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8/17/02

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

July 12, 2002

Lori Wrotenbery
Director
Oil Conservation Division

Mr. Robert C. Chase
Mack Energy Corporation
PO Box 960
Artesia, New Mexico 88211

RECEIVED
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JUL 17 2002

Re: Administrative Application for SWD: Beech Federal Well No. 3
Section 25, T17S, R27E, NMPM, Eddy County, New Mexico.

Dear Mr. Chase:

The division received your application June 14, 2002 and after evaluation, the following information is needed to complete the order:

- 1) Explanation of the water analysis included in this application. What formations do they represent and why do some have very low pH? ✓
- 2) Please include in the application a photocopy of the mud log and electric logs through the Abo interval being proposed for injection. ✓
- 3) A summary of the drill reports and completion reports for this well.
- 4) A current annotated well bore diagram including all perforations existing in the well.
- 5) The No Bluff 36 St Com #002 API: 30-015-31123 is located within the Area of Review and has a cement top as calculated by the operator - Southwest Energy Production Company - at 7,350 feet. Please provide a plan for resolving this issue.

Pending receipt of this information and since our 30-day limit for pending applications is approaching, your application is being returned. If I can be of further assistance, please call (505) 476-3448.

Sincerely,

William V Jones Jr. PE

cc: Oil Conservation Division - Artesia
Bureau of Land Management - Carlsbad

MACK ENERGY CORPORATION

BEECH FEDERAL #3

Sec 25 T17S R27E 330 FSL 1775 FEL

WELL HISTORY

ELEV: 3613'

PBTD: 7935'

TD: 7961'

SP Csg: 8 5/8" 32# LT&C J-55 9jts @ 400' C/w 325sks Class C 2% CaCl (circ 92sks)

INT Csg:

LS Csg: 5 1/2" 17# J-55 LT&C 180jts @ 7955', C/w1st stage 700sks 50/50:2 5#salt 5/10% FL25 (95sks) 2nd stage 1350sks 35/65:6 3#salt 1/4#CF, tail 250sks 50/50:2 5#salt 5/10%FL25, (circ 118 sks)

DV TOOL: 6029'

MRK JT: 6928'

CIBP: 6555' w/35' cap. 6420' w/35' cap.

T SALT: None

B SALT: None

PERFS: 6567-83 4SPF 68 holes
6590' 2 SPF
6593' 2 SPF
6594' 2 SPF
6450.5,54,56,57.5,59,60,61,62,66,67,69,70,75,77,79,81,82.5,86.5,89.5,90.5,92,93.5,95.5,96.5,98,6500,04.5,06,08,10,11.5,13.5
6107.5,25,32,33,35,37.5,41.5,46.5,54,56,59.25,70,71.5,73,75.25,77.5,79,82.5,87,89.5,92,93.5,6202,05.5,07,10,13,14.5,18,22.25,25,30,42.75,48,52.5

DRILLING REPORT

11/05/2001 MIRU L&M#3 Spud 12 1/4" hole (called BLM) @4:30 pm

11/06/2001 DAY #1 391' (351'), Survey @ 250' - 1/2 deg.TD 7AM 408', run sweep POH, rig up csg crew RIH 8 5/8" 32# LT&C J-55 9jts set at 400', BJ cmt 325sks Class C 2% CaCl plug down 10:15AM circ 92sks to pit. (Witness D. Early BLM) check not holding leave on head for 4hrs. ND head NU Type 92well head and BOP, weld flange on, Mann Services 3rd party check on BOP(called BLM did not witness) RIH BHA bit #2 7 7/8" drill out cmt and shoe. drilling new formation.

11/07/2001 452' (44') full returns. drilling cut brine

11/08/2001 1,475' (1,045'), Survey @ 1,302' - 3/4 deg.

11/09/2001 1,783' (308'), Survey @ 1,780' - 1 deg.

MACK ENERGY CORPORATION

BEECH FEDERAL #3

Sec 25 T17S R27E 330 FSL 1775 FEL

11/10/2001 2,345' (562'), Survey @ 2,157' - 3/8 deg.
11/11/2001 2,938' (593'), Survey @ 2,678' - 3/4 deg.
11/12/2001 3,485' (547'), Survey @ 2,992' - 3/4 deg.
11/13/2001 3,934' (449'), Survey @ 3,490' - 1 deg.
11/14/2001 4,263' (329'), Change to bit #3 @ 3,965' - 7 7/8" Reed HP62H, survey @ 3,925' - 1 deg.
11/15/2001 4,704' (441'), Survey @ 4,421 - 1 deg.
11/16/2001 5,050 (346'), Survey 4,889' - 1 1/2 deg.
11/17/2001 5'418' (368'), Survey @ 5,355' - 1 1/2 deg.
11/18/2001 5,726' (308')
11/19/2001 5,872' (146'), Change to bit #4 @ 5,862' - 7 7/8 Reed HP62, left one cone & shank, survey @ 5,862' - 1 3/4 deg.
11/20/2001 6,111' (239'), Hole in D.P. 13th stand
11/21/2001 6,365' (254'), Gas = Background - 50 units, connect - 50 units, max - 177 units
11/22/2001 6,689' (324'), Survey @ 6,351' - 1 1/4 deg.
11/23/2001 6,870' (181'), Hole in D.P. 16th stand, survey @ 6,810' - 1 1/2 deg.
11/24/2001 7,037' (167'), Hole in D.P. 34th stand
11/25/2001 7,164' (127'), Change to bit #5 @ 7,101' - 7 7/8" Reed HP62H, Trip Gas 307 units - Background Gas 71 units
11/26/2001 7,382' (218')
11/27/2001 7,480' (98'), 7,438' Hole in D.P. 67th stand
11/28/2001 7,662' (182'), Mas Gas 126 units - Conn Gas 66 units - Background Gas 66 units, survey @ 7,591' - 1 1/2 deg.
11/29/2001 7,863' (201')
11/30/2001 Day25, TD hole 11:00pm 11/29/01 at 7961', run 2 sweeps, pull up run short trip run back to btm clean run final sweep and spot mud pill on btm and POH, rig up Schlumberger run logs, PE,NGT,HALS, CORES,FMI, rig loggers down rih with bit, DC,DP, tag btm clean, POH laying down.
12/01/2001 Finish POH, rig up csg crew RIH 5 1/2" 17# J-55 LT&C 180jts @ 7955', DV tool 6029', Mrk Jt @ 6828', shoe jt 11.35', circ hole rig up BJ 1st stage 700sks 50/50:2 5#salt 5/10% FL25, plug down 3:30AM 12/2/01 circ 95sks, 2nd stage 1350sks 35/65:6 3#salt 1/4#CF, tail 250sks 50/50:2 5#salt 5/10%FL25, plug down 11:00AM 12/2/01 circ 118 sks. release rig.

COMPLETION REPORT

MACK ENERGY CORPORATION

BEECH FEDERAL #3

Sec 25 T17S R27E 330 FSL 1775 FEL

- 03/04/2002 RU RIH drill out DV Tool @ 6029'. RIH to 6700' & circ. hole. POH laydown drill collars.
- 03/05/2002 RU Schlumberger & perf. 6567-83' 4 SPF 68 holes, 6590' 2 SPF 6593' 2 SPF, 6594' 2 SPF. RIH w/5 1/2" RTTS & spot 1 1/2 BBIs acid. Breakdown perfs @ 4900# @ 1.8 bpm. Open bypass spot acid & balls to Pkr. Close bypass & acidize w/2000 gals 15% HCL & 222 balls. Pressure increased to 5556# @ 3.3 bpm broke back to 4530# @ 3.3 bpm Avg. Rate 6 Avg. Psi 1800# ISIP 410# 2 min. well on vaccum. Balled off 5660# w/161 balls. RU pull 11 swab runs tagging @ 2500' pulling 1700' black water.
- 03/06/2002 Swab tag @ 2500' pull 1700' black water. POH w/RTTS. RU Schlumberger set CIBP @ 6555' & cap w/35' cmt. Perf. 6450.5-6513.5 32 holes. RIH w/5 1/2" PPI Tool.
- 03/07/2002 Test CIBP 2000#. Try to circ. hole & couldn't break circ. perfs already broke down. Open bypass & spot acid & balls to pkr. Close bypass & finally caught psi balled perfs off w/20 bbls flush left. Couldn't surge balls off RIH w/ Pkr. knock balls off perfs. Reset Pkr. RU & swab. Pull 7 runs tagging @ 2500' pulling 1700' of black water. POH w/Pkr. RU Schlumberger & set CIBP @ 6420' & cap w/35' cmt. Perf. 6107.5-6252.5 35 holes. RIH w/5 1/2" PPI Tool.
- 03/08/2002 Test CIBP 2000#. Spot 4 bbls acid & breakdown perfs 2693# @ 2.4 bpm 3085# @ 4.5 bpm. Open bypass & spot acid & balls to Pkr. Close bypass & acidize 3075# @ 5 bpm 3389# @ 5.8 bpm. Balled off w/56 balls 5000#. Avg. Rate 6 Avg. Psi 3600# ISIP 2791# 5 min. 2703# 10 min. 2674# 15 min. 2664#. Pull 8 runs 8th run waited 3 hrs. pulled 200' fluid w/1% oil.
- 03/09/2002 Swab Tag 250' fluid pulled 100' w/1-2' free oil & 1-2% oil cut.
- 03/10/2002 Swab Tag 450' fluid pulled 200' w/3-4' free oil & 1-2% oil cut. RIH & PPI perfs. All perfs were broke. RU BJ & acidize w/10,000 gals 15% HCL & balled off w/55 balls 5181#. Avg. Rate 8.1 bpm Max 8.7 bpm @ 5461#. Avg. PSI 4350# ISIP 3300# 5 min. 3100# 10 min. 3050# 15 min. 2990#. Well flowed back hard for 30 min. & cont. to flow down for 1 hr. RU & swab. 4th run tag @ 2800' fluid pull 1700' w/acid.
- 03/11/2002 Swab Tag fluid @ surf. 1st run. Swab dry in 7 runs. gas would burn. wait 2 hrs. tag @ 5700' pull 200' fluid w/stain of oil. Leave tbg. & Pkr. in hole. Tbg. setting on slips w/BOP still on well. RD.
- 03/20/2002 RU Release PPI tool & POH laying down tbg. Break off well head & put swage & ball valve on well.