

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9820
LOCATION WCR 37 + 14
FOREMAN Daniel S. Itenau

TREATMENT REPORT

DATE <u>5-28-11</u>	WELL NAME <u>Miller X 31-10</u>	SECTION <u>31</u>	TWP <u>2A</u>	RGE <u>65W</u>	COUNTY <u>Weld</u>	FORMATION
CHARGE TO <u>Noble</u>		OWNER				
MAILING ADDRESS		OPERATOR <u>Noble</u>				
CITY		CONTRACTOR <u>ENSIGN 128</u>				
STATE ZIP CODE		DISTANCE TO LOCATION				
TIME ARRIVED ON LOCATION <u>5:00 AM</u>		TIME LEFT LOCATION <u>10:45 PM</u>				

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE <u>12 1/4</u>	TUBING SIZE	PERFORATIONS	THEORETICAL		INSTRUCTED
TOTAL DEPTH <u>1095.10</u>	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBTD <u>1037.41</u>	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE <u>8 5/8</u>	TUBING CONDITION		TUBING		
CASING DEPTH <u>1080.78</u>		TREATMENT VIA	TYPE OF TREATMENT		TREATMENT RATE
CASING WEIGHT <u>24#</u>	PACKER DEPTH		[] SURFACE PIPE		BREAKDOWN BPM
CASING CONDITION <u>Good</u>			[] PRODUCTION CASING		INITIAL BPM
			[] SQUEEZE CEMENT		FINAL BPM
			[] ACID BREAKDOWN		MINIMUM BPM
			[] ACID STIMULATION		MAXIMUM BPM
			[] ACID SPOTTING		AVERAGE BPM
			[] MISC PUMP		
			[] 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, psi test, Circ 40 bbls of H₂O w/ KCL 2nd 10 w/ 0.02 Dye mix + pump Lead of 258 sks Neat cement @ 10% Excess @ 14.8 lb @ 1.32 yield, Bring up weight to 152 lb w/ 3% cement 100 sks tad @ 1.27 yield, Drop Plug, Displace 66 bbls of H₂O Bump Plug @ 150 psi over 1.44 psi wait 5 min Release PSI Wash up Riv Point Arrive w/ 400 sks Neat 200 sks 3% 49/ KCL 3200 Dye 83.2 total slurry

JOB SUMMARY
DESCRIPTION OF JOB EVENTS Safety meeting 8:49 AM Circ 9:01 AM Cement 9:11 AM
Drop Plug 9:38 AM Display 9:38 AM

10 bbls 6.0 l/m 250 psi 9:42 AM
20 bbls 6.0 l/m 260 psi 9:43 AM
30 bbls 6.0 l/m 370 psi 9:45 AM
40 bbls 6.0 l/m 480 psi 9:47 AM
50 bbls 6.0 l/m 570 psi 9:50 AM
60 bbls 3.5 l/m 580 psi 9:52 AM
66.0 bbls 1.0 l/m 480 psi 9:54 AM
Bump Plug 660 psi 9:54
left w/ 112 sks Neat 100 sks 3% 49/ KCL 2200 Dye 17 bbls of Slurry Backs

John M. Taylor AUTHORIZATION TO PROCEED
Co. Man TITLE
5-28-11 DATE