

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9540
LOCATION WCR 47+50
FOREMAN Daniel Saltema

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
12-19-10	Ehrlich State PC F36-310	36	5N	65W	weld	

CHARGE TO <u>Noble</u>	OWNER
MAILING ADDRESS	OPERATOR <u>Noble</u>
CITY	CONTRACTOR <u>ENSiGN 126</u>
STATE ZIP CODE	DISTANCE TO LOCATION
TIME ARRIVED ON LOCATION <u>3:53pm</u>	TIME LEFT LOCATION <u>8:00pm</u>

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE <u>12 1/4</u>	TUBING SIZE	PERFORATIONS	THEORETICAL		INSTRUCTED
TOTAL DEPTH <u>6234</u>	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
<u>POTD 573.40</u>	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE <u>8 5/8</u>	TUBING CONDITION		TUBING		

TREATMENT VIA			TYPE OF TREATMENT		TREATMENT RATE	
CASING DEPTH <u>617.0</u>	PACKER DEPTH		<input checked="" type="checkbox"/> SURFACE PIPE		BREAKDOWN BPM	
CASING WEIGHT <u>29#</u>			<input type="checkbox"/> PRODUCTION CASING		INITIAL BPM	
CASING CONDITION <u>960#</u>			<input type="checkbox"/> SQUEEZE CEMENT		FINAL BPM	

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 30 bbls of H₂O w/ KCL 2nd 10w/10oz Dye mix
a pump 264 sks of Cement @ 30% Excess @ 15.2' @ 1.2' yield or until stopped by Cement
Drop Plug Displace 36.5 bbls of H₂O Bump Plug @ 150psi over 1st psi wait 5 min Release Psi
Washup Rig Down H₂O test ok

Arrival w 550 sks of Cement 491 KCL 32oz Dye 59.7 bbls of Slurry
JOB SUMMARY
DESCRIPTION OF JOB EVENTS Safety meeting 5:52pm Circ 6:22am Cement 6:35pm
Drop Plug 6:53pm Displace 6:53pm

<u>10 bbls 5.0/m 100psi 6:58pm</u>	<u>used 250 sks Cement</u>
<u>20 bbls 5.0/m 230psi 7:00pm</u>	<u>23% Excess</u>
<u>30 bbls 3.5/m 280psi 7:06pm</u>	<u>45.7 bbls of Slurry</u>
<u>36.5 bbls 1.0/m 250psi 7:11pm</u>	
<u>Bump Plug 410psi 7:13</u>	

Left w 300 sks of Cement 391 1st KCL 22oz Dye
6 bbls of Slurry Back

[Signature] AUTHORIZATION TO PROCEED CO MAN TITLE 12-19-10 DATE
Customers hereby acknowledges and specifically agrees to the terms and conditions on this work order, including, without limitation, the provisions on the reverse side hereof which include the release and indemnity.