

7/10/98 MIRU I&W pump truck. Ran mechanical integrity test for 1 hr on csy to 500# while disposal pump running. TP 1000#.



4/28/98 MIRU Tyler Well Service. ND wellhead, NU BOP, PU & RIH w/ 100 jts 2 7/8" tbg. Circulated well w/ 85 bbls 2% KCL w/ 1% by volume packer fluid. POOH w/ tbg. RIH w/ production tbg and packer as follows:

\$57,320

Tubing: Ran tubing as follows:

| <u>Description</u> | | <u>Length</u> | <u>Depth</u> |
|--|----------------------------------|---------------|--------------|
| Below Kelly Bushing | | 8.00 | |
| Bottom of Packer | | | 3171.45 |
| Top of Packer | | | 3164.45 |
| 100 | 2 7/8" J 55 plastic coated tbg | | 3156.45 |
| | 1 2 7/8" x 5 1/2" Model R Packer | | 7.00 |
| ND BOP. Set packer w/ 15 pts compression. NU well head. Tested csg and packer to 500# (held ok). RD Tyler Well service. | | | |

5/7/98 MI and built cmt forms for pump house foundation. SDFD.

\$57,320

5/28/98 Finished building pump house. Started plumbing in Tri-plex pump. Built tie-downs. Bolted Tri-plex pump to cmt floor.

\$57,320

5/29/98 Plumbed in discharge line from Tri Plex pump to well head. Installed flow-meter. SDFN.

\$57,320

5/30/98 MI unloaded and set 1 - 400 bbl steel tank. Plumbed in disposal equipment. SDFD.

6/2/98 Started plumbing in electricity. Turned 1 - 400 bbl tank so that 6" valve is pointing toward pump suction.

6/3/98 Hooking up electricity.

6/4/98 Hooking up electricity, plumbing in water tank.

6/5/98 Finished hooking up electric. Finished plumbing in disposal equipment.

6/11/98 Pumped water through 3" poly line from A Battery to disposal 400 bbl tank. Pumped water from B Battery through 3" poly line. Filled pulsation dampener w/ Nitrogen. Adjusted backpressure valves. Adjusted pressure kill switches. Adjusted Hi-Low levels. Ran triplex for 30 min. Discharge pressure is 700 psig. Will start after OCD approval.

6/12/98 MIRU I&W Pump Truck. Ran mechanical integrity test on csg for 1 hr @ 600#. Started disposing of produced water in well.

6/13/98 Changed out packing on plungers on Tri-Plex pump. Drained, cleaned and filled gear box on Tri-Plex pump. Turned back to disposal @ 12:30 PM.

6/14/98 Low level shut-off did not work. Tri-Plex pump air locked. Bled off air. Cleaned Murphy switch contacts. Turned back to disposal @ 12:00 noon.

10/18/97 Bleed well down. ND BOP. Unset pkr. Flange up. RU Rowland kill truck and circ pkr. down backside. Set pkr. @ 3120' with 12,000 compression. NU wellhead. Pressure test backside to 300 psi for 15 min. Gary Williams with OCD witnessed test. Test OK RD kill truck. Clean LOC, SWI and shut down till Monday.

| | | | |
|-------------|---------|------------|----------|
| Daily Cost: | \$1,750 | Cum. Cost: | \$57,320 |
|-------------|---------|------------|----------|

Penwell Energy, Inc
Well History
ORE IDA "14" FEDERAL #10, SWD
From 1/1/1920 through 1/11/1999
County,

Directions:

| | | | |
|----------|---|--------------------------|-------------------------|
| 10/4/97 | TP 1900#. Open and bleed well down in frac tank flowed 195 water, 86 oil. 281 total bbls. RU kill truck and pump 50 bbls, 10# brine killing well. ND wellhead, NU BOP, unset pkr. TOOH w/tbg., 57 stds. in derrick LD 134 jts, ND & pkr. RU Wireline and RIH w/CIBP, set plug @ 7890' POOH. PU dump bailer, RIH dump 2 sks. cmt. on CIBP. POOH w/wireline. RD wireline. SWI & SD until Monday. | Daily Cost: \$6,950 | Cum. Cost: \$6,950 |
| 10/5/97 | Shut down for weekend. | Daily Cost: \$ | Cum. Cost: \$6,950 |
| 10/6/97 | Shut in for weekend. | Daily Cost: \$ | Cum. Cost: \$6,950 |
| 10/7/97 | TIH w/tbg. RU BJ Services and spot 500 gals 15% NeFe w/add. Across zone to be perf. TOOH w/tbg. RD BJ Services. RU and perf Bell Canyon as follows: 3210'-3240' (30'), 3252'-3276' (24'), 3284'-3326' (42'), 3382'-3426' (44'), 3454'-3483' (29'), 3504'-3520' (16'), 3606'-3618' (12'). 2 SPF. RD Wireline. PU pkr, TIH set pkr. @ 3113'. SWI & SDFN. | Daily Cost: \$11,950 | Cum. Cost: \$18,900 |
| 10/8/97 | RU BJ Services and acidize Bell Canyon w/10,000 gals. NeFe w/add. & 300 ball sealers. Broke down @ 1400 psi. Avg. pressure 1800 psi, avg. rate 8.2 BPM, max pressure 2200 psi. ISDP 1060 psi, 5 min. 924 psi, 10 min. 869 psi, 15 min. 870 psi. SWI RD BJ Services. Flowed well down. Flowed 90 bbls (acid was hot). RU and made 4 swab runs, rec. 19 bbls. Todays rec. 109 bbls, 319 bbls. of load, 210 left to rec. FFL @ 2500' FS. Left well open to frac tank. SDFTN. | Daily Cost: \$18,670 | Cum. Cost: \$37,570 |
| 10/9/97 | Did not flow any fluid to frac tank overnight. RU and swab. IFL @ surfac. Made 13 swab runs. Rec. 78 bbls. FFL @ 2100' FS. (weak acid). 187 total bbls. rec., 132 left to rec. Left well open to frac tank SDFTN. | Daily Cost: \$1,900 | Cum. Cost: \$39,470 |
| 10/10/97 | Well did not make any fluid overnight. Started swabing w/IFL @ surface. FFL 2,100' FS. Rec. 85 BAW, 47 bbls. LTR. SWIFN. | Daily Cost: \$1,900 | Cum. Cost: \$41,370 |
| 10/11/97 | RU & started swabbing w/IFL @ surface. FFL 2,100' FS. Swabbed 70 bbls. of fluid, 23 bbls. over load. SWIFN. | Daily Cost: \$2,150 | Cum. Cost: \$43,520 |
| 10/12/97 | RU & started swabbing w/IFL @ surface. FFL 2,100' FS. Recovered 65 bbls. of water, 88 bbls. overload. SWIFN. | Daily Cost: \$1,900 | Cum. Cost: \$45,420 |
| 10/13/97 | Shut down for weekend. | Daily Cost: \$ | Cum. Cost: \$45,420 |
| 10/14/97 | TP 0#, small blow. RU and swab. IFL @ surface. Made 13 swab runs. FFL @ 2100' FS. Rec. 80 BW, 0 MCF; 0 BO. 168 bbls. overload. | Daily Cost: \$2,000 | Cum. Cost: \$47,420 |

10/15/97 No fluid to tank overnight. Ru and swab. IFL @ surface. Made 13 swab runs. FFL @ 2100' FS. Rec. 77 bbls. 245 over load. Total bbls. rec. 564. Leave well open to tank. SWI & SDFN.
Daily Cost: \$2,200 Cum. Cost:

10/16/97 No fluid to tank overnight. RU & swab. IFL @ surface. Made 9 swab runs. FFL @ 2100' FS. Recovered 56 bbls. fluid. 301 bbls. overload. Total bbls. rec. 620. SWI & SDFN.
Daily Cost: \$2,200 Cum. Cost:

10/17/97 RU Halliburton and Perform Injectivity Test. 2 BPM @ 810 PSI, 4 BPM @ 1050 PSI, 6 BPM @ 1370 PSI, 8 BPM @ 1780 PSI. Shut down RD Halliburton. Bleed well down SWI SDFTN.
Daily Cost: \$3,750 Cum. Cost:

10/18/97 Bleed well down. ND BOP. Unset pkr. Flange up. RU Rowland kill truck and circ pkr. down backside. Set pkr. @ 3120' with 12,000 compression. NU wellhead. Pressure test backside to 300 psi for 15 min. Gary Williams with OCD witnessed test. Test OK RD kill truck. Clean LOC, SWI and shut down till Monday.
Daily Cost: \$1,750 Cum. Cost:

Tubing: Ran tubing as follows:

| Description | | Length | Depth |
|---------------------|----------------------------|---------|---------|
| Below Kelly Bushing | | 12.50 | |
| 98 | 2 7/8", J-55, 8rd EUE tbg. | 3115.77 | 0.00 |
| | 1-2 7/8" SN | 1.10 | 0.00 |
| | 1-5 1/2" Model "R" pkr. | 6.13 | 3135.50 |

10/21/97 RD unit. Left well shut-in until OCD approval is received to start water disposal. Remove from report.

Penwell Energy, Inc
Well History
ORE IDA "14" FEDERAL #10
#Name?
County,

Directions:

| | | |
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| Daily Cost: | \$6,950 | Cum. Cost: |
| 10/5/97 | Shut down for weekend. | |
| Daily Cost: | \$ | Cum. Cost: |
| 10/6/97 | Shut in for weekend. | |
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| Daily Cost: | \$11,950 | Cum. Cost: |
| 10/8/97 | RU BJ Services and acidize Bell Canyon w/10,000 gals. NeFe w/add. & 300 ball sealers. Broke down @ 1400 psi. Avg. pressure 1800 psi, avg. rate 8.2 BPM, max pressure 2200 psi. ISDP 1060 psi, 5 min. 924 psi, 10 min. 869 psi, 15 min. 870 psi. SWI RD BJ Services. Flowed well down. Flowed 90 bbls (acid was hot). RU and made 4 swab runs, rec. 19 bbls. Todays rec. 109 bbls, 319 bbls. of load, 210 left to rec. FFL @ 2500' FS. Left well open to frac tank. SDFTN. | |
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| Daily Cost: | \$1,900 | Cum. Cost: |
| 10/10/97 | Well did not make any fluid overnight. Started swabing w/IFL @ surface. FFL 2,100' FS. Rec. 85 BAW, 47 bbls. LTR. SWIFN. | |
| Daily Cost: | \$1,900 | Cum. Cost: |
| 10/11/97 | RU & started swabbing w/IFL @ surface. FFL 2,100' FS. Swabbed 70 bbls. of fluid, 23 bbls. over load. SWIFN. | |
| Daily Cost: | \$2,150 | Cum. Cost: |
| 10/12/97 | RU & started swabbing w/IFL @ surface. FFL 2,100' FS. Recovered 65 bbls. of water, 88 bbls. overload. SWIFN. | |
| Daily Cost: | \$1,900 | Cum. Cost: |
| 10/13/97 | Shut down for weekend. | |
| Daily Cost: | \$ | Cum. Cost: |
| 10/14/97 | TP 0#, small blow. RU and swab. IFL @ surface. Made 13 swab runs. FFL @ 2100' FS. Rec. 80 BW, 0 MCF; 0 BO. 168 bbls. overload. | |
| Daily Cost: | \$2,000 | Cum. Cost: |

06/13/97

6-4-97 SITP 750. Blew down. RU swab IFL @ 755'. 50 % oil & 50% water on 1st swab run. Flow & swab 7 BO; 330 BW, 337 total; 2217 BW total bbls recovered. SI & SDFN. DWC: \$ 2,363. TWC: \$ 459,648

6-5-97 SITP 650 PSIG. RU swab IFL @ 700'. 1st swab 49% oil & 51% water. Flow & swab 354: 7 BO, 347 BW, 2571 total bbls recovered. SI & SDFN. DWC: \$ 2,003. CWC: \$ 461,997

6-6-97 SITP 500 PSIG. Bleed well down. RU swab IFL @ 1000 from surface. 3% oil, 97% water on 1st swab. Flow & swab 11 BO, 321 BW, 332 bbls total. Total bbls recovered - 2903. DWC: \$ 2,349. CWC: \$ 464,346

6-7-97 SITP 500 PSIG. Bleed well down. RU swab IFL @ 1000 from surface. Rec. 7 BO, 234 BW, 241 total bbl today. Total 3144 bbls recovered. SWI & SDFN. DWC: \$ 2,186. CWC: \$ 466,532

6-8-97 SD for weekend.

6-9-97 SD for weekend.

6-10-97 SITP 825#. Blew well down and started swabbing w/ IFL @ 950' from surface. Swabbed and flowed 10 BO and 224 BW. FFL @ 500' from surface. Daily Cost: \$ 4,970. Cum Cost: \$ 471,502.

6-11-97 SITP 565#. Blew well down. RU swab 1200' to FL, 50% oil, 50% water. 1st run swab total 8 BO, 197 BW, 205 total bbls. Rec for day: 3583 total bbls. 4% oil. SD & SIFN. Daily Cost: \$ 2,849. Cum Cost: \$ 474,351.

6-12-97 SITP 500#. Blew well down and started swabbing w/IFL @ 1,400' FS. Swabbed and flowed 8 BO and 228 BW. FFL 900' FS. SWIFN. DC \$2,839 ACC \$477,190

- 5-22-97 RIH w/bit and 5 1/2" Baker style casing scraper to DV tool. Work through tool several times and TIH to 8,000'. RU BJ Services and pickled tubing w/500 gallons of 15% HCL acid. Displaced hole w/clean 2% KCL water and spotted 200 gallons of 10% Acetic acid across zones to be perforated. TOO H w/tbg. SWIFN.
DC: \$6,646 ACC: \$418,548
- 5-23-97 Western Atlas and ran CBL from PBTD of 8,306' to 2,500'. Had good bond across all intervals to be perforated. Perforated the **First Bone Spring Sand** in the following intervals: 7,951' - 7,955', 4' X 5 holes; 7,990' - 7,996', 6' X 7 holes; OA 10' X 12 holes. RD Western Atlas and SWIFN.
DC: \$6,384 ACC: \$424,932
- 5-24-97 TIH w/PPI tool.. RU BJ Services and individually broke down **First Bone Spring Sand** perfs from 7,951' - 7,996'. Pulled up and set packer @ 7,850'. Fished control valve and acidized perfs w/1,500 gallons of 7 1/2% NeFe acid + 25 RCN ball sealers. Max pp. 4,000# @ ball-out, Min. pp. 1200#, Avg. pp 1800#, AIR 5.8 BPM. ISIP 580#, 5 min. 565#, 10 min. 547#, 15 min. 544#. Total load to recover is 83 BAW. RD BJ Services and blew well down. Swabbed 81 bbls. of AW and 4 BO, SWIFN.
DC \$8,725 ACC \$433,657
- 5-25-97 SITP 150#. Blew well down and started swabbing w/IFL 4,200' FS. Swabbed well down to SN and recovered 16 BAW and 1 BO. SWIFN.
DC \$1,444 ACC \$435,101
- 5-26-97 Shut down for Memorial Day weekend.
- 5-27-97 Shut down for Memorial Day weekend.
- 5-28-97 SITP 650#. Blew well down and started swabbing w/IFL 3,00' FS. First run recovered 30% oil and 70% LW. RD swab and released packer. TOO H w/tbg. and packer. ND BOP and NU frac valve. RU BJ Services and frac'd **First Bone Spring Sand Perfs** from 7,951' - 7,996' down 5 1/2" casing w/1,189 bbls. of gelled 2% KCL water containing Viking I-30 gel and 64,280# of 20-40 white sand + 16,220# of resin coated 20-40 white sand. Max. pp. 1,897#, Min. pp. 1,151#, Avg. pp. 1,531#. Avg. rate 26 BPM. ISIP 990#, 5 min. 969#, 10 min. 942#, 15 min. 916#. SWIFN and RD BJ Services.
DC \$7,241 ACC \$442,342
- 5-29-97 SICP 600#. Opened well up and started flowing back. Flowed back 590 bbl.s of LW and 0 BO. FCP 25# w/wide open choke. Load to recover is 796 bbls. Continue flowing back well.
DC \$2,953 ACC \$445,295
- 5-30-97 FCP 25#, wide open choke. ND frac valve and NU BOP. RIH w/Baker Model "R" packer and set packer w/14,000# of compression. ND BOP and NU wellhead. Started swabbing w/IFL @ surface. Swabbed 150 BW and 3 BO. Load to recover is 621 bbls. SWIFN
DC \$3,084 ACC \$448,379
- Ran tubing in hole as follows:**
- | | |
|--|-----------|
| Below Kelly Bushing | 12.00' |
| 248 jts. 2 7/8", 6.50#, J-55, 8rd EUE new API tubing | 7,834.32' |
| 1 - 2 7/8" seating nipple | 1.10' |
| 1 - 2 7/8" X 5 1/2" Baker Model "R" double grip packer | 7.20' |
| Bottom of packer @ | 7,854.62 |
- 5-31-97 SITP 500#. Opened well up and well kicked off flowing. Left well flowing to frac tank. In 22 hours well flowed 516 BLW and 39 BO. FTP 150# on 48/64" choke.
DC: \$4,459 ACC \$452,838
- 6-1-97 Well Died during night. SWI until Monday.
DC \$1,273 ACC \$454,111
- 6-2-97 Will swab on well today.
- 6-3-97 SITP 1000 PSIG. Open wide open. Flow 103B, 14 BO, 89 BW. 11:30 am 100# FTP, 2% oil. 2:30pm swab total 262 bbl, 16 BO, 246 BW. Total Recovery 1880 bbls.
DWC: \$ 3174 TWC: \$ 457,285

06/13/97

5-11-97

Day 16: Depth 8,010'. Ftg. Past 24 hrs. 325', Avg. ft/hr. 19.70'. Sd. Tripping for hole in D.P. MW 8.4, Vis. 28, pH 10.0. WOB 45K, RPM 60, Cum. Hrs. 98, Cum. Ftg. 2145', SPM 60, Pressure 1200#. Dev. 2o @ 7809'. Past 24 hrs. 16 1/2 drlg., 6 3/4 hrs. tripping for hole in D.P., 3/4 hr. Totco.

Daily Cost: \$5,996.

Cum. Cost: \$240,964.

5-12-97

Day 17: Depth: 8,270'. Ftg. Past 24 hrs. 260, Avg. ft/hr. 14.5. Sd & Lm. Drlg. MW 9.1, Vis 28. Bit #4: WOB 50K, RPM 60, Cum. Hrs. 116 1/2, Cum. Ftg. 2405'. SPM 61, Pressure 1150#. Past 24 hrs.: 5 1/2 hrs. trip for hole in DP, 18 1/2 hrs. drlg.

Daily Cost: \$4,920.

Cum. Cost: \$245,884.

5-13-97

Day 18: Depth: 8350'. Ftg. Past 24 hrs. 80', Avg. ft/hr. 13.33. Sh & Lm. Logging. MW 9, Vis 30. Bit #4: WOB 50K, RPM 60, Cum. Hrs. 122 1/2, Cum. Ftg. 2485'; Depth out 8350'; Cond. T5, B6, G 1/8. SPM 61, Pressure 1150#. Dev. 1 1/2° @ 8350'; Past 24 hrs. 6 hrs. drill; 2 hrs. circ.; 4 1/2 hrs. strap out of hole; 11 1/2 hrs. logging. REMARKS: DP strap was 8351', Loggers TD was 8356'.

Daily Cost: \$9,430.

Cum. Cost: \$255,314.

5-14-97

Day 19: Depth: 8350'. Ftg. Past 24 hrs. 0', Avg. ft/hr. 0'; Sh & Lm. Cutting sidewall cores. MW 9, Vis 30. Past 24 hrs. 7 1/4 hrs. tripping; 2 1/2 hrs. circ.; 2 3/4 hrs. RU loggers; 11 1/2 hrs. waiting on Schlumberger.

Daily Cost: \$6,348.

Cum. Cost: \$261,662.

5-15-97

Day 20: Depth: 8350'. Ftg. Past 24 hrs. 0', Avg. ft/hr. 0'; Sh & Lm. Circ. through DV tool. MW 9, Vis 30; CI 75,000; Past 24 hrs. 2 1/2 hrs. sidewall coring; 3 hrs. TIH; 2 hrs. circ.; 6 1/4 hrs. LDDP & DC's; 6 1/2 hrs. run 5 1/2" csg.; 1/2 hrs. circ.; 1 1/4 hrs. cmt first stage; 2 hrs. circ. thru DV Tool.

Daily Cost: \$18,935.

Cum. Cost: \$280,597.

5-16-97

Day 21: Depth: 8350'. Ftg. Past 24 hrs. 0', Avg. ft/hr. 0'; Sh & Lm. Idle. Past 24 hrs. 2 hrs. circ. through DV tool, 1 hr. cmt. 2nd stage, 6 hrs. set slips, ND BOP's, jet & clean pits.

Daily Cost: \$96,900.

Cum. Cost: \$377,497.

Ran 5 1/2" Production Casing as follows:

| | |
|--|-----------|
| 5 1/2" Halliburton Float Shoe | 1.27' |
| 1 jt. 5 1/2", 17#, J-55, 8rd LTC new API shoe joint | 45.12' |
| 5 1/2" Halliburton float collar | .87' |
| 62 jts. 5 1/2", 17#, J-55, 8rd LTC new API casing | 2,790.63' |
| 5 1/2" Halliburton hydraulic multiple stage cementer | 2.11' |
| 127 jts. 5 1/2", 17#, J-55, 8rd LTC new API casing | 5,521.38' |
| 190 jts. | |
| Total Casing | 8,361.38' |
| Less above K.B. | 11.38' |
| Casing set @ | 8,350.00' |

Ran centralizers and rough-coated casing across all zones of interest. Halliburton cemented the first stage w/600 sacks of Modified Super "H" cement containing .4% CFR-3 + .5% Halad-344 + 5#/sk. gilsonite + 3#/sk. salt mixed @ 13.00 ppg, yield 1.71 ft³, mixing H₂O 8.50 gals./sack. Plug down to 8,309' @ 5:00 AM, CST 5-15-97. Floats held O.K. Opened DV tool and circulated 6 sacks of cement to the surface. Circulated four hours between stages. Cemented second stage w/280 sacks of Class "C" Lite containing 1#/sk. gilsonite + 6% gel + 12% salt mixed @ 12.4 ppg, yield 2.37 ft³/sk, mixing H₂O 13.04 gals./sack followed by 350 sacks of Modified Super "H" mixed same as first stage. Plug down to 5521' @ 10:00 AM CST 5-15-97. DV tool closed and held O.K. ND BOP, set slips, cut-off casing. Jet and clean pits, rig released @ 4:00 PM CST, 5-15-97. Remove from report until completion begins.

5-20-97

MIRU completion unit. MIRU reverse unit. NU BOP. Unloaded new string of 2 7/8" tubing. RIH w/4 3/4" skirted mill tooth bit and 6 3 1/2" drill collars. Tagged cement on DV tool @ 5,495'. Pull up and tested casing and BOP to 1,500# O.K. PU swivel to drill out cement and swivel would not work. Circulate hole clean and SWIFN. DC: \$30,187 ACC: \$407,684

5-21-97

Changed out swivel and drilled 19' of cement on top of DV tool. Drilled DV tool @ 5,518' and pressure tested casing to 1,000# O.K. RIH and tagged wiper plug @ 8,176'. Drilled plug and fell through. Continue in hole to FC @ 8,306'. Pressure tested casing to 1,000# again and held O.K. TOOH w/tbg. and laid down 3 1/2" drill collars. SWIFN. DC: \$4,218 ACC: \$411,902

06/13/97

5-2-97

Day 7: Depth 3,141', Ftg. Past 24 hrs. 0', Lm., WOC. MW 8.4; Vis 28; Ph10, Cl 20,000; Bit #3 7 7/8", HTC J-33C, 13,13,13. BHA: bit, 1 - 6 1/2" DC, Roller Reamer, 2 - 6 1/2" DC's, Roller Reamer, 21 - 6 1/2" DC's. Size DP 4 1/2", No. DC 24, OD 6 1/2" DC Length 745, DC Wt. 65,000#. Past 24 hrs. 1 hr. finish running 8 5/8" csg., 2 3/4 hrs. circ. csg. & cmt., 20 1/4 hrs. WOC, NU BOP & Test csg.

Daily Cost: \$ 66,461.

Cum Cost: \$ 150,256.

REMARKS: Ran 8 5/8" Intermediate Casing as follows:

| | |
|--|-----------|
| 8 5/8" Halliburton Float Shoe | 1.00' |
| 2 jts. 8 5/8", 32#, J-55, 8rd STC, new API shoe joints | 88.16' |
| 8 5/8" Halliburton Float Collar | .95' |
| 69 jts. 8 5/8", 32#, J-55, 8rd STC, new API csg. | 3,057.32' |
| 71 jts. Total Casing | 3,147.43' |
| Less above K.B. | 6.43' |
| Casing Set @: | 3,141.00' |

Ran centralizers in middle of first shoe jt. and on collars of jts. #3,5,7,9.

Halliburton cmt'd w/950 sks. of Cl. "C" Lite containing 1/4#/sk flocele + 1#/sk gilsonite + 6% gel + 12% salt mixed @ 12.40 ppg., yield 2.37 sq. ft./sk., mixing water 13.03 gals./sk followed by 250 sks. of Cl. "C" Neet containing 2% CaCl₂ mixed @ 14.80 ppg., yield 1.34 sq. ft./sk., mixing water 6.31 gals./sk. Plug down to 3,229' w/1600# @ 11:45 AM CST, 5-1-97. Floats held O.K. Circ'd 220 sks. to the pit.

5-3-97

Day 8: Depth 3,878', Ftg. Past 24 hrs. 737', Avg. ft/hr. 37.79, Lm., Drlg. MW 8.5; Vis 29; pH 10, Cl 20,000; Bit #3 20 - 55 K, RPM 70, Cum. Hrs. 19 1/2, Cum. Ftg. 737. SPM 62, Pressure 1100#. Dev. 1° @ 3600'. Past 24 hrs. 19 1/2 hr. drlg., 4 hrs. WOC, 1/2 hr. Totco. REMARKS: NU BOP, tested csg., BOP, choke manifold, & annular to 1500# for 30 mins. All held o.k.

Daily Cost: \$14,205.

Cum Cost: \$ 164,461.

5-4-97

Day 9: Depth 4,724', Ftg. Past 24 hrs. 846', Avg. ft/hr. 36.79, Sd., Drlg. MW 8.5; Vis 28; pH 10.0, Cl 20,000; Bit #3 20 - 50 K, RPM 70, Cum. Hrs. 42 1/2, Cum. Ftg. 1586. SPM 62, Pressure 1100#. Dev. 1° @ 4088' & 1° @ 4,587'. Past 24 hrs. 23 hrs. drlg., 1 hrs. totco.

Daily Cost: \$15,433.

Cum Cost: \$ 179,874.

5-5-97

Day 10: Depth 5,470', Ftg. Past 24 hrs. 746', Avg. ft/hr. 35.95, Sd. & Sh, Drlg. MW 8.5; Vis 28; pH 10.0, Cl 20,000; Bit #3 50 K, RPM 65, Cum. Hrs. 63 3/4, Cum. Ftg. 2329. SPM 62, Pressure 1175#. Dev. 3/4° @ 4968'. Past 24 hrs. 20 3/4 hrs. drlg., 2 3/4 hrs. pump soft line & trip for hole in DP 34 & 35 jts. above DC's, 1/2 hr. totco.

Daily Cost: \$12,959.

Cum Cost: \$ 192,853.

5-6-97

Day 10: Depth 5,865', Ftg. Past 24 hrs. 395', Avg. ft/hr. 26.78, Sd. & Sh, TOO H w/magnet. MW 8.6; Vis 28; pH 10.0, Cl 25,000; Bit #3 20-50 K, RPM 65, Cum. Hrs. 78, Cum. Ftg. 2724, Depth Out: 5865, T8, B8, G 1/8. SPM 62, Pressure 1200#. Dev. 1 1/4° @ 5465', 1° @ 5840'. Past 24 hrs. 14 3/4 hrs. drlg., 5 1/2 hrs. tripping, 2 3/4 hrs. WO magnet, 3/4 hr. totco, 1/4 hr. fish w/magnet. REMARKS: Ran cone off bit.

Daily Cost: \$8,062.

Cum Cost: \$ 200,915.

5-7-97

Day 11: Depth 6,290', Ftg. Past 24 hrs. 425', Avg. ft/hr. 24.29, Sd., Drlg. MW 8.6; Vis 29; pH 10.0, Cl 25,000; Bit #4 7 7/8" HTC ATJ44C, 14,14,13, 50 K, RPM 60, Cum. Hrs. 17 1/2, Cum. Ftg. 425. SPM 62, Pressure 1050#. Past 24 hrs. 5 1/4 hrs. fish done & tripping, 1 1/4 hrs. wash 85' to btm., 17 1/2 hrs. drlg.

Daily Cost: \$7,905.

Cum Cost: \$ 208,820.

5-8-97

Day 12: Depth 6,835', Ftg. Past 24 hrs. 545', Avg. ft/hr. 22.90, Sd., Drlg. MW 8.7; Vis 28; pH 10.0, Cl 25,000; Bit #4 50 K, RPM 60, Cum. Hrs. 40 3/4, Cum. Ftg. 970. SPM 62, Pressure 1175#. Past 24 hrs. 23 1/4 hrs. drlg., 3/4 hrs. totco.

Daily Cost: \$9,880.

Cum Cost: \$ 218,700.

5-9-97

Day 13: Depth 7,375', Ftg. Past 24 hrs. 540', Avg. ft/hr. 23.73, Sd., Drlg. MW 8.7; Vis 29; pH 10.0, Cl 25,000; Bit #4 20-50K, RPM60, Cum. Hrs. 63 1/2. Cum. Ftg. 1510'. SPM 62, Pressure 1175#. Past 24 hrs. 22 3/4 hrs. drlg., 1 1/4 hrs. totco.

Daily Cost: \$10,520.

Cum Cost: \$ 229,220.

5-10-97

Day 15: Depth 7,685'. Ftg. Past 24 hrs. 310', Avg. ft/hr 17.22'. Sd, Drlg. MW 8.8, Vis 28, pH 10.0, Cl. 24,000. Bit #4, WOB 40K, RPM 60, Cum. Hrs. 81 1/2, Cum. Ftg. 1820, SPM 60, Pressure 1100#. Past 24 hrs.: 18 hrs. drlg., 6 hrs. trip for hole in DP.

Daily Cost: \$5,748.

Cum. Cost.: \$234,968

DAILY DRILLING REPORT
ORE IDA "14" FEDERAL #10
Section 14, T24S - R29E
Eddy County, New Mexico



PROSPECT NAME: HASHBROWN SOUTH
AFE COST: \$588,325

DIRECTIONS: From Malaga New Mexico take Co. Road 720 East .8 miles, turn North on Co. Road 745 go 1 mile, turn East go .6 mile, cross Pecos River follow Co. Road 745 Northeast for 1.4 mi., turn right on Co. Road 788 go 1.2 miles, turn East go .6 mi. bear right go Southeast go .3 miles., bear left follow road 1.3 miles, turn North go past B.K. Exploration Cedar Canyon #1 turn Southeast go 1+ miles turn Northeast go .4 mile, turn East follow road to location.

4-26-97 **Day 1: Depth 362', Ftg. Past 24 hrs. 322', Redbed, WOC, MW 8.4; Vis 32; pH 9.5; Bit #1 17 1/2" RR, 13, 13, 13, WOB All, RPM 100, Cum hrs. 5 3/4, Cum Ftg. 322', Depth out 362', Cond. T3, B3, GI. Pump Type DB-550, SL 5 1/2" x 16", SPM 62, Press. 900#. Dev. 1/4° @ 189'; 1/4° @ 362'; Past 24 hrs. 8 hrs. finish rigging up, 5 3/4 hrs. drlg, 1/4 hr. totco, 1/2 hr. circ., 1 hr. TOOH, 3 1/2 hrs. RU & run 13 3/8" surf. csg., 1 1/4 hr. cmt, 3 3/4 hrs. WOC.**

Daily Cost: \$ 31,898.

Cum Cost: \$ 31,898.

Spudded 17 1/2" surface hole @ 3:00PM CST, 4 -25-97 w/ McGee Drilling Company Rig #2.

Ran 13 3/8" Surface Casing as follows:

13 3/8" Halliburton Notched Texas Pattern Shoe .87'

8 jts. 13 3/8", 48#, H-40, 8rd, STC, new API casing w/insert

float in collar of first joint.

8 jts.

Total Casing

368.79'

Less above K.B.

369.66'

Casing set @

7.66'

362.00'

Ran centralizers in middle of first joint and on collars of joints # 2, 4, 6. Halliburton cemented w/325 sacks of Class "C" cement containing 2% CaCl₂ mixed @ 14.8 ppg, yield 1.34 sq. ft., mixing water 6.31 gals./sk. Plug down to 317' w/300# @ 3:15 AM CST 4-26-97. Float held O.K. Circ'd 40 sacks to the pit.

4-27-97 **Day 2: Depth 362', Ftg. past 24 hrs. 188'; Redbed, Drlg. Bit #2 12 1/4" WM 53CF, 13, 13, 13, WOB All, RPM 120, Cum hrs. 3 3/4, Cum Ftg. 1887', Pump Type DB-550, SL 5 1/2" x 16", SPM 62, Press. 800#. Past 24 hrs. 20 1/4 hrs. WOC & NU BOP; 3 3/4 hrs. drlg. REMARKS: Tested csg and BOP to 600# for 30 min., all held ok.**

Daily Cost: \$ 6,071.

Cum Cost: \$ 37,969..

4-28-97 **Day 3: Depth 1,550', Ftg. Past 24 hrs. 1000', Salt & Anhy., Drlg. MW 10; Vis 28; pH 10; Cl 180,000; Bit #2 WOB 20-55K; RPM 80, Cum hrs. 27 1/4, Cum Ftg. 1188', SPM 62, Press. 900#. Dev. 1/4° @ 832'; 3/4° @ 1319'; Past 24 hrs. 23 1/2 hrs. drlg, 1/2 hr. totco.**

Daily Cost: \$ 17,290.

Cum Cost: \$ 55,259.

4-29-97 **Day 4: Depth 2,110', Ftg. Past 24 hrs. 560', Salt & Anhy., Drlg. MW 10; Vis 29; pH 10; Cl 200,000; Bit #2 WOB 22-55K; RPM 80, Cum hrs. 48 3/4, Cum Ftg. 1748', SPM 62, Press. 950#. Dev. 1° @ 1809'; Past 24 hrs. 21 1/2 hrs. drlg, 2 hrs. trip to catch lost totco, 1/2 hr. totco.**

Daily Cost: \$ 10,051.

Cum Cost: \$ 65,310.

4-30-97 **Day 5: Depth 2,780', Ftg. Past 24 hrs. 670', Salt & Anhy., Drlg. MW 10; Vis 29; pH 10; Cl 200,000; Bit #2 WOB 20-55K; RPM 80, Cum hrs. 73 1/2, Cum Ftg. 2418', SPM 62, Press. 1000#. Dev. 1° @ 2297'; 1° @ 2544. Past 24 hrs. 23 1/2 hrs. drlg, 1/2 hrs. totco.**

Daily Cost: \$ 11,082.

Cum Cost: \$ 76,392.

5-1-97 **Day 6: Depth 3,141', Ftg. Past 24 hrs. 246', Avg. Ft/Hr. 21.60'. Lm., Running 8 5/8" casing. MW 10; Vis 29; pH 9.5, Cl 186,000; Bit #2 WOB 20-50K; RPM 80, Cum hrs. 88 1/2, Cum Ftg. 2779', Depth out: 3141', Condition T4,B4, G 1/8. SPM 62, Press. 1000#. Dev. 1 3/4° @ 2791'; 1 1/2° @ 3100. Past 24 hrs. 15 hrs. drlg, 1 hr. circ., 4 hr. TOOH & LD 8" DC's., 3 1/4 hrs. run 8 5/8" inter. csg., 3/4 hr. totco.**

Daily Cost: \$ 7,403.

Cum Cost: \$ 83,795.