

Cynosure Energy LLC

Federal 14/15-3-21

Frontier 28

Post Job Summary

Cement Surface Casing

Date Prepared: 11/15/2014

Job Date: 11/05/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

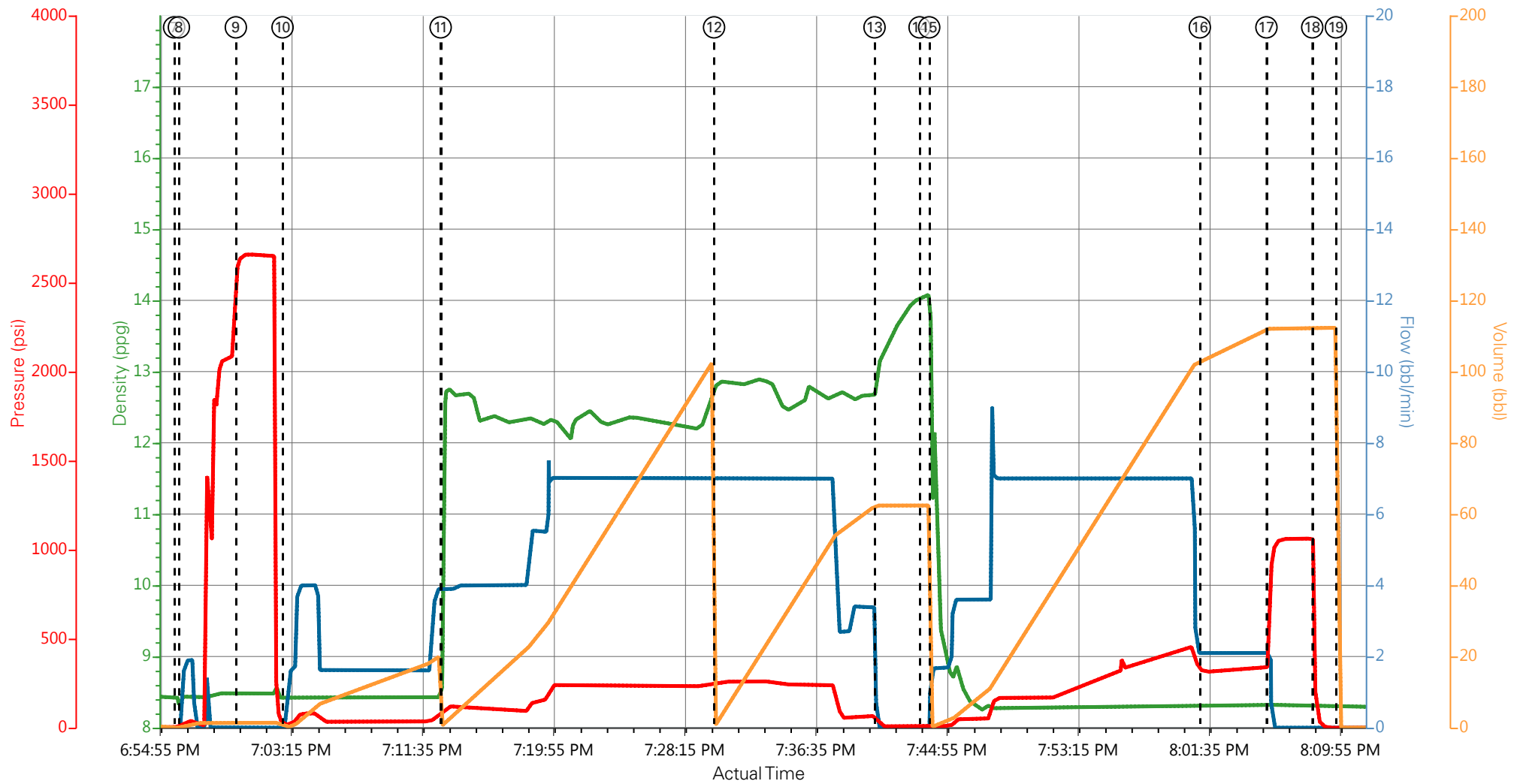
The Road to Excellence Starts with Safety

Sold To #: 373950		Ship To #: 3557148		Quote #:		Sales Order #: 0901801161				
Customer: CYNOSURE ENERGY LLC				Customer Rep:						
Well Name: FEDERAL			Well #: 14/15-3-21			API/UWI #: 05-045-22455-00				
Field: KOKOPELLI		City (SAP): NEW CASTLE		County/Parish: GARFIELD			State: COLORADO			
Legal Description: SE NE-21-6S-91W-2337FNL-743FEL										
Contractor:				Rig/Platform Name/Num: Frontier 28						
Job BOM: 7521										
Well Type: DIRECTIONAL GAS										
Sales Person: HALAMERICA\HB80977				Srvc Supervisor: Andrew Brennecke						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type					BHST					
Job depth MD		1523ft			Job Depth TVD					
Water Depth					Wk Ht Above Floor		3			
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	STC	J-55	0	1523	0	0
Open Hole Section			13.5				0	1553	0	0
Comment										

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)	Comment
Event	1	Call Out	11/5/2014	01:30:00	USER					CREW HAD JUST FINISHED AT OTHER JOB
Event	2	Pre-Convoy Safety Meeting	11/5/2014	11:00:00	USER					CREW HAD TO HAVE DRIVERS TAKE THEM TO LOCATION, ALL HES PRESENT
Event	3	Crew Leave Location	11/5/2014	11:15:00	USER					
Event	4	Arrive at Location from Other Job or Site	11/5/2014	12:30:00	USER					RIG HAD NOT STARTED CASING, ON LOCATION REQUESTED 08:00
Event	5	Rig-Up Completed	11/5/2014	18:20:00	USER					1-ELITE, 2-660 BULK TRAILERS, 9.625" QUICK LATCH PLUG CONTAINER, 2" IRON
Event	6	Pre-Job Safety Meeting	11/5/2014	18:25:00	USER					ALL HES AND RIG CREW PRESENT
Event	7	Start Job	11/5/2014	18:56:00	USER	8.31	0.00	7.00	0.0	TD-1553', TP-1523', SJ-39.9', CSG-9.625", J-55, 36#, OH-13.5", MUD-9.3, VISC-48
Event	8	Prime Pumps	11/5/2014	18:56:18	COM5	8.33	2.00	35.00	2.0	FRESH WATER
Event	9	Test Lines	11/5/2014	18:59:55	COM5	8.49	0.30	2659.00	2.2	PRESSURE HELD AT 2659 PSI
Event	10	Pump Spacer 1	11/5/2014	19:02:53	COM5	8.39	4.00	120.00	20.0	FRESH WATER
Event	11	Pump Lead Cement	11/5/2014	19:12:56	COM5	12.33	7.00	249.00	98.2	225SKS, 12.3PPG, 2.45CF/SK, 14.17GAL/SK
Event	12	Pump Tail Cement	11/5/2014	19:30:18	COM5	12.84	7.00	257.00	62.1	160SKS, 12.8PPG, 2.18CF/SK, 12.05GAL/SK
Event	13	Shutdown	11/5/2014	19:40:30	COM5					
Event	14	Drop Top Plug	11/5/2014	19:43:21	COM5					PLUG DROP VERIFIED BY TATTLE TALE
Event	15	Pump Displacement	11/5/2014	19:43:58	COM5	8.42	7.00	445.00	105.0	FRESH WATER
Event	16	Slow Rate	11/5/2014	20:01:10	USER	8.33	2.00	318.00	10.0	SLOW RATE FOR LAST 10BBLS DISPLACEMENT
Event	17	Bump Plug	11/5/2014	20:05:24	COM5	8.35	2.0	347.00	114.6	PLUG BUMPED
Event	18	Check Floats	11/5/2014	20:08:18	USER	8.34	0.00	1062.00	114.6	FLOATS HELD, .75 BBLS BACK
Event	19	End Job	11/5/2014	20:09:49	COM5	8.29	0.00	0.00	0.0	GOOD RETURNS THROUGH OUT JOB, 4 BBLS CEMENT TO SURFACE
Event	20	Rig-Down Completed	11/5/2014	21:00:00	USER					BLEW PUMP DOWN
Event	21	Crew Leave Location	11/5/2014	21:35:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNCKE AND CREW

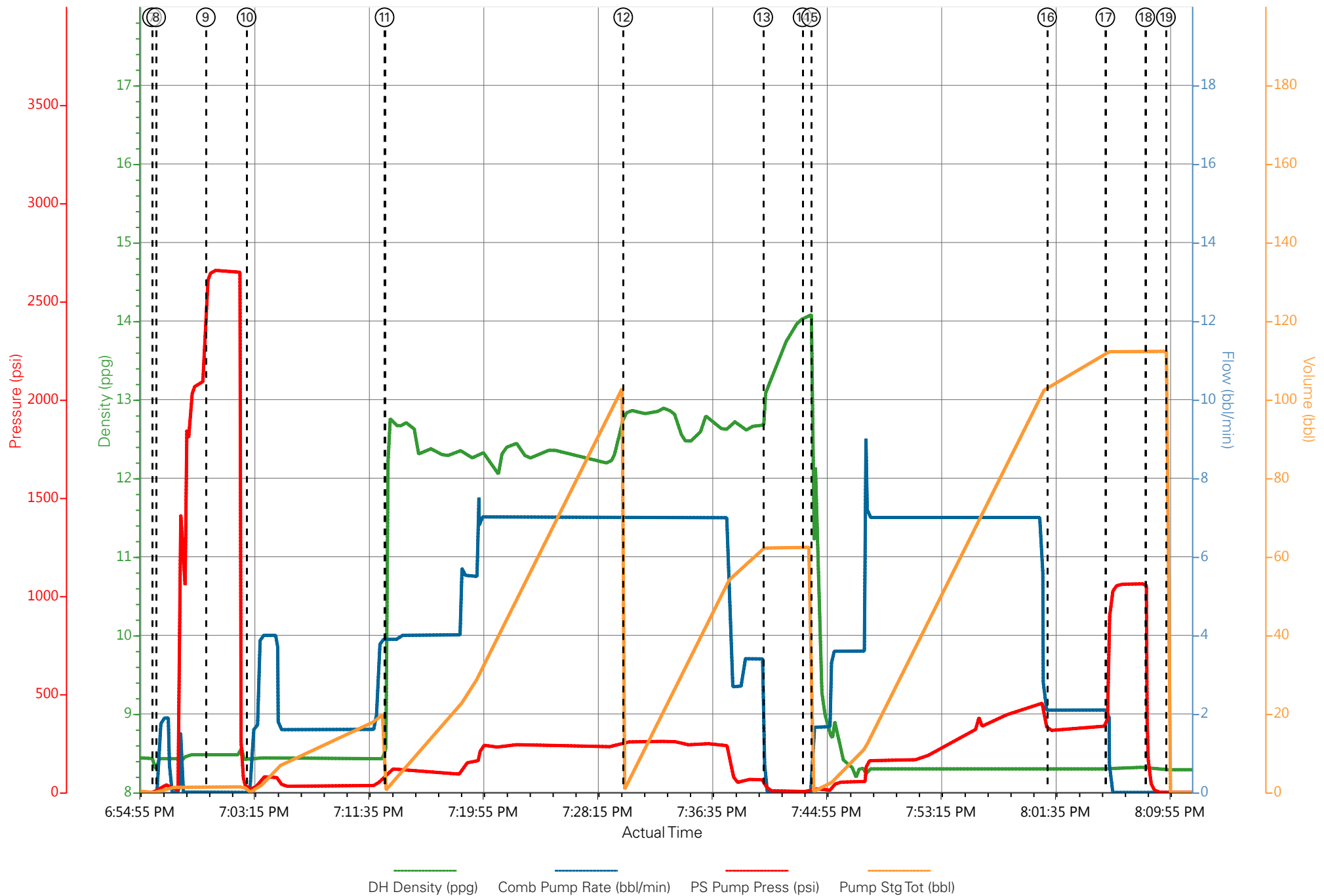
CYNOSURE - FED 14/15-3-21 - 9.625" SURFACE



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

- | | | | |
|--|--|---|---|
| ① Call Out n/a;n/a;n/a;n/a | ⑦ Start Job 8.31;0;7;0 | ⑬ Shutdown 13.17;0;26;62.4 | ⑲ End Job 8.29;0;0;0 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑧ Prime Pumps 8.43;0.8;25;0 | ⑭ Drop Top Plug 14.05;0;5;62.4 | 20 Rig-Down Completed n/a;n/a;n/a;n/a |
| ③ Crew Leave Location n/a;n/a;n/a;n/a | ⑨ Test Lines 8.49;0;2630;1.4 | ⑮ Pump Displacement 11.19;1.7;17;0.3 | 21 Crew Leave Location n/a;n/a;n/a;n/a |
| ④ Arrive at Location from Other Job or Site n/a;n/a;n/a;n/a | ⑩ Pump Spacer 1 8.42;0;14;0 | ⑯ Slow Rate 8.3;2.1;318;103.4 | |
| ⑤ Rig-Up Completed 8.41;0;6;0 | ⑪ Pump Lead Cement 11.97;3.9;99;1.2 | ⑰ Bump Plug 8.31;2.1;637;112.2 | |
| ⑥ Pre-Job Safety Meeting 8.41;0;7;0.5 | ⑫ Pump Tail Cement 12.84;7;255;1.7 | ⑱ Check Floats 8.3;0;135;112.3 | |

CYNOSURE - FED 14/15-3-21 - 9.625" SURFACE



HALLIBURTON

Water Analysis Report

Company: CYNOSURE
Submitted by: A.BRENNECKE
Attention: E.RUSSEL
Lease FED
Well # 15/14-3-21

Date: 11/5/2014
Date Rec.: 11/5/2014
S.O.# 901801161
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	250 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	51 Deg
Total Dissolved Solids		540 Mg / L

Respectfully: A.BRENNECKE

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 use

Sales Order #: 0901801161	Line Item: 10	Survey Conducted Date: 11/5/2014
Customer: CYNOSURE ENERGY LLC		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-22455-00
Well Name: FEDERAL		Well Number: 0080638653
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	11/7/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

Sales Order #: 0901801161	Line Item: 10	Survey Conducted Date: 11/5/2014
Customer: CYNOSURE ENERGY LLC		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-22455-00
Well Name: FEDERAL		Well Number: 0080638653
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	11/5/2014
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	3
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	5
Number Of Jsas Performed	
Was this a Primary Cement Job (Yes / No)	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Customer Non-Productive Rig Time (hrs)	0

Sales Order #: 0901801161	Line Item: 10	Survey Conducted Date: 11/5/2014
Customer: CYNOSURE ENERGY LLC		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-22455-00
Well Name: FEDERAL		Well Number: 0080638653
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)	NA
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	94
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	7
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