

BISON OIL WELL CEMENTING, INC.



1738 Wynkoop St., Ste. 102
Denver, Colorado 80202
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net

REF. INVOICE # 9321
LOCATION WCR 82 x 51
FOREMAN Daniel Saltzman

TREATMENT REPORT

DATE 9-22-10	WELL NAME Waugh PC AB 08-13	SECTION 8	TWP 7N	RGE 64W	COUNTY Weld	FORMATION
CHARGE TO Noble		OWNER				
MAILING ADDRESS		OPERATOR Noble				
CITY		CONTRACTOR ENsign 55				
STATE ZIP CODE		DISTANCE TO LOCATION				
TIME ARRIVED ON LOCATION 10:45 AM		TIME LEFT LOCATION 3:30 PM				

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 12 1/4	TUBING SIZE	PERFORATIONS	THEORETICAL		INSTRUCTED
TOTAL DEPTH 820-10	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBD 788.32	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE 8 5/8	TUBING CONDITION		TUBING		
CASING DEPTH 807.49		TREATMENT VIA	TYPE OF TREATMENT		TREATMENT RATE
CASING WEIGHT 24#	PACKER DEPTH		<input checked="" type="checkbox"/> SURFACE PIPE		BREAKDOWN BPM
CASING CONDITION good			<input type="checkbox"/> PRODUCTION CASING		INITIAL BPM
			<input type="checkbox"/> SOOZE 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

INSTRUCTIONS PRIOR TO JOB **Rig up. Safety meeting, PSI test to 500 psi, Circ 40 bbls of H₂O w KCL, 2nd 100 10oz Dye, mix + pump 347 sks of Cement @ 30% Excess 15.2' bbl 1.27 yield, or until stopped by Co many Drop Plug, Displace 50.2 bbls of H₂O, Bump Plug @ 150 psi over 1.0 psi, wait 5 min Release psi, washup Rig Down, H₂O test OK**

Arrived w 550 sks of Cement 491 KCL 32 oz Dye 78.4 bbls of slurry

JOB SUMMARY

DESCRIPTION OF JOB EVENTS **Safety meeting 2:01 PM Circ 2:10 PM Cement 2:20 PM Drop Plug 2:40 PM Displace 2:50 PM**

10 bbls	5.0/m	190 psi	2:44 PM	used 267 sks of cement 0% Excess 60.3 bbls of Slurry
20 bbls	5.0/m	230 psi	2:46 PM	
30 bbls	5.0/m	340 psi	2:48 PM	
40 bbls	5.0/m	470 psi	2:51 PM	
50.2 bbls	1.0/m	340 psi	2:54 PM	
Bump Plug		800 psi	2:54 PM	

Left w 283 sks of Cement 391 KCL 2202 Dye 9 bbls of Slurry Back

AUTHORIZATION TO PROCEED

TITLE

9-22-10

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.