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April 27, 2000

Hand Delivered

Michael E. Stogner
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

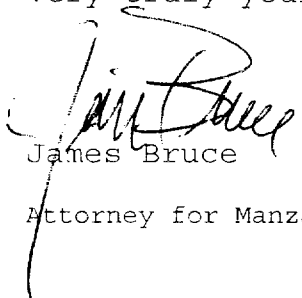
Re: Request to Amend Administrative Order NSL-4417

Manzano Oil Corporation
Cayuma Well No. 1-A
Lots 12 and 13 of irregular Section 1, Township 16 South,
Range 36 East, N.M.P.M., Lea County, New Mexico

Dear Mr. Stogner:

Enclosed, as you requested, are the daily drilling reports on the
above well.

Very truly yours,



James Bruce

Attorney for Manzano Oil Corporation

DAILY DRILLING REPORT

Cayuma #1-A
Cayuma Prospect
3580' FSL & 990' FWL
Sec 1, T16S, R36E
Lea County, New Mexico
GL 3879' KB 3894'

Manzano Oil Corporation
Phone: (505) 623-1996
Fax: (505) 625-2620
Dry Hole Cost \$222,900
Completion Cost 232,900
Total Est AFE \$455,800

3/27/00 SITP (12 hrs) 850 psi. SITP (12 hrs 20 min) 875 psi. Open well on 24/64" choke. Fluid to surface in 25 min. FTP (24/64") 310 psi end of 1 hr. Made 18 BO. SI.
This a.m. drain tsg tk, color cut tk. Have 401 BO + 8 BW. Added second tsg tk. SITP (15 hrs) 650 psi. Open well on 24/64" choke. Fluid to surface in 10 min.
1st hr - FTP (24/64") 200 psi - Rec 13 BF - 100% oil
Continue to flow.
Daily Cost \$ 300 Cumulative Cost \$564,800

3/28/00 2nd hr - FTP (24/64") Zero - Rec 8 BO - Died
3rd hr - 1 swab run - Rec 7 BF - No cut
Blew down backside. Unflanged wellhead. Release pkr. Flange up wellhead. Left pkr swinging. Open tbq w/50 psi. Blew off.
4th hr - 1 swab run - FL 1200' - Rec 13 BF - well kicked off
5th hr - FTP (3/4") 20 to 40 psi - Rec 26 BF - 30% oil
6th hr - FTP (3/4") 150 psi - Rec 29 BF - 40% oil
7th hr - FTP (3/4") 120 psi - Rec 23 BF - 40% oil -
50 psi on csg
8th hr - FTP (3/4") 120 psi - Rec 18 BF - 55% oil
9th hr - FTP (3/4") 100 psi - Rec 19 BF - 70% oil -
95 psi on csg
Total 128 BF since release of pkr
Total for day 156 BF. Reduced choke to 24/64". Left flowing to tsg tank.
This a.m. FTP (24/64") 220 psi. SICP 340 psi. Flowed 120 BF/14 hrs or 8.6 bbls/hr. SI well. Color cut tk. Have 143 BO + 132 BW in tk. Open well to tsg tk on 24/64" choke. Continue to tsg.
Daily Cost \$2,900 Cumulative Cost \$567,700

3/29/00 1st hr - Well SI to color cut tk - Rec 6 BF - partial hr
2nd hr - FTP (24/64") 120 psi - Rec 9 BF - 75% oil - CP 320 psi
3rd hr - FTP (24/64") 180 psi - Rec 11 BF - 80% oil - CP 320 psi
4th hr - FTP (24/64") 90 psi - Rec 4 BF - 50-80% oil - CP 380 psi
5th hr - FTP (24/64") 90-180 psi - Rec ? - 60-80% oil - CP 390 psi
Drained tank
6th hr - FTP (24/64") 250 psi - Rec 5 BF - 90% oil - CP 400 psi
7th hr - FTP (24/64") 260 psi - Rec 5 BF - 90% oil - CP 400 psi
8th hr - FTP (24/64") 210 psi - Rec 9 BF - 50% oil - CP 410 psi
9th hr - FTP (24/64") 200 psi - Rec 12 BF - 70% oil - CP 420 psi
Total 61 BF
SI well. Rigging down. **RELEASED RIG.** Drained tank. Have 25 jts 2-7/8" tbq on rack + 3 jts 5-1/2" csg.
This a.m. SITP 750 psi. SICP 550 psi. Have 176 BO in 2nd tk and 401 BO in 1st tk. **WILL DROP FROM REPORT UNTIL TK BATTY & GAS LINE ARE IN AND READY TO PRODUCE.**
Daily Cost \$42,600 Cumulative Cost \$610,300

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3/24/2000 Continue to flow and swab to clean up.
2nd hr - Flow & swab - Rec 9 BF - 20% oil cut
3rd hr - Swab - FL scat - Rec 15 BF - 20% oil cut
4th hr - Swab - FL scat - Rec 15 BF - 12% oil cut
5th hr - swab - FL scat - Rec 10 BF - 20% oil cut
6th hr - Flowing on 3/4" choke - Rec 14 BF - 15% oil cut
7th hr - FTP (3/4") 30 to 90 psi - Rec 17 BF - 15 to 35% oil cut
8th hr - Flow & swab - Rec 14 BF - 25% oil cut
9th hr - FTP (3/4") 20 to 120 psi - Rec 20 BF - 60% oil cut
10th hr - Swab run from 4000' -
Kick off (FTP (3/4") 20 to 80 psi
- Rec 15 BF - 30% oil cut
11th hr - FTP (3/4") 120 psi - Rec 25 BF - 30% oil cut
Total 175 BF
Reduced choke to 16/64" and left flowing to tsg tk.
This a.m. FTP (16/64") 300 psi. Flowed 90 BF/13 hrs overnight or
6.9 BF/hr. Will open choke and continue to clean up. Color cut
tank have 170 BO + 235 BW.
Daily Cost \$ 2,800 Cumulative Cost \$561,500

3/25/2000 1st hr - SI to color cut tk - Flow 4 BF - 40% oil cut
2nd hr - FTP (32/64") 110 psi - Rec 15 BF - 30 to 50% oil cut
3rd hr - FTP (32/64") 40 to 160 psi - Rec 20 BF - 20 to 60% oil cut
Drained 107 BLW
to pit
4th hr - FTP (32/64") 180 psi - Rec 20 BF - 30 to 70% oil cut
5th hr - FTP (32/64") 20 psi - Rec 10 BF - 30 to 80% oil cut
6th hr - 1 swab run
FTP (32/64") 100 to 120 psi - Rec 10 BF - 30 to 70% oil cut
7th hr - 1 swab run
FTP (32/64") 20 to 250 psi - Rec 19 BF - 40 to 80% oil cut
8th hr - FTP (32/64") 20 to 150 psi - Rec 15 BF - 40 to 70% oil cut
9th hr - FTP (32/64") 20 to 110 psi - Rec 8 BF - 30 to 70% oil cut
10th hr - FTP (32/64") 20 to 160 psi - Rec 10 BF - 70% oil cut
Total 141 BF

Have recovered a total of 460 BF since acid job. Last color cut of
tank indicates an average of 74% oil cut. Reduced choke to 16/32".
Left flowing to test tank w/FTP (16/32") 300 psi.
This a.m. FTP (16/64") 110 psi. Make 85 BF/15 hrs or 5.7 bbls/hr.
Gas rate stronger. Continue to flow.
Daily Cost \$ 2,500 Cumulative Cost \$564,000

3/26/2000 Well died some time between 8:00 a.m. and 4:00 p.m. Believed choke
plugged. Open choke to 3/4" @ 4:00 p.m. Well kicked off. Make 45
BF next 3 hrs. Had to SI because tsg tank is full.
Daily Cost \$ 500 Cumulative Cost \$564,500

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Total Est AFE \$455,800

Acidized

3/23/2000 SITP 253 psi. Installed tree saver. Loaded backside w/2500 psi. Started 23k gal 20% gelled acid job. Took 64 bbls to load tbg. With acid on formation: Rate 4.7 BPM @ 6400 psi.
Incr rate to 7.4 BPM @ 8130 psi
7.7 BPM @ 8660 psi
8.1 BPM @ 8400 psi
with 65 bbls acid in formation, pressure broke
8.2 BPM @ 7700 psi
Incr rate to 10.2 BPM @ 7000 psi
11.8 BPM @ 7280 psi
11.8 BPM @ 7360 psi for remainder of 10k gal
Have communication w/backside. Small collar leak. Have to bleed backside to keep pressure below 3000 psi.
Dropped 8 balls @ 2 balls/18 bbls for next 3000 gal of acid
With 2 balls on perms: 12.0 BPM @ 7200 psi
With all balls on perms: 12.1 BPM @ 7250 psi
Had ball action w/pressure @ 7400 psi. Broke to 7000 psi.
Incr rate to 13.0 BPM @ 7300 psi
14.1 BPM @ 7520 psi
15.3 BPM @ 7850 psi
16.2 BPM @ 8000 psi
16.3 BPM @ 7020 psi
16.4 BPM @ 7850 psi
Started flush @ 16.2 BPM @ 7880 psi
End of flush @ 16.4 BPM @ 7843 psi
ISDP = 5800 psi; 5" = 5500 psi; 10" = 5384 psi; 15" = 5248 psi. Min press 6800 psi. Max press 8850 psi. Avg press 7800 psi @ avg rate 13.8 BPM. Load to recover 672 bbls. Bleed tbg pressure to 4000 psi after 15 min SI to reduce backside pressure. Open well on 14/64" choke after 1 hr 50 min SI w/tbg press 3300 psi.
15 min - FTP (14/64") 1100 psi - Incr choke to 24/64"
30 min - FTP (24/64") 1300 psi
45 min - FTP (24/64") 1150 psi
1st hr - FTP (24/64") 800 psi - Rec 19 BF
2nd hr - FTP (24/64") 400 psi - Rec 30 BF - Incr choke to 32/64"
3rd hr - FTP (32/64") 150 psi - Rec 20 BF w/oil cut
4th hr - FTP (32/64") 25 psi - Rec 25 BF w/5% oil cut - Incr choke to 3/4"
5th hr - FTP (3/4") 25 psi - Rec 25 BF w/10% oil cut
6th hr - FTP (3/4") 20 psi - Rec 15 BF w/10 to 15% oil cut
Total 134 BF
Reduced choke to 21/64". Left flowing to tk overnight.
This a.m. well dead. Sli blow of fm gas from tk. Total gauge 144 BF. Have 528 BLWTR. Pick up swab. Initial FL 500'.
1st swab run - Pull from 1500' - 5% oil cut
2nd swab run - FL 600' - Pull from 2000' - Well kicked off
Flowed & swabbed 21 BF 1st hr - 15% oil cut. Continue to clean up.
Daily Cost \$43,500 Cumulative Cost \$558,700

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Total Est AFE \$455,800

3/18/2000 Continue swabbing:
2nd swab run - FL 5200' - Rec 1200' oil w/little load wtr on btm
3rd swab run - FL 7100' - Rec 1200' of load wtr
3rd hr - 1 swab run - FL 9,000' - Rec 5 BF - load wtr w/1 to 2% oil cut
4th hr - 1 swab run - FL 10,000' - Rec 5 BF - 10% oil cut
5th hr - 1 swab run - SN - Rec 2 BF - 3% oil cut
Wait 30 min. Make 1 swab run. No recovery. Have sli blow gas to tank.
Wait 1 hr - Make swab run - No recovery
Wait 1 hr - Make swab run - Rec 50' fluid - 50% oil cut
Wait 1 hr - Make swab run - No recovery
SI & SD. Total recovery for day 26 BF. Have approx 32 BLWTR.
Daily Cost \$ 2,000 Cumulative Cost \$512,200

3/19/2000 SITP (14-1/2 hrs) 300 psi. Open well. Blew down in 20 min. Pick up swab. Initial FL 9000'.
1st swab run - Rec 11 BF - 100% oil
Wait one hour
2nd swab run - Pull from SN - No recovery
SI & SD.
Daily Cost \$ 600 Cumulative Cost \$512,800

3/20/2000 SI Sunday. This a.m. SITP (45 hrs) 560 psi. Blew down in 30 min. No fluid to surface. Pick up swab.
1st swab run - FL 8,400' - Pull from 10,000' - Rec 5 BF - 100% oil
2nd swab run - FL 10,000' - Pull from SN - Rec 9 BF - 100% oil
Have gas blow behind cups but dies off.
Cumulative Cost \$512,800

3/21/2000 Continue to swab:
3rd swab run - No Recovery
4th swab run - Recovered 60' of fluid - 100% oil
5th swab run - No Recovery
6th swab run - Recovered 50' of fluid - 100% oil
SI & SD. Total recovery for day 15 BO.
This a.m. SITP (17 hrs) 250 psi. Initial FL 9500'. Made 2 swab runs for SN. Rec 9 BF - 100% oil. Prep to acidize tomorrow a.m.
Daily Cost \$ 1,600 Cumulative Cost \$514,400

3/22/2000 Continue to swab:
Wait one hr - make 1 swab run - No recovery
Wait one hr - make 1 swab run - Rec 120' - All oil
SI & SD.
This a.m. acidize w/23k gal.
Daily Cost \$ 800 Cumulative Cost \$515,200

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3/16/2000 Ran CBL-GR-CCL from PBTD 11,703' back to TOC of 10,100'. Fair bond. Perf w/csg gun as follows in two gun runs.

11,631-33' = 2' @ 2 spf	= 4 holes
11,634	= 1 hole
11,640-42' = 2' @ 2 spf	= 4 holes
11,659-61' = 2' @ 2 spf	= 4 holes
11,671'; 11,672'; 11,673; 11,674'	= 4 holes
11,675-77' = 2' @ 2 spf	= 4 holes
11,678	= 1 hole
Total 14'	= 22 holes

Pick up 5-1/2" x 17# Arrow Set I-10K pkr w/SN on top. Tally in hole w/356 jts of 2-7/8" N80 tbg. SDON.

This a.m. prep to finish in hole and acidize.

Daily Cost \$ 8,000

Cumulative Cost \$504,000

3/17/2000 Pick up remainder of tbg (366 jts). Run in hole to 11,675'. Pickle tbg w/750 gal of 15% inhib acid. Spot 2 bbls of 15% acid over perforated interval. Pull & set pkr @ 11,555'. Pressure csg to 1500 psi. Pressured tbg. Formation started taking fluid @ 1 BPM @ 7400 psi. Pumped away spot acid. Open bypass. Spot acid and 40 balls to end of tbg. Closed bypass. Pumped 5 bbls acid then dropped 2 balls every 1.8 bbls w/6 bbls of acid behind last set of balls. Started treating @ 1.2 BPM @ 7200 psi. Broke to 6400 psi. With acid on formation, incr rate to 2.6 BPM @ 6900 psi. Broke to 6200 psi. Incr rate to 3.8 BPM @ 6800 psi for remainder of job. Had very sli ball action. Avg rate 3.5 BPM @ 6700 psi. ISDP = 5700 psi; 5" = 5400 psi; 10" = 5320 psi; 15" = 5230 psi. Total load 116.6 bbls. Open well. Flowed back approx 2 BLW. Pressure went to zero. Unset pkr. Reverse 9 BF. Pulled BOP's. Installed wellhead. Set pkr w/6 pts compression. Pkr set @ 11,555'. Pick up swab. After swabbing 60 BLW, FL was @ 7100'. Well started making acid gas & burnable fm gas. Made one more swab run. Rec 6 BF w/FL @ 7500'. Rec acid gas, burnable gas and 3% to 4% oil cut. SION. Have 51 BLWTR.

This a.m. SITP 400 psi. Open to pit. Flowed 25 min. Died. No fluid to surface. Pick up swab. Initial FL 4900' scat to 8400'. Rec 2000' of free oil.

Continue to swab.

Daily Cost \$ 6,200

Cumulative Cost \$510,200

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2/18/2000 Day #28. TD 11,770. Pres Oper: LD drill pipe & drill collars. Prep to run 5-1/2" csg. Mud Wt 9.0, Vis 39, WL 16, pH 10, Cl 2900 ppm.
6-1/2 hrs WOO; 4-1/2 hrs trip; 5 hrs circl, unload and rack csg; 8 hrs LD drill pipe & drill collars.
Fresh Wtr Hauled 1 Loads Cum Fresh Wtr 63 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$19,300
Daily Cost \$ 6,900 Cum Cost \$398,900

2/19/2000 Day #29. TD 11,770'. Pres Oper: Rigging down. **RELEASED RIG @ 11:00 P.M. 2/18/2000.**
3/4 hr LD drill pipe & drill collars; 10-1/4 hrs run csg & cement; 2 hrs rig down and set slips; 3 hrs jet pits; 8 hrs rig down.
Fresh Wtr Hauled 1 Loads Cum Fresh Wtr 63 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$19,300
Daily Cost \$94,000 Cum Cost \$492,900

Ran 261 jts (11,775') of S95 & N80 - 17# - w/float shoe, float collar & 6 centrizers. Set @ 11,770'KB. Cemented w/220 sks Super C Modified (61:15:11) cement: Poz: CSE + 3/4% FL50. Yield 1.63, Wt 13 ppg. Plug down @ 6:00 p.m. 2/18/2000. Tsg to 1700 psi - OK. Diff Press 800 psi. Est TOC 10,500'. Set slips @ 8:00 p.m. 2/18/2000 w/175k# string wt.

Ran csg in this order:

29 jts	-	1,245.10'	-	5-1/2"	-	17#	-	S95	-	LT&C	-	8R
219 jts	-	9,956.25'	-	5-1/2"	-	17#	-	N80	-	LT&C	-	8R
13 jts	-	573.81'	-	5-1/2"	-	17#	-	S95	-	LT&C	-	8R
261 jts		11,775.16'										

2/20/2000 **WILL DROP FROM REPORT UNTIL READY TO COMPLETE.**

3/13/2000 Installing dead men.

3/14/2000 MI 2-7/8" N80 tbg this a.m. Should road in completion unit this p.m.

WIND
CAPACITIES

Blaker Old Tank

MANZANO OIL CORPORATION

CAYUNA 1-A

S1/T16S/R36E

2/15/00

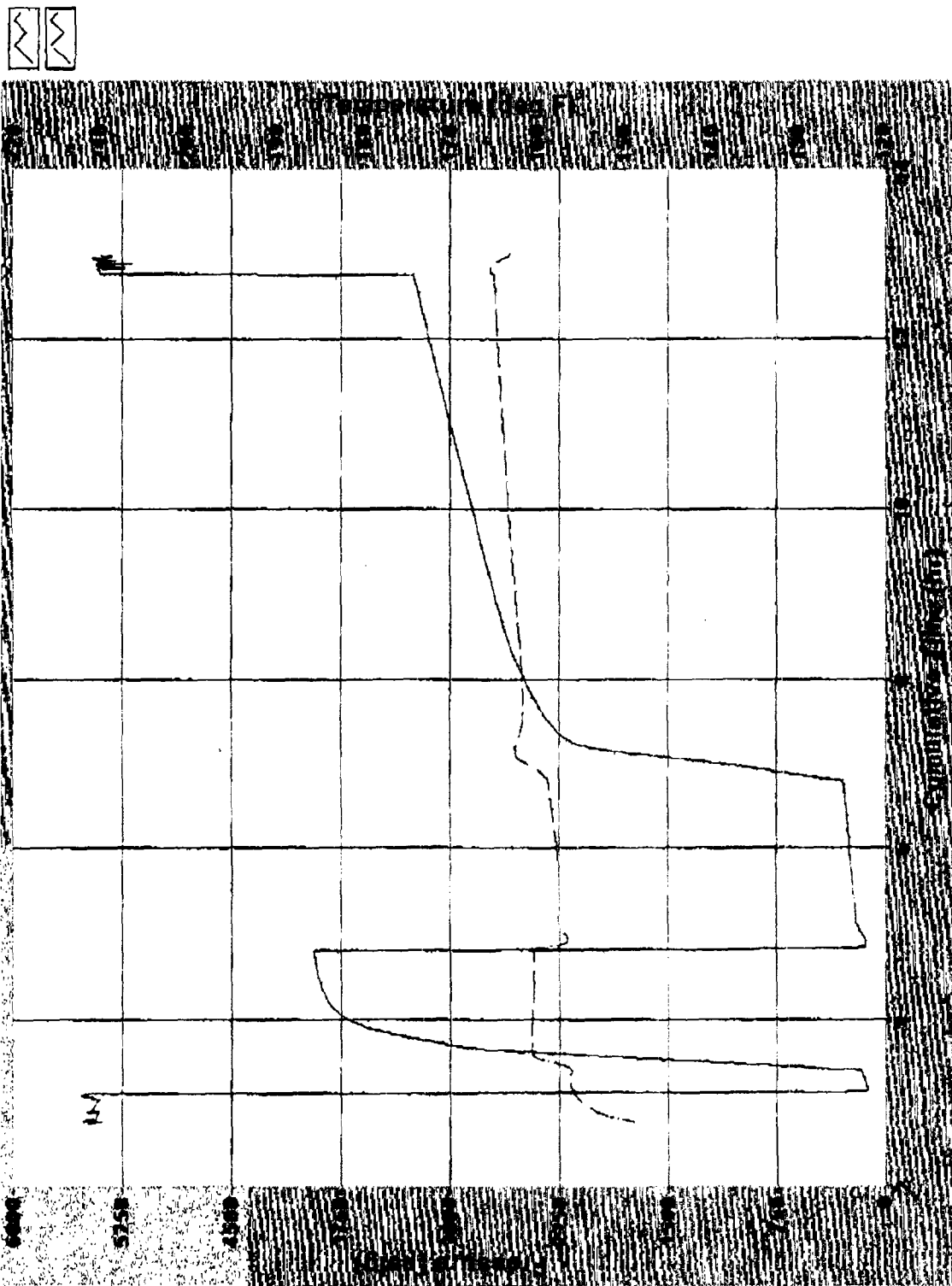
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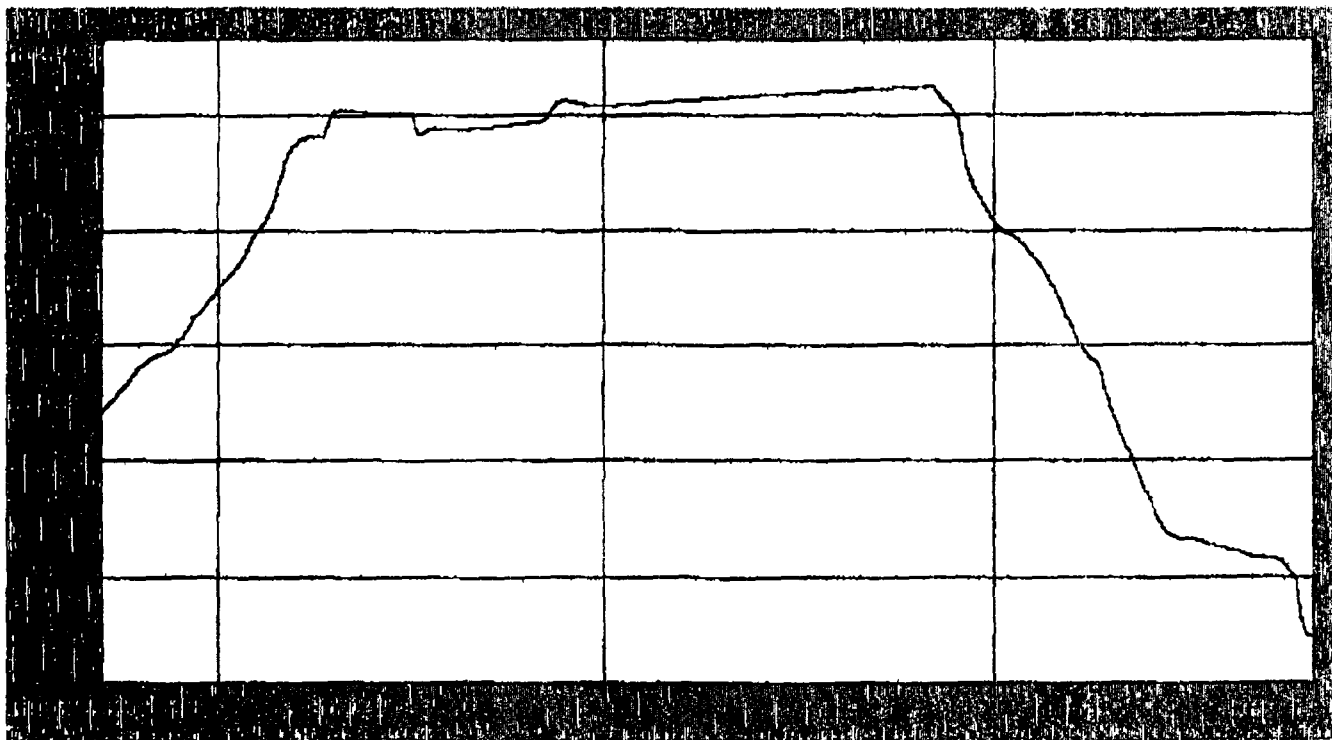
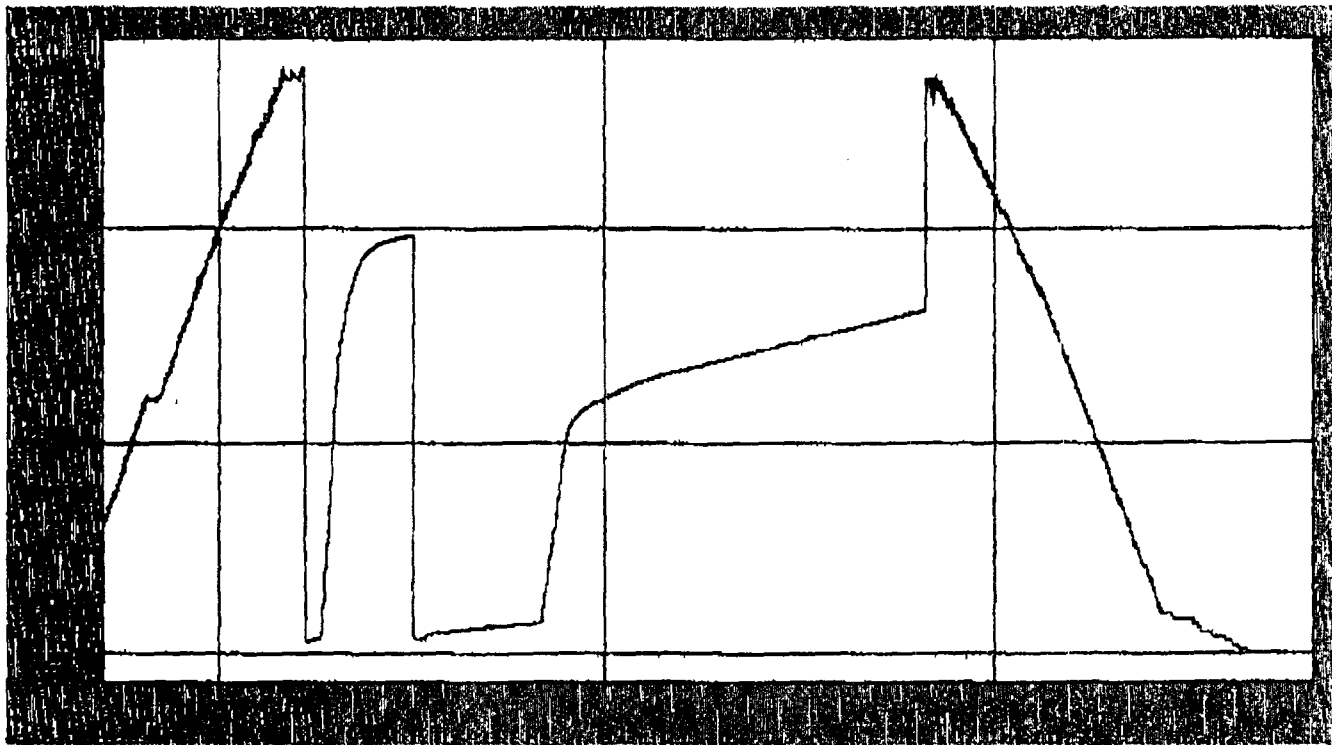
Well Name

Well Location

Date(s) of Test

Pressure vs Time







Baker Oil Tools

MANZANO OIL CORPORATION

CAYUMA 1-A

ST/18SR36E

2/15/00

Company Name

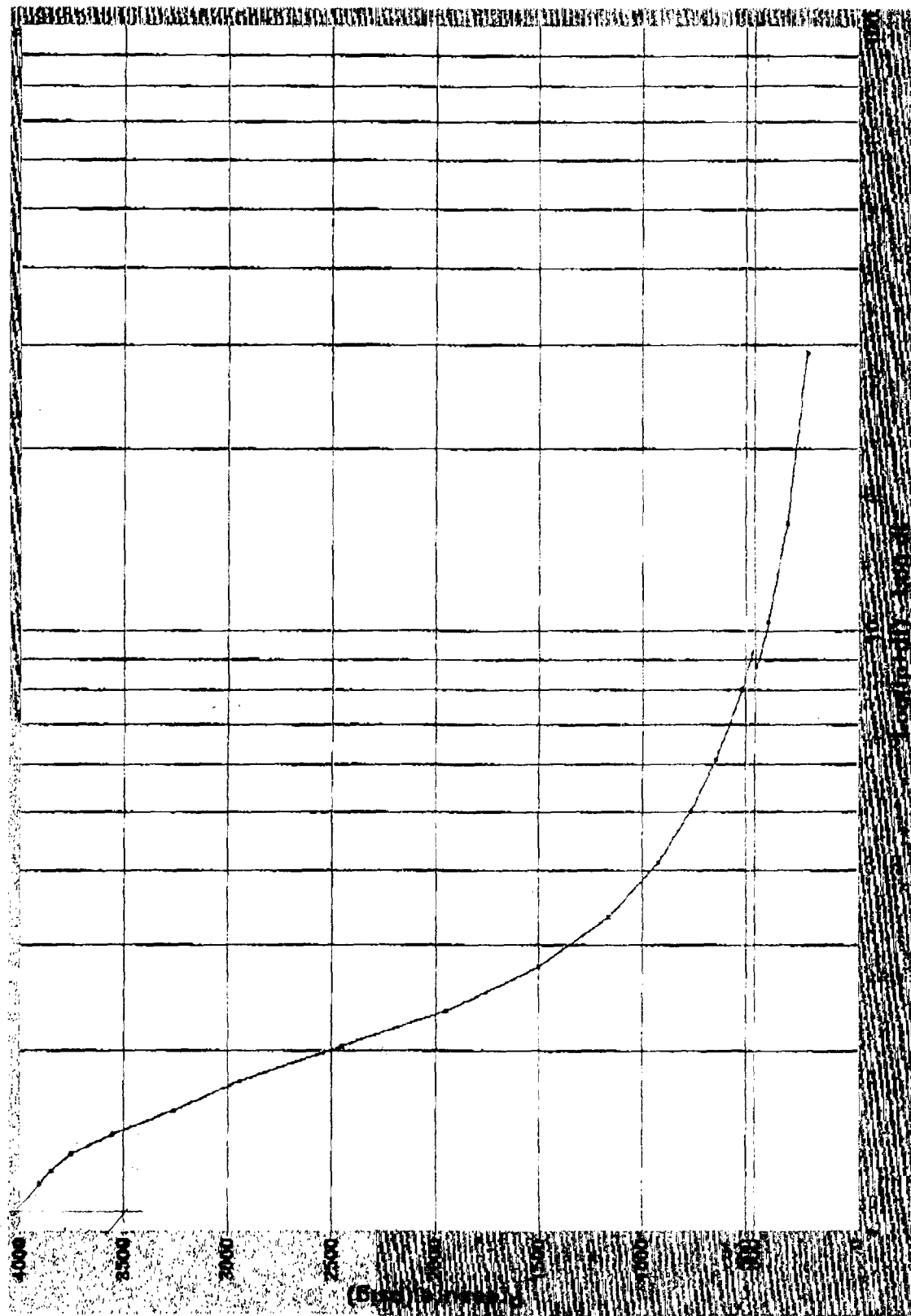
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Horner Pressure 1





Baker Oil Tools

MANZANO OIL CORPORATION

CAYUMA 1-A

SIT 16SR38E

2/15/00

Company Name

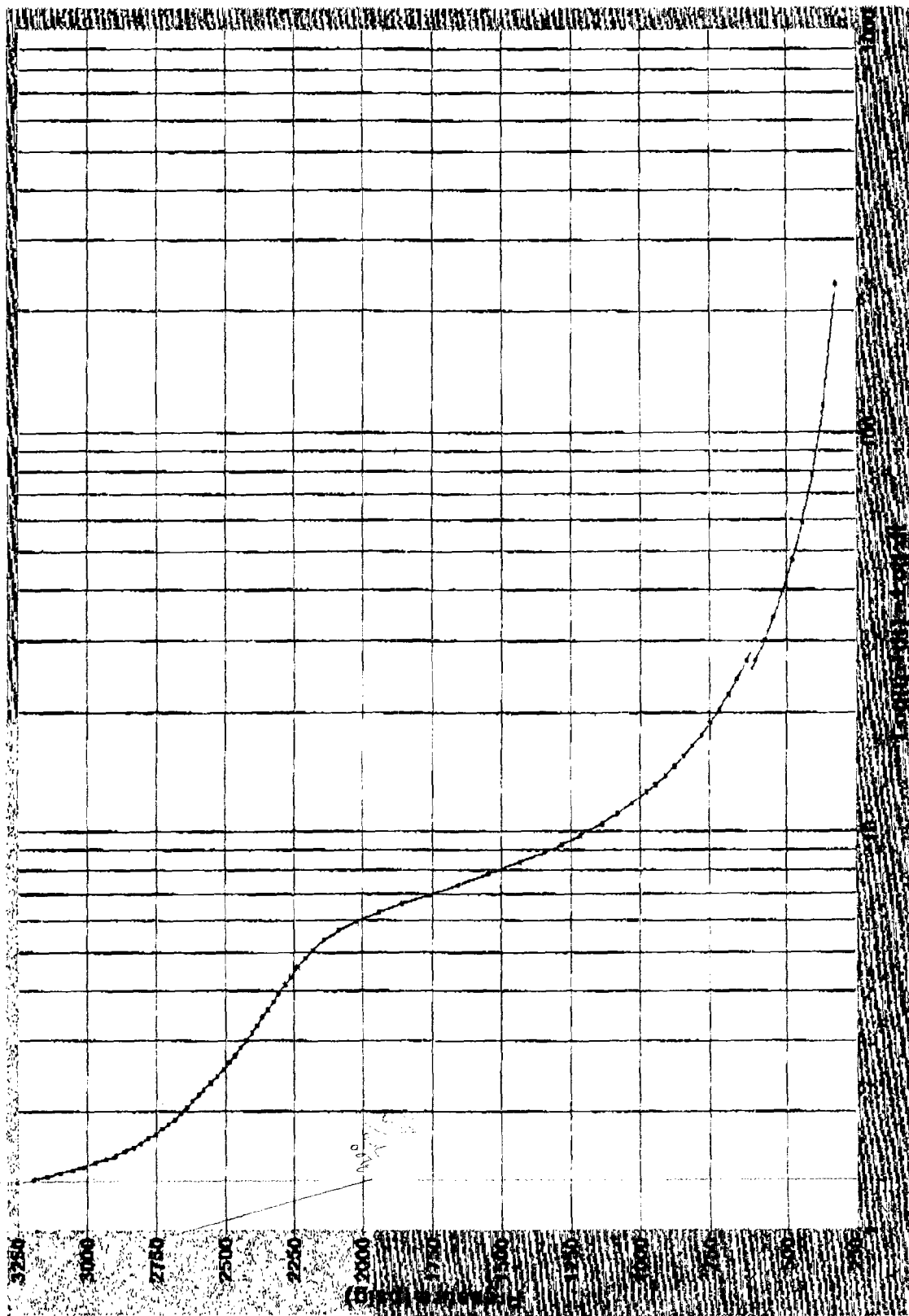
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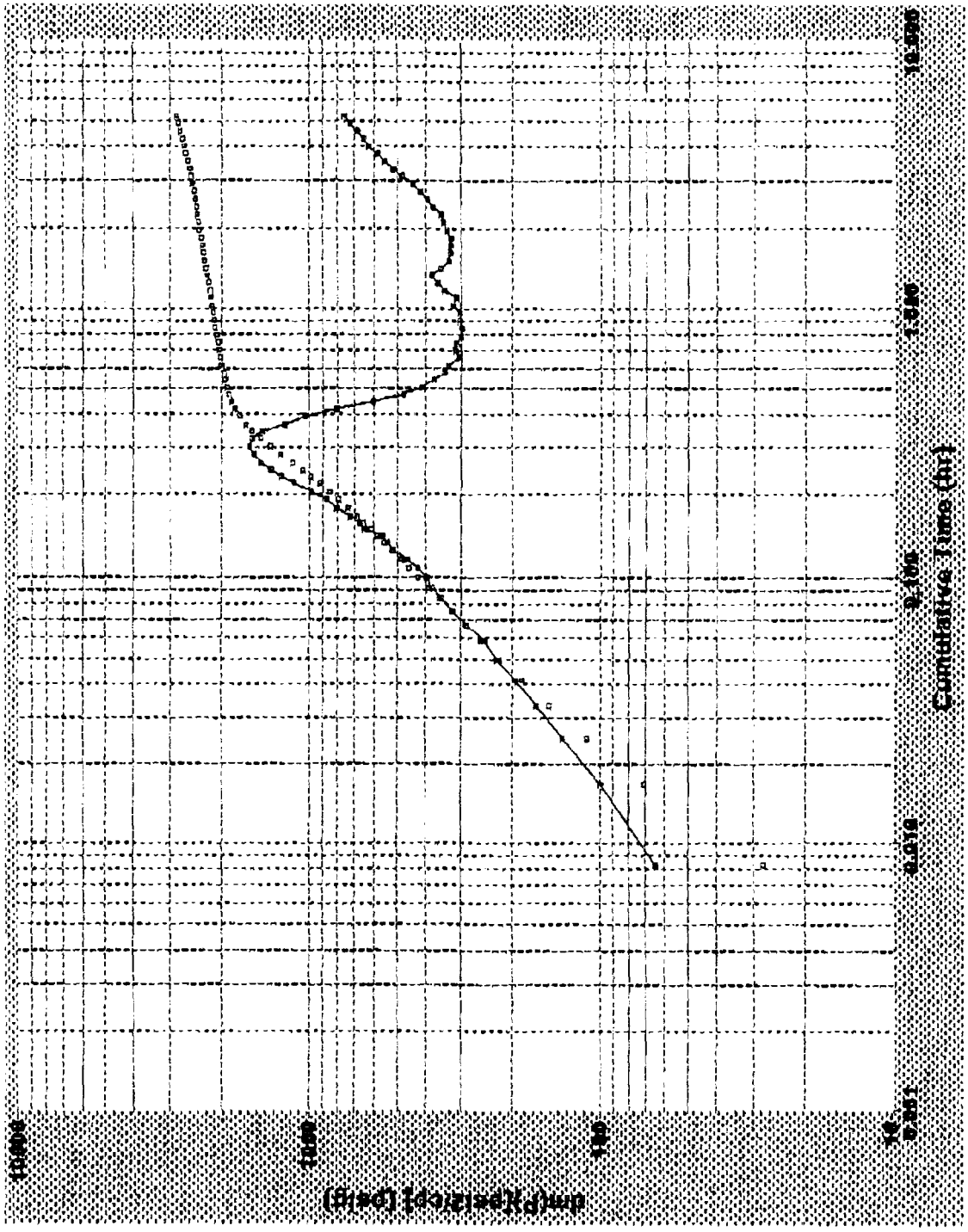


Horner Pressure 2





Derivative Graph



Deriv Pres 1
 Deriv Pres 1

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2/18/2000 Day #28. TD 11,770. Pres Oper: LD drill pipe & drill collars. Prep to run 5-1/2" csg. Mud Wt 9.0, Vis 39, WL 16, pH 10, Cl 2900 ppm.

6-1/2 hrs WOO; 4-1/2 hrs trip; 5 hrs circl, unload and rack csg; 8 hrs LD drill pipe & drill collars.

Fresh Wtr Hauled	1 Loads	Cum Fresh Wtr	63 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$19,300
Daily Cost	\$ 6,900	Cum Cost	\$398,900

2/19/2000 Day #29. TD 11,770'. Pres Oper: Rigging down. **RELEASED RIG @ 11:00 P.M. 2/18/2000.**

3/4 hr LD drill pipe & drill collars; 10-1/4 hrs run csg & cement; 2 hrs rig down and set slips; 3 hrs jet pits; 8 hrs rig down.

Fresh Wtr Hauled	1 Loads	Cum Fresh Wtr	63 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$19,300
Daily Cost	\$94,000	Cum Cost	\$492,900

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2/17/2000 Day #27. TD 11,770'. Ls. Pres Oper: WOO. Mud Wt 9.0, Vis 42, WL 15, pH 10, Cl 2900 ppm.
4 hrs DST #1; 1/2 hr load out tsg tools; 6 hrs trip; 4 hrs wait on loggers; 6-3/4 hrs logging; 2-3/4 hrs WOO.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 62 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$19,300
Daily Cost \$25,400 Cum Cost \$392,000

DST #2: STRAWN 11,610-770' W/DRLG BKS 11,632-38' & 11,672-76'

IH: 5420 psi
IF (15 min): 113 psi -159 psi: Open tool on 1/8" bubble hose w/very strong blow. Had 6.4 psi in 5 min; 13 psi in 10 min and 18.5 psi in 15 min.
ISI (1-1/2 hrs): 3933 psi: Pressure broke over but building. Gas to surface 6 min after SI.
FF (2 hrs): 126 psi - 299 psi: p* 4050 psi (Horner Plot).
Open tool on 1/4" choke w/immed blow to bottom of bucket. Had 14.5 psi in 5 min; 18 psi in 10 min and 21-1/4 psi in 20 min. Incr approx 1-1/2 psi per 10 min until reaching 27 psi in 70 min. Max press 27-1/4 psi in 90 min. Last 15 min of flow period pressure was 26-3/4 psi to 27 psi. Avg gas rate at surface 61 MCFGPD.
FSI (6 hrs): 3248 psi: Pressure building.
FH: 5407 psi p* 4000 psi (Horner Plot).

Pipe Recovery: 871.8' (5.64 bbls) of total fluid as follows:
1. Top 83.5' (1.19 bbls) of free 43.2° gravity oil.
2. Middle 483.7' (2.96 bbls) of highly oil & gas cut mud.
3. Lower 304.6' (1.49 bbls) of sli oil & highly gas cut mud.

Sampler Recovery:
Total recovery - 1250 cc consisting of 1150cc of 43° API gravity oil and 100 cc of mud. No formation water. 1.09 cu.ft. gas @ 260 psi. Reservoir temp 165° F.

Test was mechanically successful.

DAILY DRILLING REPORT

Cayuma #1-A
Cayuma Prospect
3580' FSL & 990' FWL
Sec 1, T16S, R36E
Lea County, New Mexico
GL 3879' KB 3894'

Manzano Oil Corporation
Phone: (505) 623-1996
Fax: (505) 625-2620
Dry Hole Cost \$222,900
Completion Cost 232,900
Total Est AFE \$455,800

2/16/2000 Day #26. TD 11,770'. Ls. Cut 20'/1-3/4 hrs. Pres Oper: Final SI period of DST #2: Strawn Interval 11,610-770 = 160'. Mud Wt 9, Vis 42, WL 16, pH 10, cake 2/32, Cl 2900 ppm, Nit 67. Bit #7 - 7-7/8" HR50. Out @ 11,770'. Cut 797'/93-1/2 hrs. WOB 40k# @ 45 RPM. PP 1500 psi @ 59 SPM.
1-3/4 hrs drlg; 4-3/4 hrs circl; 8-3/4 hrs trip; 1 hr LD bottom hole collar; 1-1/2 hrs makeup tsg tool; 6-1/4 hrs DST #2.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 62 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 900 Cum Mud Cost \$19,300
Daily Cost \$13,900 Cum Cost \$366,600

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,730'	13.6°	50.6°	221°N 182°E
11,770'	13.6°	50.6°	227°N 190°E

DST #2: Strawn 11,610-770' w/drlg bks 11,632-38' & 11,672-76':
Open on 1/8" bubble hose w/strong blow. Had 18-1/2 psi in 15 min. SI for 1-1/2 hrs. Had gas to surface 6 min after SI. Open for 2 hrs final flow on 1/4" choke. Bottom of bucket immediately. In 5 min had 14-1/2 psi. Incr to max of 27-1/4 psi in 1-1/2 hrs. Last 15 min of period pressure was 26-3/4 psi to 27 psi. SI for 6 hrs SI period. Will not know any more until 7:00 p.m. this evening.

*From
Surface
Location*

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2/13/2000 Day #23. Tripping for motor @ 11,389'. Sh. Cut 119'/15 hrs. Mud Wt 8.9, Vis 38, WL 16, pH 10, Cl 2600 ppm. Bit #7 - 7-7/8" HR50. Cut 416'/50 hrs. WOB 45k# @ 30 RPM. PP 1400 psi @ 59 SPM. 15 hrs drlg; 6-1/2 hrs trip; 2-1/2 hrs change out bottom hole motor.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 60 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 200 Cum Mud Cost \$18,200
Daily Cost \$12,600 Cum Cost \$326,900

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,288'	17.2°	46.5°	145°N 97°E
11,317'	16.8°	48.3°	151°N 104°E

2/14/2000 Day #24. Drlg @ 11,481'. Ls & Sh. Cut 92'/17-1/4 hrs. Mud Wt 8.9, Vis 38, WL 17, pH 10.8, Cl 3000 ppm. Bit #7 - 7-7/8" HR50. Cut 508'/67-1/4 hrs. WOB 40-45k# @ 40 RPM. PP 1400 psi @ 59 SPM. When rotating making about 8'/hr. When sliding making about 4'/hr. Has been rotating only 1/4 of time. Worst case scenario will hit target 205°N and 165°E of surface location. 17-1/4 hrs drlg; 1/4 hr survey; 3-3/4 hrs trip; 1/4 hr wash to bottom; 2-1/2 hrs rig repair.
Fresh Wtr Hauled 2 Loads Cum Fresh Wtr 62 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$18,200
Daily Cost \$12,700 Cum Cost \$339,600

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,378'	16.2°	49.7°	162°N 117°E
11,441'	15.7°	48.1°	174°N 130°E

2/15/2000 Day #25. Drlg @ 11,750'. Ls. Cut 269'/23-1/2 hrs. Mud Wt 8.9, Vis 43, WL 14, pH 10, Cl 3000 ppm, Nit 62. Bit #7 - 7-7/8" HR50. Cut 777'/91-3/4 hrs. WOB 40k# @ 45 RPM. PP 1500 psi @ 59 SPM. 23-1/2 hrs drlg; 1/2 hr survey.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 62 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 200 Cum Mud Cost \$18,400
Daily Cost \$13,100 Cum Cost \$352,700

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,513'	15.0°	47.2°	186°N 144°E
11,566'	13.9°	46.6°	196°N 154°E
11,629'	13.2°	49.1°	205°N 165°E
11,693'	13.4°	48.8°	215°N 176°E

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2/10/2000 Day #20. Drlg w/motor @ 10,955'. Ls & Sh. Cut 251'/24 hrs. Mud Wt 8.9, Vis 37, WL 16, cake 2/32, pH 10, Cl 3000 ppm. Bit #6 - 7-7/8" HR50. Cut 398'/37 hrs. WOB 25-40k# @ 40 RPM. PP 1400 psi @ 59 SPM.

24 hrs drlg, sliding & turning.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	57 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ 1,200	Cum Mud Cost	\$17,300
Daily Cost	\$13,700	Cum Cost	\$284,500

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
10,696'	7.7°	70.7°	74°N 2'E
10,759'	8.7°	69.2°	77°N 11'E
10,821'	9.0°	60.6°	81°N 19'E
10,883	10.2°	53.2°	86°N 28'E

2/11/2000 Day #21. Drlg @ 11,105'. Ls & Sh. Cut 150'/14-1/4 hrs. Mud Wt 9.0, Vis 36, WL 15, pH 10, Cl 2990 ppm. Bit #6 - 7-7/8" HR50. Out @ 10,973'. Cut 416'/40-1/4 hrs. Bit #7 - 7-7/8" HR50. In @ 10,973'. Cut 132'/11 hrs. WOB 25-40k# @ 40 RPM. PP 1400 psi @ 59 SPM.

14-1/4 hrs drlg; 8-3/4 hrs trip; 1 hr change out MWD.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	57 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$17,300
Daily Cost	\$16,200	Cum Cost	\$300,700

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
10,946'	11.0°	52.1°	94°N 37'E
11,007'	11.6°	52.7°	101°N 47'E

2/12/2000 Day #22. Drlg @ 11,270'. Sh. Cut 165'/24 hrs. Mud Wt 8.9, Vis 38, WL 16, pH 10, Cl 2700 ppm. Bit #7 - 7-7/8" HR50. Cut 297'/35 hrs. WOB 45k# @ 30 RPM. PP 1400 psi @ 59 SPM.

24 hrs drlg.

Fresh Wtr Hauled	3 Loads	Cum Fresh Wtr	60 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ 700	Cum Mud Cost	\$18,000
Daily Cost	\$13,600	Cum Cost	\$314,300

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,071'	12.2°	52.3°	109°N 57'E
11,132'	13.4°	51.3°	117°N 68'E
11,164'	13.7°	49.5°	122°N 73'E
11,224'	15.7°	44.5°	134°N 85'E

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Completion Cost 232,900
Total Est AFE \$455,800

2/06/2000 Day #16. TD 11,860'. Pres Oper: WOC. TOOH w/drill pipe. Set 245 sks Cl H cement plug (wt 18.0#/sk, yield 0.89 cu.ft./sk) from 11,700' back to 11,400'. Plug down 4:00 a.m. 2/06/2000. SD pressure 240 psi.
2-1/2 hrs logging 13-1/2 hrs trip; 2 hrs circl; 1/2 hr ream & wash to bottom; 3 hrs WOC; 1-1/2 hrs WOO; 1 hr set cement plug.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 53 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 14,100
Daily Cost \$29,600 Cum Cost \$235,100

2/07/2000 Day #17. Drlg cement plug @ 10,494' w/wtr. TIH. Tag cement plug @ 10,376'. Drill 118' of cement. Bit #5 is Rerun Bit #1 - 7-7/8" OSC w/3-16 jets. Cut 118'/2 hrs. WOB 15k# @ 60 RPM. PP 800 psi @ 59 SPM.
21 hrs WOC; 1 hr circl heavy mud; 2 hrs dress plug.
Fresh Wtr Hauled 4 Loads Cum Fresh Wtr 57 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 14,100
Daily Cost \$ 6,900 Cum Cost \$242,000

2/08/2000 Day #18. Circl and cond mud @ 10,557'. Shale. Cut 63'. Dressed cement plug to 10,500'. Bit started torquing. By 10,507' was drilling formation. TOOH to run survey @ 10,536' = 1.8° - Azimuth 44.5°; 69' North and 8' West of surface hole. Mud Wt 8.9, Vis 43, WL 26, pH 10, Cl 2500 ppm. Bit #5 - 7-7/8" OSC w/3-16 jets. Out @ 10,557'. Cut 181'. WOB 15-25k# @ 60 RPM. PP 800 psi @ 59 SPM.
4 hrs dress off cement plug; 7-1/2 hrs trip; 1-1/4 hrs ream 50' to bottom; 2 hrs circl bottoms up; 1 hr circl and displace hole w/mud; 1-1/2 hrs pick up Monel collar & MWD motor; 1-3/4 hrs circl for survey; 5 hrs circl and cond mud.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 57 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 2,000 Cum Mud Cost \$ 16,100
Daily Cost \$14,800 Cum Cost \$256,800

2/09/2000 Day #19. Drlg w/ motor @ 10,704'. Cut 147'/13 hrs. Ls & Sh. Mud Wt. 8.9, Vis 45, ph 11, WL 11, Cl 3200 ppm. Bit # 6 - 7-7/8" HR50 w/3-16 jets. In @ 10,557'. Cut 147'/13 hrs. WOB 35-40k @ 40 RPM. PP 1400 psi @ 59 SPM.
13 hrs drlg; 1/2 survey; 6-3/4 hrs trip; 1 hr ream 50' thru kick off; 1 hr cut drlg line; 1-3/4 hrs pickup down hole motor & tsq.
Fresh Wtr Hauled 3 Loads Cum Fresh Wtr 60 Load
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 16,100
Daily Cost \$14,000 Cum Cost \$270,800

Depth	Inclination	Azimuth	Coordinates
10,536'	1.8°	44.5°	69'N 8'W
10,571'	1.9°	46.8°	70'N 7'W
10,632'	4.3°	69.8°	72'N 4'W

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 Dry Hole Cost \$222,900
 Completion Cost 232,900
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2/06/2000 Day #16. TD 11,860'. Pres Oper: WOC. TOOH w/drill pipe. Set 245
 sks Cl H cement plug (wt 18.0#/sk, yield 0.89 cu.ft./sk) from
 11,700' back to 11,400'. Plug down 4:00 a.m. 2/06/2000. SD
 pressure 240 psi.
 2-1/2 hrs logging 13-1/2 hrs trip; 2 hrs circl; 1/2 hr ream & wash
 to bottom; 3 hrs WOC; 1-1/2 hrs WOO; 1 hr set cement plug.
 Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 53 Loads
 Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
 Daily Mud Cost \$ -0- Cum Mud Cost \$ 14,100
 Daily Cost \$29,600 Cum Cost \$235,100

2/07/2000 Day #17. Drlg cement plug @ 10,494' w/wtr. TIH. Tag cement plug
 @ 10,376'. Drill 118' of cement. Bit #5 is Rerun Bit #1 - 7-7/8"
 OSC w/3-16 jets. Cut 118'/2 hrs. WOB 15k# @ 60 RPM. PP 800 psi @
 59 SPM.
 21 hrs WOC; 1 hr circl heavy mud; 2 hrs dress plug.
 Fresh Wtr Hauled 4 Loads Cum Fresh Wtr 57 Loads
 Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
 Daily Mud Cost \$ -0- Cum Mud Cost \$ 14,100
 Daily Cost \$ 6,900 Cum Cost \$242,000

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2/04/2000 DST #1: Strawn Interval 11,590-11,666' = 76'
Drilling Break 11643-656' = 13'

IH: 5415 psi
IF (15 min): 116 psi - 154 psi: Open tool on 1/8" bubble hose w/strong blow. Bottom of bucket in 1 min. Had 2-1/2 psi in 3 min. Steady incr to 8-1/2 psi end of period.
ISIP (2 hrs): 4036 psi: Gas to surface 30 min after SI. Pressure broke over and flat. p* 4100 psi.
FF (2 hrs): 155 psi - 237 psi: Open well on 1/8" bubble hose. Strong blow bottom of bucket in 30 sec; 8 psi in 3 min; 11 psi in 10 min; 13 psi in 15 min. Had 1 psi/5 min to 19-1/2 psi after 40 min of flow. Incr choke to 1/4". Press incr to max of 25 psi after 55 min of flow then slow decr to 23-1/2 psi at end of flow period. Max gas rate 53 MCFGPD.
FSI (6 hrs): 3995 psi: Pressure broke over and flat. p* 4100 psi.
FH: 5397 psi

Pipe Recovery: 551' (2.7 bbls) of total fluid as follows:
(1) Top 271' (1.33 bbls) of very sli oil & gas cut mud.
(2) Middle 190' (0.93 bbls) of heavy oil & gas cut mud.
(3) Bottom 90' (0.44 bbls) of free oil.

Sampler Recovery:
Total recovery - 1300 cc consisting of 800 cc of 42° API gravity oil and 500 cc of heavy oil and gas cut mud. No fm wtr. 0.4 cu.ft. gas @ 130 psi. Reservoir temp 169° F.

Test was mechanically successful.
Total analysis this p.m.

2/05/2000 Day #15. TD 11,860'. Pres Oper: Logging. Sh, Sd & Ls. Cut 65'/5-3/4 hrs. Mud Wt 9.0, Vis 43, WL 10, pH 10, Cl 3600 ppm. Bit #4 - 7-7/8" Hughes HR50. Out @ 11,860'. Cut 735'/70 hrs. WOB 60k# @ 60 RPM. PP 1450 psi @ 59 SPM.
5-3/4 hrs drlg; 5-1/4 hrs trip; 5-1/2 hrs circl; 7-1/2 hrs logging.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 53 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 2,000 Cum Mud Cost \$ 14,100
Daily Cost \$ 8,800 Cum Cost \$205,500

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2/02/2000 Day #12. Pres Depth 11,665'. Circl for DST #1: Interval 11,590-665' = 75'. Top of Strawn 11,606'. Ls. Cut 210'/18-1/4 hrs. Mud Wt 9.0, Vis 45, WL 10, pH 10, Cl 4700 ppm, Nit 100. Bit #4 - 7-7/8" Hughes HR50. Out @ 11,665'. Cut 540'/53-1/2 hrs. WOB 60k# @ 60 RPM. PP 1300 psi @ 50 SPM.
18-1/4 hrs drlg; 1-3/4 hrs survey; 4 hrs circl.
Fresh Wtr Hauled 2 Loads Cum Fresh Wtr 53 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 100 Cum Mud Cost \$ 11,100
Daily Cost \$ 6,700 Cum Cost \$177,200

Surveys:

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,595'	1.00	129	69'N 2'E

2/03/2000 Day #13. Pres Depth 11,665'. Pres Oper = POOH with DST #1 - no footage. MW 9.0, Vis 41, WL 12, pH 10, Cl 4200 ppm.
Trip 10-1/4 hrs; Circl 1/2 hr; Unload & make up test tools 2-1/4 hrs; DST #1 11 hrs.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 53 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 1,000 Cum Mud Cost \$ 12,100
Daily Cost \$11,800 Cum Cost \$189,000

DST #1 - Open on a 1/8 bubble hose 15 mins. Surf pressure 8-1/2 psi - end of flow period. SI - 2 hrs. Gas to surface 30 mins into SI. Open on 1/8 inch bubble hose - increase to 1/4 inch choke - flowed 2 hrs. Maximum pressure 25 psi. Decrease to 23-1/2 psi - end of flow period.

2/04/2000 Day #14. Drlg @ 11,795'. Ls & Sd. Cut 130'/10-3/4 hrs. No surveys. Mud Wt 8.9, Vis 43, WL 10, pH 10, Cl 4200 ppm. Bit #4 - 7-7/8" Hughes HR50. Cut 670'/64-1/4 hrs. WOB 60k# @ 60 RPM. PP 1450 psi @ 59 SPM.
10-3/4 hrs drlg; 8 hrs trip; 3/4 hr ream & wash to bottom; 1/2 hr circl; 4 hrs bk out & load DST tools.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 53 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 12,100
Daily Cost \$ 7,700 Cum Cost \$196,700

DST #1: Strawn Interval 11,590-11,666' = 76'
Drilling Break 11643-656' = 13'

RESULTS ON FOLLOWING PAGE.

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1/29/2000 Day #8. Drlg @ 10,835'. Ls & Sh. Cut 377'/12-1/2 hrs. Mud Wt 8.4, Vis 28, pH 10, Cl 4500 ppm. Bit #3 - 7-7/8" Hughes HR44C. Cut 1527'/60-3/4 hrs. WOB 60k# @ 60 RPM. PP 1400 psi @ 59 SPM. 12-1/2 hrs drlg; 1 hr survey; 8-3/4 hrs trip for parted slick line; 3/4 hr wash to bottom. Had 90' of fill; 1 hr cut drlg line.

Fresh Wtr Hauled	1 Load	Cum Fresh Wtr	51 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ 500	Cum Mud Cost	\$ 1,300
Daily Cost	\$ 6,800	Cum Cost	\$134,000

1/30/2000 Day #9. TOOH @ 11,125'. Ls & Sh. Cut 290'/11-1/2 hrs. Mud Wt 8.6, Vis 40, WL 10, pH 10, Cl 3800 ppm. Bit #3 - 7-7/8" Hughes HR44C. Out @ 11,125'. Cut 1817'/72-1/4 hrs. WOB 60k# @ 60 RPM. PP 1400 psi @ 59 SPM. 11-1/2 hrs drlg; 3/4 hr survey; 1-3/4 hrs trip for bit; 8-1/4 hrs circl and mudding up; 1-3/4 hr work stuck drill pipe.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	51 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ 8,300	Cum Mud Cost	\$ 9,600
Daily Cost	\$15,400	Cum Cost	\$149,400

1/31/2000 Day #10. Drlg @ 11,250'. Ls & Sh. Cut 125'/13-1/4 hrs. Mud Wt 8.7, Vis 40, WL 9.6, Solids 2.5, Cake 1/32, pH 10, Cl 3800 ppm. Bit #4 - 7-7/8" Hughes HR50 w/1-12 and 2-13 jets. In @ 11,125'. Cut 125'/13-1/4 hrs. WOB 60k# @ 60 RPM. PP 1300 psi @ 59 SPM. 13-1/4 hrs drlg; 8 hrs trip for bit - LD reamers; 2-3/4 hrs wash and ream 150' to bottom - last 15' out of gauge.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	51 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$ 9,600
Daily Cost	\$12,900	Cum Cost	\$162,300

Surveys:

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
10,661'	0.50	29	69'N 8'W
10,944'	0.75	34	72'N 7'W

2/01/2000 Day #11. Drlg @ 11,455'. Sh. Cut 205'/22 hrs. Mud Wt 8.9, Vis 45, WL 10, pH 10, Nit 120, Cl 4500 ppm. Bit #4 - 7-7/8" Hughes HR50. Cut 330'/35-1/4 hrs. WOB 60k# @ 60 RPM. PP 1300 psi @ 59 SPM. 22 hrs drlg; 1-1/2 hr survey; 1/2 hr rig repair.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	51 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ 1,400	Cum Mud Cost	\$ 11,000
Daily Cost	\$ 8,200	Cum Cost	\$170,500

Surveys:

<u>Depth</u>	<u>Inclination</u>	<u>Azimuth</u>	<u>Coordinates</u>
11,282'	1.00	119	72'N 3'W

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1/26/2000 Day #5. Drlg @ 9355'. Dol. Cut 63'/9 hrs. Mud Wt 8.5, Vis 28, pH 12.5, Cl 20k ppm. Bit #2 - Diamond. In @ 9257'. Out @ 9308'. Cut 51'/33-1/2 hrs. Bit #3 - 7-7/8" Hughes HR44C w/3-12 jets. In @ 9308'. Cut 47'/4-1/2 hrs. WOB 40k# @ 60 RPM. PP 1350 psi @ 59 SPM. Have 30' drill collars - 870' - 64k#, BHA - bit, Monel collar, 2 drill collars, roller reamer, drill collar, reamer, 27 drill collars, drill pipe.

9 hrs drlg; 8-1/2 hrs trip; 1-3/4 hrs wash & ream to bottom; 1/2 hr circl; 1-1/2 hrs jet pits, switch to fresh wtr; 2-3/4 hrs rig repair.

Fresh Wtr Hauled	8 Loads	Cum Fresh Wtr	41 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$ 800
Daily Cost	\$ 14,400	Cum Cost	\$111,700

1/27/2000 Day #6. Drlg @ 9840'. Dol. Cut 485'/21-1/2 hrs. Mud Wt 8.5, Vis 28, pH 10, Cl 7000 ppm. Bit #3 - 7-7/8" Hughes HR44C. In @ 9308'. Cut 532'/26 hrs. WOB 60k# @ 60 RPM. PP 1350 psi @ 59 SPM. 21-1/2 hrs drlg; 2-1/2 hrs survey.

Fresh Wtr Hauled	0 Loads	Cum Fresh Wtr	41 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$ 800
Daily Cost	\$ 7,300	Cum Cost	\$119,000

Surveys:

Depth	Inclination	Azimuth	Coordinates
9,200'	0.93	220	57'N 30'W
9,351'	1.75	60	58'N 28'W
9,704'	1.50	80	61'N 19'W

1/28/2000 Day #7. Drlg @ 10,458'. Ls & Sh. Cut 618'/22-1/4 hrs. Mud Wt 8.4, Vis 28, pH 10. Bit #3 - 7-7/8" Hughes HR44C. Cut 1150'/48-1/4 hrs. WOB 60k# @ 60 RPM. PP 1400 psi @ 59 SPM. 22-1/4 hrs drlg; 1-3/4 hr survey.

Fresh Wtr Hauled	9 Loads	Cum Fresh Wtr	50 Loads
Brine Wtr Hauled	0 Loads	Cum Brine Wtr	0 Loads
Daily Mud Cost	\$ -0-	Cum Mud Cost	\$ 800
Daily Cost	\$ 8,200	Cum Cost	\$127,200

Surveys:

Depth	Inclination	Azimuth	Coordinates
10,038'	0.75	40	64'N 13'W
10,378'	0.75	49	67'N 10'W

DAILY DRILLING REPORT

Cayuma #1-A
Cayuma Prospect
3580' FSL & 990' FWL
Sec 1, T16S, R36E
Lea County, New Mexico
GL 3879' KB 3894'

Manzano Oil Corporation
Phone: (505) 623-1996
Fax: (505) 625-2620
Dry Hole Cost \$222,900
Completion Cost 232,900
Total Est AFE \$455,800

1/21/2000 Day #1. Pres Oper: Picking up drill pipe @ 1400'. Bit #1 - 7-7/8" Rerun with 3/16 jets. PP 300 psi @ 60 SPM. Have 6 - 6" drlg collars - 180' - 12k#. 9 hrs MI & RU; 9 hrs weld on wellhead - nipple up BOP. Tsg to 1500 psi - OK; 6 hrs pick up drlg collars & drlg pipe. Drlg surface plug and cement plug from 412 - 512'.
Fresh Wtr Hauled 10 Loads Cum Fresh Wtr 10 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 500 Cum Mud Cost \$ 500
Daily Cost \$ 52,000 Cum Cost \$ 52,000

1/22/2000 Day #2. Pres Oper: TIH open ended. Prep to set cement kick-off plug. Total clean out depth 9408'. Mud Wt 8.5, Vis 28. 13-1/2 hrs pick up drill pipe and clean out to 9208'; 3 hrs circl hole clean; 7-1/2 hrs trip - stand back drill collars & TIH open ended.
Fresh Wtr Hauled 17 Loads Cum Fresh Wtr 27 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 500
Daily Cost \$ 8,500 Cum Cost \$ 60,500

1/23/2000 Day #2. Pres Oper: WOC. Total clean out depth 9403'. Set 125 sk Class H cement plug @ 9402' (Wt 18.0#/sk; yield 0.89 cf/sk). POOH and WOC. 2-3/4 hrs trip; 1-1/2 hrs circl; 1/2 hr set cement plug; 19-1/4 hrs WOC.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 27 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 500
Daily Cost \$ 11,800 Cum Cost \$ 72,300

1/24/2000 Day #3. Pres Oper: Drill kick-off hole @ 9262' w/bottom hole motor. Mud Wt 8.6, Vis 28, pH 11, Cl 22k ppm. Past 24 hr oper: TIH. Tag plug @ 9178'. (Have 224' plug.) Dress off plug to 9257'. Circl clean. POOH. Pick up kick-off motor. TIH. Drill kick-off hole from 9257' to 9262' = 5' in 5 hrs. Have 30' - 6" drill collars - 870' @ 64k#. 5 hrs drlg; 10 hrs trip; 1/2 hr wash to bottom; 2-3/4 hrs circl; 1 hr WOC; 1-1/2 hrs dress off plug; 3/4 hr pick up motor; 2-1/2 hrs orient tool due east.
Fresh Wtr Hauled 6 Loads Cum Fresh Wtr 33 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ 300 Cum Mud Cost \$ 800
Daily Cost \$ 14,300 Cum Cost \$ 86,600

1/25/2000 Day #4. Drlg @ 9292' w/down hole motor. 100% Dol. 3 FPH. Cut 30'/24 hrs. Mud Wt 8.6, Vis 28, pH 12. Bit #2 - Diamond. Cut 35'/29 hrs. WOB 10k# @ 450 RPM. PP 1350 psi @ 60 SPM. 24 hrs drlg.
Fresh Wtr Hauled 0 Loads Cum Fresh Wtr 33 Loads
Brine Wtr Hauled 0 Loads Cum Brine Wtr 0 Loads
Daily Mud Cost \$ -0- Cum Mud Cost \$ 800
Daily Cost \$ 10,700 Cum Cost \$ 97,300