

The Road to Excellence Starts with Safety

Sold To #: 366960		Ship To #: 3186824		Quote #:		Sales Order #: 900977296	
Customer: WHITING OIL & GAS CORP - EBUS				Customer Rep: Pettjohn, Will			
Well Name: Razor			Well #: 21B-2811A		API/UWI #: 05-123-37765		
Field: WILD CAT		City (SAP): NEW RAYMER		County/Parish: Weld		State: Colorado	
Lat: N 40.83 deg. OR N 40 deg. 49 min. 48 secs.				Long: W 103.898 deg. OR W -104 deg. 6 min. 7.2 secs.			
Contractor: Frontier			Rig/Platform Name/Num: Frontier 26				
Job Purpose: Cement Intermediate Casing							
Well Type: Development Well			Job Type: Cement Intermediate Casing				
Sales Person: PLIENESS, RYAN			Srvc Supervisor: BIRCHELL, DEVIN			MBU ID Emp #: 466993	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BIRCHELL, DEVIN Ray	11.5	466993	GRIFFITHS, ZACHARY Sakae	11.5	551430	MILLER, GEOFFREY Alan	11.5	460232
VIATOR, JASON Randolph	11.5	550394						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10866497C	100 mile	11036298	100 mile	11341988C	100 mile	11360865C	100 mile
11562570C	100 mile	11764052	100 mile	12010171	100 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12-17-13	11.5	5						
TOTAL			Total is the sum of each column separately					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type			BHST	On Location	17 - Dec - 2013	06:30	MST
Job depth MD	6164. ft		Job Depth TVD	Job Started	17 - Dec - 2013	12:00	MST
Water Depth			Wk Ht Above Floor	Job Completed	17 - Dec - 2013	19:45	MST
Perforation Depth (MD)	From		To	Job Completed	17 - Dec - 2013	22:30	MST
				Departed Loc	17 - Dec - 2013	23:30	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
8 3/4" Open Hole Section				8.75				1624.	6164.	1624.	5800.
7" Intermediate Casing	Unknown		7.	6.276	29.		L-80	.	6164.	.	5800.
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1624.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	7	1	Weath
Float Shoe	7	1	Weath	6275	Bridge Plug					Bottom Plug			
Float Collar	7	1	Weath	6227	Retainer					SSR plug set			
Insert Float										Plug Container	7	1	HES
Stage Tool										Centralizers	7	25	Weath

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size		

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	TUNED SPACER III	TUNED SPACER III - SBM (483826)	20.00	bbl	10.5	6.31	47.23	.0	
	37.58 gal/bbl	FRESH WATER							
	90.3 lbm/bbl	BARITE, 100 LB SK (100003680)							
2	12.7# EconoCem B3 Lead	ECONOCEM (TM) SYSTEM (452992)	500.0	sacks	12.7	1.84	9.76		9.76
	0.3 %	HR-5, 50 LB SK (100005050)							
	9.76 Gal	FRESH WATER							
3	13.8# EXPANDACEM B2 TAIL	EXPANDACEM (TM) SYSTEM (452979)	190.0	sacks	13.8	1.68	7.75		7.75
	0.1 %	HR-5, 50 LB SK (100005050)							
	7.75 Gal	FRESH WATER							
4	Displacement		240.00	bbl	9.8			.0	
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement	Surface	5 Min		Cement Returns	48	Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID	Frac Ring # 4 @	ID
The Information Stated Herein Is Correct				Customer Representative Signature					