Form 3160-4 (August 1999)

UNITED STATES

DEPARTM. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: November 30,2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

| | VVt | ELL C | OIV | IPLE | HON | OR R | ECOMPL | -E IIO | NR | EPORT | AND | LOC | 3 | | | 5. | Lease | | ial No M-055 | | | |
|--|---|-----------------|-------------------------------------|--------------------|--------------------|-------------|---------------------|----------------------|--------------------|--------------------------|---------------------------------|------------|-----------------------|------------------|-----------------------------------|---|--------------|------------|-----------------|--|-----------|---------------------------------------|
| la. Type | of Well of Comple | | | | | _ | Dry (Work Over | Other | eenen | , П рі, | ıa Back | | Diff | Dague | | 6. | If Ind | ian, A | Allotte | e or T | ibe N | lame |
| | | | | Other | | | WOIR OVE | | ССРСП | | ig Dack | _ | DIII. | Kesvi | . | 7. | Unit | or CA | Agre | ement | Name | and No. |
| 2. Name | of Operato | | | | | | | | | | | | | | | Q | Leace | Nan | and | Wall | No. | |
| | | Har | vard | Petrole | um Cor | poration | | | | | | | | | | 8. Lease Name and Well No. James Federal, Well #6 | | | | | | |
| 3. Addre | | | | | | | | | | 3a. Phone | | | area o | ode) | | | API V | | | #0 | | |
| | PO Box 93 | | | | | | | | | | 23-1581 | 1 | | | | | 0-025- | | | | | |
| 4. Locatio | on or well | (Kepor | t loca | ation ci | early ai | nd in acc | cordance wi | th Feder | ral re | quirements |)* | | | | Ì | | Field | | _ | r Expl | orato | rv |
| At su | rface 198 | 30' FNL | . & 19 | 980' FE | L | | | | | | | | | | | West Triste Draw, Delaware | | | | | | |
| At to | At top prod. interval reported below same | | | | | | | | | | | | | | | 11. Sec., T., R., M., on Block and Survey or Area Sec 29-T23S-R32E | | | | | | |
| At to | At total depth same | | | | | | | | | | | | | | 12. County or Parish 13. State | | | | | ite | | |
| 14. Date Spudded 15. Date T.D. Reached | | | | | | | | | | 16. Date Completed | | | | | | Lea NM | | | | | | |
| | | | | 1 | - uto 1.5 | o, recue | 104 | | D&A Ready to Prod. | | | | | . | 17. Elevations (DF, RKB, RT, GL)* | | | | | | | |
| 8/10 | | | | | 8/23/02 | | | | | _ | | _ | - | | | 36 | 73' GL | , 3 | 685' K | B refe | ence | Elv |
| 18. Total | Depth: N | | 870 | | 19. Plug Back T.D. | | | | | | | 20. | 20. Depth Bridge Plug | | | | | | | | | |
| 21 T I | | TVD | 870 | | | <u></u> | | TV | D_ | 8660' | | | | | | | TV | /D] | NA | | | |
| 21. Type i | electric & | Other M | viecna | anicai 1 | .ogs Ku | n (Subm | it copy of ea | ach) | | | | 22. | Was | | | $\overline{\mathbf{Q}}$ | No | | | (Subn | | |
| CNI /I | .DT/GR, A | IT CD | т | | | | | | | | | | | DST r | | ⊑ | = | _ | | (Subm | | |
| | g and Line | | | enort a | II string | | uall) | | | | | <u> </u> | Dire | ctional | Survey | ? | No | lacksquare | Yes | (Subm | it cop | y) |
| | | 1 1000 | nu (n | ерон и | ii string | s set in v | veii) | | togo (| Comantor | No | of Ska | . 0. | G1 | | _ | | _ | —-т | | | |
| Hole Size | Hole Size Size/Grade Wt. (# | | (#/ft.) | t.) Top (MD) | | Bottom (MD) | | Stage Cementer Depth | | | No. of Sks. & Type of Cement | | | rry Vol. BBL) | | Ceme | nt To | p* | Amount Pulled | | | |
| 17 1/2" | 13 3/8" | /H40 | 54 | 4.5 | SI | urf | 575' | _ - | _ | NA | | | | | | ╁ | | r. C7: | | | | |
| 11" | | | | surf | | 4586' | | NA NA | | 500 sx "C" 1350 Poz C | | 118 455 | | + | surf Circ surf Circ | | none | | | | | |
| 7 7/8" | 7 7/8" 5 1/2" J&N | | | 17 | surf | | 8700' | | NA | | 1060 Poz C | | 326 | | - - | 3930' CBL | | | none | | | |
| | | | | | | | | | | | | gz hole | | | 5390' | + | 373 | 0 013 | | _ | HOL | ie |
| | <u> </u> | | | | | | | | | | | | | - | | 十 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 24. Tubing | | | | | | | | | | | | | | | | | | | | | | |
| Size | | n Set (N | MD) | Packe | r Depth | (MD) | Size | D | epth S | Set (MD) | Packer 1 | Depth | (MD) | | Size | | Deptl | ı Set | (MD) | Pacl | er De | pth (MD) |
| 2 7/8" | | 6920' | | L | 6920' | | | _ | | | | | | | | | | | | | | |
| 23. Produc | ing Interv | | | | | | | 2 | | rforation | | | , | | | | | | | | | |
| A) D-1- | | | TOP | | Bottom | | Perforated Interval | | | | Size | | No | . Ho | les | Perf. Status | | | | | | |
| A) Delaware B) | | | | 6955' | | 8495' | | | 8403-8495 | | | .37 | | 20 | | | open | | | | | |
| C) | | | | + | | | | | | 7973-8174 | | | .37 | | | 16 | | open | | | | |
| D) | | | | | | -+ | | | | 7363-7445 | | | .37 | | +- | 22 | | | open | | | |
| | nt Ce | ment S | 6955-7270 .37 nent Squeeze, Etc. | | | | | | | | _L | 20 open | | | | | | | | | | |
| | Depth Inter | | in, oc | | queeze, | , Etc. | | | | Ar | nount ar | ad Tur | | | L 200 No. 100 | | | | | | _ | |
| 8403-8495 | - | | | 1000 | gals 10 ' | % NeFe | 31,000 gals 30 | # wlimbs w | ./ 70 01 | | ilount at | iu i y | DE OI IV | lateria | | | FO. | 7 5 | <u> </u> | RD | + | |
| 7973-8174 | | | | _ | | | 3,000 gals 30# | | | | | | - | -6 | alo | 3.1 | 273.1 | 26.33 | 100 | 1 23 | AS | · · · · |
| 7363-7445 | | | | | | | 3,500 gais 30# | | | | | | | 34.7 | 111 | . 3GD) | | | | 1 1 | • > | |
| 5955-7270 | | | | 1 | | | 4,000 gals 30# | | | | | | | - | -0 C | 1 | 4 | 200 | 2 | - | | |
| 28. Produc | ction - Inte | rval A | | | | | i,ooo gaab soo | Allie W | 04,10 | 10# 20/40 | | | | | | | | | | <u> </u> | + | |
| Date First Produced | Test Date | Hours | | Test | Oil | , | Gas | Water | | Oil Gravi | | Ga | s | P | roductio | n/Me | thod 🔿 | - A 15 | 7 | <u>. </u> | 12 | · · · · · · · · · · · · · · · · · · · |
| 9/30/02 | | Tested | | Production | n BB | | MCF | BBL | | Corr. API | | Gra | avity : | F. | ETEO | | 07 G 12 G | | io Nath | } | 1 | |
| Choke | 10/8/02 Tbg. Press. | Csg. | | 24 Hr. | Oil | 163 | Gas | Water | 3 | | 0 | - L. | 1) C | | ydraulic | | | ·• ·• · · | | | 7.2 | <u> </u> |
| Size | Flgw. | Press | | Rate | BB | | MCF | Water BBL | | Gas: Oil Ratio | | Wel | Il Status | | | | | | | | | |
| па | na | na | | | l | 163 | 157 | 38 | 3 | 96 | 53 | prod | ducing | | | | | | | | | |
| | ction - Inte | rval B | | | | | | | | | | (F. U | 6 | | | | | | | | · · · · · | |
| Date First Produced | Test Date | Hours Tested | | Test Production | Oil on BB | | Gas | Water | | Oil Gravit | у | Gas | | P | roduction | Meth | nod | | | | | |
| | | 163160 | ' | . roducile | ,,, DB | ı. | MCF | BBL | | Corr. API | | Gra | vity | | | | | | | | | 1 |
| Choke | Tbg. Press. | Call | - | 24 Hr. | Oil | | Gas | Water | | Gas: Oil | | 117-1 | 11 Status | | | | | | | | | -V |
| Size | Flwg. | Press | | Rate | BB | L | MCF | BBL | | Ratio | | we | n otatus | | | | | | | | | 1 4 |

| 28b. Produ | iction - Inter | rval C | | | | | | | | | | | |
|------------------------|--------------------------|--|--------------------------------|------------|---------------------------------|-------------------------------|--|--------------------|--------------------------------|---------------------------------------|--|--|--|
| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | duction Method | | | | |
| Choke Size | Tbg Press Flwg. SI | Csg. Press | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas: Oil Ratio | Well Status | | | | | |
| 28c. Produ | iction - Inter | rval D | | | <u></u> | | | | | | | | |
| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method | | | | |
| Choke Size | Thg Press Flwg. SI | ess Csg. 24 Hr. Oil Gas Water Gas: Oil Rate BBL MCF BBL Gas: Oil Ratio | | | | | | | | | | | |
| 29. Dispos | ition of Gas | (Sold use | ed for fuel, v | ented, etc | .) | | | | | | | | |
| Sold | | | | | | | | | | | | | |
| Show tests, | all importa | ant zones | Include Aquof porosity a | and conte | nts thereof: (, time tool o | Cored intervi pen, flowing | als and all drill-ste and shut-in pressur | | ion (Log) Markers | | | | |
| Form | ation | Тор | Bottom | | Descr | iptions, Con | tents, etc. | | Name | | | | |
| | | | | | | | | | - Tunio | Meas. Depth | | | |
| Dela | ware | 6955 | 8495 | | Sand | l, Oil, Gas an | nd Water | | Rustler | 1170 | | | |
| | | | | | | | | | Salado | 1322 | | | |
| | | | | | | | | | Castillo | 4525 | | | |
| | | | | İ | | | | | Lamar | 4770 | | | |
| | | | | | | | | | Delaware | 4798 | | | |
| | | | | | | | | | Cherry Canyon | 5678 | | | |
| | | | | | | | | | Brushy Canyon | 7352 | | | |
| | | | | | | | | | Bone Spring | 8622 | | | |
| | | | | | | | | | | | | | |
| 32. Additio | onal remark | s (include | plugging pro | ocedure): | | | | | | | | | |
| | | | | | | | | | | | | | |
| 33. Circle | enclosed att | achments: | | | | | | | | | | | |
| | | | gs (1 full set ng and cemen | | | eologic Repo ore Analysis | | • | virectional Survey | | | | |
| 34. I hereb | y certify tha | at the fore | going and att | ached info | ormation is co | omplete and | correct as determin | ed from all availa | able records (see attached ins | structions)* | | | |
| Name (| (please prin | t) _ Jeff Hai | rvard | 1 | | | Title Preside | ent | | * | | | |
| Signati | ште | \leftarrow | | | | | Date 10/18/02 | 2 | | | | | |
| Title 18 U.S | S.C. Section | 1 1001 and | d Title 43 U. | S.C. Sect | on 1212 mal | ce it a crime | for any person kno | owingly and willf | fully to make to any departn | nent or agency of the United | | | |
| | and House | as of Hade | uiciii siaiem | onts of re | resentations | as to any ma | itter within its juriso | aiction. | | · · · · · · · · · · · · · · · · · · · | | | |