

1738 Wynkoop St., Ste. 102
Denver, Colorado 80202
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net



№ 11713

PRICE REFERENCE	DESCRIPTION	UNITS		UNIT PRICE	AMOUNT	
		QTY.	MEAS.			
	Pump charge	1	each	14 ⁰⁰ / _{ck}	14 ⁰⁰ / _{ck}	⁰⁰ / _{ct}
	BFA VII 3% BCCA-1, 25 lbs per sk BPLA-1	333	sks	22 ⁴⁵ / _{sk}	7475	85
	Mileage 4 ⁰⁰ / _{pr mile} 60 mile min Round trip Trucks	2	each	240 ⁰⁰ / _{ck}	480	⁰⁰ / _{ct}
	Mileage 1 ⁵⁰ / _{pr mile} 60 mile min Round trip Pickup	1	each	90 ⁰⁰ / _{ck}	90	⁰⁰ / _{ct}
	BCLK-1	3	cans	25 ⁰⁰ / _{ck}	75	⁰⁰ / _{ct}
	Blue Dye	10	oz	15 ⁰⁰ / _{ck}	150	⁰⁰ / _{ct}
	Data fee	1	each	225 ⁰⁰ / _{ck}	225	⁰⁰ / _{ct}
	Sugar	50	lbs	2 ⁰⁰ / _{lb}	100	⁰⁰ / _{ct}
	Total Weight		Loaded Miles	Ton Miles		

If this account is not paid within 30 days of invoice date a FINANCE CHARGE will be made. Computed at a single monthly rate of 1 1/2% which is equal to an ANNUAL PERCENTAGE RATE OF 18%.

Well: State 10-164

AFE: 13172454

Major/Minor CC: 8715.618

Signature: Kevin W. [Signature]

Approver: RCIJJ 9996

Customer or His Agent

TAX REFERENCES

SUB TOTAL

TAX

TOTAL

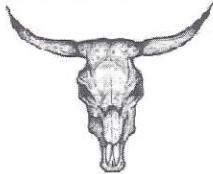
SUBJECT TO CORRECTION

Bison Oil Well Cementing, Inc. Representative

Customers hereby acknowledges and specifically agrees to the terms and conditions on this work order, including, without limitation, the provisions on the reverse side hereof which include the release and indemnity.

BISON OIL WELL CEMENTING, INC.

1547 Gaylord Street
Denver, Colorado 80206
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net



INVOICE #
LOCATION
FOREMAN

11713
34-7
Kirk

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY
3-19-13	State 1d-16H	16	3N	68W	Weld
BILL TO	CONSULTANT				
Encana	Kern				
OWNER	RIG NAME & NUMBER				
	N&P 278				
MAILING ADDRESS	DISTANCE TO LOCATION			UNITS ON LOCATION	
				3103-3211	
CITY	TIME REQUESTED			TIME ARRIVED ON LOCATION	
	8:30am			6:30am	
STATE, ZIP	TIME LEFT LOCATION				
	12:30pm				
WELL DATA			Cement Makeup		
HOLE SIZE	TUBING SIZE	PERFORATIONS	Cement Blend	BFL III 3% BCL A-1, 25% pr-sr BFL A-1	
12 1/4			Cement - Specs	lbs	Yield
				15.2	1.27
TOTAL DEPTH	TUBING DEPTH	SHOTS/FT	Annulus Factor	Capacity Factor	
843			3131	0758	
CASING SIZE	TUBING WEIGHT	OPEN HOLE			
9 5/8					
CASING DEPTH	TUBING CONDITION	TREATMENT VIA	TYPE OF TREATMENT		
833			<input checked="" type="checkbox"/> Surface Pipe <input type="checkbox"/> Production <input type="checkbox"/> Squeeze <input type="checkbox"/> MISC Pump <input type="checkbox"/> P&A		
CASING WEIGHT	PACKER DEPTH		HYD HHP = RATE X PRESSURE / 40.8		
4015					
CASING CONDITION	good		% Excess	40%	
Max Rate			BBL to Pit	20	
Max Pressure					

DESCRIPTION OF JOB EVENTS

Safety meeting, Rig up, PSI test, Per cement cler 30 BBS KCL H2O 2nd 10 w/ Dye, mix & Pump 33.3 SKS cement at 40% Excess at 1.27 yield at 15.2 lbs, Release Plug Disp 60 BBS H2O, Bump Plug at 150 PSI over Lift PSI, wait 5 min Release PSI wash up Rig Down

Arrived w/ 600 SKS cement 45 min KCL 1602 Dye

X Authorization To Proceed

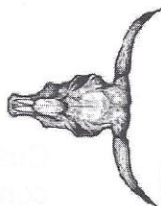
Title

X 3-19-13 Date

Customers hereby acknowledges and specifically agrees to the terms and conditions on this work order, including, without limitation, the provisions on the reverse side hereof which include the release and indemnity.

BISON OIL WELL CEMENTING, INC.

1547 Gaylord Street
Denver, Colorado 80206
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net



INVOICE #
LOCATION
FOREMAN

11713
321-7
K. H. C.

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI
MIRU	9:40														
CIRCULATE	10:56	0		11:21	10			0			0			0	
Drop Plug		10	11:24	260	10			10			10			10	
		20	11:26	350	20			20			20			20	
		30	11:28	430	30			30			30			30	
		40	11:30	500	40			40			40			40	
		50	11:32	530	50			50			50			50	
M & P		60	11:36	350	60			60			60			60	
Time	Sacks	70			70			70			70			70	
	11:02	80			80			80			80			80	
	11:14 stop	90			90			90			90			90	
		100			100			100			100			100	
		110			110			110			110			110	
		120			120			120			120			120	
		130			130			130			130			130	
		140			140			140			140			140	
		150			150			150			150			150	

Notes: used 4000 Excess

used 333 SLS cement

Bump Plug At 11:36pm Stop psi

1547 287 SLS cement 3 gal 1st kit 402 Dye

X Heini alu

Work Performed

X

Title

X 3-14-13

Date



Bison Oil Well Cementing, Inc
1738 Wynkoop St., Ste. 102
Denver, CO 80202
303-296-3010
www.Bisonoilwell.com

Cementing Customer Satisfaction Survey

Service Date 3-19-13
Invoice Amount _____
Well Name State
Well Location 341-7
County Weld
SEC/TWP/RNG 16 3N 68W
State CO
Supervisor Name Mark

Invoice Number 11713
Well Permit Number _____
Well Type Gas
Well Number 1d-16 H
Lease _____
Job Type Surface Pipe
Company Name Encana
Customer Representative Kevin
Customer Phone Number _____

Employee Name

Exposure Hours (Per Employee)

Pablo
Mentz

6
6

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 Expectations (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

Opportunity

- Best Practices
- Potential Best Practice
- Prevention/Improvement

RATING / CATEGORY

- 4 Personnel -
- 4 Equipment -
- 5 Job Design -
- 5 Product / Material -
- 5 Health & Safety -
- 5 Environmental -
- 5 Timeliness -
- 4 Condition / Appearance -
- 4 Communication -
- Improvement -

CUSTOMER SATISFACTION RATING

- Did our personnel perform to your satisfaction ?
- Did our equipment perform to your satisfaction ?
- Did we perform the job to the agreed upon design ?
- Did our products and materials perform as you expected ?
- Did we perform in a safe and careful manner (Pre / post mtgs, PPE, TSMR, etc..) ?
- Did we perform in an environmentally sound manner (Spills, leaks, cleanup, etc..) ?
- Was job performed as scheduled (On time to site, accessible to customer, completed when expected)?
- Did the equipment condition and appearance meet your expectation?
- How well did our personnel communicate during mobilization, rig up, and job execution?
- What can we do to improve our service?

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?

Additional Comments:

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?

THE INFORMATION HEREIN IS CORRECT -

Kevin Allen
Customer Representative's Signature

3-19-13
Date

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



1738 Wynkoop St., Ste. 102
Denver, Colorado 80202
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net

B.O.C. Tailgate Safety Meeting Report

INVOICE 11713

Date 3-14-13 Time 10:27 ☒ AM ☐ PM Meeting Facilitator Mark Kalihaff
Facility Name and Location State Id-1651 Work to be Undertaken Surfing Pipe

Nearest Emergency Medical Service Number (Other than 911) Longmont

MINIMUM STANDARDS REQUIREMENT VERIFICATION (must be verified for all members of a work party)

- ☒ Hard Hat ☒ Safety Glasses w/sideshields ☒ Safety Toed Footwear ☐ Personal Methane Monitor ☐ Verify Safety Training
☒ Flame Resistant Clothing ☐ New on Job Review ☐ Onsite Orientation ☐ Other (specify) _____

HAZARD IDENTIFICATION AND SAFETY BRIEFING DISCUSSION (Check and Discuss all Relevant Hazards)

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Positions of People
<input type="checkbox"/> Falling from Heights
<input checked="" type="checkbox"/> Slips/Trips/Falls
<input type="checkbox"/> Extreme Heat/Cold
<input type="checkbox"/> Electrical Current
<input type="checkbox"/> Overexertion/Heavy Lifting
<input type="checkbox"/> Spills/Releases
<input type="checkbox"/> Flying Particles
<input type="checkbox"/> Overhead Power Lines | <input checked="" type="checkbox"/> Job Safety Analysis Reviewed (if applicable)
<input type="checkbox"/> NORM or Other Radiation
<input checked="" type="checkbox"/> Overhead work/suspended Loads/Chains/Slings
<input checked="" type="checkbox"/> Trapped Pressure
<input checked="" type="checkbox"/> Flammable/Combustible/Explosives
<input checked="" type="checkbox"/> Pinch Points/Moving/Rotating Equipment
<input type="checkbox"/> Waste Handling/Disposal
<input checked="" type="checkbox"/> Excavation Collapse
<input type="checkbox"/> _____ | <input type="checkbox"/> Hazardous Substance
<input type="checkbox"/> Hazardous Atmosphere
<input checked="" type="checkbox"/> Walking/Working Surfaces
<input type="checkbox"/> Noise Levels
<input type="checkbox"/> Sharp Edges
<input type="checkbox"/> Insects/Snakes/etc.
<input type="checkbox"/> MSDS's Reviewed
<input checked="" type="checkbox"/> Walk Around Site Assessment
<input type="checkbox"/> _____ |
|---|--|---|

ADDITIONAL PPE REQUIREMENT (based on the job specific hazards, check all that apply)

Eyes/Face

- ☐ Tinted Lenses
☐ Goggles
☐ Faceshield
☐ Hearing Protection
☐ _____

Hands

- ☐ Chemical Resistant Gloves
☐ Heat Resistant Gloves
☐ Cotton or Leather Gloves
☐ Dielectric Gloves
☐ _____

Feet

- ☐ Rubber Boots
☐ Over Boots
☐ Dielectric Boots
☐ _____

Other

- ☐ Air Purifying Respirator
☐ Supplied Air Respirator
☐ Personal H2S Monitor (if in sour area)
☐ Chemical Resistant Clothing
☐ Personal Fall Arrest Systems
☐ _____

EMERGENCY PREPARATIONS

- ☒ Muster Areas ☒ Communication Methods ☒ Means of Egress ☒ Emergency Equipment

Additional Topics Covered:

Attendees (Signature)/Company	Attendees (Signature)/Company
<u>[Signature]</u>	<u>David Carlson</u>
<u>[Signature]</u>	<u>Tom Cahill</u>
<u>[Signature]</u>	<u>[Signature]</u>
<u>[Signature]</u>	<u>[Signature]</u>
<u>[Signature]</u>	<u>[Signature]</u>

Other Considerations and Field Notes:

James Morrison
[Signature]

BISON OILWELL CEMENTING JOB SAFETY ANALYSIS WORKSHEET



8. Drop plug	Slips, trips, falls. Miscommunication between pump operator and cementer, pressure against a closed stop	<ul style="list-style-type: none"> -Deploy spill berms and buckets -Utilize 3 points of contact while descending/climbing ladder and stairs -Have visual contact between cementer and pump operator before pump is engaged 	
9. Displacement	Unexpected pressure associated with resuming of pumping, casing hydraulicking from hole, serious injury from high pressure line failure or catastrophic equipment failure.	<ul style="list-style-type: none"> -Ensure rig floor remains clear and non-essential personnel stay clear from buffer area -Pump operator monitors pump pressure constantly -Utilize proper PPE 	KIC
10. Bump plug-Test float and release pressure	Pressure jumps before expected (calculated) displacement. Pressure jumps rapidly and higher than expected	<ul style="list-style-type: none"> -Pump operator slows rate to 2 BPM when 5 bbls from calculated displacement and down to 1 bpm within 2 bbls of calculated displacement -Pump operator monitors pressure constantly -Pressure relief valve installed on pump 	KIC
11. Pressure test casing (if required)	<div>Test to: <input type="text"/></div> <div>PSI- <input type="text"/></div> <div>FOR: MIN- <input type="text"/></div>	<ul style="list-style-type: none"> -Ensure rig floor remains clear and non-essential personnel stay clear from the buffer area 	KIC
12. Wash up / rig down	Splashing cement slurry, heavy lifting, pinch points, unsecured hoses	<ul style="list-style-type: none"> -Utilize stakes or portable tank manifold to secure hoses -Use proper lifting technique (2 man lift, lift with legs, plan your route) 	KIC
13. Depart location	Other traffic and personnel and location, overhead lines	<ul style="list-style-type: none"> -All Bison crew member walk the planned exit route to access possible obstacles and hazards -Utilize spotters while backing 	KIC
OTHER HAZARDS SPECIFIC TO LOCATION OR ENVIRONMENT NOT ADDRESSED ABOVE:			
DESIGNATED EMERGENCY MUSTER AREA: <div>access road</div>		NEAREST EMERGENCY MEDICAL FACILITY (OTHER THAN 911): <div>Longmont</div>	

BISON OILWELL CEMENTING JOB SAFETY ANALYSIS WORKSHEET



JOB/TASK: SURFACE CASING CEMENTING		CEMENTER/SUPERVISOR: kirk kallhoff		PAGE: 1	OF: 2
WELL NAME: State 1d-16h		RIG # h&p 278	LOCATION: 34-7	DATE: 3-19-13	
OPERATOR: Encana		CONSULTANT: Kevin		INVOICE # 11713	
PPE REQUIRED: <input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> Safety Glasses <input type="checkbox"/> Reflective Vest <input checked="" type="checkbox"/> Steel Toe Boots <input checked="" type="checkbox"/> Impact Gloves		ADDITIONAL PPE (based on job specific hazards): <input type="checkbox"/> Goggles <input type="checkbox"/> Faceshield <input type="checkbox"/> Air Purifying Respirator <input type="checkbox"/> Chemical Resistant Gloves <input type="checkbox"/> Personal H2S Monitor <input type="checkbox"/> Chemical Resistant Clothing <input type="checkbox"/> Personal Methane Monitor			
JOB STEPS		POTENTIAL HAZARDS		RECOMMENDED ACTION OR PROCEDURE	
1. Review ISA		Misunderstanding		Clarify job and associated hazards and safety concerns	
2. Conduct pre job safety meeting		Misunderstanding		-Hold safety meeting with all personnel on location, ensure everyone pays attention to ensure they understand their role and responsibility during the job -Review treatment report with consultant and obtain signature for authorization to proceed -Identify and address short service employees (SSE) who are on location -Coordinate with well site supervisor for directions on where and when to park the equipment -All Bison crew members walk the location prior to driving in to access specific hazards -Utilize spotters when trucks are in motion -Establish buffer zone around equipment utilizing cones and caution tape -Cementor follows up to ensure connections are secure -Lift with your legs and use teamwork when rigging up -Utilize reflective vests and wands to increase visibility at night -Deploy spill berms and buckets	
3. Move trucks in and rig up equipment		Other traffic on location, overhead lines, pinch points, heavy lifting, slips/falls		-Inspect slings, chains and hooks prior to lift -Ensure line of sight with crane/tugger operator is maintained throughout the lift and hand signals are understood -Ensure no personnel are under suspended equipment -Utilize a tag line to control the load	
4. Raise cement head and hoses to rig floor		Overhead work, improper hookup/load not properly secured, poor communication between ground personnel and crane/tugger operator		-Only Bison personnel install the cement head and hoses -Maintain line of sight and communication with crane/tugger operator -Remove non-essential personnel from rig floor, wait until other activity is done -Rig crew does not install chains until head and hoses are installed -Ensure a clear path when swinging a hammer -Ensure all fittings and hoses have proper pressure rating for the job and fall within the parameters of the <i>Bison Oilwell Iron Inspection Program</i>	
5. Connect Cement head/swage/pin, chickens and hoses.		Working in a congested area, pinch points, swinging hammers, slippery rig floor		-Ensure rig floor is clear and personnel are away from hoses prior to test -Establish buffer area around high pressure hoses -Lines are checked from a distance and using pressure gauges	
6. Pressure test lines		Test to: PSI: 800		Pressure relief valve set to: 1750 PSI.	
Maximum pressure allowed for job: 2500 PSI.				Max. pump pressure: 3000 PSI.	
7. Pump Spacer (dye marker)/Mix and Pump Cement		Serious injury from high pressure line failure or catastrophic equipment failure. Casing hydraulic from hole, causing injury. Burns or skin irritation from splashing cement, uncontrolled spills		-Pressure test prior to job, utilize heavy duty hose hobbles and pressure relief valve -Keep rig floor and buffer area clear while pumping -Utilize proper PPE -Have access to water to rinse affected skin	