

Caerus Oil and Gas LLC - EBUS

Puckett 43B-2

**H&P 330**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 4/12/2015

Job Date: 4/1/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

*The Road to Excellence Starts with Safety*

Sold To #: 360446	Ship To #: 3623377	Quote #: 0022027788	Sales Order #: 0902283421
Customer: CAERUS OIL AND GAS LLC - EBUS	Customer Rep: PAT		
Well Name: PUCKETT	Well #: 43B-2	API/UWI #: 05-045-22624-00	
Field: WILDCAT	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 2-7S-97W-2226FNL-638FEL			
Contractor: H & P DRLG	Rig/Platform Name/Num: H & P 330		
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB80977	Srvs Supervisor: Craig Kukus		
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2500ft Job Depth TVD 2500 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		20	19.166	90			0	90		
Casing		9.625	8.921	36			0	2500		
Open Hole Section			14.75				90	2553		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		2500		Top Plug	9.625	1	HES
Float Shoe	9.625					Bottom Plug	9.625		HES
Float Collar	9.625	1		2457		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	Fresh Water	Fresh Water	10	bbl	8.34			4		
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	VariCem GJ1	VARICEM (TM) CEMENT	320	sack	12.3	2.38		8	13.71	

13.71 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	VariCem GJ1	VARICEM (TM) CEMENT	610	sack	12.8	2.114		8	11.77
11.77 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
4	Displacement	Displacement	189.9	bbl	8.34			8	
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	Super Flush 100	Super Flush 100	6	bbl	10				
1000 gal/Mgal		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
6	Revercem	REVERCEM (TM) CEMENT	64	sack	12.8	2.12		2	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
7	Revercem	REVERCEM (TM) CEMENT	120	sack	12.8	2.12		0	11.15
11.15 Gal		FRESH WATER							
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:		8.3 lb/gal		Disp. Temperature: ## °F °C				
Plug Bumped?	Yes	Bump Pressure: 645 psi			Floats Held? Yes				
Cement Returns:	4 bbl m3	Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C				
Comment GOT CEMENT RETURNS ON TOP OUT APPROX 3 BBLS GOOD CEMENT									

## 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	4/1/2015	00:10:00	USER					CREW CALL OUT
Event	2	Depart from Service Center or Other Site	4/1/2015	03:00:00	USER					DEPART SERVICE CENTER SAFETY MEETING ALLHES CREW PRESENT
Event	3	Arrive At Loc	4/1/2015	05:11:00	USER					ARRIVE EARLY ON LOC RIG RUNNING CSG / HES EQUIP ON LOC: 1 EA CMT PUMP UNIT 1 EA 66 BULK UNIT 1 EA SUPER FLUSH UNIT 1 EA 1600 BULK BIN 1 EA SERVICES PICK UP UNIT
Event	4	Assessment Of Location Safety Meeting	4/1/2015	05:17:00	USER					ASSESMENT WALK THRU OF LOC
Event	5	Pre-Rig Up Safety Meeting	4/1/2015	05:30:00	USER					PRE-RIG UP SAFETY MEETING ALL HES CREW PRESENT
Event	6	Rig-Up Equipment	4/1/2015	05:35:00	USER					RIG UP IRON TO STAND PIPE / RIG UP BULK EQUIPMENT / RIG UP WATER SUCTION HOSES
Event	7	Pre-Job Safety Meeting	4/1/2015	07:25:00	USER	8.34	0.00	0.0	0.0	PRE-JOB SAFETY MEETING ALL RIG PERSONEL AND HES CREW PRESENT
Event	8	Start Job	4/1/2015	07:40:03	COM6	8.34	0.00	-3.00	0.0	START JOB: TD 2553 FT TP 2500 FT SJT 43 FT WF/WT 8.5# CSG 9 5/8 IN 36# J-55
Event	9	Prime Pumps	4/1/2015	07:41:02	USER	8.34	2.0	39.0	2.0	PRIME LINES WITH 2 BBL FRESH WATER AHEAD
Event	10	Test Lines	4/1/2015	07:46:04	COM6	8.34	0.00	3466.00	0.1	PRESSURE TEST LINES 5 TH GEAR STALL OUT AT 1760 PSI TEST TO 3500 PSI
Event	11	Pump Spacer 1	4/1/2015	07:48:49	COM6	8.34	4.0	112	10.0	PUMP 10 BBLS H2O AHEAD
Event	12	Pump Lead Cement	4/1/2015	07:54:53	COM6	12.3	8.0	350.0	136.0	PUMP 320 SKS LEAD CEMENT AT 12.3 PPG 2.38 Y

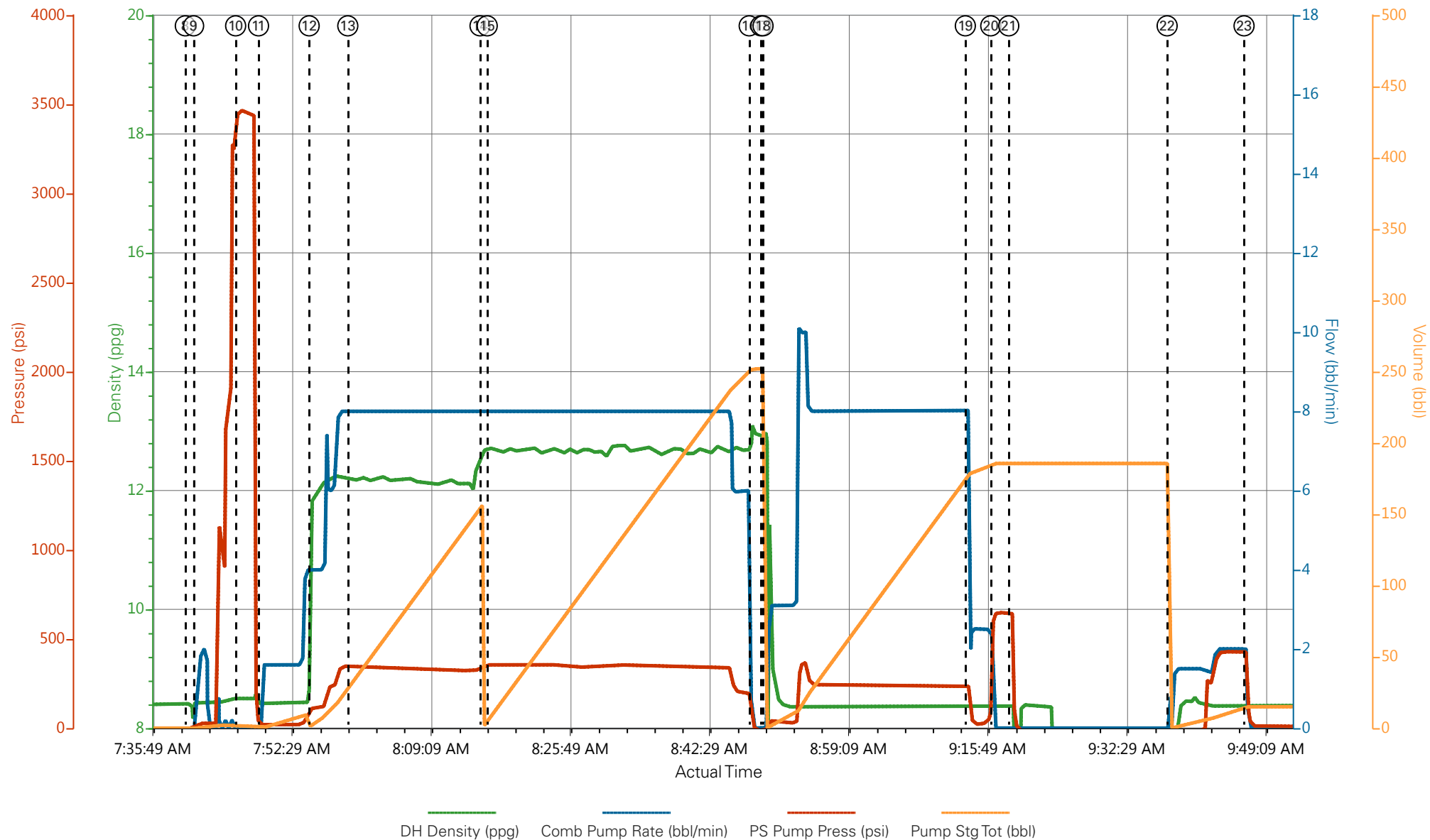
13.71 GAL/SKS W/ TUF FIBER

Event	13	Check Weight	4/1/2015	07:59:30	COM6	12.20	8.00	347.00	30.8	CMT DIP
Event	14	Pump Tail Cement	4/1/2015	08:15:20	COM6	12.8	8.00	349.00	229.0	PUMP 610 SKS TAIL CEMENT AT 12.8 PPG 2.11 Y 11.77 GAL/SKS
Event	15	Check Weight	4/1/2015	08:16:12	COM6	12.71	8.00	356.00	7.9	CMT DIP
Event	16	Shutdown	4/1/2015	08:47:35	USER	12.8	0.00	356.0	377.1	SHUT DOWN END CEMENT / READY TUB TO WASH UP ON TOP OF PLUG
Event	17	Drop Top Plug	4/1/2015	08:48:59	USER	8.34	0.00	-13.00	0.0	DROP TOP PLUG / PLUG AWAY
Event	18	Pump Displacement	4/1/2015	08:49:15	COM6	8.34	8.0	240.0	178.0	PUMP H2O DISPLACEMENT
Event	19	Slow Rate	4/1/2015	09:13:28	USER	8.34	2.5	50.0	178.2	SLOW RATE TO 2.5 BLM LAST 10 BBLS
Event	20	Bump Plug	4/1/2015	09:16:31	COM6	8.38	0.00	628.00	189.9	PLUG LANDED AT 50 PSI BUMP TO 645 PSI
Event	21	Check Floats	4/1/2015	09:18:41	USER	8.38	0.00	643.00	189.9	CHECK FLOATS / FLOATS HELD GOT 1.5 BBLS BACK TO TANKS / LAY DOWN STAND PIPE AND RUN IRON TO CELLAR TO PARISITE LINE TO PUMP 15 BBLS SUGAR WATER
Event	22	Pump Spacer 2	4/1/2015	09:37:39	COM6	8.34	2.0	240.0	15.0	PUMP 15 BBLS SUAGR WATER THRU PARISITE LINES / 1.5 BLM SEEN 240 PSI AT 2 BLM 400 PSI CSG RUN CLEAN
Event	23	Shutdown	4/1/2015	09:46:52	USER	8.37	0.0	232.00	582.0	SHUT DOWN WITH SUGAR WATER / SET UP EQUIPMENT FOR TOP OUT
Event	24	Start Job	4/1/2015	15:47:49	COM6					START TOP OUT #1
Event	25	Prime Pumps	4/1/2015	15:48:25	USER	8.37	1.0	-1.00	1.0	PRIME LINES 1 BBL AHEAD FOLLOWED BY 2 BBLS SUPERFLUSH / SHUT DOWN MIX TUB
Event	26	Pump Cement	4/1/2015	15:55:34	COM6	12.8	2.0	30.0	24.0	PUMP 64 SKS TOP OUT CEMENT AT 12.8 PPG 2.12 Y 11.15 GAL/SKS / FLOW 6 BBLS SUPER FLUSH WITH CEMENT
Event	27	Shutdown	4/1/2015	16:07:36	USER	12.8	0.0	23.00	607.0	SHUT DOWN ON TOP OUT PUMPED 24 BBLS AND 6 BBLS S/F HAD RETURNS AT 11 BBLS GONE AND

GOOD CEMENT CAME BACK

Event	28	Clean Lines	4/1/2015	16:12:07	COM6	SWAP LINES AND WASH UP TO CELLAR / SHUT WOC
Event	29	End Job	4/1/2015	16:48:06	COM6	END JOB CEMENT NOT FALLING BACK
Event	30	Pre-Rig Down Safety Meeting	4/1/2015	16:52:26	USER	PRE-RIG DOWNSAFETY MEETING ALL HES CREW PRESENT
Event	31	Rig-Down Equipment	4/1/2015	17:15:00	USER	RIG DOWN CELLAR AND WASH UP AND RIG IRON DOWN
Event	32	Depart Location	4/1/2015	17:55:00	USER	DEPART LOC SAFETY MEETING ALL HES CREW PRESENT
Event	33	Comment	4/1/2015	18:00:00	USER	THANK YOU FOR USING HALLIBURTON CEMENTING SERVICES AND THE CREW OF CRAIG KUKUS

# CAERUS OIL AND GAS HP 330 PUCKETT 43B-2 CEMENT SURFACE CSG JOB



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

▼ **HALLIBURTON** | iCem® Service

Created: 2015-04-01 06:06:35, Version: 4.1.107

Edit

Customer : CAERUS OIL AND GAS LLC - EBUS

Job Date : 4/1/2015 6:12:34 AM

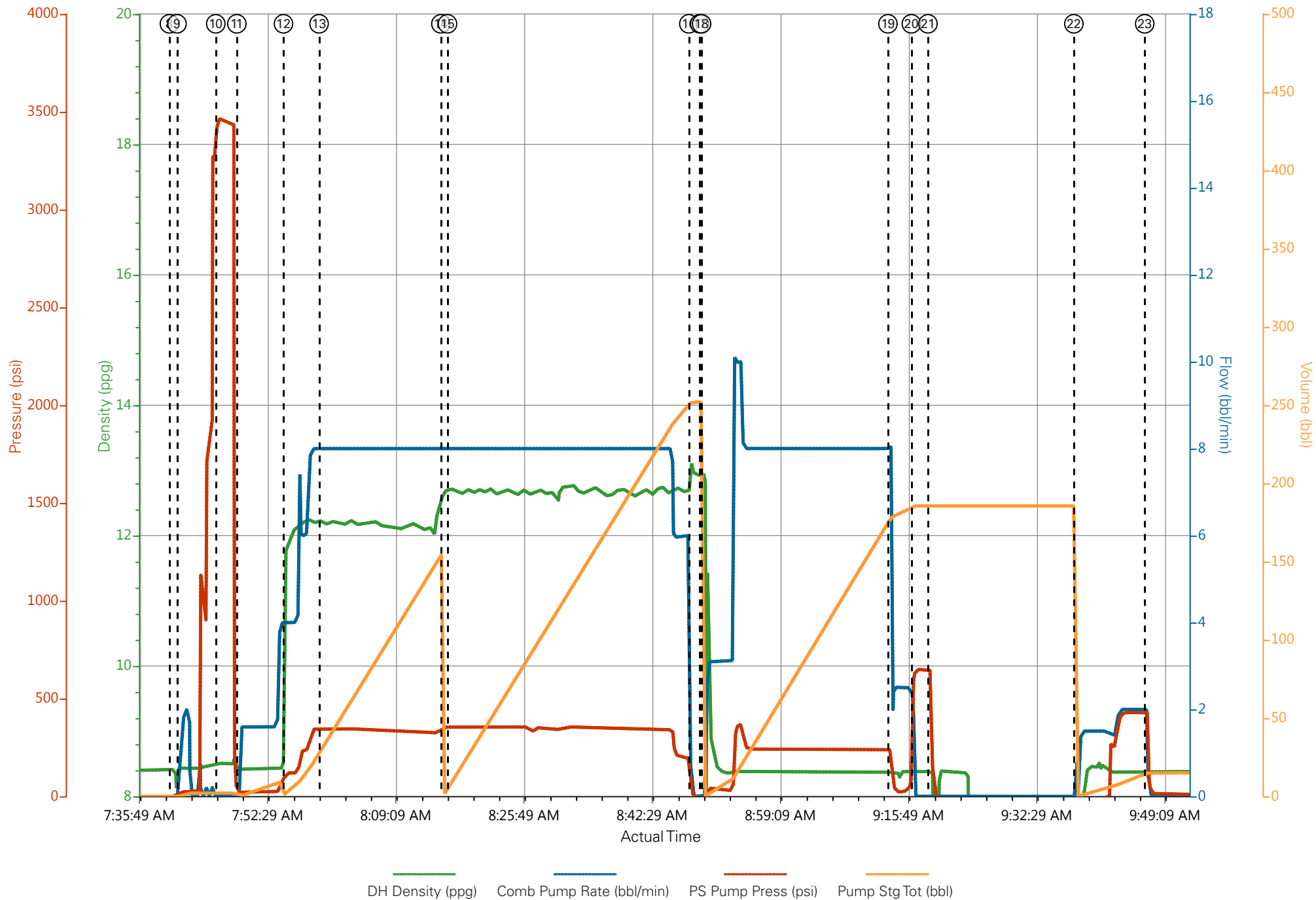
Well : 43B-2

Representative : CRAIG KUKUS

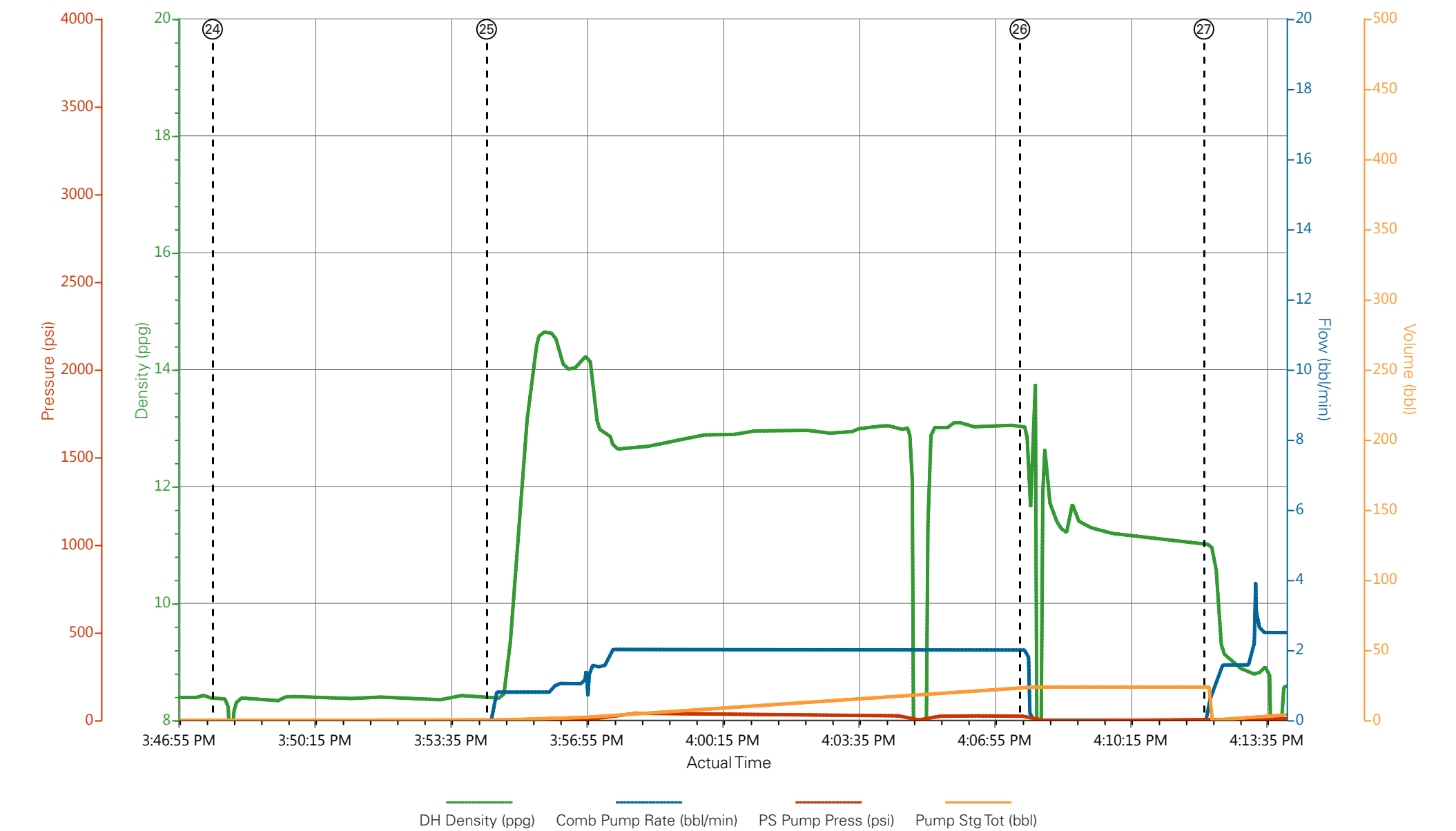
Sales Order # : 0902283421

ELITE 7 / OPERATOR : ADAM ANGELO

# CAERUS OIL AND GAS HP 330 PUCKETT 43B-2 CEMENT SURFACE CSG JOB



CAERUS OIL AND GAS HP 330 PUCKETT 43B-2 CEMENT SURFACE CSG JOB



- |  |                          |                    |                     |                     |                |
|--|--------------------------|--------------------|---------------------|---------------------|----------------|
| ① Call Out                                 | ⑥ Rig-Up Equipment       | ⑪ Pump Spacer 1    | ⑯ Shutdown          | 21 Check Floats     | 26 Shutdown    |
| ② Depart from Service Center or Other Site | ⑦ Pre-Job Safety Meeting | ⑫ Pump Lead Cement | ⑰ Drop Top Plug     | 22 Pump Sugar Water | 27 Clean Lines |
| ③ Arrive At Loc                            | ⑧ Start Job              | ⑬ Check weight     | ⑱ Pump Displacement | 23 Shutdown         |                |
| ④ Assessment Of Location Safety Meeting    | ⑨ Prime Pumps            | ⑭ Pump Tail Cement | ⑲ Slow Rate         | 24 Start Job        |                |
| ⑤ Pre-Rig Up Safety Meeting                | ⑩ Test Lines             | ⑮ Check weight     | 20 Bump Plug        | 25 Pump Cement      |                |

▼ **HALLIBURTON** | iCem® Service

Created: 2015-04-01 06:06:35, Version: 4.1.107

Edit

Customer : CAERUS OIL AND GAS LLC - EBUS  
Representative : CRAIG KUKUS

Job Date : 4/1/2015 6:12:34 AM  
Sales Order # : 0902283421

Well : 43B-2  
ELITE 7 / OPERATOR : ADAM ANGELO

# HALLIBURTON

## Water Analysis Report

Company: CAERUS OIL AND GAS

Submitted by: CRAIG KUKUS

Attention: \_\_\_\_\_

Lease PUCKETT

Well # 43B-2

Date: 4/1/2015

Date Rec.: 4/1/2015

S.O.# 902283421

Job Type: 8 5/8 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 <sub>4</sub> )	1500	<200 Mg / L
Chlorine (Cl <sub>2</sub> )		0 Mg / L
Temp	40-80	58 Deg
Total Dissolved Solids		410 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

<b>Sales Order #:</b> 0902283421	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/1/2015
<b>Customer:</b> CAERUS OIL AND GAS LLC - EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> PAT BLACKMER		<b>API / UWI: (leave blank if unknown)</b> 05-045-22624-00
<b>Well Name:</b> PUCKETT		<b>Well Number:</b> 0080702189
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> 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	4/1/2015
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	PAT BLACKMER
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	

<b>CUSTOMER SIGNATURE</b>
---------------------------

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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	4/1/2015

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	10
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	7
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	6
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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<b>Well Name:</b> PUCKETT		<b>Well Number:</b> 0080702189
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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> 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.	
<b>Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?</b> Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	Yes
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	99
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> 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
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	No
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0