

BISON OIL WELL CEMENTING, INC.



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REF. INVOICE # 9717

LOCATION Cr 55-78

FOREMAN Kirk Kallhaas
Mike R LR Jessie

TREATMENT REPORT

DATE 3-9-11	WELL NAME Richter USX AB 27-03	SECTION 27	TWP 7N	RGE 64W	COUNTY Weld	FORMATION
CHARGE TO Noble		OWNER				
MAILING ADDRESS		OPERATOR Noble				
CITY		CONTRACTOR Cdr 21				
STATE ZIP CODE		DISTANCE TO LOCATION				
TIME ARRIVED ON LOCATION 4:30am		TIME LEFT LOCATION 10:30am				

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 12 1/4	TUBING SIZE	PERFORATIONS	THEORETICAL		INSTRUCTED
TOTAL DEPTH 790.2	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBTD 739.29	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE 8 5/8	TUBING CONDITION		TUBING		
CASING DEPTH 779.11		TREATMENT VIA	TYPE OF TREATMENT		TREATMENT RATE
CASING WEIGHT 24 lb	PACKER DEPTH		[X] SURFACE PIPE		BREAKDOWN BPM
CASING CONDITION good			[] PRODUCTION CASING		INITIAL BPM
			[] SQUEEZE CEMENT		FINAL BPM
			[] ACID BREAKDOWN		MINIMUM BPM
			[] ACID STIMULATION		MAXIMUM BPM
			[] ACID SPOTTING		AVERAGE BPM
			[] MISC PUMP		
			[] OTHER		HYD HHV = 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, Psitest, circ 40 BBLs Kel H2O 2nd 10w/Dye, mix Pump 334 sKs cement at 300psi excess at 1.27 yield at 15.2 lbs, or until cement stops us, Release Plug Displace 46.9 BBLs H2O, Bump Plug At 150 psi over Lift psi wait 5 min Release psi, wash up Rig Down

Arrived w/ 650 sKs cement 4 gallons Kel 16oz Dye 75.4 BBLs slurry

JOB SUMMARY DESCRIPTION OF JOB EVENTS safety meeting 8:30am circ 8:53am cement 9:25am

Drop Plug 9:25am Displace 9:25am

used 16% excess
used 300 sKs cement
67.3 BBLs slurry
10 BBLs At 5.5 BBLs/m 9:28am 250 psi
20 BBLs At 5.5 BBLs/m 9:30am 300 psi
30 BBLs At 5.5 BBLs/m 9:32am 410 psi
40 BBLs At 3.5 BBLs/m 9:36am 320 psi
46.9 BBLs At 1.0 BBLs/m 9:39am 270 psi
Bump Plug 9:39am 400 psi

LPT w/ 350 sKs cement 3 gal Kel 6oz Dye BBLs Back 12

Authorization to Proceed Co Rep TITLE DATE 3-9-11

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