

TORCH OPERATING COMPANY

Spur 11 State Com #1
Turkey Track
Eddy County, New Mexico

Atoka Sand Completion Procedure Frac Through-Tubing

OBJECTIVE: Complete as an Atoka Sand flowing gas well.

LOCATION: SHL - 660' FNL & 660' FWL of Sec. 11 T19S R29E
BHL - 660' FNL & 660' FWL of Sec. 11 T19S R29E

WELL DATA

Surface Casing:	11-3/4" 42.0#/ft. K-55 LT&C set @ 357'
Intermediate Casing:	8-5/8" 24.0#/ft. K-55 LT&C set @ 2,996'
Production Casing:	5-1/2" 17#/ft. L-80 LTC set @ 11,650' (80% burst = 6192 psi)
Tubing:	2-7/8", 6.5 # N-80, 8rd w/ API mod seal (80% burst = 8456 psi.)
TOC:	8000 ft
Total Depth:	11,650'
PBTD:	Existing: 11,380'; Proposed: 11,180'
Packer:	Existing: 11,151'; Proposed: 9750'
Proposed Perfs:	10,756' – 10,776' & 10,784' – 10,796'
Type Fluid In Hole:	5% -6% KCl water

RECOMMENDED PLUBACK & RE-COMPLETION PROCEDURE

1. Mob in workover rig. RU WOR.
2. RU pump truck. Fill tubing with 6 % KCL. Kill well. Have powdered (dry) KCL on location. Do not use liquid KCL. Set BPV.
3. ND tree. Send same to Cameron for inspection and repairs. NU and test BOP's to 5000 psi.
4. Pull BPV. MU landing joint. Back out hold down pins on hanger. PU on tubing. Release packer. Let well U-tube. Circ bottom's up. Make sure well is dead. POOH with tubing. Send packer in for re-dressing and inspection.
5. MIRU ELU. MU CIBP w/ GR and CCL. RIH. Set same at 11,200 ft. POOH. Close rams. Test CIBP to 5000 psi. MU dump bailer. Make cement run. Dump 35 ft cement. RD EL unit.

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6. MU TCP gun assy. with auto-release firing head, fill disc sub and "X" nipple per attached diagram. MU packer. Run RA tag one joint above packer. TIH w/ same. Test tubing to 7500 psi doubles below while TIH. Circ corr inhibitor. RU EL. Make confirmation pass to verify guns are on depth. Space out. Set packer. Test backside to 2500 psi.
7. Hang off tubing. ND BOP's. NU tree. Test tree to 5000 psi. RU swabbing line. Swab down well to 9800 ft. RU manifold with gas measuring meters.
8. Drop firing bar. Perforate the Atoka Sand at 10,756'-10,776' & 10,784' – 10,796'. Swab down well if required.
9. F & C well. Clean up until well is stabilized or satisfactory results from flow-back are obtained. Report results to Houston Office as soon as possible for possible acidizing or Frac analysis in the event there is no natural flow.
10. Have contingency plan available to acidize well if election made to acidize prior to Frac. Acidize and flow back well (Detailed acidize prog to be provided)
11. MIRU frac equipment. Install tree saver. **Note:** BJ Services will provide tree saver and flow-back manifold. Install pressure relief valve on 5-1/2" casing. Put 2000 psi on casing. Test surface lines to 7500 psi. Frac well down tubing per procedure (detailed procedure to be provided). RDMO frac equipment.
12. Open well to test manifold for clean-up as soon as possible. Adjust chokes according to schedule provided. Flow back load and cleanup well thru clean-up facilities. Monitor pressures. After clean-up is completed, switch well to permanent facilities for sales.



Bellwether Exploration Company

1331 Lamar, Suite 1455 Houston, TX 77010-3039

CURRENT

RKB: 3386'
Elv: 3364'

BELLWETHER EXPLORATION

DATE: 05-Oct-00

11 3/4" @ 357'

WELL: **Spur 11 State Com #1**

FIELD: Turkey Track

CTY, ST Eddy, New Mexico

LOC: Sec 11 T19S R29E

BEC WL: NRI:

8-5/8" @ 2996'

Estimated top of cement - 8000'

Baker Mod M Packer at 11,152'

"X" nipple at 11,166'

EOT & WL re-entry guide @ 11,167'

Well **Spur 11 State Com #1**

Current ☒

Proposed ☐

Upper Morrow perfs:

CASING

Surface

Prod.

TBG

11,248'-11,260' &

11,310'-11,315'

Size

8.625"

5.50"

2 7/8

ETOC @ 11,380'

Weight

32.0

17.5

6.5

CIBP @ 11,410'

Grade

J-55

L-80

N-80

Lower Morrow perfs

11,423' -11,427' & 11,442' -11,456'

& 11,458' -11,465'

Thread

ST&C

ST & C

8rd

FC @ 11,556'

5-1/2", 17#, L-80 @ 11,650'

Depth

2996'

11,650'

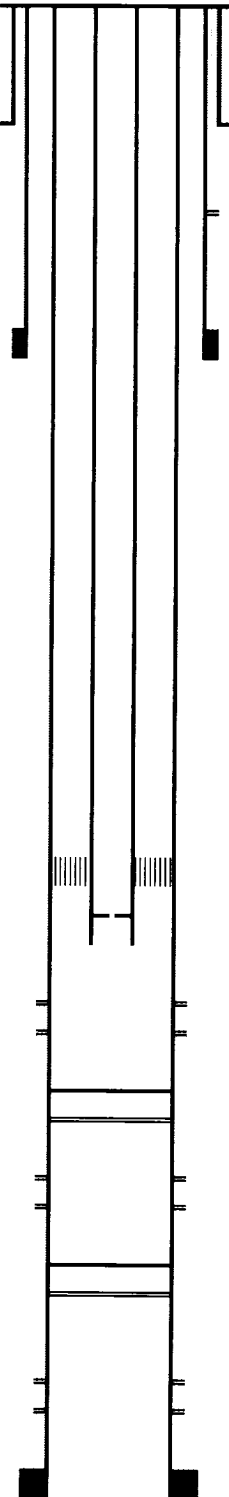
0-11,167'

TD: 11650'

PBTD: 11380'



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