
WINDY HILL GAS STORAGE LLC

Windy Hills 2007 #1

Morgan County , Colorado

Cement Intermediate Casing

10-Jun-2007

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 352578	Ship To #: 2578360	Quote #:	Sales Order #: 5157213
Customer: WINDY HILL GAS STORAGE LLC	Customer Rep:		
Well Name: Windy Hills 2007	Well #: #1	API/UWI #:	
Field:	City (SAP): UNKNOWN	County/Parish: Morgan	State: Colorado
Contractor: Unit Drilling	Rig/Platform Name/Num: Unit 134		
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well	Job Type: Cement Intermediate Casing		
Sales Person: STATEN, LARRY	Srv Supervisor: BAGNER, AUGUST	MBU ID Emp #:	242142

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BAGNER, AUGUST D	54.0	242142	BEERS, CRAIG A	54.0	282847	GROCE, MATTHEW H	54.0	319203
HALL, ROLAND J.	54.0	273321	JENSEN, GENTRY E	54.0	401253	MCCORMACK, JAMES W	54.0	122548
MILNES, ZACH A	54.0	276570	NEIMAN, BRIAN E	54.0	401252	PEAK, JOSEPH S	54.0	376194
PROCHNOW, JOSEPH W	54.0	331417	RILEY, SHANE Patrick	54.0	386961	WEISS, RANDAL Frank	54.0	411402

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025057	70 mile	10025065	70 mile	10025071	70 mile	10025079	70 mile
10025106	70 mile	10025185C	70 mile	10026107	70 mile	10190461	70 mile
10236136	70 mile	10325783	70 mile	10423451	70 mile	10592960	70 mile
10592962	70 mile	10616138	70 mile	10623573C	70 mile	10624130	70 mile
10636013	70 mile	10822009	70 mile	10822521	70 mile	10829459	70 mile
10896153	70 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL								

Total is the sum of each column separately

Job				Job Times			
Formation Name				Date	Time	Time Zone	
Formation Depth (MD)	Top	Bottom		Called Out	07 - Jun - 2007	13:00	MST
Form Type		BHST	190 degF	On Location	08 - Jun - 2007	09:00	MST
Job depth MD	5089. ft	Job Depth TVD	5098. ft	Job Started	10 - Jun - 2007	04:45	MST
Water Depth	. ft	Wk Ht Above Floor	6. ft	Job Completed	10 - Jun - 2007	09:00	MST
Perforation Depth (MD)	From	To		Departed Loc	10 - Jun - 2007	12:00	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
20" Surface Casing	Used		20.	19.124	94.		Unknown	.	478.		
20" Intermediate Open Hole				20.				478.	5089.		
16" Intermediate Casing	Used		16.	14.85	97.		Unknown	.	5089.		
4 1/2" Drill Pipe	Used		4.5	3.754	16.6		Unknown	.	5039.		

Tools and Accessories																			
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make						
Guide Shoe					Packer					Top Plug									
Float Shoe					Bridge Plug					Bottom Plug									
Float Collar					Retainer					SSR plug set									
Insert Float										Plug Container									
Stage Tool										Centralizers									
Miscellaneous Materials																			
Gelling Agt			Conc		Surfactant			Conc		Acid Type		Qty	Conc %						
Treatment Fld			Conc		Inhibitor			Conc		Sand Type		Size	Qty						
Fluid Data																			
Stage/Plug #: 1																			
Fluid #	Stage Type	Fluid Name			Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk								
1	MUD FLUSH	MUD FLUSH - ZI - SBM (13383)			40.00	bbl	8.4	.0	.0	5.0									
2	50-50 Poz Premium	POZ PREMIUM 50/50 - SBM (12302)			2975	sacks	11.1	2.73	16.26	5.0	16.26								
	3 lbm	SILICALITE - COMPACTED, 50 LB SK (100012223)																	
	1 %	ECONOLITE (100001580)																	
	3 %	MICROBOND HT, 50 LB SK (100003723)																	
	0.5 lbm	KWIK SEAL, SK (100064010)																	
	16.94 Gal	FRESH WATER																	
3	Premium Tail Cement	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)			1345	sacks	15.8	1.17	4.79	5.0	4.79								
	0.1 %	CFR-3, W/O DEFOAMER, 50 LB SK (100003653)																	
	0.2 %	HALAD(R)-344, 50 LB (100003670)																	
	3 %	MICROBOND HT, 50 LB SK (100003723)																	
	0.2 %	HR-5, 50 LB SK (100005050)																	
	0.5 lbm	KWIK SEAL, SK (100064010)																	
	5.113 Gal	FRESH WATER																	
4	Water Displacement					bbl	8.34	.0	.0	5.0									
Calculated Values				Pressures				Volumes											
Displacement				Shut In: Instant				Lost Returns		Cement Slurry		Pad							
Top Of Cement				5 Min				Cement Returns		Actual Displacement		Treatment							
Frac Gradient				15 Min				Spacers		Load and Breakdown		Total Job							
Rates																			
Circulating				Mixing				Displacement				Avg. Job							
Cement Left In Pipe				Amount	48 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												

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Field:	City (SAP): UNKNOWN	County/Parish: Morgan	State: Colorado
Legal Description:			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: Unit Drilling		Rig/Platform Name/Num: Unit 134	
Job Purpose: Cement Intermediate Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: STATEN, LARRY		Srv Supervisor: BAGNER, AUGUST	MBU ID Emp #: 242142

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Depart Yard Safety Meeting	06/07/2007 15:00							Stayed in Motel in Cheyenne
Depart from Service Center or Other Site	06/08/2007 06:00							Departed Cheyenne
Arrive At Loc	06/08/2007 09:00							
Wait on Customer or Customer Sub-Contractor Equipm	06/08/2007 09:00							Crew Running Casing - Wait for casing crew to leave before spotting equipment due to small location.
Casing on Bottom	06/09/2007 11:30							
Pre-Rig Up Safety Meeting	06/09/2007 14:00							
Rig-Up Equipment	06/09/2007 14:15							Start spotting equipment and blowing cement into bins from 3rd party haulers
Running In Hole	06/09/2007 15:00							Rig crew running in hole with drill pipe for Innerstring
Safety Meeting	06/10/2007 03:30							Pre-Job Safety Meeting with Rig Crew
Start Job	06/10/2007 04:45							
Test Lines	06/10/2007 04:48					3000.0		Pressure Test Lines to 3,000 psi
Pump Water	06/10/2007 04:53		2	20	20	300.0		Pump 20 bbls Fresh Water Spacer
Pump Spacer	06/10/2007 05:01		2	40	60	400.0		Pump 40 bbls Mud Flush
Pump Water	06/10/2007 05:17		5	30	90	700.0		Pump 30 bbls Fresh Water

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	06/10/2007 05:24		8.5	1445	1535	600.0		Pump 1,445 bbls Lead Cement. Saw beginning of cement returns ~ 1,360 bbls of Lead Cement Away.
Pump Tail Cement	06/10/2007 08:15		4.5	280	1815	330.0		Switched to Tail once good cement returned to surface. Slowed pump rate to allow Vac Trucks to dispose of cement and still keep up. ~ 441 bbls Lead Cement returned to pit.
Shutdown	06/10/2007 09:07							
Clean Lines	06/10/2007 09:08							Wash pumps and lines to the pit
Pump Displacement	06/10/2007 09:14		4.5	5	5	110.0		Pump 5 bbls Fresh Water behind Cement
Pump Displacement	06/10/2007 09:15		4.5	71.6	76.6	110.0		Pump 71.6 bbls Mud Displacement - Total displacement was Drill Pipe Capacity plus 1/2 casing shoe capacity.
Shutdown	06/10/2007 09:35					720.0		Shutdown - 720 psi differential pressure
Check Floats	06/10/2007 09:38							Release pressure - less than 1/4 bbls back
End Job	06/10/2007 09:43							Rig unstung drill pipe - pump truck left lines open, no fluid returned to pump truck
Safety Meeting - Pre Rig-Down	06/10/2007 10:00							
Rig-Down Equipment	06/10/2007 10:10							
Depart Location for Service Center or Other Site	06/10/2007 15:00							