

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

MAR 13 2018

FORM APPROVED

OMB NO. 1004-0137

Expires: February 28, 1995

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WORK OIL WELL ☒ GAS WELL ☒ DRY ☐ Other _____		5. LEASE DESIGNATION AND SERIAL NO. BIA 360																			
1b. TYPE OF WELL NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache																			
2. NAME OF OPERATOR DJR Operating, LLC		7. UNIT AGREEMENT NAME N/A																			
3. ADDRESS AND TELEPHONE NO. Po Box 156 Bloomfield NM 87413, 505-632-3476		8. FARM OR LEASE NAME, WELL NO. Chacon Amigos 17																			
4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)* At Surface 2042' FSL x 2035' FEL At top prod. Interval reported below 1980' FSL X 1980' FWL At total depth 1980' FNL X 1980' FWL		9. API WELL NO. 30-043-21184																			
14. PERMIT NO. _____ DATE ISSUED _____		10. FIELD AND POOL OR WILDCAT Lindrith Gallup Dakota West																			
15. DATE SPUDDED 11-18-14 16. DATE T.D. REACHED 11-30-14 17. DATE COMPL. (Ready to prod.) 3-2-18 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 7196' GR 19. ELEV. CASINGHEAD _____		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Surface: "J" Sec.11-T22N-R3W																			
20. TOTAL DEPTH, MD & TVD 7850' MD TVD 7792' MD TVD 21. PLUG BACK T.D., MD & TVD _____ MD TVD _____ 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY NMOCB X ROTARY TOOLS CABLE TOOLS _____		12. COUNTY OR PARISH Sandoval County 13. STATE NM																			
24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* (7356'-7346') & (7277'-7244')		25. WAS DIRECTIONAL SURVEY MADE Yes																			
26. TYPE ELECTRIC AND OTHER LOGS RUN Double Spaced Nuetron, Spectral Density, high Resolution Induction Log, CBL LOG		27. WAS WELL CORED _____																			
23. CASING RECORD (Report all strings set in well)																					
<table border="1"><thead><tr><th>CASING SIZE/GRADE</th><th>WEIGHT, LB./FT.</th><th>DEPTH SET (MD)</th><th>HOLE SIZE</th><th>TOP OF CEMENT, CEMENTING RECORD</th><th>AMOUNT PULLED</th></tr></thead><tbody><tr><td>8 5/8" J-55</td><td>24#</td><td>551'</td><td>12 1/4"</td><td>404 sks to surface</td><td>40 bbls</td></tr><tr><td>5 1/2" J-55</td><td>17#</td><td>7835'</td><td>7 7/8"</td><td>919 sks to surface</td><td>69 bbls</td></tr></tbody></table>				CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED	8 5/8" J-55	24#	551'	12 1/4"	404 sks to surface	40 bbls	5 1/2" J-55	17#	7835'	7 7/8"	919 sks to surface	69 bbls
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34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold																					
35. LIST OF ATTACHMENTS Wendell Tixier																					
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records																					
<table border="1"><thead><tr><th>SIGNED</th><th>TITLE</th><th>DATE</th></tr></thead><tbody><tr><td>Amy Archuleta</td><td>Regulatory</td><td>3/16/2018</td></tr></tbody></table>				SIGNED	TITLE	DATE	Amy Archuleta	Regulatory	3/16/2018												
SIGNED	TITLE	DATE																			
Amy Archuleta	Regulatory	3/16/2018																			

*(See Instructions and Spaces for Additional Data on Reverse Side)

NMOCB

AV

34

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

38.

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
San Jose	Surface					
Nacimiento	1122'					
Ojo Alamo	2380'					
Kirtland	2515'					
Fruitland	2646'					
Pictured cliffs	2779'					
Lewis	2872'					
Mesa Verde	4461'					
Mancos	5216'					
Gallup	6200'					
Dakota	7206'					

HALLIBURTON

DJR Operating

Chacon Amigos 17

Intervals 1-1

Dakota

Sandoval County, NM

API: 30-043-21184

Prepared for: Phil Varty

February 23, 2018

Stimulation Treatment **Post Job Report**

7.5% MCA Acid Treatment

Prepared By:

Rene Guerra

Justin Floyd

505 Crew

Notice: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

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Engineering Executive Summary

On February 22, 2018 a stimulation treatment was performed in the Dakota formation on the Chacon Amigos 17 well in Sandoval County, NM. The Chacon Amigos 17 was a 216 stage Verticle Plug and Perf Design. The proposed treatment consisted of:

8,150 gallons of 2% KCL Water
5,500 gallons of 7.5% MCA Acid

The actual treatment fully completed 1 of 216 stages. 0 stages were skipped, and 0 stages screened out or were otherwise cut short of design. The actual treatment consisted of:

13,641 gallons of 2% KCL Water
5,500 gallons of 7.5% MCA Acid

A more detailed description of the actual treatment can be found in the attached reports. The following comments were provided to summarize events and changes to the proposed treatment:

Halliburton is strongly committed to quality control on location. Before and after each job all chemicals, proppants, and fluid volumes are measured to assure the highest level of quality control. Tank fluid analysis, crosslink time, and break tests are performed before each job in order to optimize the performance of the treatment fluids.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Thank you,

Matthew Filla
Associate Technical Professional
Halliburton Energy Services

Rene Guerra
Senior Technical Professional
Halliburton Energy Services

Interval Summary					
Interval 1					
Chacon Amigos 17					
Date:		2/23/2018			
Start Time:		11:41:00 AM			
End Time:		11:55:00 AM			
Initial Rate (Breakdown):	6.0	bpm			
Initial Pressure (Breakdown):	39	psi			
Max BH Rate:	44.0	bpm			
Max Pressure:	4151	psi			
Max Prop Conc:	0	(lbs/gal)			
Average BH Rate:	36.0	bpm			
Average Slurry Rate:	36	bpm			
Total N2:	0	scf			
Average Pressure:	2002	psi			
Initial Wellhead Pressure:	80	psi			
ISDP:	1700	psi			
Final Fracture Gradient:	0.772	psi/ft			
5 min:	1301	psi			
10 min:	1061	psi			
15 min:	887	psi			
Pad BH Volume:	0	gal			
Pad Percentage:	0%	%			
2% KCL Water Volume	13,641	gal	325	bbls	
7.5% MCA Acid Volume	5,500	gal	131	bbls	
Volume	0	gal	0	bbls	
Total Fluid Volume:	19,141	gal	456	bbls	
Pump-In Volume (Wireline Run):	0	gal	0	bbls	
Flush Volume:	7,414	gal	177	bbls	
Interval Status:	Completed				
Comments:					
All acid treatment pumped per design.			Engineer: Rene Guerra Treater: Casey Baggett Supervisor: Jahan Jahan Customer Rep: Randy Snyder		

Customer DJR Operating
Formation Dakota
Lease Chacon Amigos 17
API 30-043-21184
Date February 22, 2018



Stage Summaries

Interval	Fluids									
	Average		Max		2% KCL Water		7.5% MCA Acid		Total Clean Fluid	
	Pressure	Slurry Rate	Pressure	BH Rate	gal	bbl	gal	bbl	gal	bbl
1	2002	36.0	4151	44.0	13,641	325	5,500	131	19,141	456

	Fluids									
	Average		Max		2% KCL Water		7.5% MCA Acid		Total Clean Fluid	
	Pressure	Rate	Pressure	Rate	gal	bbl	gal	bbl	gal	bbl
Planned					8,150	194	5,500	131	13,650	325
Recorded	2002	36.0	4151	44.0	13,641	325	5,500	131	19,141	456

CUSTOMER DJR Operating 30-043-21184
 LEASE Chacon Amigos 17 904664903
 FORMATION Dakota 2/22/2018

8.44
 150

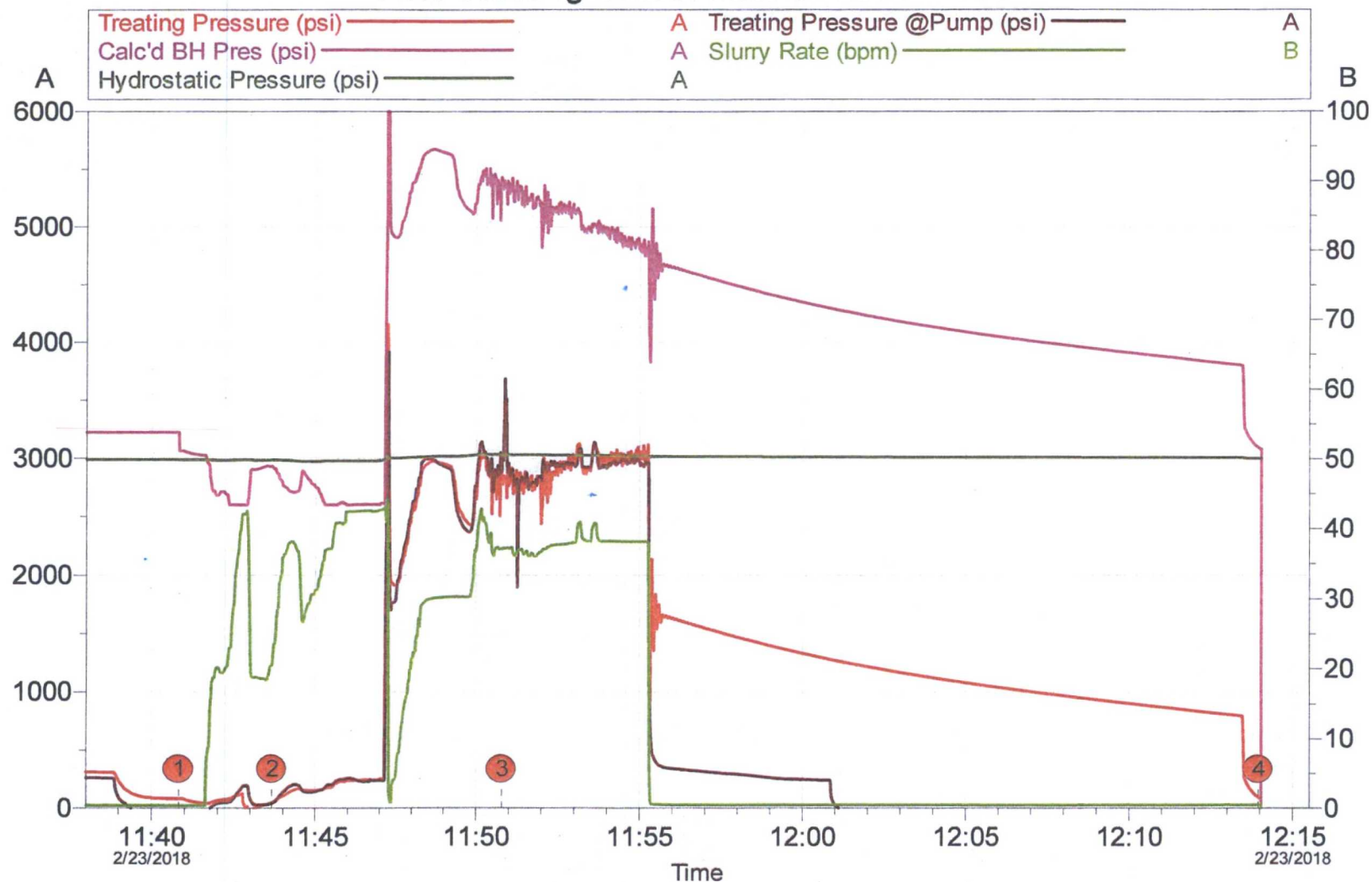
HALLIBURTON Production Enhancement

Treatment Interval	Stage Number	Fluid Description	Stage Description	Slurry Rate (bpm)	Surface Slurry Rate (bpm)	BH Rate (bpm)	Design Clean Volume (gal)	Design Slurry Volume (gal)	Design BH Volume (gal)	Actual Clean Volume (gal)	Actual Slurry Volume (gal)	Actual BH Volume (gal)	Actual Slurry Volume (bbls)	Cla-Web (gpt)	FDP-S1176-15 (gpt)	Musol A (gpt)	Fe-1A (gpt)	5% MCA Act (gal)
1	1-0																	
	1-1	2% KCL Water	Load well	50.00	50.00	50	1,000	1,000	1,000	6,227	6,227	6,227	148					
	1-2	7.5% MCA Acid	Acid	50.00	50.00	50	5,500	5,500	5,500	5,500	5,500	5,500	131	2.00	1.28	50.00	10.00	5500.00
	1-3	2% KCL Water	Flush	50.00	50.00	50	7,150	7,150	7,150	7,414	7,414	7,414	177					
							13,650			19,141	19,141	19,141	456					

Fluid Type	Design Total (gal)	Actual Total (gal)	Proppant Type	Design Total (lbs)	Calculated Total (lbs)
2% KCL Water	8,150	13,641	-	-	-
7.5% MCA Acid	5,500	5,500	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

	Cla-Web (gal)	FDP-S1176-15 (gal)	Musol A (gal)	Fe-1A (gal)	5% MCA Act (gal)
Initial Design Material Volume	11	7	275	55	5,500
Actual Design Material Volume	11	7	275	55	5,500
Physical Material Volume Pumped	11	7	275	55	5,500
Physical Material Volume Deviance		-1%			

Acid Treating Chart - Interval 7244'-7356'



Customer: DJ RESOURCES INC	Job Date: 23-Feb-2018	Sales Order #: 0904664903	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184	Eng	

HALLIBURTON

DJR Operating
Chacon Amigos 17

Sandoval County, NM

API: 30-043-21184

Stimulation Treatment
Appendix

- Wellbore Information
- Planned Design
- Chemical Summary

Customer DJR Operating
Formation Dakota
Lease Chacon Amigos 17
API 30-043-21184
Date 2/22/2018
Isolation Type Cemented Liner

HALLIBURTON | Production
 Enhancement

Treatment Tubulars					
Size	Description	FUF (gal/ft)	MD Top (ft)	MD Btm (ft)	Volume (gal)
5.5" 17#	Casing	0.9764	0	7,836	7,651
			Total	7,836	7,651

Directional Data	
KOP	5025 ft
Avg. TVD	5100 ft
Total MD	7,836 ft

			Sleeve/Perf Depth (ft)		Perforations						
Zone #	Displacement to Top Sleeve/Perf (gal)	(BBLs)	Top	Btm	Zone #	Number of Perf Clusters	Perf Gun Length (ft)	Perf Density (spf)	Total Shots	Phasing (deg)	Overflush Volume (gal)
1	7073	168.4	7,244	7,356	1	2	1	4	172	120	7,073

Toe

CUSTOMER
LEASE
FORMATION

DJR Operating
Chacon Amigos 17
Dakota

30-043-21184
904664903
2/22/2018

BFD (lb/gal) 8.44
BHST (°F) 150

HALLIBURTON | Production Enhancement

Treatment Interval	Stage Number	Fluid Description	Stage Description	Surface Clean Rate (bpm)	Surface Slurry Rate (bpm)	BH Rate (bpm)	Design Clean Volume (gal)	Design Slurry Volume (gal)	Design BH Volume (gal)	Stage Time (min)	Interval Time (hh:mm:ss)	Cla-Web (gpt)	FDP-S1176-15 (gpt)	Musol A (gpt)	Fe-1A (gpt)	7.5% MCA Acid (gpt)
1											0:06:30					
	1-1	2% KCL Water	Load well	50.00	50.00	50	1,000	1,000	1,000	0:00:29	0:06:30					
	1-2	7.5% MCA Acid	Acid	50.00	50.00	50	5,500	5,500	5,500	0:02:37	0:06:01	2.00	1.28	50.00	10.00	5500
	1-3	2% KCL Water	Flush	50.00	50.00	50	7,150	7,150	7,150	0:03:24	0:03:24					
							13,650	13,650	13,650	0:00:00						

Fluid Type	Design Total (gal)
2% KCL Water	8,150
7.5% MCA Acid	5,500
-	-

Proppant Type	Design Total (lbs)
-	-
-	-
-	-

Cla-Web (gal)	FDP-S1176-15 (gal)	Musol A (gal)	Fe-1A (gal)	7.5% MCA Acid (gal)
11	7	275	55	5,500

Initial Design Material Volume

Customer
Formation
Lease
API
Date

2/22/2018



Interval Summary - Chemicals

Interval	Liquid Additives			Acid	
	Cla-Web	FDP-S1176-15	Musol A	Fe-1A	7.5% MCA Acid
	<i>gal</i>	<i>gal</i>	<i>gal</i>	<i>gal</i>	<i>gal</i>
Prime Up	0	0	0	0	0
1	11	7	275	55	5500
Total	11	7	275	55	5500
w/o Prime Up	11	7	275	55	5500

HALLIBURTON

DJR Operating
Chacon Amigos 17
Intervals 1-1
Dakota

Sandoval County, NM
API: 30-043-21184
Prepared for: Phil Varty
January 0, 1900

Stimulation Treatment
Post Job Report

70Q Water Frac

Prepared By:
Rene Guerra
Justin Floyd
505 Crew

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Engineering Executive Summary

On February 22, 2018 a stimulation treatment was performed in the Dakota formation on the Chacon Amigos 17 well in Sandoval County, NM. The Chacon Amigos 17 was a 216 stage Verticle Plug and Perf Design. The proposed treatment consisted of:

0 gallons of 2% KCL Water
0 gallons of 7.5% MCA Acid
68,266 gallons of 30# WaterFrac G
14,114 gallons of Treated Water
209,000 pounds of CRC 20/40

The actual treatment fully completed 1 of 216 stages. 0 stages were skipped, and 0 stages screened out or were otherwise cut short of design. The actual treatment consisted of:

0 gallons of 2% KCL Water
0 gallons of 7.5% MCA Acid
72,970 gallons of 30# WaterFrac G
19,121 gallons of Treated Water
203,620 pounds of CRC 20/40

A more detailed description of the actual treatment can be found in the attached reports. The following comments were provided to summarize events and changes to the proposed treatment:

BH Rate was change to 45 bpm to not exceed max presure with 70Q N2.

Halliburton is strongly committed to quality control on location. Before and after each job all chemicals, proppants, and fluid volumes are measured to assure the highest level of quality control. Tank fluid analysis, crosslink time, and break tests are performed before each job in order to optimize the performance of the treatment fluids.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Thank you,

Matthew Filla
Associate Technical Professional
Halliburton Energy Services

Rene Guerra
Senior Technical Professional
Halliburton Energy Services

<u>Interval Summary</u>				
<u>Interval 1</u>				
Chacon Amigos 17				
Date:	2/25/2018			
Start Time:	2:03:00 PM			
End Time:	3:19:00 PM			
Initial Rate (Breakdown):	13.6	bpm		
Initial Pressure (Breakdown):	4511	psi		
Max BH Rate:	56.0	bpm		
Max Pressure:	4651	psi		
Max Prop Conc:	11.23	(lbs/gal)		
Average BH Rate:	46.7	bpm		
Average Slurry Rate:	18	bpm		
Average Quality:	71	%		
Total N2:	4894273	scf		
Average Pressure:	4405	psi		
Initial Wellhead Pressure:	1404	psi		
Average Visc:	26	cP		
Average N2 Rate:	35967	scfm		
Average pH:	7.9			
ISIP:	2224	psi		
Initial Fracture Gradient:	0.763	psi/ft		
ISDP:	2642	psi		
Final Fracture Gradient:	0.824	psi/ft		
5 min:	2311	psi		
10 min:	2201	psi		
15 min:	2128	psi		
Pad BH Volume:	92403	gal		
Pad Percentage:	37%	%		
CRC 20/40 Pumped	203,620	lbs		
Pumped	0	lbs		
Total Proppant Pumped:	203,620	lbs		
Proppant in Formation:	203,620	lbs		
2% KCL Water Volume	0	gal	0	bbls
7.5% MCA Acid Volume	0	gal	0	bbls
30# WaterFrac G Volume	72,970	gal	1,737	bbls
Total Fluid Volume:	92,091	gal	2,193	bbls
Pump-In Volume (Wireline Run):	0	gal	0	bbls
Flush Volume:	19,121	gal	455	bbls
Interval Status:	Completed			

Comments:

Notice N2 was not able to establish 70Q rate was all over. At the beginning of sand stage the blender operator switch to by-pass mode the blender tub was sand off. Costumer decided to flush the well with 10,000 gal. BH rate was changed to 45 BPM to compensate for high treating pressure. IFS BHTP was change to 3850 and 1250 scf/bbl. to achieve the 70Q. Job pumped to completion, all proppant placed per design. Final ISDP = 2642 psi, FG = 0.824 psi/ft. N2 Pumped to formation 4,894,273 scfs, N2 Total with Cooldown 6,362,555 scfs.

Engineer: Rene Guerra
Treater: Casey Baggett
Supervisor: Jahan Jahan
Customer Rep: Randy Snyder

Customer DJR Operating
 Formation Dakota
 Lease Chacon Amigos 17
 API 30-043-21184
 Date February 22, 2018



Stage Summaries

Interval	Average					Max		2% KCL Water		7.5% MCA Acid		30# WaterFrac G		Treated Water		Total Clean Fluid		Proppants	
	Pressure	Slurry Rate	Visc	Total N2	pH	Pressure	BH Rate	gal	bbl	gal	bbl	gal	bbl	gal	bbl	gal	bbl	CRC 20/40	Total Proppant
1	4405	17.7	26	4894273	7.9	4651	56.0	0	0	0	0	72,970	1,737	19,121	455	92,091	2,193	203,620	92,091

	Average					Max		2% KCL Water		7.5% MCA Acid		30# WaterFrac G		Treated Water		Total Clean Fluid		Proppants	
	Pressure	Rate	Visc	Total N2	pH	Pressure	Rate	gal	bbl	gal	bbl	gal	bbl	gal	bbl	gal	bbl	CRC 20/40	Total Proppant
Planned								0	0	0	0	68,266	1,625	14,114	336	82,380	1,961	35,715	209,000
Recorded	4405	17.7	26	4894273	7.90	4651	56.0	0	0	0	0	72,970	1,737	19,121	455	92,091	2,193	203,620	92,091
Weight Tickets																		203,620	203,620

** IFS numbers for proppant are taken from software calculations
 ** Proppant is billed from Weight Ticket volumes

Customer DJR Operating
 Formation Dakota
 Lease Chacon Amigos 17
 API 30-043-21184
 Date 2/22/2018
 Isolation Type Cemented Liner

HALLIBURTON | Production
 Enhancement

Treatment Tubulars					
Size	Description	FUF (gal/ft)	MD Top (ft)	MD Btm (ft)	Volume (gal)
5.5" 17#	Casing	0.9764	0	7,836	7,651
			Total	7,836	7,651

Directional Data	
KOP	5025 ft
Avg. TVD	6849 ft
Total MD	7,836 ft

			Sleeve/Perf Depth (ft)		Perforations							
	Zone #	Displacement to Top Sleeve/Perf (gal)	(BBLs)	Top	Btm	Zone #	Number of Perf Clusters	Perf Gun Length (ft)	Perf Density (spf)	Total Shots	Phasing (deg)	Overflush Volume (gal)
Toe	1	7073	168.4	7,244	7,356	1	2	1	4	172	120	7,073

CUSTOMER
LEASE
FORMATION

DJR Operating
Chacon Amigos 17
Dakota

API
SALES ORDER
DATE

BFD (lb/gal) 8.44
BHST (°F) 150

HALLIBURTON

Treatment Interval	Stage Number	Fluid Description	Stage Description	Proppant Description	Surface Prop Conc (ppg)	BH Prop Conc (ppg)	Actual Clean Volume (gal)	Actual Prop Total (lbs)	Actual Slurry Volume (gal)	Actual BH Volume (gal)	Actual N2 Volume (scf)	Actual Clean Volume (bbls)	Actual Slurry Volume (bbls)	Losurf-3000 (gpt)	Cla-Web (gpt)	HC-2 (gpt)	BE-7 (gpt)	GBW-30 (ppt)	Optiflo H.T.E (ppt)	WG-35 (ppt)
1	1-0																			
	1-1	30W WaterFrac G	Pre-Pad				8,079		8,079	11,716	138,028		192	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-2	30W WaterFrac G	Pad				19,431		19,431	60,877	1,572,982		483	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-3	30W WaterFrac G	PLF	CRC 20/40	3.19	1.00	7,534	7,927	8,558	27,488	746,653	189	204	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-4	Treated Water	Flush				10,028		10,028	10,028			239	0.50	0.50	3.50	0.25			
	1-5	30W WaterFrac G	Pad				9,745		11,275	31,526	648,251		268	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-6	30W WaterFrac G	PLF	CRC 20/40	3.19	1.00	4,766	17,923	5,438	16,433	327,225	427	129	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-7	30W WaterFrac G	PLF	CRC 20/40	6.12	2.00	8,226	51,740	10,405	28,311	532,909	1,232	248	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-8	30W WaterFrac G	PLF	CRC 20/40	8.81	3.00	9,216	92,660	12,866	32,560	386,126	2,208	306	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-9	30W WaterFrac G	PLF	CRC 20/40	11.90	4.00	5,973	33,370	8,661	20,150	342,099	795	206	0.50	0.50	3.50	0.25	1.00	1.00	30.00
	1-10	Treated Water	Flush				9,093		9,093	9,093			217	0.50	0.50		0.25			
	1-11	Treated Water	Shut-In																	
							92,091	203,620	103,884	248,182			2,472							

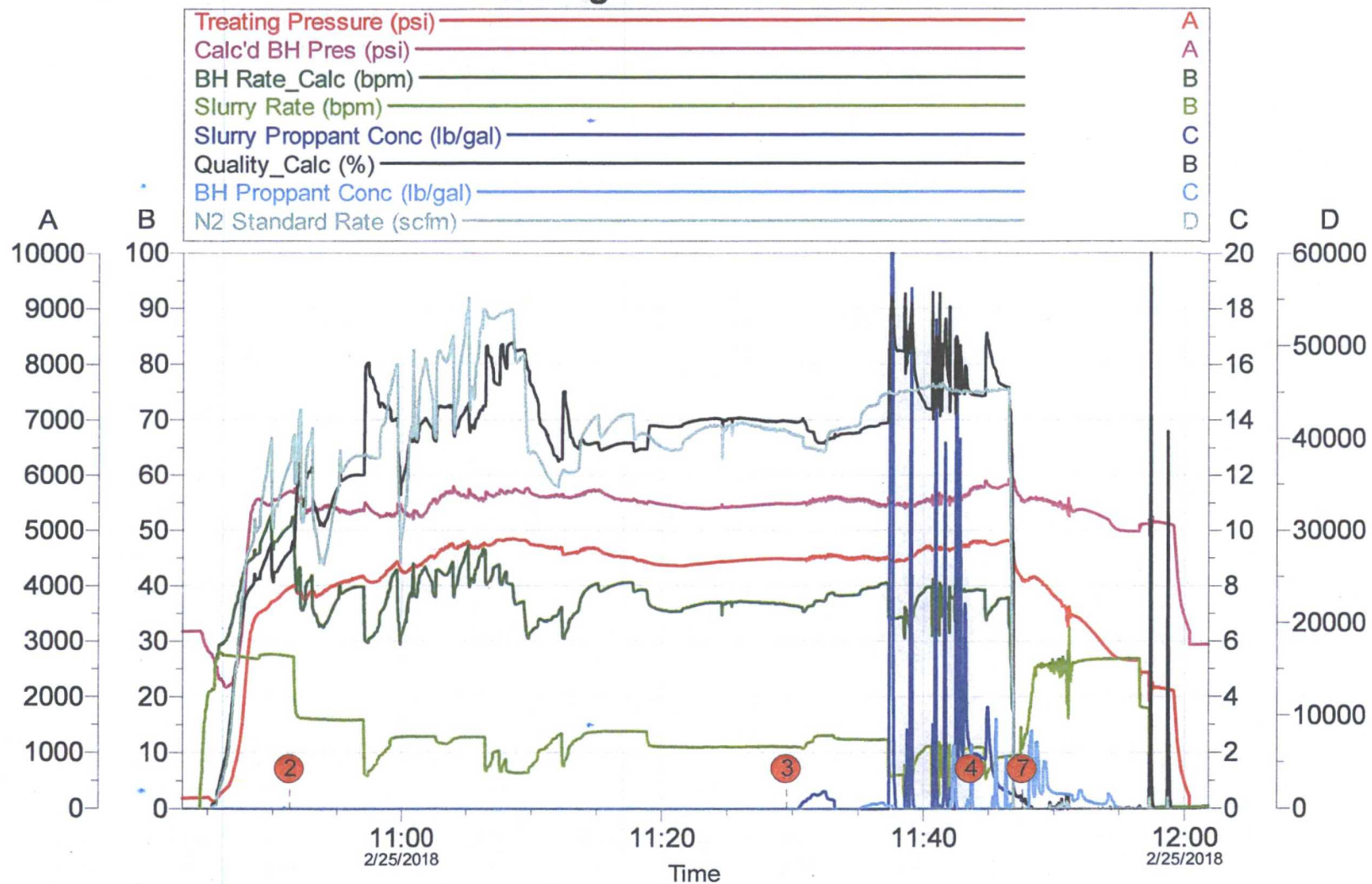
Fluid Type	Design Total (gal)	Actual Total (gal)
2% KCL Water	-	-
7.5% MCA Acid	-	-
30W WaterFrac G	68,266	72,970
Treated Water	14,114	19,121
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Proppant Type	Calculated Total (lbs)	Ticket Total (lbs)
CRC 20/40	1,094	203,620
-	-	-
-	-	-
-	-	-
-	-	-

** IFB numbers for proppant are taken from software calculations based on multiple variables
** Proppant is billed from Weight Ticket volumes
1,475

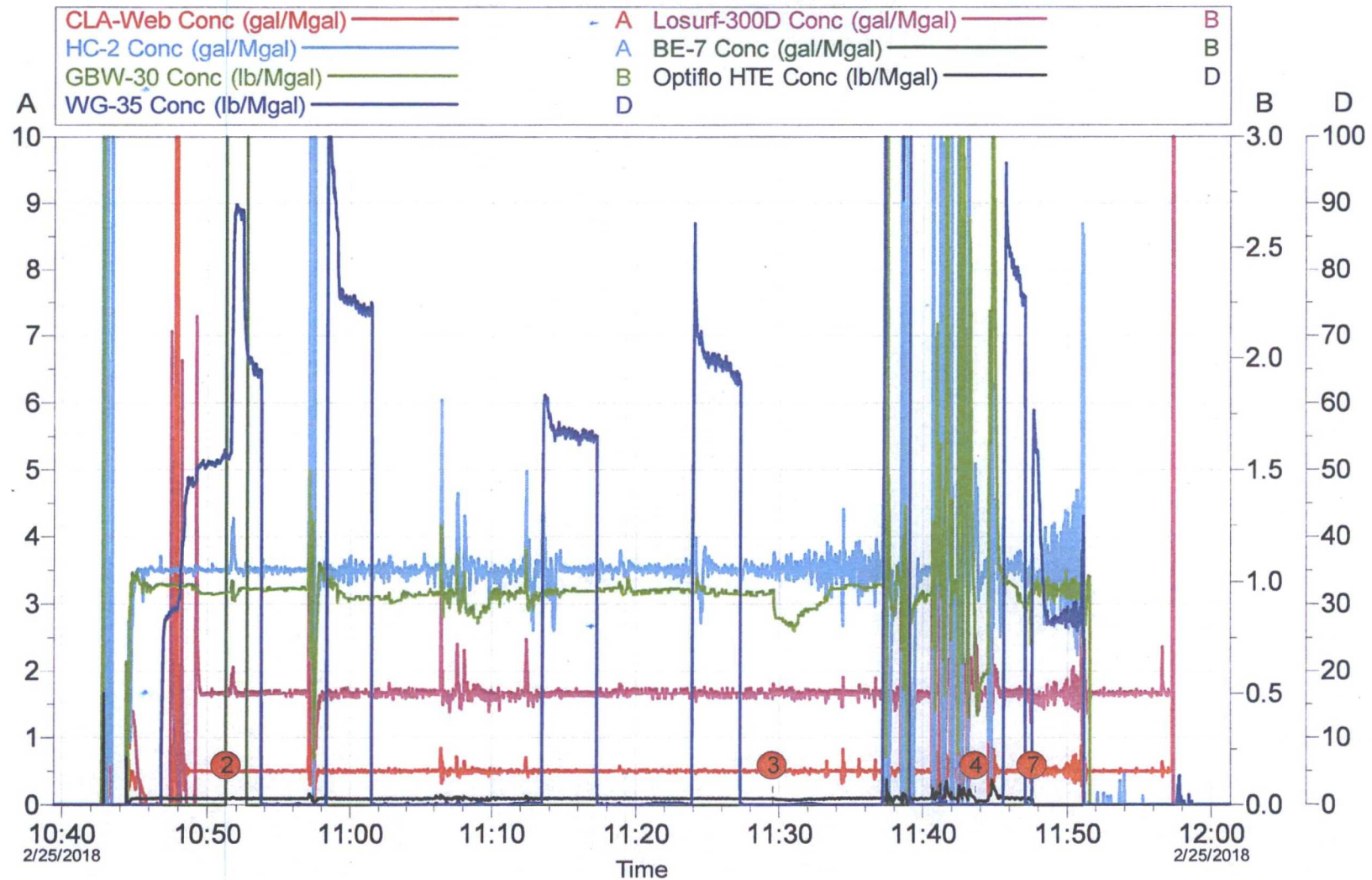
	Losurf-3000 (gal)	Cla-Web (gal)	HC-2 (gal)	BE-7 (gal)	GBW-30 (lbs)	Optiflo H.T.E (lbs)	WG-35 (lbs)
Initial Design Material Volume	41	41	288	21	75	75	2,048
Actual Design Material Volume	46	46	290	23	73	73	2,189
Physical Material Volume Pumped	36	40	245	31	78	69	2,380
Physical Material Volume Deviance	-22%	-13%	-16%	35%	0%	-5%	9%
MicroMotion Volume Pumped	42	45	257	39	74	70	2,380
MicroMotion Volume Deviance	-9%	-2%	-12%	156%	1%	-4%	9%
Loaded	-41	-41	-288	-21	-75	-75	-2,048
Excess to Bid	-46	-46	-290	-23	-73	-73	-2,189
Excess to Actual	-46	-46	-290	-23	-73	-73	-2,189

Treating Chart - Interval 1A



Customer: DJ RESOURCES INC	Job Date: 25-Feb-2018	Sales Order #: 0904664456	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184		

Chemical Chart - Interval 1A



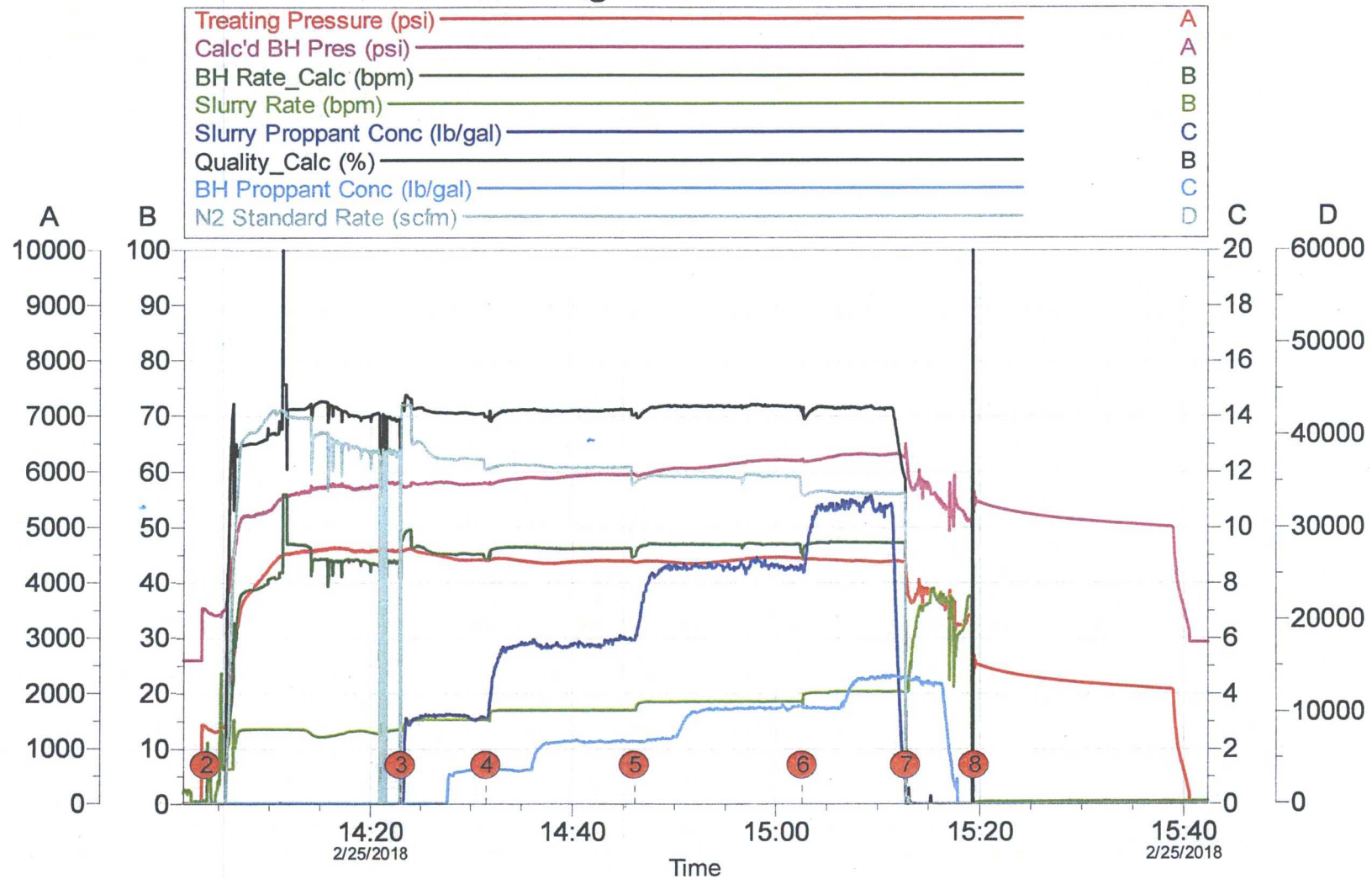
Customer: DJ RESOURCES INC	Job Date: 25-Feb-2018	Sales Order #: 0904664456	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184		

Net Pressure Plot - Treatment 1A



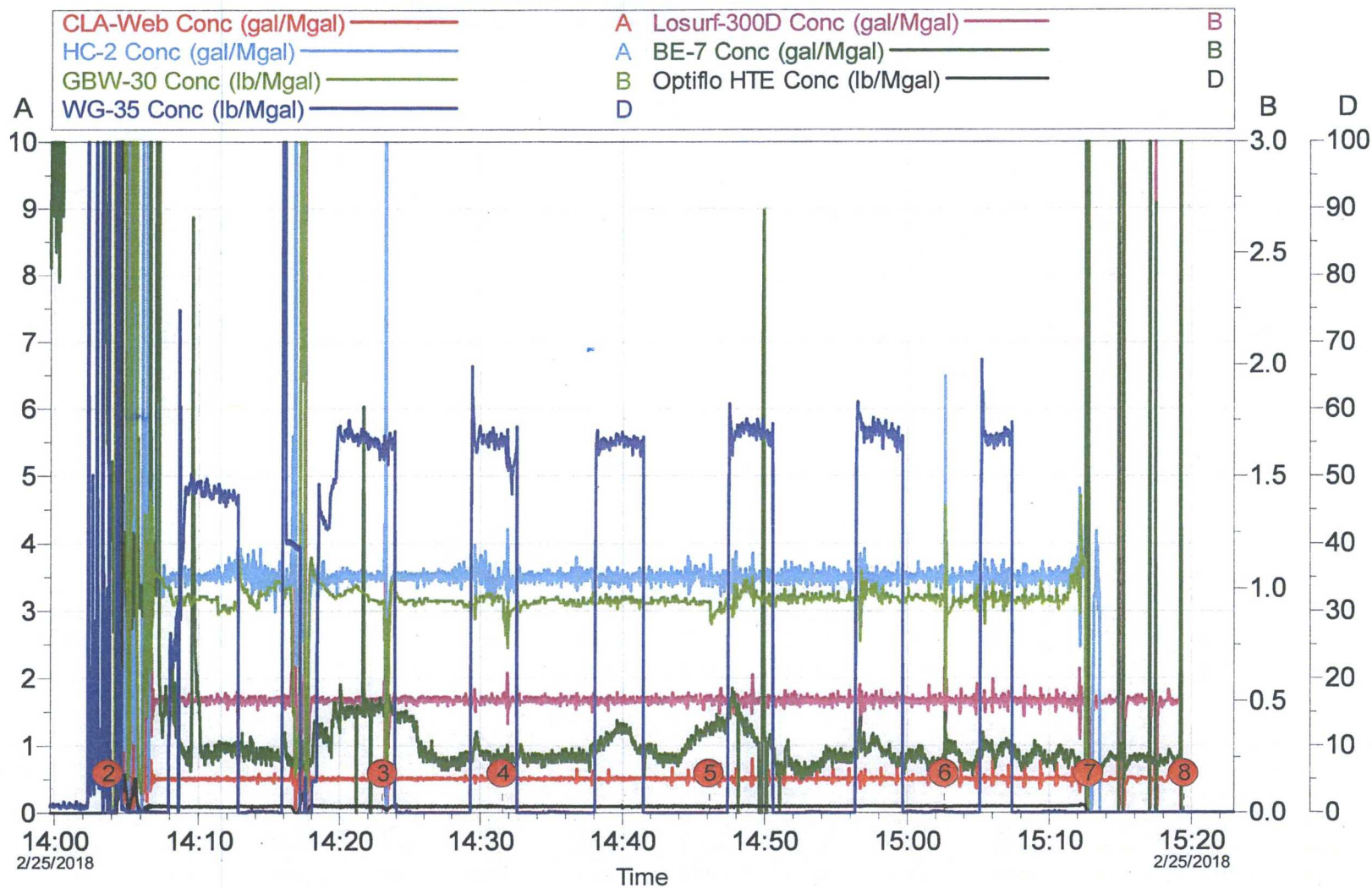
Customer: DJ RESOURCES INC	Job Date: 25-Feb-2018	Sales Order #: 0904664456	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184		

Treating Chart - Interval 1B



Customer: DJ RESOURCES INC	Job Date: 25-Feb-2018	Sales Order #: 0904664456	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184		

Chemical Chart - Interval 1B



Customer: DJ RESOURCES INC	Job Date: 25-Feb-2018	Sales Order #: 0904664456	HALLIBURTON
Well Description: Chacon Amigos 17	UWI: 30-043-21184		

Net Pressure Plot - Treatment 1B



Customer:	DJ RESOURCES INC	Job Date:	25-Feb-2018	Sales Order #:	0904664456	HALLIBURTON
Well Description:	Chacon Amigos 17	UWI:	30-043-21184			

DJR Operating
Chacon Amigos 17

Sandoval County, NM

API: 30-043-21184

Stimulation Treatment
Appendix

- Planned Design
- Chemical Summary
- Stage 1A Summary
- Lab QC Report
- Field QC Report

CUSTOMER DJR Operating
 LEASE Chacon Amigos 17
 FORMATION Dakota

API 30-043-21184
 SALES ORDER 904664456
 DATE 2/22/2018

BFD (lb/gal) 8.44
 BHST (°F) 150

HALLIBURTON

Treatment Interval	Stage Number	Fluid Description	Stage Description	Proppant Description	Surface Prop Conc (ppg)	BH Prop Conc (ppg)	Surface Clean Rate (bpm)	Surface Slurry Rate (bpm)	BH Rate (bpm)	Design Clean Volume (gal)	Design Slurry Volume (gal)	Design BH Volume (gal)	Design Prop Total (lbs)	N2/CO2 Quality (%)	Design N2 Volume (scf)	Design N2 Rate (scfm)	Stage Time (min)	Interval Time (hh:mm:ss)	Lossurf-300D (gal)	Cla-Web (gal)	HC-2 (gal)	BE-7 (gal)	GBW-30 (ppm)	Optiflo H.T.E. (ppm)	WG-35 (ppm)	7.5% MCA Acid (gal)
1																		2:10:26								
	1-1	30# WaterFrac G	Pre-Pad				27.50	27.50	55	8,000	8,000	16,000		50	247,976	35,800	0:06:56	2:10:26	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-2	30# WaterFrac G	Pad				11.10	11.10	37	19,500	19,500	65,000		70	1,410,365	33,700	0:41:50	2:03:31	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-3	30# WaterFrac G	PLF	CRC 20/40	3.19	1.00	11.09	12.70	37	4,702	5,384	15,000	15,000	70	319,130	31,600	0:10:05	1:21:41	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-4	Treated Water	Flush				40.00	40.00	40	7,057	7,057	7,057					0:04:12	1:11:36	0.50	0.50	3.50	0.25				
	1-5	30# WaterFrac G	Pad				13.50	13.50	45	9,750	9,750	32,500		70	705,182	41,000	0:17:12	1:07:24	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-6	30# WaterFrac G	PLF	CRC 20/40	3.19	1.00	13.49	15.45	45	4,702	5,384	15,000	15,000	70	319,130	38,500	0:08:18	0:50:12	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-7	30# WaterFrac G	PLF	CRC 20/40	6.12	2.00	13.49	17.24	45	8,174	10,446	25,000	50,000	70	521,320	36,100	0:14:26	0:41:54	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-8	30# WaterFrac G	PLF	CRC 20/40	8.81	3.00	13.48	18.88	45	9,191	12,872	27,000	81,000	70	551,617	34,000	0:16:14	0:27:28	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-9	30# WaterFrac G	PLF	CRC 20/40	11.30	4.00	13.48	20.40	45	4,247	6,428	12,000	48,000	70	240,092	32,000	0:07:30	0:11:14	0.50	0.50	3.50	0.25	1.00	1.00	30.00	
	1-10	Treated Water	Flush				45.00	45.00	45	7,057	7,057	7,057					0:03:44	0:03:44	0.50	0.50	3.50	0.25	1.00	1.00		
1-11	Treated Water	Shut-in				0.00	0.00	0	0	0	0					0:00:00	0:00:00									
										82,380	91,877	221,614	209,000		4,314,614		0:00:05									

Fluid Type	Design Total (gal)
2% KCl Water	-
7.5% MCA Acid	-
30# WaterFrac G	68,266
Treated Water	14,114
-	-
-	-
-	-
-	-
-	-
-	-

Proppant Type	Design Total (lb)
CRC 20/40	209,000
-	-
-	-
-	-

Lossurf-300D (gal)	Cla-Web (gal)	HC-2 (gal)	BE-7 (gal)	GBW-30 (lb)	Optiflo H.T.E. (lb)	WG-35 (lb)	7.5% MCA Acid (gal)
41	41	288	21	75	75	2,048	

Initial Design Material Volume

Lossurf-300D (ppm)	Cla-Web (ppm)	HC-2 (ppm)	BE-7 (ppm)	GBW-30 (ppm)	Optiflo H.T.E. (ppm)	WG-35 (ppm)
0.9	0.9	6.6	0.5	1.9	1.9	56.7

Customer DJR Operating
Formation Dakota
Lease Chacon Amigos 17
API 30-043-21184
Date 2/22/2018



Interval Summary - Chemicals

Interval	Liquid Additives				Dry Additives		Acid	
	Losurf-300D	Cla-Web	HC-2	BE-7	GBW-30	Optiflo H.T.E	WG-35	7.5% MCA Acid
	<i>gal</i>	<i>gal</i>	<i>gal</i>	<i>gal</i>	<i>lbs</i>	<i>Units</i>	<i>lbs</i>	<i>gal</i>
Prime Up	0	0	0	0	0	0	0	0
1	36	40	245	31	73	69	2380	
Total	36	40	245	31	73	69	2380	0
w/o Prime Up	36	40	245	31	73	69	2380	0

Interval Summary

Interval 1

Chacon Amigos 17

Date:	2/25/2018			
Start Time:	10:36:00 AM			
End Time:	12:00:00 PM			
Initial Rate (Breakdown):	27.0	bpm		
Initial Pressure (Breakdown):	3177	psi		
Max BH Rate:	52.8	bpm		
Max Pressure:	4841	psi		
Max Prop Conc:	3.2	(lbs/gal)		
Average BH Rate:	36.9	bpm		
Average Slurry Rate:	14	bpm		
Average Quality:	70	%		
Total N2:	2457663	scf		
Average Pressure:	4514	psi		
Initial Wellhead Pressure:	305	psi		
Average Visc:	26	cP		
Average N2 Rate:	35046	scfm		
Average pH:	7.9			
ISIP:	2224	psi		
Initial Fracture Gradient:	0.875	psi/ft		
ISDP:		psi		
Final Fracture Gradient:	N/A	psi/ft		
5 min:		psi		
10 min:		psi		
15 min:		psi		
Pad BH Volume:	60877	gal		
Pad Percentage:	55%	%		
CRC 20/40 Pumped	7,936	lbs		
Pumped	0	lbs		
Total Proppant Pumped:	7,936	lbs		
Proppant in Formation:	194	lbs		
2% KCL Water Volume	0	gal	0	bbls
7.5% MCA Acid Volume	0	gal	0	bbls
30# WaterFrac G Volume	35,044	gal	834	bbls
Total Fluid Volume:	45,072	gal	1,073	bbls
Pump-In Volume (Wireline Run):	0	gal	0	bbls
Flush Volume:	10,028	gal	239	bbls
Interval Status:	Cut Short			

Comments:

Not able to establish 70Q N2 pumped was having issues. At the beginning of sand stage the blender sand off. Customer decided to go to flush 10000 gal.

Engineer: Rene Guerra
Treater: Casey Baggett
Supervisor: Jahan Jahan
Customer Rep: Randy Snyder

HALLIBURTON

Rockies, Farmington

Lab Results-PE

Job Information

Request/Fluid ID	2056548/1	Rig Name		Date	21/FEB/2018
Submitted By	Rene Guerra	Job Type	Fracturing/Stimulation	Well	
Customer		Location	San Juan	Fluid System	Linear

Well Information

Formation	Dakota	Depth MD	7300 ft	BHST	150 degF
Pressure	4000 psi	Depth TVD	6700 ft	Cool Down Temperature	

Base Fluid Properties

Viscosity	Polymer Loading	Mix Fluid Amount	1000 ml
-----------	-----------------	------------------	---------

Mix Fluid

Fluid Information- Design

Lot No.	Chemical	Conc Unit	Base Fluid	Iteration#1
	WG-35	ppt	30	30
	Lo-Surf 300D	gpt	0.5	0.5
	Cla Web	gpt	0.5	0.5
	BE-7	gpt	0.25	0.25
	HC-2	gpt		3.5
	GBW-30	ppt		1

Iteration Number	Additional Comments
1	Please perform a half life test (following full hydration) using the base fluid with GBW-30 and HC-2

Request Comments

DJR Bonanza 15 and Chacon Amigo 17
Frac is scheduled to begin 2/24/2018
Water is being brought to the lab 2/22/2018
Engineer Contact:
Rene Guerra 970-286-1724,
Matt Filla 970-250-1978

Fluid Results Request ID 2056548/ 1

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Foam Half Life Testing

	Iteration#1
Test ID	30174650
Initial Fluid Volume (ml)	100
Foam Volume (ml)	220
Foam Half-Life (minutes)	18

Gel/Hydration Test, Iteration Number:Base Fluid, Request Test ID:30173425

Time (min)	Viscosity (cP)	pH
3	22	8.01
6	23.5	
9	23.5	
12	23.5	

Water Analysis, Iteration Number:Base Fluid, Request Test ID:30173424

Specific Gravity	pH	Chlorides (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Dissolved Iron (mg/L)	Potassium (mg/L)	Bicarbonates (mg/L)
1.022	8.02	63	168	28.3	1.9	4000	296

Carbonates (mg/L)	Hydroxides (mg/L)	Sulfates (mg/L)	Sodium (mg/L)	TDS (mg/L)	Temperature (°F)	% Water
0	0	1575	0	15170	70.9	100

conductivity 25.7 mS/cm
color faint brown

Additional Comments

HALLIBURTON

Fann 35 Analysis Data Sheet

Field Test
Farmington, NM
505

Customer:	DJR
Location:	Chacon Amigos 17
Interval:	1
Date:	25-Feb-18

Test No: 1
Submitted By: Rene Guerra

Temperature of Test °F

Fluid:	Linear Gel
--------	------------

Viscosity	Submitted Location Water		500	mL
	WG-35		1.80	grams
	30	cP	75.00	°F

Hydrated

8.1 pH

The following components are mixed in 200.00 mls of hydrated gel.

[illegible]

Buffered

8.0 pH

		Dry Additives			
0.02	gram(s)	GBW-30	1.00	lbs/Mgal	
0.02	gram(s)	Optiflo III	1.00	lbs/Mgal	
				lbs/Mgal	
			--	--	

Lot #

Final

8.0 pH

Other Additives	

Time	Visc (cP)	°F
1	19	
2	23	
3	27	
6	30	

Notes:

[illegible]

This test was performed in a heat cup on a Fann-35 with an R1-B2 rotor-bob combination at 100 rpm and a Shear rate of 37.7 sec⁻¹.

