:30 PM 6-18-89. Set 20' of
21" conductor pipe. Building location. Prep to move
in rotary tools 6-20-89.
- 6-20-89 Moving in rotary tools.
- 6-21-89 Moving in rotary tools. Prep to resume drilling this PM.
- 6-22-89 TD 622'. Short trip. Made 622' in 5-3/4 hours, 108.17'/
hr. MW 8.7, Vis 40. Surveys 131' 0 deg, 220' 1/4 deg,
338' 1/4 deg, 543' 1/4 deg. WOB 5-10000#, RPM 200, SPM
68, PP 1100#. Resumed drilling 10:00 PM 6-21-89.
- 6-23-89 Drilling 1377'. Made 755' in 8-1/4 hours, 91.52'/hr. MW
8.6, Vis 29. Surveys 622' 1/2 deg, 1067' 3/4 deg. WOB
25-30000#, RPM 120, SPM 68, PP 1000#. Reached TD 5:15 AM
6-22-89. Ran 15 joints 8-5/8" 24# (607.10') casing, set
618' KB. Cemented with 200 sacks Halliburton Lite with 2%
CaCl. Tailed in with 100 sacks Standard cement with 2%
CaCl. Displaced with 37 bbls water. PD 10:30 AM 6-22-89.
Bumped plug to 1000#, released pressure and float held
okay. Circulated 45 sacks to surface. WOC. Drilled out
8:30 PM 6-22-89. WOC 10 hours. Nippled up and tested to
1000# for 30 mins, OK. Reduced hole to 7-7/8". Drilled
plug and resumed drilling.
- 6-24-89 Drilling 2655' Stone Corral. Made 1278' in 19-3/4 hours,
64.70'/hr. MW 8.6, Vis 27. Drilling with fresh water.
Surveys 1691' 1/2 deg, 2184' 1/2 deg. WOB 35-40000#, RPM
100, SPM 68, PP 1000#. TIH with bit #3 at 1691'. DC \$875
- 6-25-89 Drilling 3407' Neva. Made 752' in 16-3/4 hours, 44.89'/hr.
MW 9.5, Vis 29, pH 7, Cl 37000, Solids 3.7%, Calcium 2000.
Surveys 2682' 1/2 deg, 3271' 1/2 deg. WOB 40,000#, RPM
100, SPM 68, PP 1000#. DC \$735
- 6-26-89 Drilling 4107' Heebner. Made 700' in 22-3/4 hours, 30.76'/
hr. MW 9.5, Vis 28, pH 7, Cl 67000, Solids 3.7%, Calcium
2000. Survey 3926' 1 deg. WOB 40000#, RPM 90, SPM 68, PP
1000#. DC \$735
- FORMATION TOPS:
Neva 3413' (+538')
Foraker 3490' (+471')
Penn 3770' (+191')
Shawnee 3876' (+85')
Heebner 4104' (-143')
Toronto 4130' (-169')
- 6-27-89 TD 4362'. Rig repair - working on drive shaft. Made 255'
in 11-1/4 hours, 22.66'/hr. MW 8.6, Vis 42. WOB 40000#,
RPM 90, SPM 68, PP 1000#. Had hole in drill pipe 4 stands
above drill collars. Displaced hole with mud at 4362'.
As they started displacing, lost 25000# string weight on
300# PP. Displaced hole. POH--56 stands out twisted 450
box on transmission drive shaft. DC \$735
- SAMPLE TOP: Lansing 4162' (-201')
- 6-28-89 TD 4362' Lansing. POH with fishing tools. MW 8.6, Vis
42, PV 10, YP 16, Gels 6/14, pH 10.5, Wl 12.8, FC 1/32, Cl
8000, Salt 2.1%, Calcium 120. Made first fish run with
6" grapple. Latched onto fish but kept slipping off.
Made second run with 5-7/8" grapple, got over fish but
still would not latch on. DC \$800
- 6-29-89 Drilling 4560' Lansing. Made 198' in 10-3/4 hours,
18.42'/hr. MW 8.8, Vis 41, Gels 17, pH 10.5, Wl 12.4, FC
1/32, Cl 7000, Solids 3.1%, Calcium 40. WOB 40000#, RPM
90, SPM 67, PP 1100#. DC \$820; CC \$4700

Yates Petroleum - Harding #1 (Unit A) 35-17S-42W Kiowa Co., CO

6-30-89 Drilling 4753' Cherokee. Made 193' in 13-1/2 hours,
14.30'/hr. MW 9, Vis 39, YP 15, Gels 8/15, pH 11, Wl
16.2, FC 1/32, Cl 11000, Solids 3.3%, Calcium 40, LCM
trace. WOB 35-40000#, RPM 90, SPM 66, PP 1000#. Laid
down crooked collar. Worked on pump #1. Top of Cherokee
4740'. DC \$820; CC \$5520

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- 6-30-89 Drilling 4753' Cherokee. Made 193' in 13-1/2 hours, 14.30'/hr. MW 9, Vis 39, YP 15, Gels 8/15, pH 11, Wl 16.2, FC 1/32, Cl 11000, Solids 3.3%, Calcium 40, LCM trace. WOB 35-40000#, RPM 90, SPM 66, PP 1000#. Laid down crooked collar. Worked on pump #1. Top of Cherokee 4740'. DC \$820; CC \$5520
- 7-1-89 Drilling 5020' Atoka. Made 267' in 19 hours, 14.05'/hr. MW 9, Vis 46, PV 12, YP 16, Gels 7/20, pH 10, Wl 13.6, FC 1/32, Cl 9000, Solids 5.1%, Sand trace, Calcium 40. Survey 4894' 1 deg. WOB 35-40000#, RPM 80, SPM 64, PP 1000#. Rig repair - weld 10" suction on #2 pump. DC \$820; CC \$6340
- 7-2-89 TD 5109' Morrow. Running DST #1 5020-5101' (81'). Made 81' in 4 hours, 20.25'/hr. MW 9.1, Vis 47, PV 14, YP 26, Gels 9/30, pH 10.5, Wl 10, FC 1/32, Cl 11000, Solids 5.4%, Sand trace, Calcium 40, Nitrates 120 ppm. BGG 60, Max 200. WOB 40000#, RPM 80, SPM 64, PP 1000#. Top of Morrow 5038'. Drilling Break in Johanna sand 5072-5078', 3-1/2 - 1-1/2 - 2-1/2 mpf, 200 units gas show. Sandstone with occ. excellent porosity, bright hydrocarbon fluor., good cut with trace live oil. DC \$3520; CC \$9860
- 7-3-89 Drilling 5203' Keyes. Made 102' in 5-3/4 hours, 17.74'/hr. MW 8.9, Vis 51, PV 15, YP 20, Gels 9/32, pH 10, Wl 10.4, FC 1/32, Cl 11000, Solids 5.2%, Sand trace, Calcium 20. BGG 40, TG 175. WOB 40000#, RPM 85, SPM 64, PP 700#. RESULTS OF DST #1 5020-5101' (81') MORROW: TIMES - 30", 60", 60". Opened tool with strong 3" blow, built to bottom of bucket in 4 minutes. ISI very weak surface blow built to 1". Re-opened with 1" blow built to 1-1/2" in 45 minutes. No blow on final Shut-in. Tool did not open on 2nd open--plugged off. RECOVERY - Total 1320', 240' gassy mud, 480' gassy muddy salt water (85% water, 10% mud, 5% gas), 600' gassy salt water (95% water, 5% gas). SAMPLER - 100 cc gas and 2100 cc water at 350 psi. Rw .1 at 87 deg F, Cl 60000; Mud - Rw .5 at 73 deg F, Cl 13000. BHT: 123 deg. PRESSURES:

IHP	2530.2
IFP	362.8-688.3
ISIP	1081.6
FFP	1081.6-1086.4
FSIP	1089.7
FHP	2526.1

 DC \$3730; CC \$13,590
- 7-4-89 TD 5480' Spurgeon. TOH for logs. Made 177' in 19-1/2 hours, 9.07'/hr. MW 9.1, Vis 54, PV 14, YP 19, Gels 10/34, pH 11, Wl 10.6, FC 1/32, Cl 12000, Solids 4.3%, Sand trace, Calcium 20, Nitrates 110, BGG 40. WOB 40000#, RPM 80-85, SPM 64, PP 800#. Reached TD 4:00 AM 7-4-89. DC \$1225; CC \$14,815
- 7-5-89 TD 5480' Spurgeon. Circulating--waiting on State to plug. MW 9.0, Vis 46, PV 14, YP 19, Gels 9/30, pH 10.5, Wl 10.6, FC 1/32, Cl 12000, Solids 4.5%, Sand trace, Calcium 20. Survey 5450' 3/4 deg. Laid down drill collars. TIH with 78 stands drill pipe. Circulated on bottom. Waiting on plugging tops from State. DC \$7090; CC \$21,905
- 7-6-89 TD 5480'. Rig released. Received plugging instructions from State of Colorado at 8:00 AM 7-5-89. Plugged well as follows:
 - Plug #1 2034-2084' (50') with 25 sacks Class "A".
 - Plug #2 1220-1275' (55') with 40 sacks Class "A".
 - Plug #3 638-588' (50') with 25 sacks Class "A".
 - Plug #4 30'-Surface with 10 sacks Class "A".
 Cemented with total 100 sacks at 15.6 ppg. Cut off 8-5/8" casing 3' below GL. Weld 1/2" steel plate across top.

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Rig released 5:00 PM 7-5-89. DC \$4710; CC \$26,616
PLUGGED AND ABANDONED. FINAL REPORT.

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