

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9549
LOCATION WCR 46 + 93
FOREMAN Daniel Sattman

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
1-15-11	Betz PC 610-33N	9	4N	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>3:03 AM</u>	TIME LEFT LOCATION <u>6:00 AM</u>

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE <u>12 1/4</u>	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
TOTAL DEPTH <u>754.20</u>	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBTD <u>703-65</u>	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE <u>8 5/8</u>	TUBING CONDITION		TUBING		
CASING DEPTH <u>747.10</u>		TREATMENT VIA	TYPE OF TREATMENT		
CASING WEIGHT <u>24#</u>	PACKER DEPTH		<input checked="" type="checkbox"/> SURFACE PIPE	TREATMENT RATE	
CASING CONDITION <u>good</u>			<input type="checkbox"/> PRODUCTION CASING	BREAKDOWN BPM	
			<input type="checkbox"/> SQUEEZE CEMENT	INITIAL BPM	
			<input type="checkbox"/> ACID BREAKDOWN	FINAL BPM	
			<input type="checkbox"/> ACID STIMULATION	MINIMUM BPM	
			<input type="checkbox"/> ACID SPOTTING	MAXIMUM BPM	
			<input type="checkbox"/> MISC PUMP	AVERAGE BPM	
			<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 Ris up, Safety meeting, Psi test, Circ 40 bbls of H₂O w/ 2nd 10 w/o
oz Dye, mix & pump 319 sts of Cement @ 30% Excess @ 15.2' @ 1.27 yield or until stopped
By Co man, Drop Plug Displace 44.7 bbls of H₂O Bump Plug @ 150 psi over left psi
wait 5 min Release psi wash up Run Down H₂O test OK
Arrived w 550 sts of Cement 491 Kcl 32 oz Dye bbls of Slurry Back

JOB SUMMARY
DESCRIPTION OF JOB EVENTS Safety meeting 3:49 AM Circ 4:16 AM Cement 4:31 AM
Drop Plug 4:55 AM Displace 4:55 AM

10 bbls	5.0/m	90 psi	5:00 AM	used 271 sts of cement
20 bbls	5.0/m	120 psi	5:03 AM	10% Excess
30 bbls	5.0/m	230 psi	5:07 AM	61.2 bbls of Slurry
40 bbls	2.5/m	270 psi	5:13 AM	
44.8 bbls	1.0/m	270 psi	5:20 AM	
Bump Plug		360 psi	5:20 AM	

left w 279 sts of cement 391 Kcl 22 oz Dye
10 bbls of Slurry Back

[Signature]
AUTHORIZATION TO PROCEED
1-15-2011
TITLE
1-15-11
DATE