

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9558
LOCATION WCR 46+31
FOREMAN Daniel Saltzman

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
2-2-11	Five Rivers K 15-30	16	4N	66W	Weld	

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>8:37 pm</u>	TIME LEFT LOCATION <u>2:10 AM</u>

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE <u>12 1/4</u>	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
TOTAL DEPTH <u>653.4</u>	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
<u>PBTD 600.54</u>	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE <u>8 5/8</u>	TUBING CONDITION		TUBING		
CASING DEPTH <u>243.4</u>		TREATMENT VIA	TYPE OF TREATMENT		
CASING WEIGHT <u>29#</u>	PACKER DEPTH		TREATMENT RATE		
CASING CONDITION <u>good</u>			<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	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 10w 10oz Dye, mix + pump 277 sks of Cement @ 30% Excess @ 15-2" @ 1.27 yield, or until stopped by Co mow, Drop Plug Displace 38.2 bbls of H₂O Bump plug @ 150 psi over lift psi wait 5 min Release PSI washup Rig Down H₂O test OK

Arrived w/ 550 sks of Cement 59/ KCL 32 oz Dye 62.6 bbls of Slurry

JOB SUMMARY
DESCRIPTION OF JOB EVENTS Safety meeting 12:25 AM Circ 12:41 AM Cement 12:55 AM Drop plug 1:14 AM Displace 1:14 AM

10 bbls	3.5/m	100 psi	1:19 AM	used 236 sks of Cement
20 bbls	3.5/m	270 psi	1:23 AM	10% Excess
30 bbls	3.5/m	300 psi	1:27 AM	53.3 bbls of Slurry
38.2 bbls	1.0/m	310 psi	1:30 AM	
Bump Plug	420 psi		1:30 AM	

Left w/ 314 sks of Cement 49/ KCL 16 oz Dye 1 bbls of Slurry Back

iam Bonner WSS 2-12-11
AUTHORIZATION TO PROCEED TITLE DATE