

CEMENT JOB REPORT



| | | | |
|---|--|----------------------|------------------------------------|
| CUSTOMER SHELL WESTERN E & P INC | DATE 06-FEB-13 | F.R. # 1001963618 | SERV. SUPV. James Kirkpatrick |
| LEASE & WELL NAME RANDOLPH TRUST 2107 #31-1H - API 15159227230 | LOCATION 31-21S-7W | | COUNTY-PARISH-BLOCK Rice Kansas |
| DISTRICT McAlester | DRILLING CONTRACTOR RIG # Patterson 264 | | TYPE OF JOB Surface |

| SIZE & TYPE OF PLUGS | LIST-CSG-HARDWARE | MECHANICAL BARRIERS | MD | TVD | HANGER TYPES | MD | TVD |
|---------------------------------------|-------------------|---------------------|----|-----|--------------|----|-----|
| 9-5/8" Top Cem Plug, Nitrile cvr, Phe | No Shoe, Cust Sup | | | | | | |

| 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 |
| Class C, 0.01% static free, 2% cacl2, 0.25pps Celoflake | | 375 | 14.8 | 1.35 | 6.34 | 02:45 | 90 | 56.64 |
| H2O | | | 8.34 | | | | 36 | |
| H2O | | | 8.34 | | | | 20 | |

Available Mix Water 150 Bbl. Available Displ. Fluid 300 Bbl. TOTAL 146 56.64

| HOLE | | | TBG-CSG-D.P. | | | | | | COLLAR DEPTHS | | | |
|-------|----------|-------|--------------|-------|------|------|-----|-----|---------------|------|-------|-------|
| SIZE | % EXCESS | DEPTH | ID | OD | WGT. | TYPE | MD | TVD | GRADE | SHOE | FLOAT | STAGE |
| 12.25 | | 540 | 8.921 | 9.625 | 36 | CSG | 533 | 506 | J-55 | 533 | 465 | |

| 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. |
| 18. | 18 | 47. | | 60 | 60 | | | | | | 9.625 | 8RD | WATER BASED MU | 8.9 |

| 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 | RIG |
| 36 | BBLs | H2O | 8.34 | 250 | | | | | 2816 | 830 | RIG |

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NO PROBLEMS

| 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 <u>2500 PSI</u> | |
| | | | | | | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/> | |
| 04:15 | 2500 | | | | H2O | TEST PUMP AND LINES, START H2O AHEAD | |
| 04:25 | 130 | | 4 | 20 | H2O | PUMP H2O AHEAD, START CEMENT @ 14.8# | |
| 04:40 | 200 | | 4 | 80 | CEMENT | 80 BBL INTO CEMENT, CEMENT RETURNS TO SURFACE, CONTINUE DISPLACEMENT | |
| 04:45 | 190 | | 4 | 90 | CEMENT | PUMP CEMENT, SHUT DOWN, START DISPLACEMENT | |
| 05:00 | 200 | | 2.5 | 36 | H2O | PUMP DISPLACEMENT, BUMP PLUG, TEST FLOAT, HOLDING | |
| | | | | | | TOOK PRESSURE UP TO 800 PSI AT BUMP | |
| | | | | | | 46 BBL CEMENT RETURNS TO SURFACE | |
| | | | | | | CEMENT : 375 SACKS CLASS C + 0.01% STATIC FREE + 2% CaCl2 + 0.25 PPS CELLO FLAKE | |
| | | | | | | THANK YOU FOR USING BAKER HUGHES, JIM AND 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 | SERVICE SUPERVISOR SIGNATURE: |
|---------------------------------------|------------------|---------------------------------------|---------------------------|-------------------|-----------------|------------------------------|-------------------------------|
| <input checked="" type="checkbox"/> Y | N 200 | <input checked="" type="checkbox"/> Y | N 46 | 146 | 0 | Y <input type="checkbox"/> N | |