

ConocoPhillips

END OF WELL SCHEMATIC

Well Name: San Juan 30-5 # 229A
API #: 30-039-27773
Location: 1700' FSL & 1500' FEL
 Sec. 21 - T30N - R5W
 Rio Arriba County, NM
Elevation: 6401' GL (above MSL)
Drl Rig RKB: 13' above Ground Level
Datum: Drl Rig RKB = 13' above GL

Spud: 15-Aug-04

Release Drl Rig: 19-Aug-04

Move In Cav Rig: 27-Sep-04

Release Cav Rig: 6-Oct-04

Note - this well is equipped with rods & pump
 7-1/16" 3M x 2-3/8" EUE 8rd Bonnet
 11" 3M x 7-1/16" 3M Tubing Head
 9-5/8" 8 RD x 11" 3M Casing Head

Surface Casing Date set: 16-Aug-04
 Size 9 5/8 in
 Set at 243 ft # Jnts: 5
 Wt. 32.3 ppf Grade H-40
 Hole Size 12 1/4 in Conn STC
 Excess Cmt 125 %
 T.O.C. SURFACE

Csg Shoe 243 ft

TD of 12-1/4" hole 243 ft

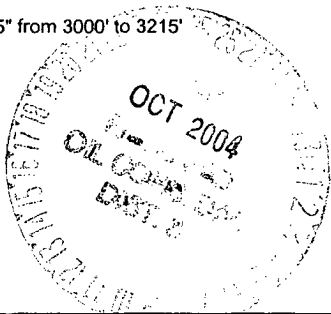
Notified BLM @ _____ hrs on _____
 Notified NMOCD @ _____ hrs on 13-Aug-04

Intermediate Casing Date set: 18-Aug-04
 Size 7 in 71 jts
 Set at 2995 ft 0 pups
 Wt. 20 ppf Grade J-55
 Hole Size 8 3/4 in Conn STC
 Excess Cmt 160 % Top of Float Collar 2952 ft
 T.O.C. SURFACE Bottom of Casing Shoe 2995 ft
 Pup @ _____ ft TD of 8-3/4" Hole 2995 ft
 Pup @ _____ ft

Notified BLM @ 10:30 hrs on 17-Aug-04
 Notified NMOCD @ 10:30 hrs on 17-Aug-04

Production Liner Date set: 04-Oct-04
 Size 5 1/2 in
 Nominal Wt. 15.5 ppf
 Grade J-55 Connections: LTC
 # Jnts: 6
 Hole Size 6.25 / 9.5 inches
 Underreamed 6-1/4" hole to 9.5" from 3000' to 3215'
 Top of Liner 2941 ft
 PBDT 3214 ft
 Bottom of Liner 3215 ft

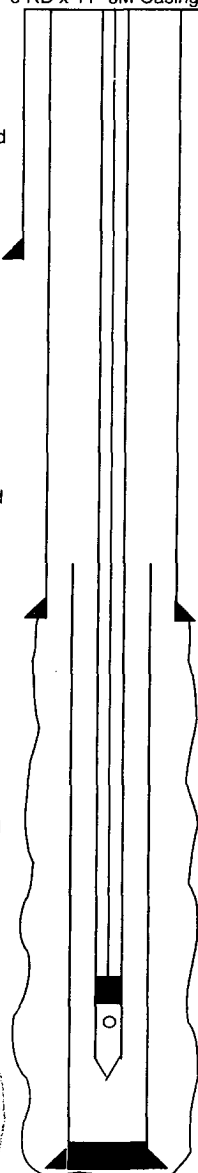
This well was NOT cavitated.



☒ New
☐ Used

☒ New
☐ Used

☒ New
☐ Used



TD 3,215 ft

Surface Cement

Date cmt'd: 16-Aug-04

Lead : 150 sx Class G Cement
 + 2% BWOC S001 CaCl2
 + 0.25 lb/sx D029 Cellophane Flakes
 1.16 cuft/sx, 174 cuft slurry at 15.8 ppg
 Displacement: 15.8 bbls fresh wtr
 Bumped Plug at: 01:00 hrs w/ 310 psi
 Final Circ Press: 150 psi
 Returns during job: YES
 CMT Returns to surface: 5 bbls
 Floats Held: No floats used
 W.O.C. for 6.00 hrs (plug pump to start NU BOP)
 W.O.C. for 19.00 hrs (plug pump to test csg)

Intermediate Cement

Date cmt'd: 18-Aug-04

Lead : 385 sx Class G Cement
 + 3% D079 Extender
 + 0.25 lb/sx D029 Cellophane Flakes
 + 0.2% D046 Antifoam
 2.61cuft/sx, 1004.9 cuft slurry at 11.7 ppg
 Tail : 100 sx 50/50 POZ : Class G cement
 + 2% D020 Bentonite
 + 2% S001 Calcium Chloride
 + 5 lb/sx D024 Gilsonite
 + 0.25 lb/sx D029 Cellophane Flakes
 + 0.1% D046 Antifoam
 1.27 cuft/sx, 127 cuft slurry at 13.5 ppg
 Displacement: 119.6 bbls
 Bumped Plug at: 23:30 hrs w/ 1150 psi
 Final Circ Press: 650 psi @ 2 bpm
 Returns during job: YES
 CMT Returns to surface: 20 bbls
 Floats Held: ☒ Yes ☐ No

UNCEMENTED LINER

Schematic prepared by:
 Steven O. Moore, Drilling Engineer
 11-Oct-2004

COMMENTS:

9-5/8" Surf:	No float equipment was run. Ran a guide shoe and an aluminum baffle plate 1 jt above the guide shoe @ 201'. Displaced top wiper plug with water. Shut in casing head and WOC before backing out landing jt. CENTRALIZERS @ 233', 146', 102', & 69'. Total: 4
7" Intermediate	DISPLACED W/ 119.6 BBLs. FRESH WATER. CENTRALIZERS @ 2985', 2907', 2823', 2737', 2694', 2651', 212', 83', & 40'. TURBOLIZERS @ 2608', 2564', 2525', 2482', 2439', & 2396'. Total: 9 Total: 6
5.5" Liner	Ran 6-1/16" bladed shoe and w/ float on btm of liner. Ran liner w/ TIW H-Latch Drop Off Tool (no liner hanger).
Perforations	Perforated 5-1/2" liner with guns on E-line at 4 spf, 0.75" diameter, 120 degree phased holes Perf. Intervals: 3028'-3031', 3040'-3044', 3048'-3050', 3075'-3078', 3111'-3130', 3100'-3108', 3132'-3138'. TOTAL SHOTS = 180.
Tubing	32.68' x 2-7/8" EUE 8rd box Orange Peeled Mud Anchor with eight each 0.25" x 8" slots just below the upset, 2-7/8" x 2-3/8" EUE 8rd crossover collar, 2-3/8" OD (1.78" ID) F-Nipple, 1 ea 8' x 2-3/8" EUE pup jt and 100 jts 2-3/8" 4.7# J-55 EUE 8rd tubing, Bottom of Mud Anchor at 3199'. F-Nipple at 3168' MD RKB.
Pump & Rods	12" long strainer attached below 1-1/4" RHAC-Z insert pump with 3 ea 25' x 1-1/4" OD sinker bars on top of pump 123 ea 3/4" OD rods, 1 ea 6' x 3/4" OD pony rod, 1 ea 1-1/4" OD x 22' polished rod, and 1 ea 2' pony rod on top. Set pump in F-Nipple at 3168' MD RKB

Farrell, Juanita R

From: Moore, Steven O.
Sent: Tuesday, October 12, 2004 8:59 AM
To: Farrell, Juanita R
Subject: Comments for Completion Report for San Juan 30-5 # 229A

Juanita,

Please include the following in the Completion Report for San Juan 30-5 # 229A

On Friday, 1-Oct-2004, we drilled out of the 7" intermediate casing shoe and drilled through the Fruitland Coal and Picture Cliffs formation to the authorized TD of 3215' MD RKB. We found the bottom of the lowest coal at 3138' MD RKB.

While drilling the rat hole / sump hole (per the approved program) we lost circulation while drilling at 3200' MD RKB. We continued to drill to approved TD of 3215' MD RKB and regained circulation. We circulated out several slugs of water - and the formation cuttings circulated to surface indicated that we had drilled into a water bearing sand at approximately 3200' MD RKB. Our observations after regaining circulation were that the well was making water at a rate of approximately ½ bbl per minute (or approximately 500 bbls water per day), and it appeared to us that the water was coming from the bottom 15 ft of the hole.

Therefore, because of these observations, we felt that we might need to plug back part of the sump hole / rat hole to shut off the water influx from the bottom of the hole. Steve Moore, ConocoPhillips Company, contacted Jim Lovato, BLM, Adrienne Brumley, BLM, and Charlie Perrin, NMOCD and proposed a plan to plug back part of the rat hole / sump hole to shut off the water. Permission was given for the proposed plan - however, approximately 2 hrs after the initial influx of water was observed, the water rate dropped off to approximately 1 gallon per 40 minutes (approximately 0.85 bbls water per day), thus eliminating the need to plug back the rat hole / sump hole.

We performed a flow test and a shut-in pressure build up test – and released the shut in pressure as a natural surge. We underreamed the 6-1/4" hole and obtained a post-underreamed flow test and shut-in pressure build up test. Both of the flow tests were dry – no observable mist or water was produced in these tests. And we did not circulate out any more slugs of water.

Therefore, because the well stopped making water, we decided not to perform the plug back procedure that we had proposed. Steve Moore discussed this with Jim Lovato on Monday, October 4, 2004, and with Charlie Perrin on Tuesday, October 5, 2004.

We ran the 5-1/2" liner on Monday, October 4, 2004. We perforated the liner and ran the tubing string on Tuesday, October 5, 2004. We ran the insert pump and rods on Wednesday, October 6, 2004. This concluded our drilling and completion operations for this well.

Sincerely,
Steve Moore

