



Bison Oil Well Cementing Tail & Lead

Cementing Customer Satisfaction Survey

Service Date	3/21/2014
Well Name	five rivers 22-19
County	yuma
State	colorado
SEC	19
TWP	2n
RNG	46w

Invoice Number	12156
API #	05-125-12079-00
Job Type	
Company Name	asgustus

Customer Representative:

Supervisor Name:

Employee Name (Including Supervisor)
aaron
jairo
oscar

Exposure Hours (Per Employee)
4
4
4
12

3038800551

Total Exposure Hours

Did we encounter any problems on this job? Yes No

To Be Completed By Customer

Rating/Description

- 5 - Superior Performance (Established new quality/performance standards)
 - 4 - Exceeded Expectation (Provided more than what was required/expected)
 - 3 - Met Expectations (Did what was expected)
 - 2 - Below Expectations (Job problems/failures occurred - *Recovery made)
 - 1 - Poor Performance (Job problems/failures occurred - *Some recovery made)
- *Recovery: resolved issue(s) on jobsite in a timely and professional manner

RATING	CATEGORY	CUSTOMER SATISFACTION RATING
_____	Personnel -	Did our personnel perform to your satisfaction?
_____	Equipment -	Did our equipment perform to your satisfaction?
_____	Job Design -	Did we perform the job to the agreed upon design?
_____	Product/Material -	Did our products and materials perform as you expected?
_____	Health & Safety -	Did we perform in a safe and careful manner (Pre/post mtgs, PPE, TSMR, etc.)?
_____	Environmental -	Did we perform in an environmentally sound manner (spills, leaks, cleanup, etc.)?
_____	Timeliness -	Was job performed as scheduled (On time to site, accessible to customers, completed when expected)?
_____	Condition/Appearance -	Did the equipment condition and appearance meet your expectations?
_____	Communication -	How well did our personnel communicate during mobilization, rig up and job execution?

Please Circle:

- Yes No Did an accident or injury occur?
- Yes No Did an injury requiring medical treatment occur?
- Yes No Did a first-aid injury occur?
- Yes No Did a vehicle accident occur?
- Yes No Was a post-job safety meeting held?

Please Circle:

- Yes No Was a pre-job safety meeting held?
- Yes No Was a job safety analysis completed?
- Yes No Were emergency services discussed?
- Yes No Did environmental incident occur?
- Yes No Did any near misses occur?

Additional Comments:

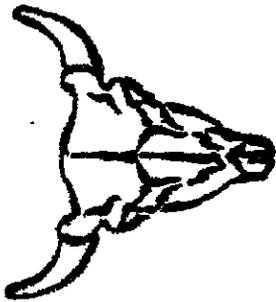
THE INFORMATION HEREIN IS CORRECT -

X

Customer Representative's Signature

DATE: _____

Any additional Customer Comments or HSE concerns should be described on the back of this form



Bison Oil Well Cementing Two Cement Surface Pipe

Date: 3/21/2014
 INVOICE #: 12156
 LOCATION: Yuma
 FOREMAN: Aaron Carrasco

Customer: asgustus
 Well Name: five rivers 22-19

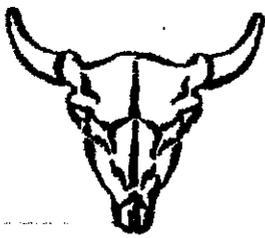
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DESCRIPTION OF JOB EVENTS

	5:56 AM	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
		BbLS	Time	PSI	BbLS	Time	PSI	BbLS	Time	PSI	BbLS	Time	PSI	BbLS	Time	PSI
Safety Meeting		0	#####	0	0		0			0			0			
MIRU	3:46 AM	10	#####	100	10		10			10			10			
CIRCULATE	6:17 AM	20	#####	210	20		20			20			20			
Drop Plug		30	#####	300	30		30			30			30			
7:00 AM		40	#####	470	40		40			40			40			
M & P		50	#####	1000	50		50			50			50			
Time		60			60		60			60			60			
6:36 am- 6:56 am	215	70			70		70			70			70			
		80			80		80			80			80			
		90			90		90			90			90			
		100			100		100			100			100			
		110			110		110			110			110			
		120			120		120			120			120			
Lead mixed bbls	40	130			130		130			130			130			
Lead % Excess	56%	140			140		140			140			140			
Lead Sacks	140	150			150		150			150			150			

Notes:

Tail mixed bbls	37.2
Tail % Excess	232%
Tail Sacks	249
Total Sacks	388
bbl Returns	



**Bison Oil Well Cementing
Tail & Lead**

Date: 3/21/2014
 Invoice #: 12156
 API#: 05-125-12079-00
 Foreman: Aaron Carrasco

Customer: asgustus
 Well Name: five rivers 22-19

County: yuma
 State: colorado
 Sec: 19
 Twp: 2n
 Range: 46w

Consultant: mark zion
 Rig Name & Number: excell rig 2
 Distance To Location: 60
 Units On Location: 3101-4029
 Time Requested: 4:00 AM
 Time Arrived On Location: 3:45 AM
 Time Left Location:

WELL DATA		Cement Data	
Casing Size (in) :	4.500	Lead	
Casing Weight (lb) :	10.5	Cement Name:	
Casing Depth (ft.) :	2,867	Cement Density (lb/gal) :	12.1
Total Depth (ft) :	2880	Cement Yield (cuft) :	2.21
Open Hole Diameter (in) :	6.25	Gallons Per Sack	12.04
Conductor Length (ft) :	0	% Excess	0%
Conductor ID :	0	Tail	
Shoe Joint Length (ft) :	43	Cement Name:	
Landing Joint (ft) :	9	Cement Density (lb/gal) :	13.8
		Cement Yield (cuft) :	1.33
		Gallons Per Sack:	6.28
		% Excess:	0%
Sacks of Tail Requested	75	Fluid Ahead (bbls)	0.0
HOC Tail (ft):	0	H2O Wash Up (bbls)	0.0
One or the other, cannot have quantity in both		Spacer Ahead Makeup	
Max Rate:		5-kcl =10- dye=45 kcl	
Max Pressure:			

Casing ID 4.052 Casing Grade J-55 only used

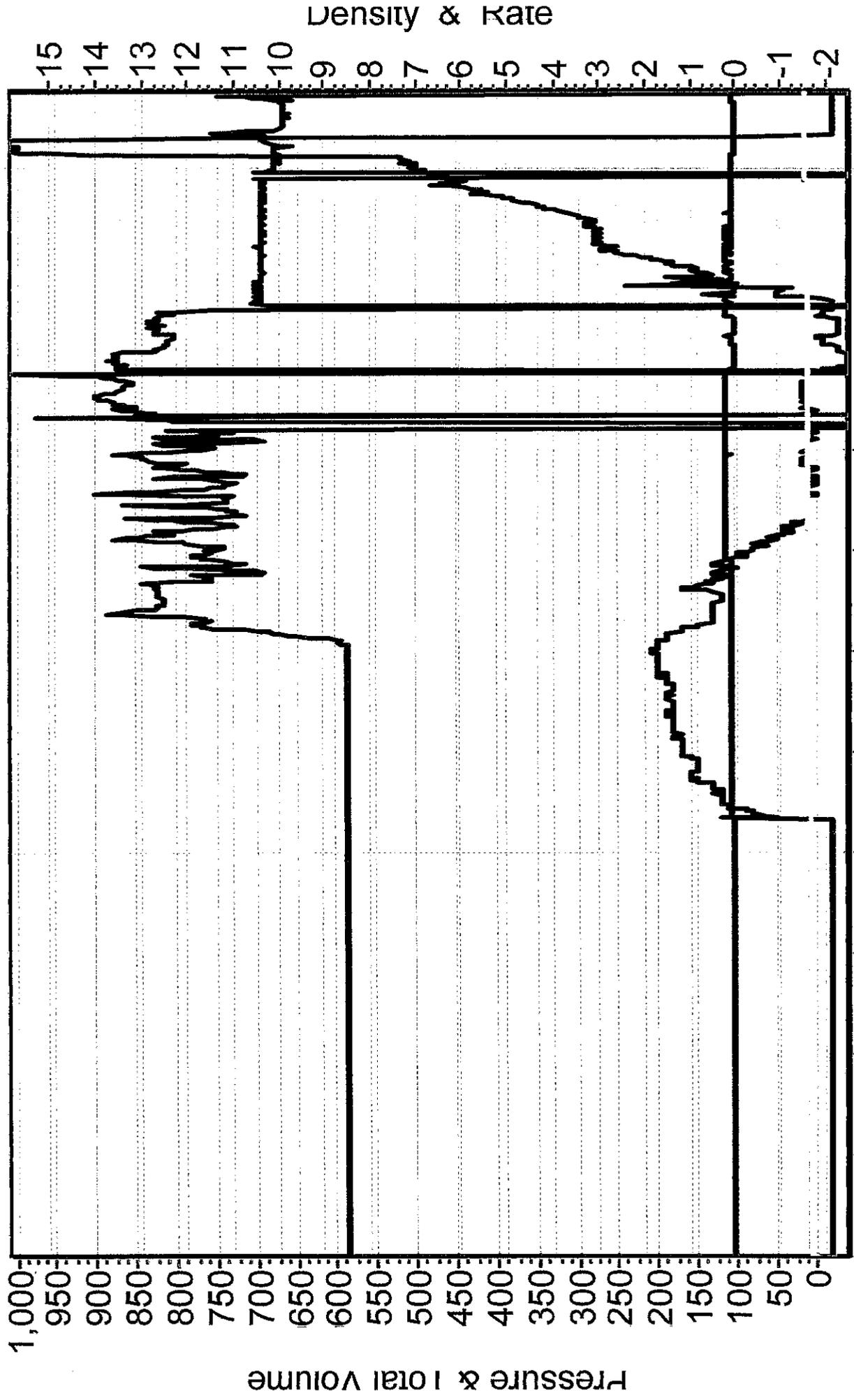
Lead Calculated Results		Tail Calculated Results	
HOC of Lead	1923.34 ft	Tail Cement Volume In Ann	99.75 cuft
Casing Depth - HOC Tail		(HOC Tail) X (OH Ann)	
Volume of Lead Cement	197.34 cuft	Total Volume of Tail Cement	95.90 Cuft
HOC of Lead X Open Hole Ann		(HOC Tail X OH Ann) - (Shoe Length X Shoe Joint Ann)	
Volume of Conductor	0.00 cuft	bbls of Tail Cement	17.77 bbls
(Conductor ID Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)		(HOC of Tail) X (OH Ann) + (Cement Yield) X (Shoe Joint Ann) X (.1781) X (% Excess)	
Total Volume of Lead Cement	197.34 cuft	HOC Tail	934.66 ft
(cuft of Lead Cement) + (Cuft of Conductor)		(Tail Cement Volume) ÷ (OH Ann)	
bbls of Lead Cement	35.15 bbls	Sacks of Tail Cement	75.00 sk
(Total cuft of Lead Cement) X (.1781) X (1+%Lead Excess)		(Total Volume of Tail Cement) ÷ (Cement Yield)	
Sacks of Lead Cement	89.29 sk	bbls of Tail Mix Water	11.21 bbls
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		(Sacks of Tail Cement X Gallons Per Sack) ÷ 42	
bbls of Lead Mix Water	25.60 bbls	Pressure of cement in annulus	
(Sacks Needed) X (Gallons Per Sack) ÷ 42		Hydrostatic Pressure	1802.20 PSI
Displacement	45.04 bbls	Collapse PSI:	#N/A psi
(Casing ID Squared) X (.0009714) X (Casing Depth) + (Landing Joint) - (Shoe Length)		Burst PSI:	#N/A psi
Total Water Needed:	25.60 bbls		



Authorization To Proceed

M/D TOTCO 2000 SERIES

— PSI — Barrels / Minute — Barrels — Lbs / Gallon



21/2014 5:39:00 AM 3/21/2014 6:13:53 AM 3/21/2014 6:48:51 AM