

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9816
LOCATION WCR 14 + 37
FOREMAN Daniel Saltzman

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
5-21-11	miller A 31-03	31	2A	65W	Weld	

CHARGE TO <u>Noble</u>	OWNER
MAILING ADDRESS	OPERATOR <u>Noble</u>
CITY	CONTRACTOR <u>ENGIN 128</u>
STATE ZIP CODE	DISTANCE TO LOCATION
TIME ARRIVED ON LOCATION <u>9:27 AM</u>	TIME LEFT LOCATION <u>11:50 AM</u>

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
<u>12 1/4</u>					
TOTAL DEPTH <u>1064.0</u>	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
<u>1064.09</u>	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE <u>8 3/8</u>	TUBING CONDITION		TUBING		
CASING DEPTH <u>1046.2</u>		TREATMENT VIA			

TYPE OF TREATMENT		TREATMENT RATE	
<input checked="" type="checkbox"/> SURFACE PIPE		BREAKDOWN BPM	
<input type="checkbox"/> PRODUCTION CASING		INITIAL BPM	
<input type="checkbox"/> SQUEEZE CEMENT		FINAL BPM	
<input type="checkbox"/> ACID BREAKDOWN		MINIMUM BPM	
<input type="checkbox"/> ACID STIMULATION		MAXIMUM BPM	
<input type="checkbox"/> ACID SPOTTING		AVERAGE BPM	
<input type="checkbox"/> MISC PUMP			
<input type="checkbox"/> OTHER			

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, 1st 10 w/ 10 oz Dye mix + Pump 298 sks of Neat Cement @ 20% Excess @ 14.81 bbl @ 1.32 yield, mix tail @ BFW 3% 100 sks @ 15.21 bbl @ 1.27 yield, Drop Plug Displace 63.9 bbls of H₂O bump Plug @ 150 psi over lift psi wait 5 min Release psi airshup Rig Down

Arrived w 500 sks Neat 200 sks 3% 4 q/KCL 3202 Dye 92.6 Total Slurry

JOB SUMMARY			
DESCRIPTION OF JOB EVENTS			
<u>Safety meeting</u>	<u>12:06</u>	<u>Circ 12:13 AM</u>	<u>Cement 12:24 AM</u>
<u>Drop Plug</u>	<u>12:50 AM</u>	<u>Displace</u>	<u>12:50</u>
<u>10 bbls</u>	<u>6.0/m</u>	<u>260 psi</u>	<u>12:53 PM</u>
<u>20 bbls</u>	<u>6.0/m</u>	<u>320 psi</u>	<u>12:55 PM</u>
<u>30 bbls</u>	<u>6.0/m</u>	<u>430 psi</u>	<u>12:56 PM</u>
<u>40 bbls</u>	<u>6.0/m</u>	<u>520 psi</u>	<u>1:00 PM</u>
<u>50 bbls</u>	<u>6.0/m</u>	<u>580 psi</u>	<u>1:01 PM</u>
<u>60 bbls</u>	<u>2.5/m</u>	<u>470 psi</u>	<u>1:03 PM</u>
<u>63.9 bbls</u>	<u>1.0/m</u>	<u>450 psi</u>	<u>1:05 PM</u>
<u>Bump Plug</u>	<u>720 psi</u>		<u>1:05 PM</u>

Left w 202 Neat 100 3% 3 q/KCL 2202 Dye 30 bbls of Slurry Back

M

AUTHORIZATION TO PROCEED

TITLE

5-21-11

DATE