

# BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 10233

LOCATION 55-36

FOREMAN Kirk Kallhauf  
Mike R LR marks

## TREATMENT REPORT

DATE 7-19-11	WELL NAME Spike State D10-21D	SECTION 10	TWP 3N	RGE 64W	COUNTY Weld	FORMATION
CHARGE TO Noble		OWNER				
MAILING ADDRESS		OPERATOR Noble				
CITY		CONTRACTOR Ensign 126				
STATE ZIP CODE		DISTANCE TO LOCATION				
TIME ARRIVED ON LOCATION 2:30am		TIME LEFT LOCATION 6:00am				

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 12 1/4	TUBING SIZE	PERFORATIONS	THEORETICAL		INSTRUCTED
TOTAL DEPTH 798.3	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBTD 744.19	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE 8 7/8	TUBING CONDITION		TUBING		
CASING DEPTH 791		TREATMENT VIA	TYPE OF TREATMENT		TREATMENT RATE
CASING WEIGHT 2416	PACKER DEPTH		1- SURFACE PIPE		BREAKDOWN BPM
CASING CONDITION good			1- PRODUCTION CASING		INITIAL BPM
			1- SQUEEZE CEMENT		FINAL BPM
			1- ACID BREAKDOWN		MINIMUM BPM
			1- ACID STIMULATION		MAXIMUM BPM
			1- ACID SPOTTING		AVERAGE BPM
			1- MISC PUMP		
			1- OTHER		HYD HHP = RATE X PRESSURE X 40.8

PRESSURE SUMMARY			
BREAKDOWN or CIRCULATING psi	AVERAGE psi		
FINAL DISPLACEMENT psi	ISIP psi		
ANNULUS psi	5 MIN SIP psi		
MAXIMUM psi	15 MIN SIP psi		
MINIMUM psi			

INSTRUCTIONS PRIOR TO JOB: Rig up, safety meeting, Psidat, circ 50 SKS Kel H2O, 2nd 10w Dye, mix & Pump 338 SKS cement at 30% excess at 1.27, yield at 15.2 lbs or until cement stops up, no more than 50% excess per cement. Release Plug, Disp 47.4 BBls, Bump Plug at 150 psi over Lift Psi, wait 5 min, Release Psi, wash up Rig Down. 1-H2O test OK.

Arrived w/ 575 SKS cement 4 gal Kel 16oz Dye 76.2 BBls slurry

### JOB SUMMARY

DESCRIPTION OF JOB EVENTS: safety meeting 4:02am circ 4:29am cement 4:42am  
Drop Plug 5:03am Disp 5:03am  
10 BBls at 4.5 BBls/m 5:07am 180 psi used 264 SKS cement  
20 BBls at 4.5 BBls/m 5:09am 310 psi used 1% excess  
30 BBls at 4.5 BBls/m 5:11am 460 psi 59.2 BBls slurry  
40 BBls at 3.5 BBls/m 5:15am 480 psi  
47.4 BBls at 1.0 BBls/m 5:18am 370 psi  
Bump Plug 5:18am 510 psi

Lift w/ 311 SKS cement 2 gal 3/4 SKS Kel & Dye

BBls Back 13

AUTHORIZATION TO PROCEED

TITLE

DATE