Well file

THIS FORM TO BE SUBMITTED ALONG WITH FORM NO. 114 NOT LATER THAN 10 DAYS AFTER WELL COMPLETION OR ABANDONMENT IF A DRY HOLE. SHOW HIGHLIGHTS, DETAILS IN CHRONOLOGICAL ORDER, WITH DATE, CONDITION AND DEPTH OF HOLE. SHOW CHANGES IN TYPE OF MUD WITH REASONS. LOST CIRCULATION, BLOWOUTS, SURVEYS FOR DEVIATION FROM VERTICAL, DRILL STEM TESTS, CORING DEPTHS, ELECTRICAL SURVEYS, DESCRIPTION OF POSSIBLE PRODUCING ZONES CAUSED OFF, DESCRIPTION OF CASING JOBS SHOWING TYPES OF SHOES AND FLOAT EQUIPMENT, DETAILS OF CASING PULLED PRIOR TO COMPLETION, SIDETRACKED FISH, SHOT AND ACIDIZING RECORDS, PLUGS, ETC.

USE TYPEWRITER.

LEASE N. M. Federal "N" WELL NO. 3
SEC. 18 T. 30N R. 12W COUNTY San Juan
STATE New Mexico FIELD
A.P.I. NO. 60-358

HISTORY OF WELL
AT TIME OF COMPLETION

ALL DEPTHS FROM TOP OF ROTARY BUSHING UNLESS OTHERWISE STATED.

| Date 1960 | Depth | Remarks |
|---|---|---|
| 4/5 | | N.M. Federal "N" #3 was staked by San Juan Engineering Co. 1190' FNL & 1190' FWL, Sec. 18-T30N-R12W, San Juan County, N.M., Elev. 5933, Derrick Floor 5924', Ground Level 5924'. |
| 4/9-11 | | Preparing location & road by Younger Construction. |
| 4/14 | | Moved in rotary tools - Meade Drilling Company |
| 4/15 | | Rigging up rotary tools. Spud 12 1/4" hole 7:30 P.M. |
| 4/16 | | Finished drilling surface hole to 360' @2:30 A.M. Ran 12 jts - 362.17' - of 8 5/8" OD 24# J-55 8RD Thd csg, Rge.2, STAC, set at 356.23' w/325 sx reg neat cmt w/2% $CaCl_2$ circ. 40 sacks at surface. Used Baker WDW shoe, 2 centralizers 90 ft apart, casinghead 11' below KDB, Best Life thread lubricant. Plug Down 6:30 AM |
| 4/17 | | WOC 24 hrs. Nipple up BOP & test csg to 1000# for 30 min. |
| 4/18 | 1913' | Trip for bit #1 @1913', progress 1553'. Straight hole test, 600' 1/4°, 1100' 1/2°, 1913' 1/2°, Mud 9.2# 35 Vis 22 WL. |
| 4/19 | 2950' | Progress 1037' sd & sh, top Pictured Cliffs 2045' plus 3889'. No show. Straight hole test 1/2° @2640'. Mud 9.0# 36 Vis 8 WL |
| 4/20 | 3470' | Progress 520' sd & sh. Top Mesaverde 2835 plus 3099 - no show. Straight hole test 3294' 1°, Mud 9.3# 37 Vis 6 WL |
| 4/21 | 3680' | Progress 210' sd & sh. Straight hole test 3717' 1/4°, Mud 9.4# 38 Vis 7 WL |
| 4/22 | 4181' | Progress 501' sd & sh. Straight hole test 4181' 3/4°, Mud 9.3# Vis 50 7 WL. |
| 4/23 | 4600' | Progress 419' sd & sh, straight hole test 0° @4644', Mud 9.5#, 49 Vis 9 WL. |
| 4/24 | 5000' | Progress 300' sh, 0° 5000', Mud 9.6# Vis 45 8 WL |
| 4/25 | 5310' | Progress 310' sd & sh, 1/4° 5286', Mud 9.7#, 44 Vis 8 WL. Lost piece from cone & bearings on bit #2. Ran bit #2 w/junk basket. |
| 4/26 | 5720' | Progress 410' sh, Mud 9.8#, 47 Vis 8 WL, recovered piece of cone & bearings lost from bit #2. |
| 4/27 | 6090' | Progress 370' sd & sh, 1/4° 5770', Mud 9.7#, Vis 62 6 WL, slight fluorescense in wet sample between 5870' & 5980'. No fluorescence, no show in dry sample. |
| 4/28 | 6520' | Progress 430' sh, 1/2° 6350', Mud 9.7#, Vis 77 4.5 WL |
| 4/29 | 6670' | Progress 150' sd & sh, Lost circ 6625' for 2 hrs, total 300 bbls of mud. Regained 100% circ mud 9.4 Vis 94 6 WL |
| 4/30 | 6843' | Progress 173' sd & sh, 3/4° @6750', 9.4-9.7# Mud 100Vis 6 WL |

CORRECT _____ APPROVED _____

14-1 Backpr

THIS FORM TO BE SUBMITTED ALONG WITH FORM NO. 114 NOT LATER THAN 10 DAYS AFTER WELL COMPLETION OR ABANDONMENT IF A DRY HOLE. SHOW HISTORICAL DETAILS IN CHRONOLOGICAL ORDER, WITH DATE, CONDITION AND DEPTH OF HOLE. SHOW CHANGES IN TYPE OF BUB WITH REASONS. LOST CIRCULATION, ELEVATIONS, SURVEYS FOR DEVIATION FROM VERTICAL, DRILL STEM TESTS, CORING DEPTHS, ELECTRICAL SURVEYS, DESCRIPTION OF PRODUCIBLE FORMATIONS BEING SHUT OFF, DESCRIPTION OF CASING JOBS INCLUDING TYPES OF SHOES AND FLOAT EQUIPMENT, DETAILS OF CASING PULLED PRIOR TO COMPLETION, DESIGNATED PERF, SHOT AND ACIDIZING RECORDS, PLUGS, ETC.

USE TYPEWRITER.

LEASE Jack Federal NCT WELL NO. 1
SEC. 18 T. 30N R. 12W COUNTY San Juan
STATE New Mexico FIELD
A.F.E. NO. 60-358

HISTORY OF WELL
AT TIME OF COMPLETION

ALL DEPTHS FROM TOP OF RIGHT ROBINSON HOLDER BUSHING ELEVATION.

| Date 1960 | Total Depth | |
|---|---|---|
| 5/1 | 6875 (Rotary Tool Depth) | Finished hole 3:00 P.M. 4/30/60, run Schl DS-Induction, GR-Sonic Logs. Schl TD 6874', run 48 jts - 1525.87' - 4 1/2" OD 11.6# J-55 8 RD, Rge 2 Csg, ST&C & 165 jts - 5348.76' - 4 1/2" OD 9.5# J-55 8 RD CF&I Csg, ST&C (Thds off measurements) set at 6,875' w/325 sxs 50-50 pozmix w/12 1/2# Gilsonite per sx, plug down. Used 26 centralizers 18' apart, 10 centralizers 90' apart, Baker Flex Flow Float, Baker WDW shoe, casinghead 11' below KDB. Plug down 3:00 P.M. 5/1/60. WOC 6 hrs, Nipple up 4 1/2" csg & install tree, ran temp survey. Top cmt 5300' in Annulus. Top of cmt in csg 6[illegible]. Top of Dakota 6562' (-628). |
| 5/2 | 6875' | WOC & picking 2 3/8" tbg & stand in derrick. |
| 5/3 | | Press test csg to 2500# for 30 min - no leak. Run Lane Wells RFC log TD-6830'. Log from 4350' to 6830'. Lane Wells meas. flat w/Schl sonic log. Perf. 6564' to 6572', 6578' to 6588', 6600' to 6606', 6624' to 6630', 6642' to 6656', 6674' to 6680' w/2 Jet holes per ft. Total of 88 holes. Meas from Schl sonic log. Run 2 3/8" tbg in hole. |
| 5/4 | | Run tbg to 6697', treat perf w/500 gallons Dowell BDA. Displace hole w/treated wtr. Spot acid across perf. Sqz acid into formation @5000# @5 BPM. Press dropped to "0" immediately after acid was displaced. Pulled tbg, rig up Dowell for sd wtr free treatment. Treat perf w/80,000 gal wtr & 80,000# 20-40 mesh sd. Used 2 1/2# of J-100 & 1 gal W-23 per ops thousand gal wtr. Break down formation w/wtr @3000# press dropped to 2 300# @34 BPM. Pumped 25,000 gal & 25,000# sd @2300# - dropped 20 rubber balls. No increase in press. Pumped 25,000 gal & 25,000# sd @2300#, dropped 20 rubber balls, press increased from 2300# to 2600#, pumped 10,000 gal & 10,000# sd @2400#, dropped 10 rubber balls, Pressd increased from 2400# to 2500#, pumped 20,000 gal wtr & 20,000# sd @2400# final press on flush 2600#, max press 3000#, avg inj rate 43 BPM, immediate shut down press 1250#, 5 min 1000#, 15 min 700#, 1 hr 500#, 4 hr 250#, open well to pit & bleed off press w/approx 150 BW. Run 206 jts 2 3/8" OD - EUE 4.7# J-55 Tbg. Tag point 6547 w/pin collar. Nipple up well head. Well started flowing to pit 2 P.M. 5/3/60. Flow to pit in 10 hrs csg press increased from 150# to [illegible], tbg press 250#. Flowing 14/64" choke. Released Hondo Drlg Rig 7 A.M. 5/4/60. |
| 5/5 | | Flow to pit 24 hrs on 14/64" choke, tbg press 150# (beginning 24 hr test, 100# [illegible] press [illegible] (beginning), 150# after 24 hrs. Gauge 1200 MCFPD plus or minus [illegible] fresh wtr per hr. No condensate. |
| 5/6 | | Flow to pit 24 hrs. 14/64" choke. Estimated 1500 MCFPD plus estimated 10 BW & [illegible] cond per hr., FTP 100#, FCP 400#, shut in 3 hrs, SITP 1175#, SICP 1200#. |
| 5/9 | | SI 23 hrs, SITP 1690#, SICP 430#, clean to pit 1 hr, produced estimated 10 bbls wtr & 1 bbl cond. |
| 5/10 | | SI 27 hrs, SITP 1900#, SICP 1890#, clean to pit 1 hr, prod an estimated 10 BW & 1 bbl cond per hr, FTP 130#, FCP 900#. |

CORRECT: _____ SUBMITTED: _____ APPROVED: _____ SUPERINTENDENT

SUNRAY

THIS FORM TO BE SUBMITTED ALONG WITH FORM NO. 114 NOT LATER THAN 10 DAYS AFTER WELL COMPLETION OR ABANDONMENT IF A DRY HOLE. SHOW HISTORICAL DETAILS IN CHRONOLOGICAL ORDER, WITH DATE, CONDITION AND DEPTH OF HOLE. SHOW CHANGES IN TYPE OF MUD WITH REASONS LOST CIRCULATION, BLOWOUTS, SURVEYS FOR DEVIATION FROM VERTICAL, DRILL STEM TESTS, CORING DEPTHS, ELECTRICAL SURVEYS, DESCRIPTION OF POSSIBLE PRODUCING ZONES CASED OFF, DESCRIPTION OF CASING JOBS SHOWING TYPES OF SHOES AND FLOAT EQUIPMENT, DETAILS OF CASING PULLED PRIOR TO COMPLETION, SIDETRACKED FISH, SHOT AND ACIDIZING RECORDS, PLUGS, ETC.

USE TYPEWRITER.

HISTORY OF WELL
AT TIME OF COMPLETION

LEASE N.M. Federal "N" WELL NO. 3
SEC. 18 T. 30N R. 12W COUNTY San Juan
STATE New Mexico FIELD
A.F.E. NO. 60-358

ALL DEPTHS FROM TOP OF KELLY BUSHING UNLESS OTHERWISE SPECIFIED.

| Date 1960 | Total Depth | |
|---|---|---|
| 5/11 | | SI 22 hrs, SITP 1923#, SICP 1975#, clean to pit 1 hr, produced an est 10 BW & 1 bbl cond per hr. |
| 5/12 | | SI 23 hrs, SITP 1625#, SICP 1690#, flow to pit 1 1/2 hrs an est 10 BW & 1 bbl cond per hr, FTP 300#, FCP 950#. |
| 5/13 | | SI 24 hrs, SITP 1925#, SICP 1950#. |
| 5/16 | | SI 21 hrs, SITP 1960#, SICP 1980#, clean to pit 2 hrs, est 10 BW & 1 bbl cond per hr, FTP 300#, FCP 700#, after 2 hrs flowing. |
| 5/17 | | SI 17 hrs, SITP 1900#, SICP 1940#, clean to pit 2 hrs, est 8 BW & 1 bbl cond per hr, FTP 300#, FCP 680#. |
| 5/18 | | SI 52 hrs, SITP 1975#, SICP 2000#, clean to pit 3 hr, est 5 BW & 1 bbl cond per hr, FTP 275#, FCP 675# after 3 hrs. SI for 7 day SI press test. |
| 5/19 | | SI for 7 day press test. |
| 5/20 | | " |
| 5/23 | | " |
| 5/24 | | " |
| 5/25 | | " |
| 5/26 | | Ran 1 point back press test. SI 7 days, SITP 2040#, SICP 1545#, flow on 3/4" choke 3 hrs, FTP 300#, FCP 690#, Qa 2536 MCFPD, absolute potential 2786 MCFPD, Well complete. |

CORRECT _____ SIGNATURE

APPROVED A. E. McStewart SUPERINTENDENT