

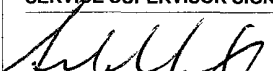
CEMENT JOB REPORT



30-025-39029

CUSTOMER COG Operating, LLC				DATE 04-OCT-09		F.R. # 561110178				SERV. SUPV. SAMUEL A MARTINEZ			
LEASE & WELL NAME LEAKER CC 18 - API 30025390290000				LOCATION SEC116-T17S-R32E				COUNTY-PARISH-BLOCK Lea New Mexico					
DISTRICT Artesia				DRILLING CONTRACTOR RIG # BASIC 35				TYPE OF JOB Long String					
SIZE & TYPE OF PLUGS				LIST-CSG-HARDWARE				PHYSICAL SLURRY PROPERTIES					
5-1/2" Top Cem Plug, Nitrile cvr, Ph		Float Collar, Al Flap, 5-1/2 - 8rd		SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT ³	WATER GPS	PUMP TIME HR:MIN.	Bbl SLURRY	Bbl MIX WATER			
		Float Shoe 5-1/2 - 8rd											
MATERIALS FURNISHED BY BJ													
MUD CLEAN II					8.4				12				
35/65/6C+2/10%FL52+2/10%SMS+5%SALT+5#LCM+1/8#CF				700	12.5	2.05	10.75		256	179.47			
50/50/2C+1%FL25+1%BA58+3/10%SMS+5%SLT+3#LCM+1/8#CF				400	14	1.36	5.95		97	56.73			
Available Mix Water 800 Bbl. Available Displ. Fluid 800 Bbl.				TOTAL				365	236.20				
HOLE			TBG-CSG-D.P.				COLLAR DEPTHS						
SIZE	% EXCESS	DEPTH	SIZE	WGT.	TYPE	DEPTH	GRADE	SHOE	FLOAT	STAGE			
7.875	0	7012	5.5	17	CSG	7015	L-80	7015	6970	0			
LAST CASING			PKR-CMT RET-BR PL-LINER			PERF. DEPTH		TOP CONN		WELL FLUID			
SIZE	WGT	TYPE	DEPTH	BRAND & TYPE		DEPTH	TOP	BTM	SIZE	THREAD	WGT.		
8.625	32	CSG	2314	NO PACKER		0	0	0	5.5	8RD	9.2		
DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TBG PSI		MAX CSG PSI		MIX WATER		
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED	Operator	RATED	Operator			
162	BBLS			1761	0	0	0	0	7740	6192	RIG		

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NONE

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR.:MIN.	PRESSURE - PSI		RATE BPM	BBL. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW ☒ CO. REP. ☒	
	PIPE	ANNULUS				TEST LINES	4500 PSI
						CIRCULATING WELL - RIG	☒ BJ ☐
19:00						ARRIVED ON LOC. H20 GOOD	
20:00						SAFETY MEETING	
20:31	4900	0	.5	.5	H20	LINE TEST	
20:33	150	0	5	12	H20	MUD CLEAN II SPACER	
20:35	175	0	5	10	H20	FRESH WATER SPACER	
20:37	250	0	6	256	CMT	LEAD SLURRY AT 12.5	
21:25	300	0	5	97	CMT	TAIL SLURRY AT 14.0	
21:48	0	0	0	20	H20	SHUT DOWN/DROP PLUG/WASH TO PIT	
21:53	1720	0	6.2	152	H20	DISPLACEMENT	
22:21	1791	0	2.8	10	H20	SLOW RATE	
22:27	2511	0	0	0	N/A	PLUG DOWN/HELD PRESSURE	
22:37	0	0	0	0	H20	CHECK FLOATS	
						CIRCULATED 156 SKS	
						THANK YOU, SAMMY AND CREW	
BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	SERVICE SUPERVISOR SIGNATURE:
☒ Y ☐ N	2511	☒ Y ☐ N	57	537	0	☒ Y ☐ N	 100409

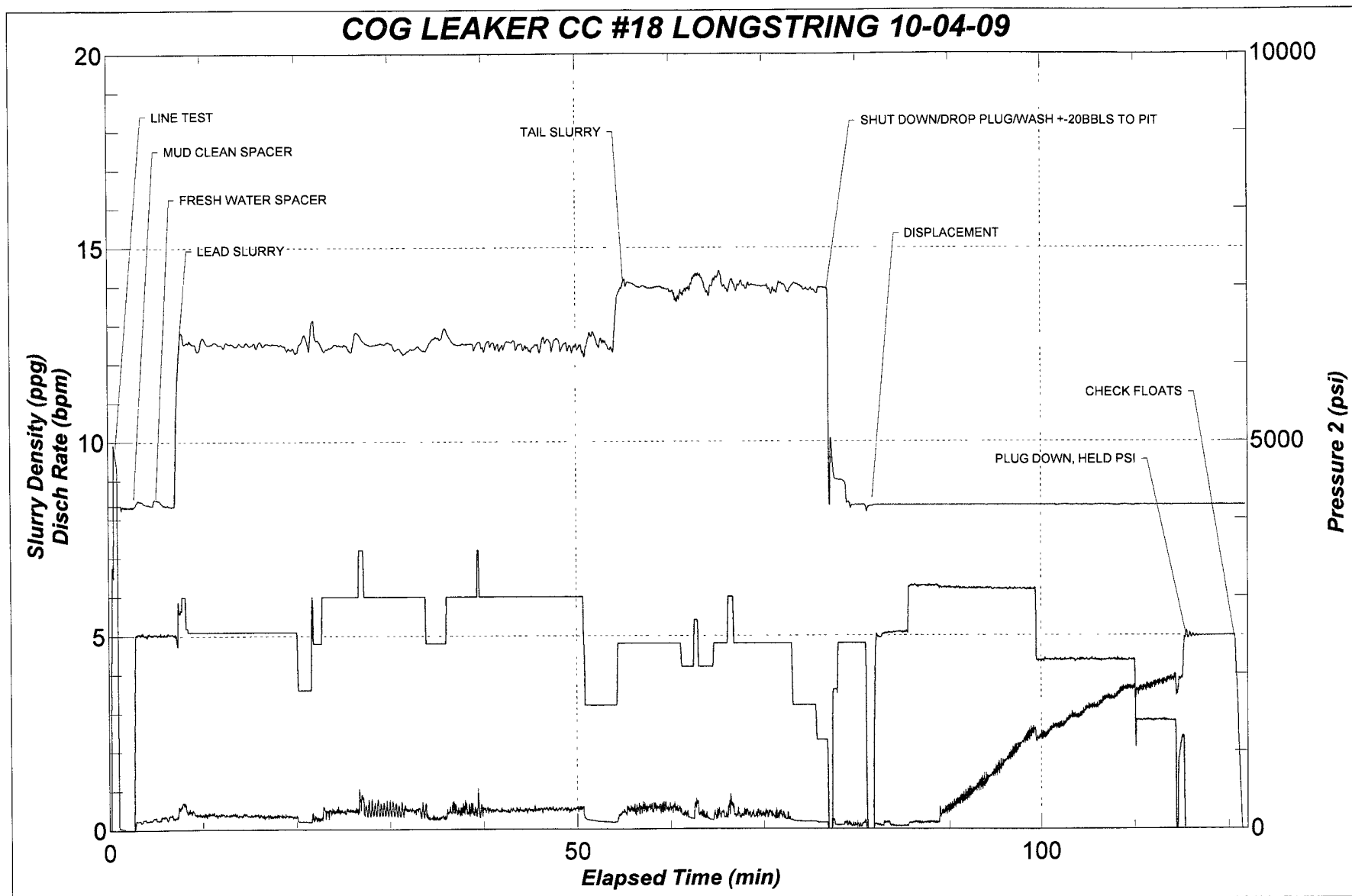


BJ Services JobMaster Program Version 3.20

Job Number: 561110178

Customer: COG

Well Name: LEAKER CC 18





PERMIAN REGION LAB Cement Lab Report

Phone: (432) 530-2667 Fax: (432) 530-0279

Test Number: 529437313
Report Number:

Test Date: 9/26/2009

WELL INFORMATION

Operator: COG Operating
API #:
Well Name: Leaker CC #18
Slurry Type: Lead
Blend Type: Field
Comments:

County: Lea
State: NM
Requested By: Jake Garcia
TVD: 7000 MD: 7000
District: Artesia

TEST DATA AND SCHEDULE

Time To Temp (min): 37.00
Initial Press (psi): 500
Final Press (psi): 3780
BHST (deg F): 103
BHCT (deg F): 98

Mud Density (lb/gal): 9
Mix Water Density (lb/gal): 8.34
Mix Water Type: Tap Water
Surf Temp (deg F): 80
Job Type: Long String

Comments: FL52A was added to the field blend.

SLURRY AND TEST RESULTS

Vendor: Cemex

Slurry: 35:65:6 Class 'C' + 0.20% FL-52A + 0.20% SMS + 5.00% Salt (4.481 lb/sk) + 5.00 lb/sk LCM-1 + 0.125 lb/sk Cello Flake

Density: 12.5 lb/gal
Yield: 2.051 CuFt/sk
Mix Water: 10.75 gal/sk (103%)
Total Mix Liquid: 10.75 gal/sk
Fluid Loss: cc/30 min

Pump Time (50 Bc):
Pump Time (70 Bc): 3:47
Pump Time (100 Bc):

Free Water (ml): (Tested at 90 Degrees)

Compressive Strength

Temp	Time	Strength	Type
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Rheology (PL=Power Law, BP= Bingham Plastic)

Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80F	53	36	30	23	13	11	0.248	0.076	14.7	23.1	BP

Comments:



PERMIAN REGION LAB Cement Lab Report

Phone: (432) 530-2667 Fax: (432) 530-0279

Test Number: 529437311
Report Number:

Test Date: 9/26/2009

WELL INFORMATION

Operator: COG Operating
API #:
Well Name: Leaker CC #18
Slurry Type: Tail
Blend Type: Field
Comments:

County: Lea
State: NM
Requested By: Jake Garcia
TVD: 7000 MD: 7000
District: Artesia

TEST DATA AND SCHEDULE

Time To Temp (min): 37.00
Initial Press (psi): 500
Final Press (psi): 3780
BHST (deg F): 103
BHCT (deg F): 98

Mud Density (lb/gal): 9
Mix Water Density (lb/gal): 8.34
Mix Water Type: Tap Water
Surf Temp (deg F): 80
Job Type: Long String

Comments: SMS was added to the field blend.

SLURRY AND TEST RESULTS

Vendor: Cemex

Slurry: 50:50:2 Class 'C' + 1.00% FL-25 + 1.00% BA-58 + 0.30% SMS + 5.00% Salt (2.482 lb/sk) + 3.00 lb/sk LCM-1 + 0.125 lb/sk Cello Flake

Density: 14 lb/gal
Yield: 1.364 CuFt/sk
Mix Water: 5.952 gal/sk (59.09%)
Total Mix Liquid: 5.952 gal/sk
Fluid Loss: cc/30 min

Pump Time (50 Bc):
Pump Time (70 Bc): 3:01
Pump Time (100 Bc):

Free Water (ml): (Tested at 90 Degrees)

Compressive Strength

Temp	Time	Strength	Type
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Rheology (PL=Power Law, BP= Bingham Plastic)

Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80F	201	145	127	105	58	48	0.229	0.359	69.5	85.9	PL

Comments: