

CEMENT JOB REPORT



| | | | |
|---|---------------------------|----------------------|--------------------------------------|
| CUSTOMER SHELL WESTERN E & P INC | DATE 11-OCT-12 | F.R. # 1001938735 | SERV. SUPV. JONATHAN M SCHULZ III |
| LEASE & WELL NAME HARRIS FARMS 3407 #8-2H - API 15077218470000 | LOCATION 8-34S-7W | | COUNTY-PARISH-BLOCK Harper Kansas |
| DISTRICT McAlester | DRILLING CONTRACTOR RIG # | | TYPE OF JOB Liner |

| SIZE & TYPE OF PLUGS | LIST-CSG-HARDWARE | MECHANICAL BARRIERS | MD | TVD | HANGER TYPES | MD | TVD |
|----------------------|------------------------------|---------------------|----|-----|--------------|----|-----|
| | Provided by Baker Oil Tool;s | | | | | | |

| MATERIALS FURNISHED BY BJ | LAB REPORT NO. | PHYSICAL SLURRY PROPERTIES | | | | | | |
|---|----------------|----------------------------|----------------|---------------|-----------|------------------|------------|---------------|
| | | SACKS OF CEMENT | SLURRY WGT PPG | SLURRY YLD FT | WATER GPS | PUMP TIME HR:MIN | Bbl SLURRY | Bbl MIX WATER |
| SealBond Spacer | | | 8.45 | | | | 40 | |
| H50:50 + 3%NaCl+ .6%SMS +.0% R-3+ .5%FI-52A | | 385 | 14.3 | 1.24 | 5.54 | | 84 | 49.98 |
| Displacement | | | 8.34 | | | | 112 | |
| reverse out | | | 8.34 | | | | 150 | |

| | | | | | | | | |
|---------------------|------|------|------------------------|-----|------|-------|-----|-------|
| Available Mix Water | 1000 | Bbl. | Available Displ. Fluid | 900 | Bbl. | TOTAL | 386 | 49.98 |
|---------------------|------|------|------------------------|-----|------|-------|-----|-------|

| HOLE | | | TBG-CSG-D.P. | | | | | | | COLLAR DEPTHS | | |
|-------|----------|-------|--------------|-----|------|------|------|------|-------|---------------|-------|-------|
| SIZE | % EXCESS | DEPTH | ID | OD | WGT. | TYPE | MD | TVD | GRADE | SHOE | FLOAT | STAGE |
| 6.125 | | 9095 | 3.34 | 4 | 14 | DP | 4410 | 4410 | P-110 | | | |
| | | | 4 | 4.5 | 11.6 | CSG | 9095 | 4685 | P-110 | | | |

| LAST CASING | | | | | | PKR-CMT RET-BR PL-LINER | | PERF. DEPTH | | TOP CONN | | WELL FLUID | | |
|-------------|----|-----|------|------|------|-------------------------|--|-------------|-----|----------|------|------------|----------------|------|
| ID | OD | WGT | TYPE | MD | TVD | BRAND & TYPE | | DEPTH | TOP | BTM | SIZE | THREAD | TYPE | WGT. |
| 6.4 | 7 | 23 | CSG | 4962 | 4962 | | | | | | 2 | 1502 | WATER BASED MU | 8.5 |

| DISPL. VOLUME | | DISPL. FLUID | | CAL. PSI | CAL. MAX PSI | OP. MAX | MAX TBG PSI | | MAX CSG PSI | | MIX WATER |
|---------------|------|--------------|------|-----------|--------------|---------|-------------|----------|-------------|----------|-----------|
| VOLUME | UOM | TYPE | WGT. | BUMP PLUG | TO REV. | SQ. PSI | RATED | Operator | RATED | Operator | |
| 112 | BBLS | Displacement | 8.34 | 1500 | | | | | 8552 | 5000 | Rig Tanks |
| | | reverse out | 8.34 | | | | | | | | |

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: Arrive on location @ 1630

| PRESSURE/RATE DETAIL | | | | | | EXPLANATION | |
|----------------------|----------------|---------|----------|-------------------|------------|--|----------|
| TIME HR:MIN. | PRESSURE - PSI | | RATE BPM | Bbl. FLUID PUMPED | FLUID TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> | |
| | PIPE | ANNULUS | | | | TEST LINES | 6800 PSI |
| | | | | | | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | |
| 16:30 | | | | | | Arrive on location | |
| 22:15 | | | | 40 | SPACER | rig pumps 40bbbls sealbond spacer | |
| 22:45 | 6800 | | | | WATER | test pumps & lines | |
| 22:57 | 269 | | 3 | | SLURRY | open well/start slurry 14.3ppg | |
| 23:21 | 322 | | 4 | 84 | SLURRY | end slurry | |
| 23:23 | | | | | WATER | wash pumps & lines | |
| 23:26 | 105 | | 3 | | WATER | drop TRP/start displacement | |
| 23:30 | 674 | | 7 | 22 | WATER | bbls pumped when caught cement | |
| 23:33 | 1100 | | 3 | 41 | WATER | bbls pumped shear first plug | |
| 23:50 | 1803 | | 3 | 112 | WATER | bump plug/shutdown | |
| 23:53 | 4500 | | | | | test casing | |
| 23:58 | 0 | | | -2 | | bleed off pressure check floats/ holding/bbls back | |
| 00:16 | 4520 | | | | | test backside pressure | |
| 00:26 | 4430 | | | | WATER | good test bleed off pressure | |
| 00:44 | 564 | | 6 | | WATER | begin reverse out | |
| 01:12 | 722 | | 6 | 150 | WATER | end reverse out | |
| | | | | | | Calculated top of cement @ 4828' | |
| | | | | | | 36bbbls of spacer return/ no cement returns | |
| | | | | | | Thanks for using BHI Pressure pumping | |

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| PRESSURE/RATE DETAIL | | | | | | EXPLANATION | |
|--|------------------------|--|---------------------------------|-------------------------|-----------------------|--|--------------------------------------|
| TIME HR:MIN. | PRESSURE - PSI | | RATE BPM | Bbl. FLUID PUMPED | FLUID TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> | |
| | PIPE | ANNULUS | | | | TEST LINES 6800 PSI | |
| | | | | | | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | |
| Jonathan Schulz & Crew | | | | | | | |
| BUMPED PLUG | PSI TO BUMP PLUG | TEST FLOAT EQUIP. | BBL.CMT RETURNS/ REVERSED | TOTAL BBL. PUMPED | PSI LEFT ON CSG | SPOT TOP OUT CEMENT | <u>SERVICE SUPERVISOR SIGNATURE:</u> |
| <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 1786 | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | 0 | 396 | 0 | Y <input checked="" type="checkbox"/> N | |