

Caerus Oil and Gas LLC - EBUS

Puckett 42B-2

H&P 330

Post Job Summary

Cement Surface Casing

Date Prepared: 5/1/2015

Job Date: 4/30/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 360446	Ship To #: 3623410	Quote #:	Sales Order #: 0902366555
Customer: CAERUS OIL AND GAS LLC - EBUS		Customer Rep: WHITEY / GEORGE	
Well Name: PUCKETT		Well #: 42B-2	API/UWI #: 05-045-22626-00
Field: WILDCAT	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 2-7S-97W-2197FNL-651FEL			
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 330	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB80977		Srvc Supervisor: Craig Kukus	
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2535ft Job Depth TVD 2535 FT
Water Depth	Wk Ht Above Floor 4 FT
Perforation Depth (MD)	From To

Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.921	36			0	2535	0	0
Open Hole Section			14.75				0	2545	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		2535		Top Plug	9.625	1	HES
Float Shoe	9.625					Bottom Plug	9.625		HES
Float Collar	9.625	1		2492		SSR plug set	9.625		HES
Insert Float	9.625					Plug Container	9.625	1	HES
Stage Tool	9.625					Centralizers	9.625		HES

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/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Lead Cement	VARICEM (TM) CEMENT	485	sack	11	3.65		8	23.08	
23.08 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	

2	Tail Cement	VARICEM (TM) CEMENT	155	sack	12.8	2.18		8	12.11	
12.11 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	Super Flush 101	Super Flush 101	32	bbl	9.17			4		
21 gal/bbl		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	Annular Fill	REVERCEM (TM) CEMENT	300	sack	12.8	2.12		3.5	11.15	
11.15 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
5	Top Out	Type I-II Cement	330	sack	15.6	1.16		4	5.02	
5.02 Gal		FRESH WATER								
94 lbm		TYPE I / II CEMENT, BULK (101439798)								
0.10 Gal		CALCIUM CHLORIDE - LIQUID, 5 GAL PAIL (100005054)								
Cement Left In Pipe		Amount	43 ft		Reason			Shoe Joint		
Mix Water:		pH ##	Mix Water Chloride:		## ppm		Mix Water Temperature:			## °F °C
Cement Temperature:		## °F °C	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:			## °F °C
Plug Bumped?		Yes	Bump Pressure:		684 psi		Floats Held?			Yes
Cement Returns:		9 bbl	Returns Density:		15.6 lb/gal kg/m3		Returns Temperature:			## °F °C
Comment										

1.0 Real-Time Job Summary

1.1 Job Event Log

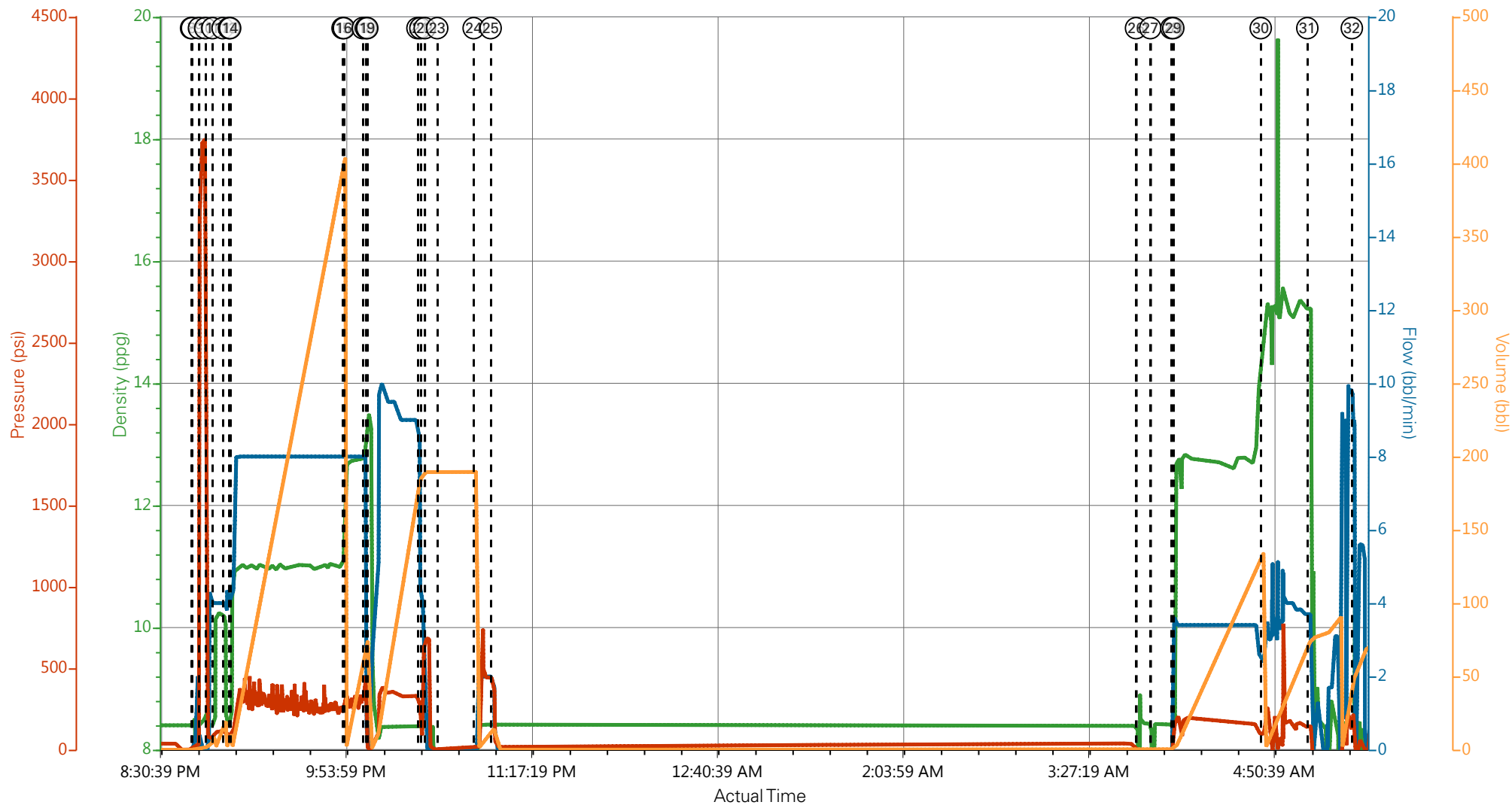
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	4/29/2015	11:00:00	USER					CREW CALL OUT
Event	2	Depart from Service Center or Other Site	4/29/2015	13:06:00	USER					SAFETY MEETING DEPARTING SERVICE CENTER ALL HES CREW PRESENT
Event	3	Arrive At Loc	4/29/2015	16:00:00	USER					ARRIVE EARLY ON LOC RIG RUNNING CSG / HES EQUIPMENT ON LOC: 1 EA CMT PUMP UNIT 2 EA 660 BULK UNITS 1 EA SUPER FLUSH UNIT 1 EA SERVICE PICK UP UNIT 1 EA SILO UNIT W/ LEAD CMT 1 EA SILO W/ TOP CMT
Event	4	Pre-Rig Up Safety Meeting	4/29/2015	17:00:00	USER					PRE-RIG UP SAFETY MEETING ALL HES PRESENT
Event	5	Rig-Up Equipment	4/29/2015	17:10:00	USER					SPOT IN EQUIPMENT AND RIG UP IRON TO RED ZONE AND STAND PIPE / RIG UP WATER SUCTION HOSES AND BULK EQUIP
Event	6	Pre-Job Safety Meeting	4/29/2015	18:00:00	USER					PRE-JOB SAFETY MEETING ALL RIG PERSONEL AND HES CREW PRESENT
Event	7	Start Job	4/29/2015	20:45:46	COM6	8.34	0.00	0.00	0.0	START JOB: TD 2545 FT TP 2535 FT SJT 43 FT OH 14 3/4 IN CSG 9 5/8 IN 36# J-55 WF/WT 9.4#
Event	8	Prime Pumps	4/29/2015	20:46:10	USER	8.34	2.0	38.0	2.0	PRIME LINES WITH FRESH WATER
Event	9	Test Lines	4/29/2015	20:49:19	COM6	8.34	0.80	3757.00	.10	PRESSURE TEST LINES / 3730 PSI TEST GOOD
Event	10	Pump Spacer 1	4/29/2015	20:52:09	COM6	8.34	4.0	86.0	10.0	PUMP FRESH WATER AHEAD 10 BBLS
Event	11	Pump Spacer 2	4/29/2015	20:55:23	COM6	11.01	4.00	118.00	20.0	PUMP SUPER FLUSH 20 BBLS AHEAD
Event	12	Pump Spacer 1	4/29/2015	20:59:56	COM6	8.36	4.00	87.00	10.0	PUMP H2O BEHIND 10 BBLS

Event	13	Pump Lead Cement	4/29/2015	21:02:46	COM6	11.0	8.0	290.0	315.0	PUMP 485 SKS LEAD CMENT AT 11.0 PPG 3.65 Y 23.08 GAL/SKS NO RETURNS AT THIS TIME
Event	14	Check Weight	4/29/2015	21:03:18	COM6	10.90	5.60	142.00	4.9	CHECK CMT WT
Event	15	Pump Tail Cement	4/29/2015	21:53:46	COM6	12.82	8.00	327.00	61.0	PUMP 155 SKS TAIL CEMENT AT 12.8 PPG 2.18 Y 12.11 GAL/SKS / NO RETURNS AT THIS TIME
Event	16	Check Weight	4/29/2015	21:54:23	COM6	12.71	8.00	299.00	6.2	CHECK CMT WT
Event	17	Shutdown	4/29/2015	22:02:49	USER	12.73	0.0	357.00	416.0	SHUT DOWN END CEMENT / READY TUB TO WASH UP ON TOP OF PLUG
Event	18	Drop Top Plug	4/29/2015	22:04:19	COM6	8.34	0.00	-5.00	0.0	DROP TOP PLUG / PLUG AWAY
Event	19	Pump Displacement	4/29/2015	22:04:53	COM6	8.34	9.5	360.0	180.0	PUMP H2O DISPLACEMENT
Event	20	Slow Rate	4/29/2015	22:27:23	USER	8.37	4.00	86.00	182.0	SLOW RATE LAST 10 BBLS TO 4 BBL MIN / NO RETURNS
Event	21	Bump Plug	4/29/2015	22:28:42	COM6	8.39	0.00	652.00	192.0	PLUG LANDED AT 100 PSI BUMP TO 684 PSI
Event	22	Check Floats	4/29/2015	22:30:40	USER	8.39	0.00	684.00	192.0	CHECK FLOATS GOT BACK 1.5 BBLS TO TANKS
Event	23	Rig Down Lines	4/29/2015	22:36:15	USER	0.00	0.00	0.0	608.0	RIG DOWN FLOOR AND SET UP TO PUMP SUGAR WATER THRU PARISITE LINE
Event	24	Pump Spacer 1	4/29/2015	22:52:37	COM6	8.34	2.0	700.0	15.0	PUMP 15 BBLS SUGAR WATER THRU PARISITE LINE
Event	25	Shutdown	4/29/2015	23:00:14	USER	8.34	0.0	0.0	623.0	SHUT DOWN / PARISITE LINE CLEAN / WOC AND BOP TEST
Event	26	Start Job	4/30/2015	03:49:57	USER	8.34	0.00	-7.00	0.0	START PUMPING ANULAR FILLER
Event	27	Pump Spacer 1	4/30/2015	03:56:22	USER	8.34	2.0	-6.00	2.0	PUMP 2 BBLS H2O AHEAD TO CHECK LINES
Event	28	Pump Cement	4/30/2015	04:05:48	COM6	12.8	3.5	170.0	113.5	PUMP ANULAR FILL CEMENT AT 12.8 PPG 2.12 Y 11.15 GAL/SKS AT 75 BBLS GONE INJECT SUPER FLUSH 101 / USED 10 BBLS
Event	29	Check Weight	4/30/2015	04:06:41	COM6	12.8				CHECK CMT WT
Event	30	Pump Cement	4/30/2015	04:45:56	COM6	15.6	4.0	208.0	68.0	PUMP TOP OUT CMT AT 15.6 PPG 1.16 Y 5.02

GAL/SKS ADDING LIQUID CC DOWNHOLE /
 CEMENT TO SURFACE 9 BBLS / PUMP 68 BBLS
 CEMENT DOWN HOLE 330 SKS / 35 GAL LIQUID
 CC USED / 32 BBLS SUPER FLUSH

Event	31	Pump Displacement	4/30/2015	05:06:51	USER	8.34	3.70	146.00	2.0	PUMP H2O BEHIND 2 BBLS / SHUT DOWN BREAK OFF LINES AND WASH UP IN CELLAR
Event	32	End Job	4/30/2015	05:26:50	COM6	0.0	0.0	0.0	808.0	END TOP OUT JOB WITH 9 BBLS CEMENT TO SURFACE / AT 06:09 CMT FELL 6 IN
Event	33	Pre-Rig Down Safety Meeting	4/30/2015	06:09:39	USER					PRE-RIG DOWN SAFETY MEETING ALL HES CREW PRESENT
Event	34	Rig-Down Equipment	4/30/2015	06:15:00	USER					RIG DOWN IRON FROM CELLAR AND WATER SUCTION LINES AND BULK EQUIP
Event	35	Depart Location	4/30/2015	07:10:00	USER					DEPART LOC SAFETY MEETING ALL HES CREW PRESENT
Event	36	Comment	4/30/2015	07:15:00	USER					THANK YOU FOR USING HALLIBURTON CEMENTING SERVICES AND THE CREW OF CRAIG KUKUS

CEARUS OIL & GAS HP 330 PUCKETT 42B-2 CEMENT SURFACE CSG JOB



DH Density (ppg) 0 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) -25 Pump Stg Tot (bbl) 150.1

- | | | | | | |
|--|--------------------|--------------------|---------------------|-------------------|--------------------------------|
| ① Call Out | ⑦ Start Job | ⑬ Pump Lead Cement | ⑰ Pump Displacement | 25 Shutdown | 31 PUMP H2O BEHIND |
| ② Depart from Service Center or Other Site | ⑧ Prime Pumps | ⑭ Check weight | 20 Slow Rate | 26 Start Job | 32 End Job |
| ③ Arrive At Loc | ⑨ Test Lines | ⑮ Pump Tail Cement | 21 Bump Plug | 27 PUMP H2O AHEAD | 33 Pre-Rig Down Safety Meeting |
| ④ Pre-Rig Up Safety Meeting | ⑩ PUMP H2O | ⑯ Check weight | 22 Check Floats | 28 Pump Cement | 34 Rig-Down Equipment |
| ⑤ Rig-Up Equipment | ⑪ PUMP SUPER FLUSH | ⑰ Shutdown | 23 Rig Down Lines | 29 Check weight | 35 Depart Location |
| ⑥ Pre-Job Safety Meeting | ⑫ Pump Spacer 1 | ⑱ Drop Top Plug | 24 PUMP SUGAR WATER | 30 Pump Cement | 36 Comment |

▼ **HALLIBURTON** | iCem® Service

Created: 2015-04-29 16:57:51, Version: 4.1.107

Edit

Customer : CAERUS OIL AND GAS LLC - EBUS

Job Date : 4/29/2015 6:22:44 PM

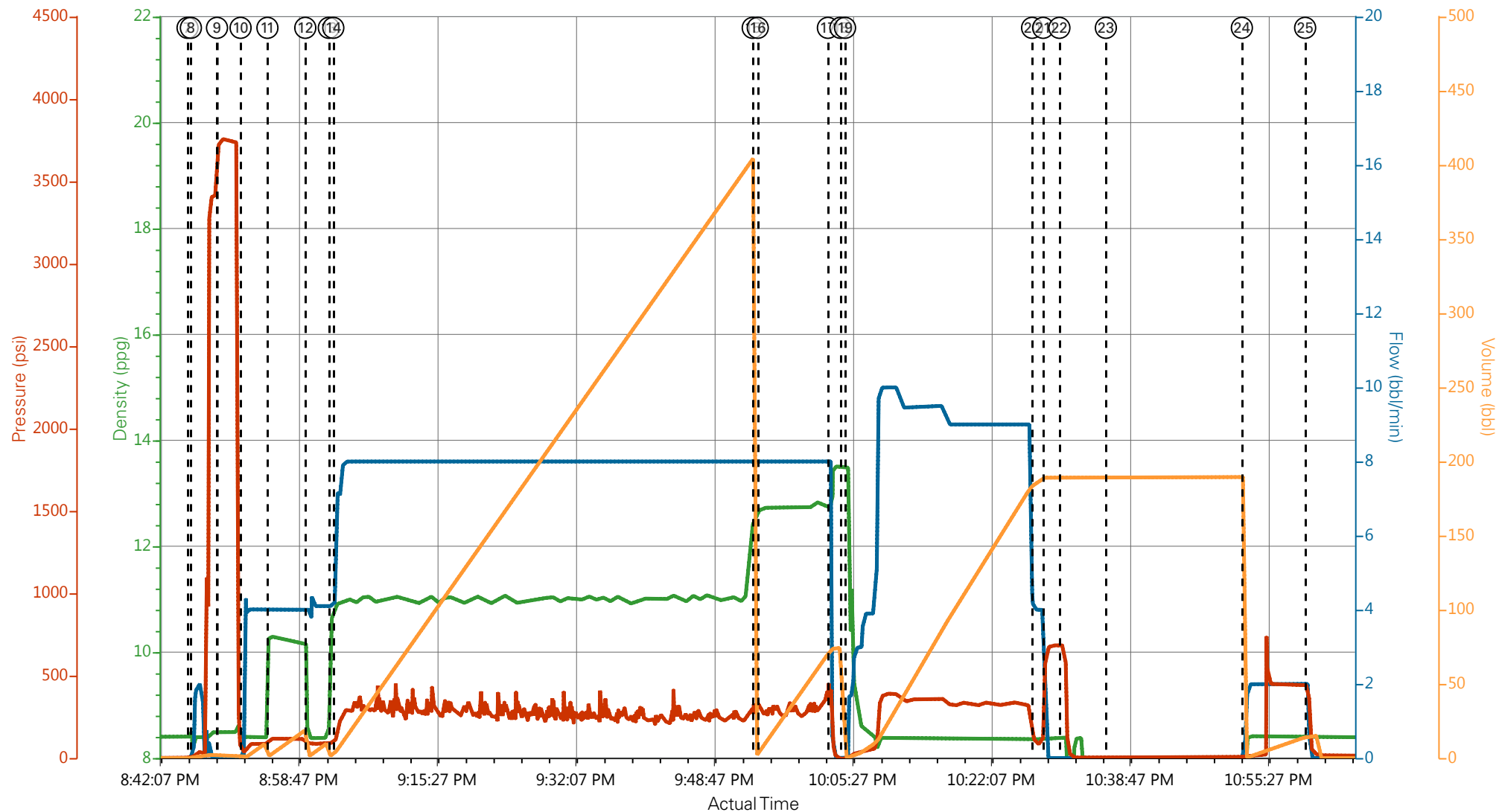
Well : 42B-2

Representative : CRAIG KUKUS

Sales Order # : 0902366555

ELITE 7 / OPERATOR : ROGER LAULAINEN

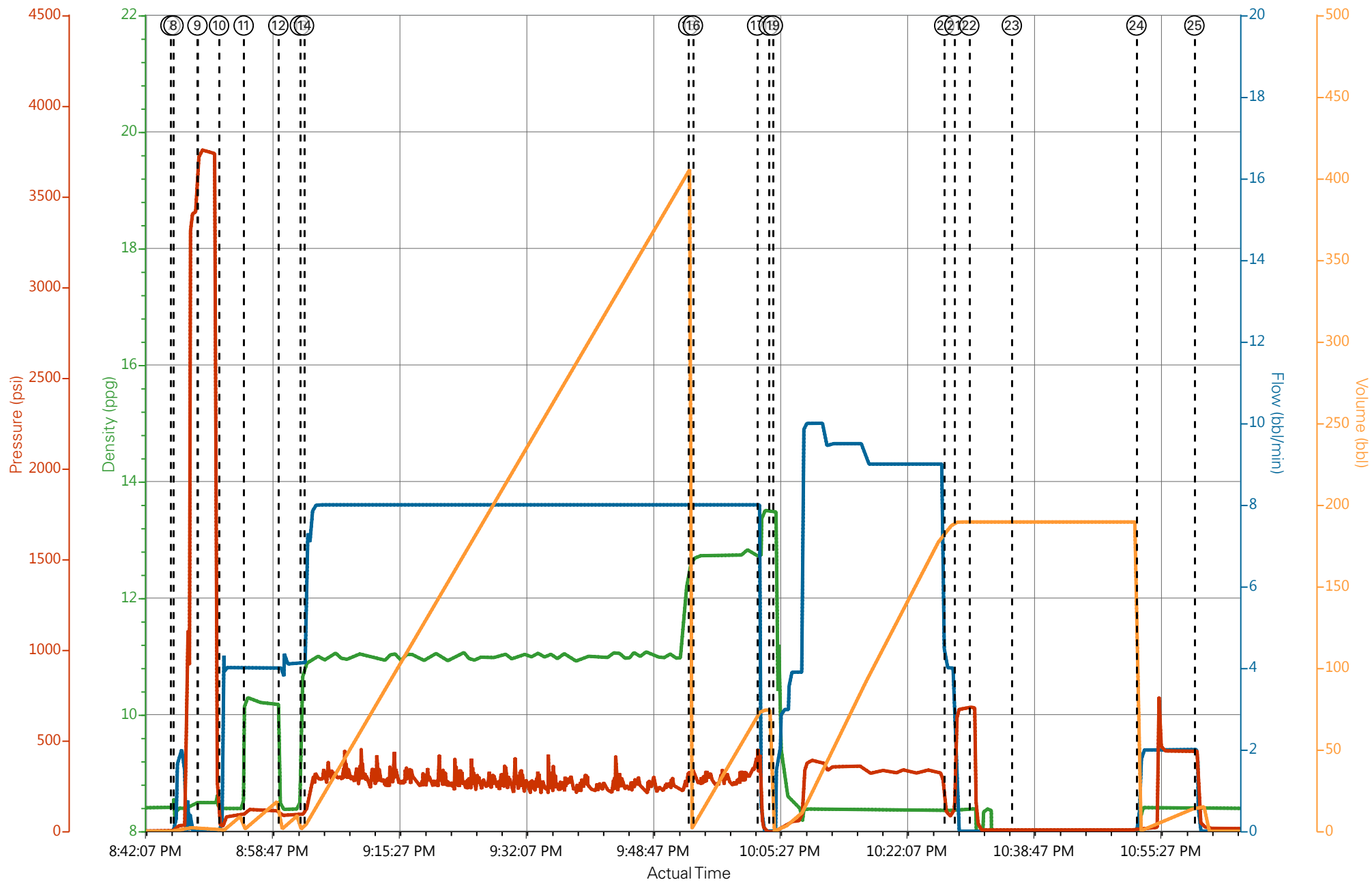
CEARUS OIL & GAS HP 330 PUCKETT 42B-2 CEMENT SURFACE CSG JOB



DH Density (ppg) 8.39 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 17 Pump Stg Tot (bbl) 0

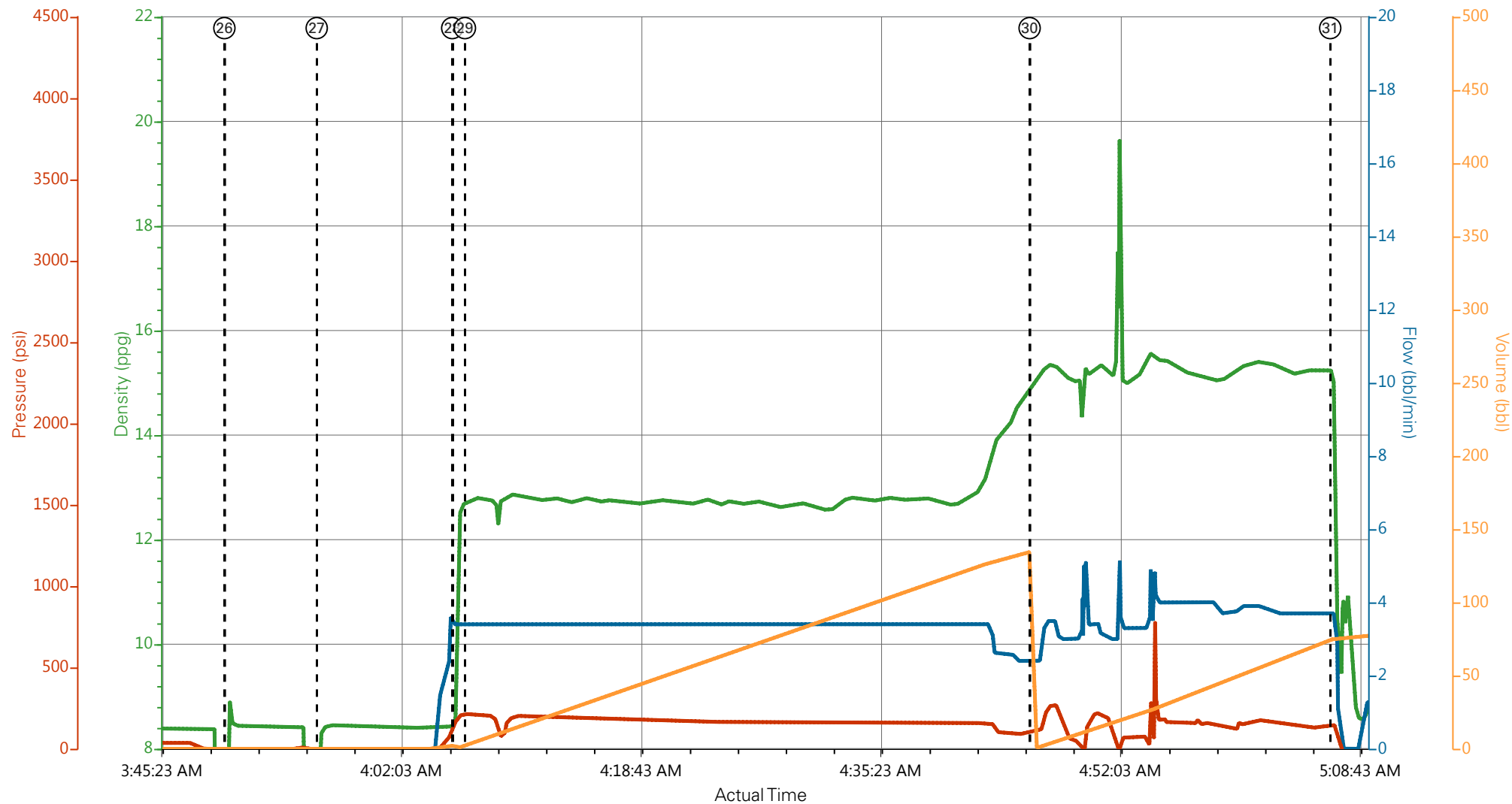
- | | | | | |
|--|--------------------------|--------------------|---------------------|---------------------|
| ① Call Out | ⑥ Pre-Job Safety Meeting | ⑪ PUMP SUPER FLUSH | ⑯ Check weight | 21 Bump Plug |
| ② Depart from Service Center or Other Site | ⑦ Start Job | ⑫ Pump Spacer 1 | ⑰ Shutdown | 22 Check Floats |
| ③ Arrive At Loc | ⑧ Prime Pumps | ⑬ Pump Lead Cement | ⑱ Drop Top Plug | 23 Rig Down Lines |
| ④ Pre-Rig Up Safety Meeting | ⑨ Test Lines | ⑭ Check weight | ⑲ Pump Displacement | 24 PUMP SUGAR WATER |
| ⑤ Rig-Up Equipment | ⑩ PUMP H2O | ⑮ Pump Tail Cement | 20 Slow Rate | 25 Shutdown |

CEARUS OIL & GAS HP 330 PUCKETT 42B-2 CEMENT SURFACE CSG JOB



DH Density (ppg) 8.39 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 17 Pump Stg Tot (bbl) 0

CEARUS OIL & GAS HP 330 PUCKETT 42B-2 CEMENT SURFACE CSG JOB



DH Density (ppg) 8.46 Comb Pump Rate (bbl/min) 5.6 PS Pump Press (psi) 64 Pump Stg Tot (bbl) 55.5

- | | | | | | |
|--|--------------------|--------------------|---------------------|-------------------|--------------------|
| ① Call Out | ⑦ Start Job | ⑬ Pump Lead Cement | ⑰ Pump Displacement | 25 Shutdown | 31 PUMP H2O BEHIND |
| ② Depart from Service Center or Other Site | ⑧ Prime Pumps | ⑭ Check weight | 20 Slow Rate | 26 Start Job | 32 End Job |
| ③ Arrive At Loc | ⑨ Test Lines | ⑮ Pump Tail Cement | 21 Bump Plug | 27 PUMP H2O AHEAD | |
| ④ Pre-Rig Up Safety Meeting | ⑩ PUMP H2O | ⑯ Check weight | 22 Check Floats | 28 Pump Cement | |
| ⑤ Rig-Up Equipment | ⑪ PUMP SUPER FLUSH | ⑰ Shutdown | 23 Rig Down Lines | 29 Check weight | |
| ⑥ Pre-Job Safety Meeting | ⑫ Pump Spacer 1 | ⑱ Drop Top Plug | 24 PUMP SUGAR WATER | 30 Pump Cement | |

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Created: 2015-04-29 16:57:51, Version: 4.1.107

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Customer : CAERUS OIL AND GAS LLC - EBUS

Job Date : 4/29/2015 6:22:44 PM

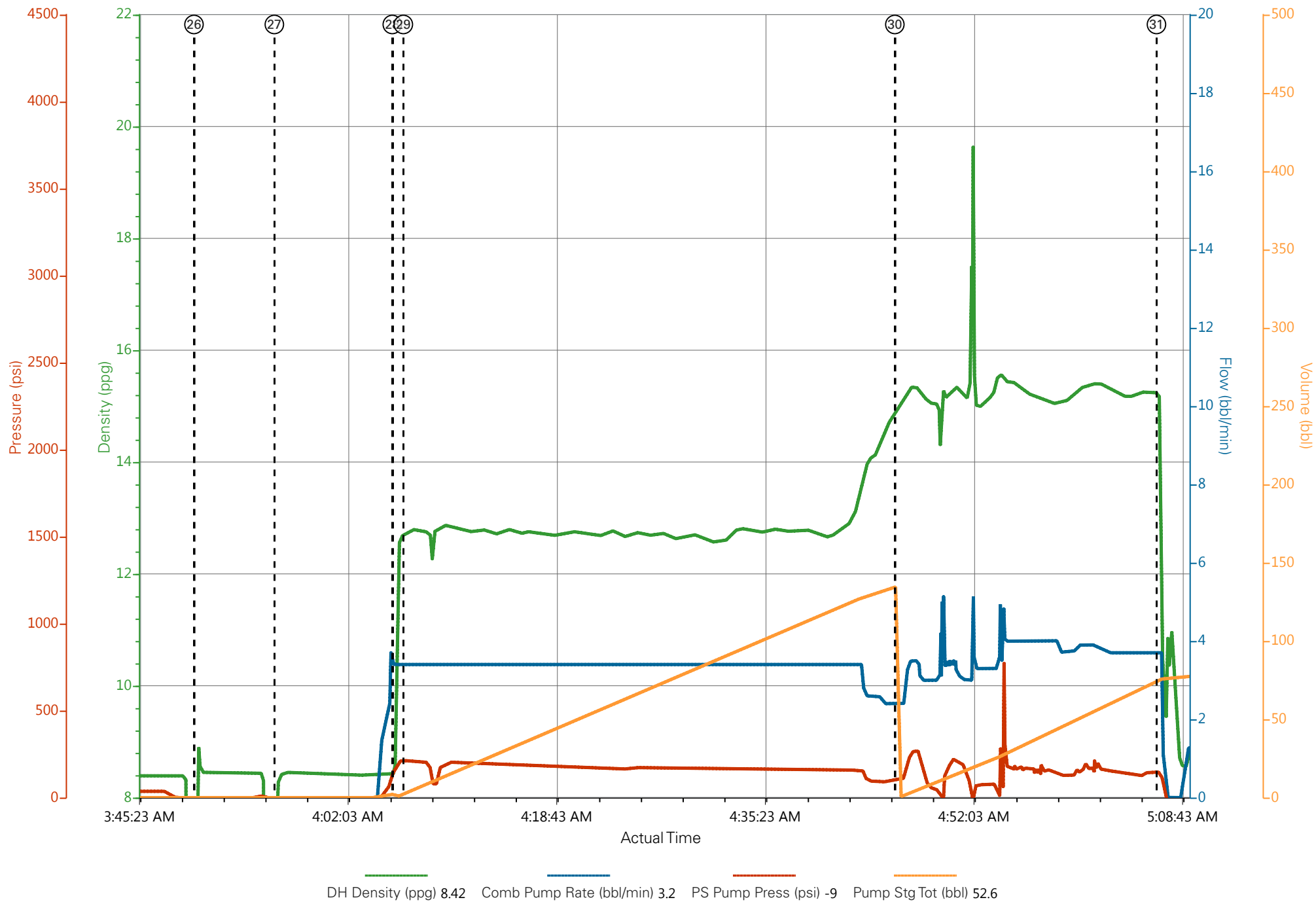
Well : 42B-2

Representative : CRAIG KUKUS

Sales Order # : 0902366555

ELITE 7 / OPERATOR : ROGER LAULAINEN

CEARUS OIL & GAS HP 330 PUCKETT 42B-2 CEMENT SURFACE CSG JOB



HALLIBURTON

Water Analysis Report

Company: CEARUS OIL AND GAS
Submitted by: CRAIG KUKUS
Attention: _____
Lease: PUCKETT
Well #: 42B-2

Date: 4/29/2015
Date Rec.: 4/29/2015
S.O.#: 902366555
Job Type: SURFACE

Specific Gravity	MAX	0
pH	8	7
Potassium (K)	5000	200 Mg / L
HARDNESS	500	425 Mg / L
Iron (FE2)	300	0 Mg / L
Chlorides (Cl)	3000	250 Mg / L
Sulfates (SO ₄)	1500	<200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	40-80	60 Deg
Total Dissolved Solids		525 Mg / L

Respectfully: CRAIG KUKUS

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its

Sales Order #: 0902366555	Line Item: 10	Survey Conducted Date: 4/30/2015
Customer: CAERUS OIL AND GAS LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: GEORGE		API / UWI: (leave blank if unknown) 05-045-22626-00
Well Name: PUCKETT		Well Number: 0080702226
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	4/30/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX19742
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	GEORGE
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	FIELD TICKET DOES NOT MATCH HALLIBURTON CEMENT PROPOSAL !

CUSTOMER SIGNATURE

Sales Order #: 0902366555	Line Item: 10	Survey Conducted Date: 4/30/2015
Customer: CAERUS OIL AND GAS LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: GEORGE		API / UWI: (leave blank if unknown) 05-045-22626-00
Well Name: PUCKETT		Well Number: 0080702226
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	4/30/2015

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	7
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Pumping Hours Total number of hours pumping fluid on this job. Enter in decimal format.	5
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	6
Was this a Primary Cement Job (Yes / No) Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Customer Non-Productive Rig Time (hrs)	0

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Customer Representative: GEORGE		API / UWI: (leave blank if unknown) 05-045-22626-00
Well Name: PUCKETT		Well Number: 0080702226
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment? Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
If a top plug was run, was the plug bumped? (Yes/No/N/A) If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If applicable, was Halliburton float equipment used? (Yes/No/N/A) If applicable, was Halliburton float equipment used? (Yes/No/N/A)	No
If applicable, did the floats hold? (Yes/No/N/A) If applicable, did the floats hold? (Yes/No/N/A)	Yes
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	99
Pump Rate (percent) of Job Stayed At Designed Pump Rate Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	99
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	Yes
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0