

CEMENT JOB REPORT

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JAN 29 2010



30-025-39029

HOBBSD

CUSTOMER COG Operating, LLC		DATE 26-SEP-09	F.R. # 561110174	SERV. SUPERVISOR SAMUEL A MARTINEZ			
LEASE & WELL NAME LEAKER CC #18 - API 30015390290000		LOCATION SEC16-T17S-R32E		COUNTY-PARISH-BLOCK Eddy New Mexico			
DISTRICT Artesia		DRILLING CONTRACTOR RIG # BASIC 35		TYPE OF JOB Intermediate			
SIZE & TYPE OF PLUGS		LIST-CSI-HARDWARE		PHYSICAL SLURRY PROPERTIES			
8-5/8" Top Cem Plug, Nitrile cvr, Ph		Float Collar, Al Flap, 8-5/8 - 8rd		SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT ³	WATER GPS
		Float Shoe 8-5/8 - 8rd					
MATERIALS FURNISHED BY BJ							
50/50/10C+5%SALT+5#LCM+1/4#CELLOFLAKE				500	11.8	2.45	13.52
C+2%CACL				200	14.8	1.32	6.32
Available Mix Water 500 Bbl. Available Displ. Fluid 500 Bbl.				TOTAL		265	190.91
HOLE		TBG-CSG-D.P.		COLLAR DEPTHS			
SIZE	% EXCESS	DEPTH	SIZE	WGT.	TYPE	DEPTH	GRADE
11	0	2314	8.625	32	CSG	2315	J-55
						2315	2273
LAST CASING		PKR-CMT RET-BR PL-LINER		PERF. DEPTH		TOP CONN	
SIZE	WGT	TYPE	DEPTH	BRAND & TYPE		WELL FLUID	
13.38	48	CSG	672	NO PACKER		0	
DISPL. VOLUME		DISPL. FLUID		CAL. PSI		CAL. MAX PSI	
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED
138	BBLS			577	0	0	0

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	2500 PSI
						CIRCULATING WELL - RIG ☒ BJ ☐	
20:30						ARRIVED ON LOC. H2O GOOD	
22:30						SAFETY MEETING	
23:03	3500	0	.5	.5	H2O	LINE TEST	
23:05	100	0	5	10	H2O	FRESH WATER SPACER	
23:07	195	0	6	218	CMT	LEAD SLURRY AT 11.8	
23:45	163	0	5	47	CMT	TAIL SLURRY AT 14.8	
23:55	0	0	0	0	N/A	SHUT DOWN/DROP PLUG	
23:57	535	0	6.2	128	H2O	DISPLACEMENT	
00:17	577	0	2.7	10	H2O	SLOW RATE	
00:23	1064	0	0	0	N/A	PLUG DOWN	
00:24	0	0	0	0	H2O	CHECK FLOATS	
						CIRCULATED 188 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	1064	☒ Y ☐ N	82	413	0	☒ Y ☐ N	<i>Samuel A Martinez</i> 092609

FOR RECORD ONLY

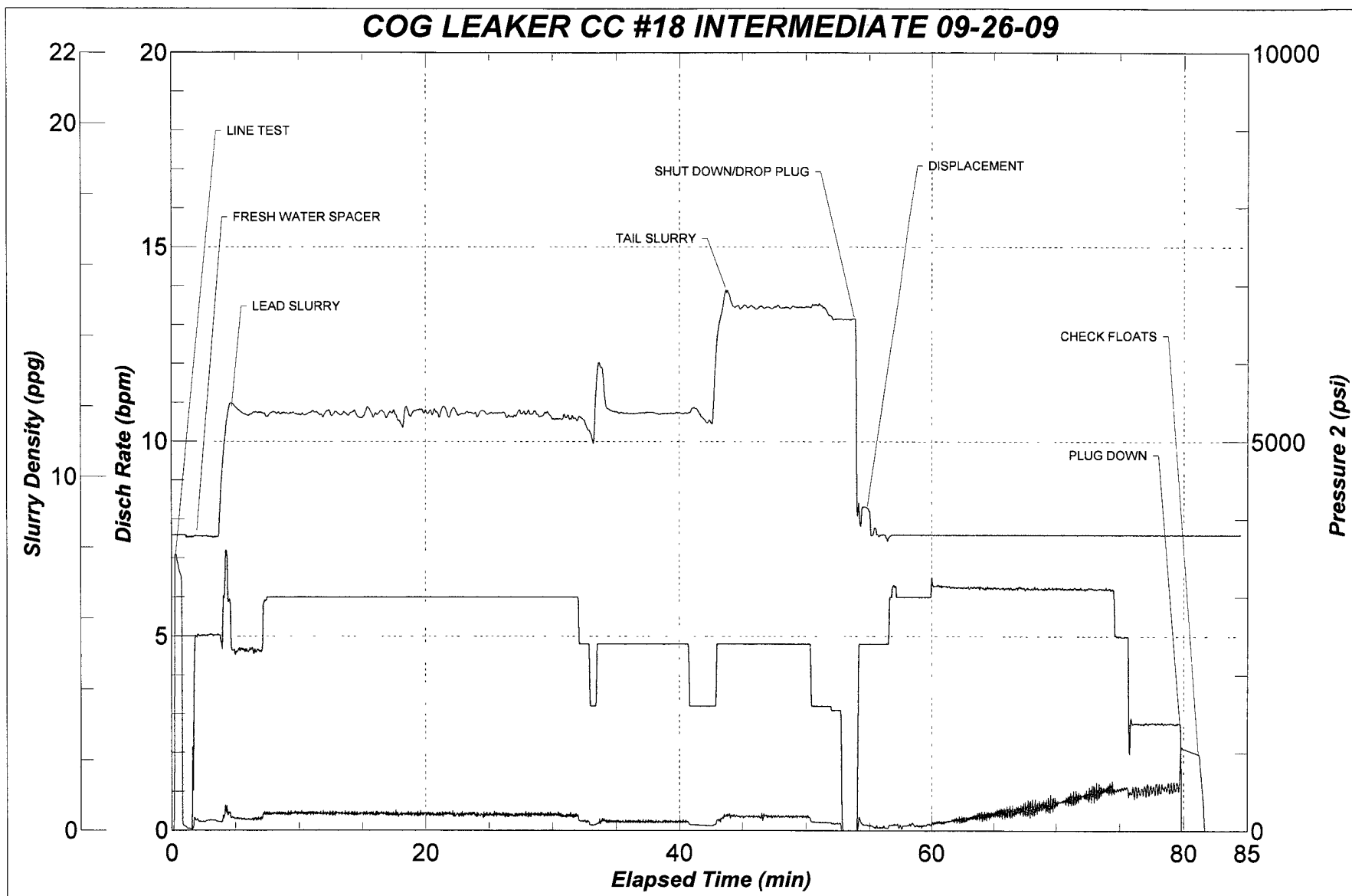


BJ Services JobMaster Program Version 3.20

Job Number: 561110174

Customer: COG

Well Name: LEAKER CC 18





PERMIAN REGION LAB
Cement Lab Report

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

Report Number:

WELL INFORMATION

Operator: **COG OPER**
API #:
Well Name: **Leaker CC #18**
Slurry Type: Single
Blend Type: Lab
Comments:
County: Eddy
State: NM
Requested By: Jake Garcia
TVD:
District: Artesia

TEST DATA AND SCHEDULE

Time To Temp (min): 17.40
Initial Press (psi): 300
Final Press (psi): 1240
BHST (deg F): 89
BHCT (deg F): 85
Mud Density (lb/gal): 8.8
Mix Water Density (lb/gal): 8.34
Mix Water Type: Tap Water
Surf Temp (deg F): 80
Job Type: **2314**
Comments: Compressive Strength for BLM

SLURRY AND TEST RESULTS

Vendor: Cemex
Slurry: 50:50:10 Class 'C' + 5.00% Salt (5.66 lb/sk) + 5.00 lb/sk LCM-1 + 0.25 lb/sk Cello Flake

Density: 11.8 lb/gal
Yield: 2.453 CuFt/sk
Mix Water: 13.57 gal/sk (134.8%)
Total Mix Liquid: 13.57 gal/sk
Fluid Loss: cc/30 min
Pump Time (50 Bc):
Pump Time (70 Bc): 6:35
Pump Time (100 Bc):
Free Water (ml): (Tested at 90 Degrees)

Compressive Strength				Rheology (PL=Power Law, BP= Bingham Plastic)											
Temp	Time	Strength	Type	Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
85	12	69	UCA	80	68	61	57	53	28	18	0.202	0.189	36.2	31.1	PL
85	24	211	UCA												
85	48	413	UCA												
85	60:48	500	UCA												
85	72	585	UCA												

Comments:



PERMIAN REGION LAB
Cement Lab Report

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

Report Number:

WELL INFORMATION

Operator: **COG OPER** County: Eddy
API #: State: NM
Well Name: **Leater CC #18** Requested By: Jake Garcia
Slurry Type: Tail TVD:
Blend Type: Lab District: Artesia
Comments:

TEST DATA AND SCHEDULE

Time To Temp (min): 13.00 Mud Density (lb/gal): 8.34
Initial Press (psi): 250 Mix Water Density (lb/gal): 8.34
Final Press (psi): 690 Mix Water Type: Tap Water
BHST (deg F): 80 Surf Temp (deg F): 80
BHCT (deg F): 80 Job Type: **2314**
Comments:

SLURRY AND TEST RESULTS

Vendor: Cemex
Slurry: Class 'C' + 2.00% CaCl₂

Density: 14.8 lb/gal Pump Time (50 Bc):
Yield: 1.345 CuFt/sk Pump Time (70 Bc): 3:02
Mix Water: 6.355 gal/sk (56.38%) Pump Time (100 Bc):
Total Mix Liquid: 6.355 gal/sk
Fluid Loss: cc/30 min Free Water (ml): (Tested at 90 Degrees)

Compressive Strength				Rheology (PL=Power Law, BP= Bingham Plastic)											
Temp	Time	Strength	Type	Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80	8:19	500	UCA	80	85	63	51	40	22	17	0.254	0.126	24.9	40.7	BP
80	12	731	UCA												
80	24	1306	UCA												

Comments:



PERMIAN REGION LAB
Cement Lab Report

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

Report Number:

WELL INFORMATION

Operator: **COG OPER**
API #: **Lea Ker CC # 18**
Well Name: **Lea Ker CC # 18**
Slurry Type: Single
Blend Type: Lab
Comments:
County: Eddy
State: NM
Requested By: Jake Garcia
TVD:
District: Artesia

TEST DATA AND SCHEDULE

Time To Temp (min): 17.40
Initial Press (psi): 300
Final Press (psi): 1240
BHST (deg F): 89
BHCT (deg F): 85
Mud Density (lb/gal): 8.8
Mix Water Density (lb/gal): 8.34
Mix Water Type: Tap Water
Surf Temp (deg F): 80
Job Type: **2314**
Comments: Compressive Strength for BLM

SLURRY AND TEST RESULTS

Vendor: Cemex
Slurry: 50:50:10 Class 'C' + 5.00% Salt (5.66 lb/sk) + 5.00 lb/sk LCM-1 + 0.25 lb/sk Cello Flake

Density: 11.8 lb/gal
Yield: 2.453 CuFt/sk
Mix Water: 13.57 gal/sk (134.8%)
Total Mix Liquid: 13.57 gal/sk
Fluid Loss: cc/30 min
Pump Time (50 Bc):
Pump Time (70 Bc): 6:35
Pump Time (100 Bc):
Free Water (ml): (Tested at 90 Degrees)

Compressive Strength				Rheology (PL=Power Law, BP= Bingham Plastic)											
Temp	Time	Strength	Type	Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
85	12	69	UCA	80	68	61	57	53	28	18	0.202	0.189	36.2	31.1	PL
85	24	211	UCA												
85	48	413	UCA												
85	60:48	500	UCA												
85	72	585	UCA												

Comments:



PERMIAN REGION LAB
Cement Lab Report

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

Report Number:

WELL INFORMATION

Operator: **COG OPER** County: Eddy
API #: State: NM
Well Name: **Leaker C #18** Requested By: Jake Garcia
Slurry Type: Tail TVD:
Blend Type: Lab District: Artesia
Comments:

TEST DATA AND SCHEDULE

Time To Temp (min): 13.00 Mud Density (lb/gal): 8.34
Initial Press (psi): 250 Mix Water Density (lb/gal): 8.34
Final Press (psi): 690 Mix Water Type: Tap Water
BHST (deg F): 80 Surf Temp (deg F): 80
BHCT (deg F): 80 Job Type: **2314**
Comments:

SLURRY AND TEST RESULTS

Vendor: Cemex
Slurry: Class 'C' + 2.00% CaCl₂

Density: 14.8 lb/gal Pump Time (50 Bc):
Yield: 1.345 CuFt/sk Pump Time (70 Bc): 3:02
Mix Water: 6.355 gal/sk (56.38%) Pump Time (100 Bc):
Total Mix Liquid: 6.355 gal/sk
Fluid Loss: cc/30 min Free Water (ml): (Tested at 90 Degrees)

Compressive Strength				Rheology (PL=Power Law, BP= Bingham Plastic)											
Temp	Time	Strength	Type	Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80	8:19	500	UCA	80	85	63	51	40	22	17	0.254	0.126	24.9	40.7	BP
80	12	731	UCA												
80	24	1306	UCA												

Comments:



PERMIAN REGION LAB
Cement Lab Report

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

WELL INFORMATION

Operator: **COG OPER.** County: Eddy
API #: State: NM
Well Name: **Leaker CC #18** Requested By: Jake Garcia
Slurry Type: Tail TVD: **672**
Blend Type: Lab District: Artesia
Comments:

TEST DATA AND SCHEDULE

Time To Temp (min): 13.00 Mud Density (lb/gal): 8.34
Initial Press (psi): 250 Mix Water Density (lb/gal): 8.34
Final Press (psi): 690 Mix Water Type: Tap Water
BHST (deg F): 80 Surf Temp (deg F): 80
BHCT (deg F): 80 Job Type: Surface
Comments:

SLURRY AND TEST RESULTS

Vendor: Cemex

Slurry: Class 'C' + 2.00% CaCl₂ + 0.25 lb/sk Cello Flake

Density: 14.8 lb/gal Pump Time (50 Bc):
Yield: 1.346 CuFt/sk Pump Time (70 Bc): 3:02
Mix Water: 6.345 gal/sk (56.3%) Pump Time (100 Bc):
Total Mix Liquid: 6.345 gal/sk
Fluid Loss: cc/30 min Free Water (ml): (Tested at 90 Degrees)

Compressive Strength				Rheology (PL=Power Law, BP= Bingham Plastic)											
Temp	Time	Strength	Type	Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80	8:19	500	UCA	80	85	63	51	40	22	17	0.254	0.126	24.9	40.7	BP
80	12	731	UCA												
80	24	1306	UCA												

Comments:



PERMIAN REGION LAB
Cement Lab Report

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

Test Number:
Report Number:

WELL INFORMATION

Operator: *COG Oper.*
API #: *Leaker CC #18*
Well Name: *Leaker CC #18*
Slurry Type: Lead
Blend Type: Lab
Comments:

County: Eddy
State: NM
Requested By: Jake Garcia
TVD: *672*
District: Artesia

TEST DATA AND SCHEDULE

Time To Temp (min): 13.00
Initial Press (psi): 250
Final Press (psi): 690
BHST (deg F): 80
BHCT (deg F): 80
Comments: BLM Test

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

SLURRY AND TEST RESULTS

Vendor: Cemex

Slurry: Class 'C' + 4.00% Bentonite (II) + 2.00% CaCl₂ + 0.25 lb/sk Cello Flake

Density: 13.5 lb/gal
Yield: 1.746 CuFt/sk
Mix Water: 9.166 gal/sk (81.33%)
Total Mix Liquid: 9.166 gal/sk
Fluid Loss: cc/30 min

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

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

Compressive Strength

Temp	Time	Strength	Type
80	12	434	UCA
80	13:30	500	UCA
80	24	757	UCA
80	48	1128	UCA

Rheology (PL=Power Law, BP= Bingham Plastic)

Temp	600	300	200	100	6	3	n'	k'	Yp	Pv	Best
80	88	75	71	65	34	24	0.207	0.227	44.2	39.0	PL

Comments: