



Service Order

2009-Apr-30

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
SHELL OIL COMPANY	Martinez, Raul	Hobbs, NM	2009-Feb-19	2201758762
Well Name and Number	Legal Location	Field	County	State/Province
Latigo Ranch 3-3	Cuervo		Guadalupe	NM
Well Master:	API / UWI:			
0631107819	3-019-20138			
Rig Name	Well Age	Sales Engineer	Job Type	
Nabors M-43	New	Bryant, Rodney	Cern Interm Casing	
Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD
		9.88 in	5,978 ft	5,978 ft
				psi
				143 °F
				121 °F
Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location
Casing		ft	Single cement hea	850
	Casing			
Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
5978	7.63	29.7	P-110	
	Tubing			
Depth,	Size, in	Weight, lb/ft	Grade	Thread
Services Instructions:				
Cement 5978' of 7 5/8" intermediate casing LOU: 4900005296 Network Latigo #30088286				
Extra Equipment:				
Head, manifold QC Swadge - 8 rd thread				
Perforated Intervals				
Top, ft	Bottom, ft	spf	No. of Shots	Total Interval
				ft
				Diameter
				in
Expected On Location:				
Ready To Pump:				

Contact	Voice	Mobile	FAX	Notes
George Stampley		281-714-2406		

Notes:

NO cell phones on location
Sign in with safety man first thing on location
Hearing protection required while on location

Directions:

Directions attached

Other Notes:

Cell service dead on location-call yard when leaving Santa Rosa on way to location.
Call dispatch when arriving in Santa Rosa after job. Customer has phone for emergencies

Comments:

Up to date JSA's and HARC- discuss with company man before performing any work on location

Rain for rent catch tarps under pump truck-NO SPILLS

Any spills or incidents to be reported IMMEDIATELY to company man and safety supervisor on location

Fluid Systems:

Extra		
300 lbs of sugar		
Density:	lb/gal	Thickening Time:
Yield:	ft ³ /sk	
H2O Mix:	0 gal/sk	
H2O:	0 gal	Eq. Sack Weight: 0 lb
		Total Blend: 0 sacks
Dowell Code	Conc/ Amount	Total Quantity
57998000	300 lbs	300

Tail		
266 sks Class C + 0.6% D800		
Density:	14.8 lb/gal	Thickening Time:
Yield:	1.33 ft ³ /sk	
H2O Mix:	6.381 gal/sk	
H2O:	1697.35 gal	Eq. Sack Weight: 94 lb
		Total Blend: 266 sacks
Dowell Code	Conc/ Amount	Total Quantity
D800	0.564 lbs/sk	150.024
D903	94 lbs/sk	25004

Lead		
1024 sks 35:65 Poz/C + 10% D020 + 0.4% D046 + 5% D044 + 3pps D042 + 0.25pps D029 + 0.15% D13		
Density:	11.8 lb/gal	Thickening Time:
Yield:	2.63 ft ³ /sk	
H2O Mix:	15.674 gal/sk	
H2O:	16050.2 gal	Eq. Sack Weight: 89 lb
		Total Blend: 1024 sacks
Dowell Code	Conc/ Amount	Total Quantity
D046	0.4 % BWOB	364.544
D020	10 % BWOB	9113.6
D132	28 lbs/sk	28672
D903	61 lbs/sk	62464
D013	0.133 lbs/sk	136.192
D029	0.25 lbs/sk	256
D042	3 lbs/sk	3072
D044	5 % BWOW	6692.923392

Shell - Latigo Ranch 3-3 Intermediate Field Blend Lead

Fluid No : 2009 9C135001	Client : Shell	Location / Rig : Guadalupe, NM	Signatures
Date : Apr-16-2009	Well Name : Latigo Ranch 3-3	Field :	A. Galindo

Job Type	Intermediate	Depth	6300.0 ft	TVD	6300.0 ft
BHST	145 degF	BHCT	121 degF	BHP	5110 (psi)
Starting Temp.	80 degF	Time to Temp.	00:42 hr:mn	Heating Rate	0.99 degF/min
Starting Pressure	565 psi	Time to Pressure	00:42 hr:mn	Schedule	9.6-1

Composition

Slurry Density	11.80 lb/gal	Yield	2.69 ft ³ /sk	Mix Fluid	15.858 gal/sk
Solid Vol. Fraction	21.3 %	Porosity	78.7 %	Slurry type	Conventional

Blend 35/65 C

Code	Mass Pct. Sack
D903	61 lb
D132	28 lb

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
35/65 C		89 lb of BLEND	Blend	186.60 lb/ft ³	
Fresh water	15.623 gal/sk		Base Fluid		
D020	10.000 %BWOB		Extender		
D046	0.400 %BWOB		Antifoam		
D044	5.000 %BWOW		Salt		
D042	3.000 lb/sk		LCM/extender		
D029	0.250 lb/sk		Lost circ		
D013	0.150 %BWOB		Retarder		

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	21.0	22.0
200	18.5	20.5
100	16.0	17.0
60	14.0	16.0
30	12.0	14.0
6	10.0	9.0
3	8.0	8.0
10 sec Gel	10	9
10 min Gel	16	9
1 min Stirring	21	21
Temperature	80 degF	121 degF
	Pv: 8.809 cP	Pv: 8.374 cP
	Ty: 12.54 lbf/100ft ²	Ty: 14.21 lbf/100ft ²

Thickening Time

Consistency	Time
POD :	03:12 hr:mn
50 Bc	03:32 hr:mn
70 Bc	06:59 hr:mn

Shell - Latigo Ranch 3-3 Intermediate Field Blend Tail

Fluid No : 2009 9C135002	Client : Shell	Location / Rig : Guadalupe, NM	Signatures
Date : Apr-16-2009	Well Name : Latigo Ranch 3-3	Field :	A. Galindo

Job Type	Intermediate	Depth	6350.0 ft	TVD	6350.0 ft
BHST	145 degF	BHCT	121 degF	BHP	3745 (psi)
Starting Temp.	80 degF	Time to Temp.	00:34 hr:mn	Heating Rate	1.04 degF/min
Starting Pressure	468 psi	Time to Pressure	00:34 hr:mn	Schedule	9.5-2

Composition

Slurry Density	14.80 lb/gal	Yield	1.33 ft ³ /sk	Mix Fluid	6.329 gal/sk
Solid Vol. Fraction	36.4 %	Porosity	63.6 %	Slurry type	Conventional
Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
C		94 lb of BLEND	Blend	197.27 lb/ft ³	
Fresh water	6.329 gal/sk		Base Fluid		
D800	0.600 %BWOC		Retarder		

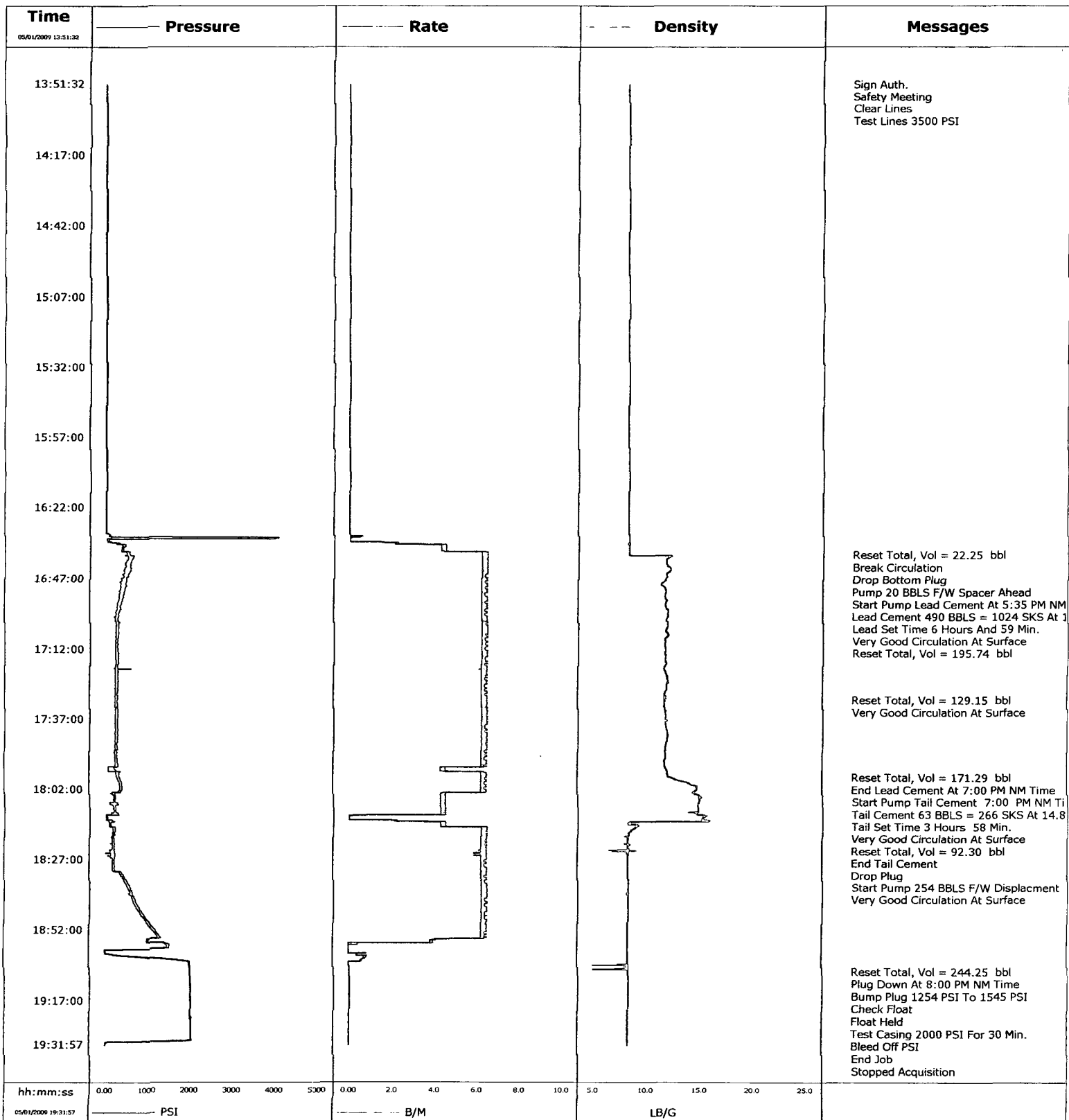
Rheology (Average readings)

(rpm)	(deg)	(deg)
300	38.0	57.0
200	32.0	49.0
100	24.5	39.5
60	21.0	35.0
30	17.5	30.0
6	15.5	19.0
3	13.5	14.0
10 sec Gel	18	16
10 min Gel	32	12
1 min Stirring	57	50
Temperature	80 degF	121 degF
	Pv: 22.863 cP	Pv: 29.490 cP
	Tv: 16.06 lbf/100ft ²	Tv: 28.65 lbf/100ft ²

Thickening Time

Consistency	Time
POD :	03:58 hr:mn
50 Bc	04:23 hr:mn
70 Bc	04:33 hr:mn

Well	#3-3	Client	Shell Oil Company
Field	Ladigo Ranch	SIR No.	2201758762
Engineer		Job Type	Cement 7 5/8 Inter. Casing
Country	United States	Job Date	05-01-2009



Cementing Service Report

Customer SHELL OIL COMPANY						Job Number 2201758762			
Well Latigo Ranch 3-3			Location (legal)			Schlumberger Location Hobbs, NM		Job Start 2009-May-01	
Field Cuervo		Formation Name/Type		Deviation		Bit Size 9.88 in	Well MD 5,983 ft	Well TVD 5,983 ft	
County Guadalupe		State/Province NM		BHP psi	BHST 143 °F	BHCT 121 °F	Pore Press. Gradient psi/ft		
Well Master: 0631107819		API / UWI: 3-019-20138		Casing/Liner					
Rig Name Nabors M-43	Drilled For Oil & Gas		Service Via		Depth, ft 5982	Size, in 7.63	Weight, lb/ft 33.7	Grade N80	
Offshore Zone		Well Class New		Well Type Exploration		Thread HYD			
Drilling Fluid Type		Max. Density lb/gal		Plastic Vi: cp		Tubing/Drill Pipe			
Service Line Cementing		Job Type Cem Intern Casing		Perforations/Open Hole					
Max. Allowed Tubing Pressure psi		Max. Allowed Ann. Pressure psi		WellHead Connection Single cement hea		Top, ft	Bottom, ft	spf	
Service Instructions Cement 5978' of 7 5/8" intermediate casing LOU: 4900005296 Network Latigo #30088286						No. of Shots		Total Interval ft	
						Diameter in			
						Packer Type		Packer Depth ft	
						Treat Down Casing		Displacement 254 bbl	
Tubing Vol. bbl		Casing Vol. 274 bbl		Annular Vol. 234 bbl		OpenHole Vol 420 bbl			
Casing/Tubing Secured ☒				1 Hole Volume Circulated prior to Cementing ☐		Casing Tools			
Lift Pressure: 4778 psi				Pipe Rotated ☐		Pipe Reciprocated ☐		Squeeze Job	
No. Centralizers: Top Plugs: 1 Bottom Plugs: 1				Cement Head Type: Single		Shoe Type: Guide		Squeeze Type	
Job Scheduled For: 2009-May-01 11:30				Arrived on Location: 2009-May-01 21:30		Shoe Depth: 5978 ft		Tool Type:	
						Stage Tool Type: ft		Tool Depth: ft	
						Stage Tool Depth: ft		Tail Pipe Size: in	
						Collar Type: Float		Tail Pipe Depth: ft	
						Collar Depth: 5933 ft		Sqz Total Vol: bbl	
Date	Time	Treating Pressure 24 hr clock psi	Flow Rate tbt/min	Density lb/gal	Volume bbl	0	0	0	Message
2009-May-01	13:51	32	0.0	8.33	0.0	0	0	0	
2009-May-01	13:51								Sign Auth.
2009-May-01	13:51	32	0.0	8.33	0.0	0	0	0	
2009-May-01	13:51								Safety Meeting
2009-May-01	13:51	32	0.0	8.33	0.0	0	0	0	
2009-May-01	13:51								Clear Lines
2009-May-01	13:51	32	0.0	8.33	0.0	0	0	0	
2009-May-01	13:52								Test Lines 3500 PSI
2009-May-01	16:36	402	4.5	8.32	10.7	0	0	0	
2009-May-01	16:38								Reset Total, Vol = 22.25 bbl
2009-May-01	16:38	567	6.2	12.29	22.3	0	0	0	
2009-May-01	16:39	569	6.4	12.17	23.9	0	0	0	
2009-May-01	16:39								Break Circulation
2009-May-01	16:39	621	6.4	12.04	26.1	0	0	0	
2009-May-01	16:39								Drop Bottom Plug
2009-May-01	16:39								Pump 20 BBLs F/W Spacer Ahead
2009-May-01	16:39	571	6.2	11.96	27.4	0	0	0	
2009-May-01	16:40								Start Pump Lead Cement At 5:35 PM NM Time
2009-May-01	16:40	558	6.4	11.83	30.5	0	0	0	

Well			Field			Service Date		Customer			Job Number
Latigo Ranch #3-3			Cuervo			09121-May-01		SHELL OIL COMPANY			2201758762
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message		
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0			
2009-May-01	16:41								Lead Cement 490 BBLS = 1024 SKS At 11.8 PPG		
2009-May-01	16:41	556	6.2	11.80	37.4	0	0	0			
2009-May-01	16:41								Lead Set Time 6 Hours And 59 Min.		
2009-May-01	16:41	561	6.4	11.82	40.0	0	0	0			
2009-May-01	16:41	510	6.2	11.86	41.5	0	0	0			
2009-May-01	16:41								Very Good Circulation At Surface		
2009-May-01	16:41	561	6.5	11.86	42.1	0	0	0			
2009-May-01	16:46	486	6.4	11.85	73.2	0	0	0			
2009-May-01	16:51	417	6.2	11.82	104.8	0	0	0			
2009-May-01	16:56	359	6.4	11.87	136.4	0	0	0			
2009-May-01	17:01	272	6.4	11.88	168.0	0	0	0			
2009-May-01	17:06	291	6.4	11.99	199.6	0	0	0			
2009-May-01	17:09	294	6.4	11.66	218.0	0	0	0			
2009-May-01	17:09								Reset Total, Vol = 195.74 bbl		
2009-May-01	17:11	285	6.4	11.75	231.2	0	0	0			
2009-May-01	17:16	300	6.4	11.85	262.8	0	0	0			
2009-May-01	17:21	281	6.2	11.95	294.5	0	0	0			
2009-May-01	17:26	275	6.2	11.79	326.0	0	0	0			
2009-May-01	17:30								Reset Total, Vol = 129.15 bbl		
2009-May-01	17:30	270	6.4	11.73	347.1	0	0	0			
2009-May-01	17:31	300	6.2	11.68	357.7	0	0	0			
2009-May-01	17:32								Very Good Circulation At Surface		
2009-May-01	17:32	287	6.2	11.67	362.8	0	0	0			
2009-May-01	17:36	282	6.4	11.77	389.3	0	0	0			
2009-May-01	17:41	294	6.4	11.96	421.0	0	0	0			
2009-May-01	17:46	285	6.4	11.75	452.5	0	0	0			
2009-May-01	17:51	280	6.2	11.71	484.1	0	0	0			
2009-May-01	17:56	332	6.2	12.07	512.8	0	0	0			
2009-May-01	17:57	359	6.2	12.58	518.4	0	0	0			
2009-May-01	17:57								Reset Total, Vol = 171.29 bbl		
2009-May-01	17:58								End Lead Cement At 7:00 PM NM Time		
2009-May-01	17:58	345	6.5	12.88	521.7	0	0	0			
2009-May-01	18:00								Start Pump Tail Cement 7:00 PM NM Time At 14.8 PPG		
2009-May-01	18:00	397	6.2	14.70	535.5	0	0	0			
2009-May-01	18:00								Tail Cement 63 BBLS = 266 SKS At 14.8 PPG		
2009-May-01	18:00	408	6.5	14.76	538.1	0	0	0			
2009-May-01	18:01	396	6.4	14.77	540.2	0	0	0			
2009-May-01	18:01								Tail Set Time 3 Hours & 58 Min.		
2009-May-01	18:01	409	6.4	14.80	541.5	0	0	0			
2009-May-01	18:01								Very Good Circulation At Surface		
2009-May-01	18:01	406	6.4	14.77	544.3	0	0	0			
2009-May-01	18:06	245	4.5	14.87	568.6	0	0	0			
2009-May-01	18:11	42	0.0	15.29	586.4	0	0	0			
2009-May-01	18:16	213	6.2	8.42	607.8	0	0	0			
2009-May-01	18:17								Reset Total, Vol = 92.30 bbl		
2009-May-01	18:17	217	6.4	8.33	610.7	0	0	0			
2009-May-01	18:17								End Tail Cement		

Well			Field			Service Date		Customer			Job Number
Latigo Ranch #3-3			Cuervo			09121-May-01		SHELL OIL COMPANY			2201758762
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message		
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0			
2009-May-01	18:17	222	6.2	8.37	612.4	0	0	0			
2009-May-01	18:17	223	6.4	8.39	613.0	0	0	0			
2009-May-01	18:17								Drop Plug		
2009-May-01	18:18								Start Pump 254 BBLs F/W Displacement		
2009-May-01	18:18	218	6.5	8.38	615.0	0	0	0			
2009-May-01	18:19								Very Good Circulation At Surface		
2009-May-01	18:19	211	6.4	8.34	624.0	0	0	0			
2009-May-01	18:21	210	6.2	8.33	639.4	0	0	0			
2009-May-01	18:26	228	6.4	8.33	671.0	0	0	0			
2009-May-01	18:31	409	6.2	8.33	702.6	0	0	0			
2009-May-01	18:36	595	6.2	8.33	734.3	0	0	0			
2009-May-01	18:41	710	6.2	8.33	766.0	0	0	0			
2009-May-01	18:46	914	6.2	8.33	797.5	0	0	0			
2009-May-01	18:51	1186	6.4	8.33	829.1	0	0	0			
2009-May-01	18:57	1530	0.0	8.33	853.2	0	0	0			
2009-May-01	19:02	1436	0.7	8.34	854.5	0	0	0			
2009-May-01	19:06								Reset Total, Vol = 244.25 bbl		
2009-May-01	19:06	2006	0.0	8.32	855.0	0	0	0			
2009-May-01	19:07	2008	0.0	8.32	855.0	0	0	0			
2009-May-01	19:07	2007	0.0	8.32	855.0	0	0	0			
2009-May-01	19:07								Plug Down At 8:00 PM NM Time		
2009-May-01	19:08	2010	0.0	8.32	855.0	0	0	0			
2009-May-01	19:08								Bump Plug 1254 PSI To 1545 PSI		
2009-May-01	19:09	2010	0.0	8.32	855.0	0	0	0			
2009-May-01	19:09								Check Float NO CEMENT TO SURFACE		
2009-May-01	19:09	2010	0.0	8.32	855.0	0	0	0			
2009-May-01	19:09								Float Held		
2009-May-01	19:10	2013	0.0	8.32	855.0	0	0	0			
2009-May-01	19:10								Test Casing 2000 PSI For 30 Min.		
2009-May-01	19:12	2017	0.0	8.32	855.0	0	0	0			
2009-May-01	19:17	2029	0.0	8.32	855.0	0	0	0			
2009-May-01	19:22	2039	0.0	8.32	855.0	0	0	0			
2009-May-01	19:27	2048	0.0	8.32	855.0	0	0	0			
2009-May-01	19:31	35	0.0	8.32	855.0	0	0	0			
2009-May-01	19:31								Bleed Off PSI		
2009-May-01	19:31								End Job		
2009-May-01	19:31	35	0.0	8.32	855.0	0	0	0			

Well Latigo Ranch #3-3			Field Cuervo		Service Date 09121-May-01		Customer SHELL OIL COMPANY			Job Number 2201758762	
Date	Time 24 hr clock	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl	0 0	0 0	0 0	Message		
Post Job Summary											
Average Pump Rates, bpm						Volume of Fluid Injected, bbl					
Slurry	N2	Mud	Maximum Rate			Total Slurry	Mud	Spacer	N2		
6			6			553		20			
Treating Pressure Summary, psi						Breakdown Fluid					
Maximum	Final	Average	Bump Plug to	Breakdown		Volume			Density		
2000		350	2000			bbl			8.34 lb/gal		
Avg. N2 Percent	Designed Slurry Volume		Displacement		Mix Water Temp	☐ Cement Circulated to Surface?			Volume bbl		
%	bbl		254 bbl		°F	☐ Washed Thru Perfs			To ft		
Customer or Authorized Representative				Schlumberger Supervisor				☐ CirculationLost			
Stampley, George				Cantu, Ernest				☒ Job Completed			