

Submit 3 Copies To Appropriate District Office  
District I:  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|   |  |   |
|---|--|---|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) |  | WELL API NO.<br>30-045-32881  |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other   |  | 5. Indicate Type of Lease<br>STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> |
| 2. Name of Operator<br>Thompson Engineering & Prod. Corp.   |  | 6. State Oil & Gas Lease No.  |
| 3. Address of Operator<br>7415 East Main Street, Farmington, NM 87402   |  | 7. Lease Name or Unit Agreement Name<br>Johnston  |
| 4. Well Location<br>Unit Letter N : 905' feet from the South line and 1585' feet from the West line<br>Section 28 Township 30N Range 12W NMPM County San Juan   |  | 8. Well Number #1E  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>5436' GL  |  | 9. OGRID Number<br>37581  |
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>  |  |   |
| Pit type      Depth to Groundwater      Distance from nearest fresh water well      Distance from nearest surface water   |  |   |
| Pit Liner Thickness:      mil      Below-Grade Tank: Volume      bbls;      Construction Material   |  |   |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

|   |  |
|---|--|
| <b>NOTICE OF INTENTION TO:</b><br>PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/><br>TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/><br>PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/><br>OTHER: <input checked="" type="checkbox"/> Fracture Treatment Report | <b>SUBSEQUENT REPORT OF:</b><br>REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/><br>COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/><br>CASING/CEMENT JOB <input type="checkbox"/><br>OTHER: <input checked="" type="checkbox"/> |
|---|--|

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

On 07/26/05 the above well was Fraced per attached treatment reports.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Paul C. Thompson TITLE PRESIDENT DATE 08/05/05

Type or print name Paul C. Thompson, P.E. E-mail address: paul@walsheng.net Telephone No. 505-327-4892  
**For State Use Only**

APPROVED BY: Chad X TITLE SUPERVISOR DISTRICT # 3 DATE AUG 11 2005  
Conditions of Approval (if any):

**FRACTURE TREATMENT REPORT**

**Operator:** Thompson Engineering **Well Name:** Johnston #1E  
**Date:** 26-Jul-05  
**Field:** Basin Dakota **Location:** 28/30N/12W **County:** San Juan **State:** NM  
**Stimulation Company:** BJ Services **Supervisor:** Paul Thompson

**Stage #:** 1/2 Granerous

**Sand on location:** **Design:** 18,750 Brady **Weight ticket:** **Size/type:** 20/40 Brady & 20/40 SLC  
6,250 SLC  
**Fluid on location :** **No. of Tanks:** 2 **Strap:** 16' & 18' **Amount:** 680 **Usable:** 600

**Perforations:**

**Depth:** 6084-90, 6092-94, 6107 **Total Holes:** 27 **PBTD:** 6120' KB  
CIBP  
**Shots per foot:** 3 spf **EHD:** 0.34"

**Breakdown:**

**Acid:** 250 gal of 15% HCl  
**Balls:** None  
**Pressure:** 1140 **Rate:** 4.2  
No obvious break  
Pressures dropped 160 psi  
as the acid hit formation.

**Stimulation:**

**ATP:** 3000 psi **AIR:** 25.5 BPM  
**MTP:** 3560 psi **MIR:** 25.9 BPM

|         | Sand Stage | Pressure | Rate | BHTP |
|---------|------------|----------|------|------|
| ISIP:   | pad        | 3192     | 25.5 | 4845 |
| 5 min:  | 1 ppg      | 2835     | 25.5 | 4958 |
| 10 min: | 2 ppg      | 2744     | 25.7 | 4975 |
| 15 min: | 3 ppg      | 2665     | 25.7 | 5011 |
|         | 4 ppg      | 2636     | 25.3 | 5076 |
|         | 4 ppg SLC  | 3258     | 25.1 | 5519 |

**Job Complete at:** 1735 hrs. **Date:** 7/26/2005 **Start flow back:** 1830 hrs  
on a vacuum  
**Total Fluid Pumped:** 478 bbls  
**Total Sand Pumped:** 21,060 Brady **Total Sand on Formation:** 28,000#  
7,000 SLC  
**Total Nitrogen Pumped:** None

**Notes:**

All frac fluid was Aztec City water with 2% KCl, biocide, and 20#/1000 gal guar gel (Lightning 20), borate crosslinker, surfactant, pH buffers, enzyme and encapsulated breakers. Nolte plot was slightly positive throughout the job. The well almost screened out during the flush. The frac gradient based on the ISIP was 0.95 psi/ft. At 1830 hrs the well was on a vacuum. SI the well.

## FRACTURE TREATMENT REPORT

Operator: Thompson Engineering Well Name: Johnston #1E  
Date: 26-Jul-05  
Field: Basin Dakota Location: 28/30N/12W County: San Juan State: NM  
Stimulation Company: BJ Services Supervisor: Paul Thompson

Stage #: 1/2 Dakota

Sand on location: Design: 105,000 & 35,000 Weight ticket: 126,060# & 42,000# Size/type: 20/40 Brady & 20/40 SLC

Fluid on location : No. of Tanks: 7 Strap: 19 Amount: 2660 Usable: 2380

### Perforations:

Depth: 6212-19 & 6222-28 @ 1 spf Total Holes: 120 PBSD: 6258'  
6147 - 82 @ 3 spf  
Shots per foot: EHD: 0.34" Loggers

### Breakdown:

Acid: 500 gal of 15% HCl  
Balls: None  
Pressure: 600 Rate: 5.1  
Formation broke at 1604 psi  
Pressures dropped 370 psi  
as the acid hit formation.

### Stimulation:

ATP: 2400 psi AIR: 45.0 BPM  
MTP: 3280 psi MIR: 49.6 BPM

|             | Sand Stage | Pressure | Rate | BHTP |
|-------------|------------|----------|------|------|
| ISIP: 1700  | pad        | 2414     | 44   | 3815 |
| 5 min: 1331 | 1 ppg      | 2259     | 44.4 | 3838 |
| 10 min: 987 | 2 ppg      | 2213     | 44.4 | 3935 |
| 15 min: 661 | 3 ppg      | 2500     | 45.7 | 4440 |
|             | 3 ppg SLC  | 2959     | 44.8 | 4806 |

Job Complete at: 1355 hrs. Date: 7/26/2005 Start flow back: 1830 hrs  
on a vacuum  
Total Fluid Pumped: 1799 bbls  
Total Sand Pumped: 105,000 Brady Total Sand on Formation: 140,000#  
35,000 SLC  
Total Nitrogen Pumped: None

### Notes:

All frac fluid was Aztec City water with 2% KCl, biocide, and 20#/1000 gal guar gel (Lightning 20), borate crosslinker, surfactant, pH buffers, enzyme and encapsulated breakers. Nolte plot was slightly positive throughout the job. The frac gradient based on the ISIP was 0.70 psi/ft. Treating pressures started to increase as the 3 ppg stage hit formation. Did not attempt to go to 4 ppg. Crosslinked gels were weak. Displaced sand to the top perf.