KOLAR Document ID: 1761521

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 35906
Name: BCE-Mach III LLC
Address 1: 14201 WIRELESS WAY SUITE 300
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73134 + 2521
Contact Person: Tami Laird
Phone: (405) 821-0568
CONTRACTOR: License # 35696
Name: Atlas Drilling, LLC
Wellsite Geologist: N/A
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

01/05/2024	01/14/2024	01/23/2024
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-007-24489-01-00
Spot Description:
SE - SE - SW - NW Sec. 14 Twp. 35 S. R. 12 ☐ East ☑ West
188 Feet from ☐ North / ☑ South Line of Section
1320 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Barber
Lease Name: ACHENBACH 14-11-35-12 Well #: 1H
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 1368 Kelly Bushing: 1383
Total Vertical Depth: 4803 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 334 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: ppm Fluid volume: bbls
Dewatering method used:
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
☐ **Confidentiality Requested**
Date: 02/26/2024
☐ **Confidential Release Date:** 02/25/2026
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Todd Bryant **Date:** 03/04/2024

Page Two

Operator Name: BCE-Mach III LLC Lease Name: ACHENBACH 14-11-35-12 Well #: 1H

Sec. 14 Twp. 35 S. R. 12 ☐ East ☑ West County: Barber

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☐ Yes	☑ No
Geologist Report / Mud Logs	☐ Yes	☑ No

List All E. Logs Run:

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Mississippian	5156	TVD

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	9.625	36	334	Class A	160	Attached
Intermediate	8.75	7	26	5151	Class A	215	Attached
Liner	6.125	4.5	13.5	12322	N/A	0	Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☑ Yes ☐ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☑ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☑ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection: 01/26/2024

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☑ Other *(Explain)* PAGL

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	71	370	1032	5211	21

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☑ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom
5242	12322

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
	5242	12322			372 BBLS 15% HCL; 45,312 BBLS SLICKWATER; NO SAND

TUBING RECORD: Size: 2.875 Set At: 5066 Packer At: N/A

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	BCE-Mach III LLC
Well Name	ACHENBACH 14-11-35-12 1H
Doc ID	1761521

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	9.625	36	334	Class A	160	Attached
Intermediate	8.75	7	26	5151	Class A	215	Attached
Liner	6.125	4.5	13.5	12322	N/A	0	Attached

Prepared By: Tyler Howle

Achenbach 14/11-35-12 1H

Final 1/18/2024

Completion Procedure

Mississippi Formation

AFE#DC23121

Surface Location: 188' FSL and 1320' FWL in Section 14-35S-12W

Bottom Hole Location: 341' FNL and 1285' FWL in Section 11-35S-12W

Latitude 36.999338 Longitude -98.599275

Barber County, KS

API #15-007-24489-01-00

KB: 16' AGL
GLE: 1368'
TD: 12322' MD (4803' TVD)
PBTD: 12087' MD (Landing Collar)

Casing Summary:

All Table Values Are Listed Without Safety Factor

Size	Depth (ft)	Weight #/ft	Grade PSI	Connection	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Tension (lbs)	Capacity (bbl/ft)
9 5/8"	334'	36	J-55	LTC	8.921	8.765	3,520	2,020	453,000	0.0773
7"	5,242'	26	P-110	BPN	6.276	6.151	9,950	6,230	693,000	0.0383
4-1/2"	5096' - 12322'	13.5	P-110	BTC	3.920	3.795	12,410	10,670	422,000	0.0149
2-7/8"	TBD	6.5	J-55	EUE	2.441	2.347	7680	7260	99660	0.00579

Maximum allowable pressure during frac is 5,000 psi

Surface:	9 5/8" 36# J-55 LTC	(50 bbl cement to surface)
Intermediate:	7" 26# P-110 BPN	(Cemented w/ full returns.)
Prod Liner:	4-1/2" 13.5# P-110 BTC	(OH packers, no cement)

Wellhead:

9-5/8" SOW X 11" 5k Casing Head (A Section)

Direction To Location:

From Hardtner KS. East on Hwy 281 2.5 mi, south 1.1 mi on Roundup Rd.

Directional:

Horizontal well. KOP at 4205'. Build Section from 4205' - 5488' MD. TD at 12322' MD ; 4803' TVD. Average TVD in lateral is ~4844'.
Bottom Hole Location: 341' FNL and 1285' FWL in Section 11-35S-12W
Heel hard line is 330' FSL. Toe Hard line is 330' FNL. Based on the final directional drilling survey, the wellbore does not cross either heel or toe hard line.

Current Well Status:
Newly drilled well ready for completion.

Objective:
Complete Mississippian lateral with 15 stages of OH packer/slickwater frac.

First Responder Emergency Contacts

Alfalfa/Woods County Emergency Contacts

	Kiowa	Alva
Fire	620-825-4886	580-328-5510
Ambulance	911 or 620-825-4112	911 or 580-327-2300
Sheriff	620-886-5678	580-327-3434

Hospital: Share Medical Center
Hwy 60. ~0.1 mi North and East of Hwy 270 and Hwy 60 Jct
Alva, OK 73717
ph: (580) 327-2800

Mach Emergency Contacts

Notify one of the individuals listed below, as soon as reasonably possible, for any injury incident requiring transport for medical attention, any incident which has impacted or has the potential to impact the public, any spill in excess of 10 bbl which has breached containment, or any property damage expected to exceed $100,000. Continue notification attempts in sequential order until someone has been reached. Voicemail, email, and text are not acceptable means of notification.

Contact	Cell Number
Justin Flanagan	**405-435-1100**
Randy Summers	**405-423-3367**
Tyler Howle	**405-234-0004**
Clarence Watts	**405-546-9694**
Dustin Elmore	**580-747-6691**
Rick Hughes	**405-249-0484**

The **SAFETY** of **OUR TEAM** and the **PROTECTION** of **OUR ENVIRONMENT** is **OUR RESPONSIBILITY**

*S*top work authority

- Each of us have not only the authority but the responsibility to stop any operation, at any time, if we feel the potential exists for either ourselves or our team to be exposed to unsafe conditions.
- No operation should be resumed until all involved are satisfied that it can be done safely.
- What if you saw an operation that you knew was unsafe, you decided to look the other way, and one of your team members was seriously injured or killed--how would that affect the rest of your life!

*A*ccountability

- Working safely is something each of us must commit to do every day. It is our responsibility.
- Make it your priority to constantly be aware of hazards that could put your personal safety or the safety of our team at risk.
- If you or your team are working in an unsafe manner and have not improved behavior after counseling, you may be asked not to return to work.

*F*amily Matters

- Serious injuries and fatalities have occurred in operations just like ours.
- It can happen to you.
- How would your family's lives be changed if you were no longer able to provide for them due to injury or death?

*E*valuate

- Every job can be performed safely.
- Unnecessary risks are not to be taken to complete any job.
- Complete a job safely analysis prior to beginning any task. Take the time to ask what could happen? What can be done to ensure that the job will be completed without incident?

Pre Job Checklist:

1) Insure all ratholes and ditches used in the drilling operation have been filled and that location is free of slip/trip/fall hazards. Ensure portable toilets and trash trailers are made available as required. Keep location and surrounding areas free of debris. Report any existing safety or environmental issues prior to beginning job.

2) Install anchors and/or pull test as required. Install riser and ball valve with bull plug and 2000# gauge on surface casing to above ground level. **Open surface casing valve in cellar** and fill cellar as required to eliminate/minimize confined space risk.

3) Evaluate wellhead height and provide work platforms, man lifts, and fall protection as needed to provide safe access.

4) Check and monitor surface casing, intermediate casing, and tubing pressures. Record pressures on report daily.

Procedure

Frac Operations EH&S Focus

A high percentage of EH&S incidents in frac operations are related to RU and RD activity. Please focus on the following during frac ops:

- Ensuring that everyone understands they are responsible for their own safety plus the safety of those working around them

- Ensuring that everyone is familiar with and understands their responsibility regarding Stop Work Authority

- Ensuring that everyone is familiar with and understands the 10 Rules to Protect Ourselves and our Team

- Discuss the importance of wearing PPE, lifting hazards, chemical hazards, weather hazards, simultaneous operations hazards, overhead load hazards and live perf gun hazards during safety meetings and JSAs

- Keep all unnecessary personnel away from overhead loads, pressurized lines and perforating guns at all times

- Adjust work pace or shut down ops as weather conditions dictate (heat, cold, storms, etc)

Notify OCC 48 hours prior to beginning frac operations.

1) Set 8 frac tanks and 2 acid tanks on location. RU water transfer with transfer line(s) from the frac pit to the frac tanks on location. Be prepared to transfer fresh water at a rate of 65 bpm throughout frac. Inspect tanks and verify that caps are installed in all frac tanks prior to filling. Inspect tanks for leaks during and after filling and monitor for leaks from the time frac tanks are filled until emptied.

2) NU 7-1/16" 5k frac stack. Pressure test lines and frac head to 5,000 psi. Set electronic kick-out to 4,800 psi. **Maximum allowable surface pressure is 5,000 psi.**

3) **Open well and pressure up on casing to 2,500 psi. Hold 2 minutes. Increase pressure to 3,000 psi and hold 2 min (ensureing OH packers set). Increase pressure until P-sleeve shifts open (pinned to open ~4,000 psi).**

4) Frac the MISSISSIPPI (Stage 1) as follows:

NOTE: FR concentration should be kept as low as possible throughout job in order to obtain a minimum rate of 65 bpm. Do not exceed 0.75 gal/1000 concentration of FR without prior discussion with engineer.

STAGE 1

	Top Perf @	12,087'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			**-**	**38**

Drop Stage 2 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 2) as follows:

STAGE 2

	Top Perf @	11,629'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			**-**	**38**

Drop Stage 3 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 3) as follows:

STAGE 3

	Top Perf @	11,172'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			**-**	**38**

Drop Stage 4 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 4) as follows:

STAGE 4

	Top Perf @	10,669'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			**-**	**38**

Drop Stage 5 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 5) as follows:

STAGE 5

	Top Perf @	10,212'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			**-**	**38**

Drop Stage 6 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 6) as follows:

STAGE 6

	Top Perf @	9,755'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 7 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 7) as follows:

STAGE 7

	Top Perf @	9,298'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 8 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 8) as follows:

STAGE 8

	Top Perf @	8,841'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 9 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 9) as follows:

STAGE 9

	Top Perf @	8,338'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 10 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 10) as follows:

STAGE 10

	Top Perf @	7,881'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 11 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 11) as follows:

STAGE 11

	Top Perf @	7,424'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 12 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 12) as follows:

STAGE 12

	Top Perf @	6,973'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 13 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 13) as follows:

STAGE 13

	Top Perf @	6,505'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 14 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 14) as follows:

STAGE 14

	Top Perf @	6,038'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Drop Stage 15 ball accroding to packer sheet. Drop rate to 10 bpm 50 bbls before seating ball.
Frac the MISSISSIPPI (Stage 15) as follows:

	Top Perf @	5,572'					
Fluid	**Rate**	**Vol, gal**	**Vol, bbl**	**Prop**	**Prop Con**	**Prop, lbs**	**Time, min**
Slickwater	20	2,500	60				0.7
15% HCL	80	1,000	24				0.3
Slickwater	100	124,200	2957				37.0
TOTAL		**127,700**	**3,040**			-	**38**

Total Frac Job Volumes: **45,607 bbls** **- lbs**

5) RDMO frac crew. Release all support equipment not needed during tube-up.

Well Service Unit Operations EH&S Focus

WSU operations account for a high percentage of EH&S incidents in Miss completion operations. Please focus on the following prior to and during WSU ops:

- Ensuring that everyone understands they are responsible for their own safety plus the safety of those working around them
- Ensuring that everyone is familiar with and understands their responsibility regarding Stop Work Authority
- Ensuring that everyone is familiar with and understands the 10 Rules to Protect Ourselves and our Team
- Conducting rig inspections and correcting any deficiencies identified
- Adjusting work pace or shut down ops as weather conditions dictate (heat, cold, storms, etc)

6) Set and/or pull test rig anchors as required. MIRU WSU and supporting equipment.

7) Set and/or pull test rig anchors as required. MIRU WSU and supporting equipment.

8) Unload and talley +/- 5,060' of 2-7/8" 6.5# J-55 EUE tbg.

9) Above the 7 1/16" 5K frac valve, NU 7 1/16" 5K hyd BOP w/ 2 7/8" pipe rams. Function test pipe rams.

(Have BOP vendor stump test ram BOPs to 250/5,000 psi prior to BOP delivery. Chart test and have chart delivered with BOPs.)

10) MIRU EWL truck. PU and RIH with the following BHA:

a) 2-7/8" WLEG
b) 2-7/8" x 6' Perforated Sub
c) Ceramic disc sub
d) 2-7/8" XN nipple (2.313" profile x 2.205" No-Go)
e) 7" x 2-7/8" ASIX double grip packer (w/ on/off)

Set packer at 5,060'. POOH with wireline. RDMO EWL truck.

11) TIH with the following BHA:

a) ON/Off Skirt
d) +/- 5,060' 2-7/8" 6.5# J-55 8rd EUE tbg w/ GLV as designed.

Make up 7-1/16" x 2-7/8" EUE EN tubing hanger assembly. Latch onto on/off tool and space out w/ +/-10k compression. Land tubing hanger and close TIW valve through BOP. ND BOP and FV.

12) NU 7-1/16" 5k x 2-7/8" 5k production tree.

13) Send flowback reports to flowback distribution list at the following times: 6 am, 1 pm, and 9 pm.

Mach Resources

14201 Wireless Way
Oklahoma City, OK 73134

Lease :	**Achenbach 14/11-35-12 1H**	**Casing**									
API No:	**15-007-24489-01-00**	**Size**	**Weight**	**Grade**	**Thread**	**Depth (ft)**	**ID (in)**	**Drift**	**Collapse**	**Burst**	**BBL/Ft**
KB :	16'	9 5/8"	36.0	J-55	LTC	334	8.921	8.765	2020	3520	0.0773
GL:	1,368'	7"	26.0	P-110	BPN	5242	6.276	6.151	6230	9950	0.0383
Legals :		4-1/2"	13.5	P-110	BTC	5096' - 12322'	3.920	3.795	10670	12410	0.0149
County:	Barber										
State:	KS	**Tubing**									
Spud:		**Size**	**Weight**	**Grade**	**Thread**	**Depth**	**ID**	**Drift**	**Collapse**	**Burst**	**BBL/Ft**
RR:		2-7/8"	6.5	J-55	EUE	TBD	2.441	2.347	7680	7260	0.00579
Latitude:	36.999338000										
Longitude:	-98.599275000										

Current WBD xx/xx/15 TJH

Key Depths	(ft)
TD	12,322
TVD	4,844
PBTD	12,087
Kick Off Points	4,205
Landing Point	5,488
Radius of Curve	817
EST. top of Cement	
Comments on the Cement Job	

Highlights

Est. BHT	130	F
Est. BHP	1,695	psi
Completed Lat Length	7,080	ft
Fluid in the wellbore	8.33 ppg Water	

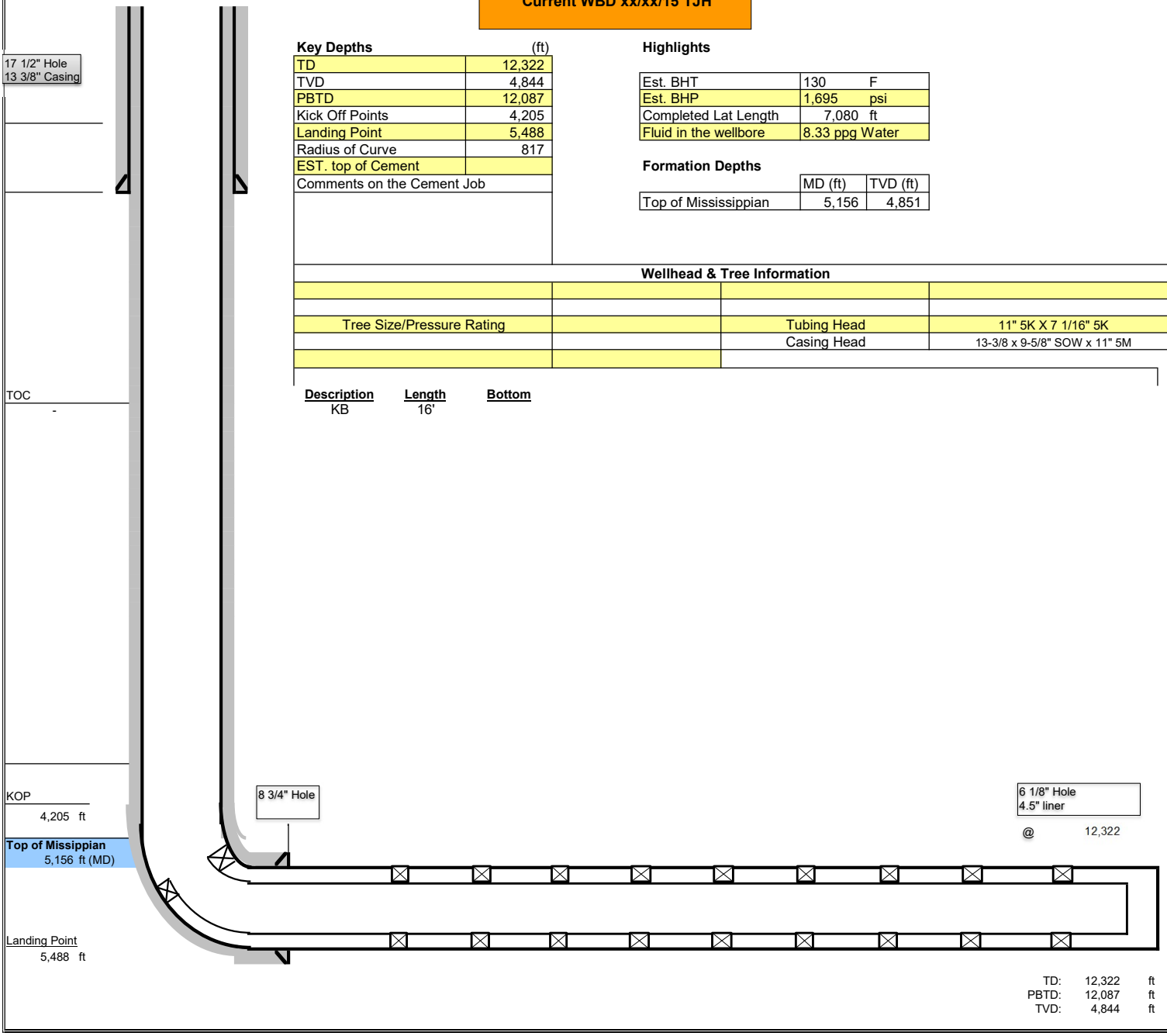
Formation Depths

	MD (ft)	TVD (ft)
Top of Mississippian	5,156	4,851

Wellhead & Tree Information

Tree Size/Pressure Rating		Tubing Head	11" 5K X 7 1/16" 5K
		Casing Head	13-3/8 x 9-5/8" SOW x 11" 5M

Description	**Length**	**Bottom**
KB	16'	



	Designed					
	Bottom	Length	Top	Actual	Ball	Stage
TD	12,322'					
P-Sleeve #1	12,086'	3'	12,083'	12,087'		1
Packer #1	11,852'	4'	11,848'	11,858'		
Sleeve #2	11,621'	4'	11,617'	11,629'	2.813''	2
Packer #2	11,386'	4'	11,382'	11,401'		
Sleeve #3	11,155'	4'	11,151'	11,172'	2.875''	3
Packer #3	10,920'	4'	10,916'	10,943'		
Sleeve #4	10,689'	4'	10,685'	10,669'	2.938''	4
Packer #4	10,454'	4'	10,450'	10,441'		
Sleeve #5	10,223'	4'	10,219'	10,212'	3.000''	5
Packer #5	9,988'	4'	9,984'	9,983'		
Sleeve #6	9,757'	4'	9,753'	9,755'	3.063''	6
Packer #6	9,522'	4'	9,517'	9,527'		
Sleeve #7	9,291'	4'	9,287'	9,298'	3.125''	7
Packer #7	9,055'	4'	9,051'	9,069'		
Sleeve #8	8,824'	4'	8,820'	8,841'	3.188''	8
Packer #8	8,589'	4'	8,585'	8,567'		
Sleeve #9	8,358'	4'	8,354'	8,338'	3.250''	9
Packer #9	8,123'	4'	8,119'	8,109'		
Sleeve #10	7,892'	4'	7,888'	7,881'	3.313''	10
Packer #10	7,657'	4'	7,653'	7,652'		
Sleeve #11	7,426'	4'	7,422'	7,424'	3.375''	11
Packer #11	7,191'	4'	7,187'	7,208'		
Sleeve #12	6,960'	4'	6,956'	6,973'	3.438''	12
Packer #12	6,725'	4'	6,721'	6,739'		
Sleeve #13	6,494'	4'	6,490'	6,505'	3.500''	13
Packer #13	6,259'	4'	6,255'	6,271'		
Sleeve #14	6,028'	4'	6,024'	6,038'	3.563''	14
Packer #14	5,793'	4'	5,789'	5,804'		
Sleeve #15	5,562'	4'	5,558'	5,572'	3.625''	15
7" Shoe	5,242'					

Directional Survey Calculations	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7967	188	1320	4009
BHL	12322	90.73	358.14	4803.88	7625.45	53.06	7625.45	0.00	341	7814	1285	3999
Mississippian Entry	5156	74.56	58.81	4850.54	463.87	1.13	463.87	10.47	7503	652	1316	4011
Top OH	5242	82.26	0.89	4867.37	548.08	2.11	548.08	8.64	7418	736	1316	4010
Bottom OH	12322	90.73	358.14	4803.88	7625.45	53.06	7625.45	0.00	341	7814	1285	3999

Survey Points		X	Y				m
	NW Corner XY Coord	1969778	129123			North Line slope	-0.00606
	SW Corner XY Coord	1969684	120965	Surface XY	1971006	121149	East Line slope	0.00565
	NE Corner XY Coord	1975060	129091			South Line slope	-0.003
	SE Corner XY Coord	1975014	120949			West Line slope	0.011522

	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (deg)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
									7967	188	1320	4009
	136.00	0.40	272.45	136.00	0.02	-0.47	0.02	0.29	7967	188	1319	4010
	227.00	0.75	276.32	226.99	0.10	-1.38	0.10	0.39	7966	188	1318	4011
	283.00	0.70	288.05	282.99	0.25	-2.07	0.25	0.28	7966	188	1318	4011
	350.00	0.70	276.62	349.98	0.42	-2.87	0.42	0.21	7966	188	1317	4012
	405.00	1.63	203.28	404.98	-0.26	-3.51	-0.26	2.87	7967	188	1316	4013
	495.00	4.40	191.85	494.84	-4.82	-4.73	-4.82	3.13	7971	183	1315	4014
	586.00	7.47	179.64	585.35	-14.15	-5.41	-14.15	3.63	7981	174	1315	4014
	675.00	8.70	175.33	673.46	-26.64	-4.82	-26.64	1.54	7993	161	1315	4014
	764.00	8.18	175.64	761.50	-39.67	-3.79	-39.67	0.59	8006	148	1317	4013
	854.00	8.18	173.40	850.58	-52.41	-2.57	-52.41	0.35	8019	136	1318	4011
	948.00	8.31	180.91	943.61	-65.85	-1.91	-65.85	1.15	8032	122	1319	4011
	1,037.00	7.82	178.80	1,031.73	-78.33	-1.88	-78.33	0.64	8045	110	1319	4011
	1,128.00	7.08	170.85	1,121.97	-90.06	-0.86	-90.06	1.39	8057	98	1320	4009
	1,218.00	6.95	185.48	1,211.30	-100.95	-0.50	-100.95	1.99	8068	87	1321	4009
	1,307.00	6.86	185.35	1,299.65	-111.61	-1.51	-111.61	0.10	8078	76	1320	4010
	1,397.00	6.29	183.50	1,389.06	-121.88	-2.31	-121.88	0.68	8088	66	1319	4011
	1,486.00	4.70	178.45	1,477.65	-130.39	-2.51	-130.39	1.87	8097	58	1319	4011
	1,574.00	3.87	176.52	1,565.40	-136.96	-2.23	-136.96	0.96	8104	51	1319	4011
	1,664.00	3.12	172.39	1,655.24	-142.42	-1.73	-142.42	0.88	8109	46	1320	4010
	1,754.00	1.93	197.13	1,745.15	-146.29	-1.85	-146.29	1.76	8113	42	1320	4010
	1,845.00	0.40	155.03	1,836.13	-148.05	-2.17	-148.05	1.82	8115	40	1319	4010
	1,940.00	0.48	92.85	1,931.13	-148.37	-1.63	-148.37	0.48	8115	40	1320	4010
	2,036.00	0.70	80.45	2,027.12	-148.29	-0.65	-148.29	0.26	8115	40	1321	4009
	2,131.00	0.66	73.51	2,122.12	-148.04	0.45	-148.04	0.10	8115	40	1322	4008
	2,226.00	0.66	77.55	2,217.11	-147.77	1.51	-147.77	0.05	8114	40	1323	4007
	2,322.00	0.53	71.14	2,313.10	-147.50	2.47	-147.50	0.15	8114	40	1324	4006
	2,418.00	0.53	42.40	2,409.10	-147.03	3.19	-147.03	0.27	8114	41	1325	4005
	2,513.00	0.62	30.79	2,504.09	-146.27	3.75	-146.27	0.15	8113	42	1325	4005
	2,609.00	0.57	36.64	2,600.09	-145.44	4.30	-145.44	0.08	8112	43	1326	4004
	2,704.00	0.66	48.90	2,695.08	-144.70	4.99	-144.70	0.17	8111	43	1327	4003
	2,799.00	0.79	66.13	2,790.08	-144.07	6.00	-144.07	0.27	8111	44	1328	4002
	2,894.00	0.84	47.41	2,885.07	-143.34	7.12	-143.34	0.28	8110	45	1329	4001
Top of Tangent	2,989.00	0.88	25.78	2,980.06	-142.21	7.95	-142.21	0.34	8109	46	1329	4000
@ 0'	3,084.00	0.84	23.81	3,075.05	-140.91	8.54	-140.91	0.05	8107	47	1330	4000
	3,178.00	0.84	25.21	3,169.04	-139.66	9.12	-139.66	0.02	8106	48	1331	3999
	3,273.00	0.53	36.33	3,264.03	-138.68	9.67	-138.68	0.35	8105	49	1331	3999
	3,368.00	0.70	54.61	3,359.02	-137.99	10.41	-137.99	0.27	8104	50	1332	3998
Btm of Tangent	3,461.00	0.48	51.32	3,452.02	-137.41	11.17	-137.41	0.24	8104	51	1333	3997
@ 0'	3,555.00	0.40	346.28	3,546.02	-136.85	11.40	-136.85	0.51	8103	51	1333	3997
	3,649.00	0.22	91.48	3,640.02	-136.53	11.50	-136.53	0.54	8103	51	1333	3997
	3,744.00	0.53	170.98	3,735.01	-136.97	11.76	-136.97	0.56	8103	51	1333	3997
	3,840.00	0.44	189.00	3,831.01	-137.78	11.77	-137.78	0.18	8104	50	1333	3997
	3,935.00	0.53	221.25	3,926.01	-138.47	11.42	-138.47	0.30	8105	50	1333	3997
	4,030.00	0.31	244.41	4,021.00	-138.91	10.90	-138.91	0.29	8105	49	1332	3997
	4,121.00	0.40	294.55	4,112.00	-138.88	10.39	-138.88	0.34	8105	49	1332	3998
	4,158.00	0.53	288.05	4,149.00	-138.78	10.11	-138.78	0.38	8105	49	1332	3998
	4,205.00	1.89	319.60	4,195.99	-138.12	9.40	-138.12	3.12	8105	50	1331	3999
	4,217.00	2.64	328.66	4,207.98	-137.73	9.13	-137.73	6.91	8104	50	1331	3999
	4,238.00	5.41	337.01	4,228.93	-136.41	8.49	-136.41	13.45	8103	52	1330	4000
	4,264.00	7.96	342.10	4,254.75	-133.56	7.46	-133.56	10.06	8100	54	1329	4001
	4,312.00	12.22	345.22	4,302.00	-125.49	5.14	-125.49	8.94	8092	62	1326	4003

4,359.00	16.70	349.62	4,347.50	-114.03	2.65	-114.03	9.81	8081	74	1324	4006
4,407.00	20.84	352.61	4,392.94	-98.77	0.31	-98.77	8.85	8065	89	1321	4008
4,454.00	26.51	357.40	4,435.97	-79.98	-1.24	-79.98	12.73	8047	108	1320	4010
4,501.00	31.78	359.73	4,477.00	-57.11	-1.78	-57.11	11.47	8024	131	1319	4011
4,548.00	35.96	2.19	4,516.02	-30.93	-1.31	-30.93	9.36	7997	157	1319	4010
4,596.00	39.03	3.55	4,554.10	-1.76	0.17	-1.76	6.62	7968	186	1320	4009
4,643.00	41.10	3.15	4,590.07	28.44	1.93	28.44	4.44	7938	216	1321	4007
4,690.00	45.67	1.97	4,624.22	60.68	3.36	60.68	9.87	7906	249	1323	4006
4,737.00	50.11	1.66	4,655.72	95.52	4.46	95.52	9.46	7871	284	1323	4005
4,784.00	52.97	1.00	4,684.95	132.31	5.31	132.31	6.18	7834	320	1324	4005
4,831.00	57.45	359.55	4,711.77	170.90	5.48	170.90	9.86	7796	359	1323	4005
4,878.00	61.54	359.51	4,735.62	211.38	5.15	211.38	8.70	7755	399	1323	4005
4,925.00	62.73	358.89	4,757.59	252.93	4.57	252.93	2.79	7714	441	1322	4006
4,973.00	63.56	358.93	4,779.27	295.75	3.75	295.75	1.73	7671	484	1320	4007
5,023.00	64.18	358.85	4,801.29	340.63	2.88	340.63	1.25	7626	529	1319	4008
5,031.00	64.18	358.54	4,804.77	347.83	2.72	347.83	3.49	7619	536	1319	4008
5,068.00	65.01	358.80	4,820.65	381.24	1.94	381.24	2.33	7585	569	1317	4009
5,078.00	66.02	358.89	4,824.79	390.34	1.76	390.34	10.13	7576	578	1317	4010
5,101.00	68.66	359.33	4,833.65	411.56	1.43	411.56	11.61	7555	600	1317	4010
5,115.00	70.59	359.37	4,838.53	424.68	1.28	424.68	13.79	7542	613	1316	4010
5,164.00	75.34	0.16	4,852.88	471.52	1.10	471.52	9.82	7495	659	1316	4011
5,171.00	76.13	0.52	4,854.60	478.30	1.14	478.30	12.34	7488	666	1316	4011
5,215.00	79.96	0.96	4,863.71	521.33	1.69	521.33	8.76	7445	709	1316	4010
5,268.00	84.48	0.82	4,870.89	573.83	2.51	573.83	8.53	7393	762	1316	4010
5,300.00	84.66	0.65	4,873.91	605.68	2.92	605.68	0.77	7361	794	1316	4010
5,331.00	86.37	0.30	4,876.34	636.58	3.17	636.58	5.63	7330	825	1316	4010
5,362.00	88.79	0.43	4,877.65	667.55	3.37	667.55	7.82	7299	856	1316	4010
5,394.00	89.23	1.22	4,878.20	699.54	3.83	699.54	2.83	7267	888	1316	4009
5,488.00	90.02	0.69	4,878.82	793.53	5.40	793.53	1.01	7173	982	1316	4008
5,582.00	90.29	0.52	4,878.56	887.52	6.39	887.52	0.34	7079	1076	1316	4008
5,677.00	90.68	0.47	4,877.76	982.51	7.21	982.51	0.41	6984	1171	1316	4007
5,770.00	91.16	0.52	4,876.26	1,075.50	8.01	1,075.50	0.52	6891	1263	1315	4007
5,864.00	90.51	1.44	4,874.89	1,169.47	9.62	1,169.47	1.20	6797	1357	1316	4006
5,958.00	91.52	0.69	4,873.23	1,263.44	11.37	1,263.44	1.34	6703	1451	1317	4005
6,051.00	90.15	0.52	4,871.87	1,356.42	12.35	1,356.42	1.48	6610	1544	1317	4004
6,145.00	90.07	0.69	4,871.69	1,450.42	13.34	1,450.42	0.20	6516	1638	1317	4004
6,239.00	90.11	0.38	4,871.55	1,544.41	14.22	1,544.41	0.33	6422	1732	1316	4004
6,333.00	90.42	359.77	4,871.11	1,638.41	14.34	1,638.41	0.73	6328	1826	1315	4004
6,427.00	90.90	359.33	4,870.03	1,732.40	13.61	1,732.40	0.69	6234	1920	1314	4005
6,520.00	91.21	359.24	4,868.32	1,825.38	12.44	1,825.38	0.35	6141	2013	1311	4007
6,614.00	89.85	359.64	4,867.45	1,919.37	11.53	1,919.37	1.51	6047	2107	1309	4008
6,708.00	90.15	359.68	4,867.45	2,013.37	10.97	2,013.37	0.32	5953	2201	1308	4010
6,803.00	90.90	359.24	4,866.58	2,108.36	10.07	2,108.36	0.92	5858	2296	1306	4011
6,899.00	89.63	0.69	4,866.13	2,204.35	10.01	2,204.35	2.01	5762	2392	1304	4012
6,993.00	90.29	0.47	4,866.20	2,298.35	10.97	2,298.35	0.74	5668	2486	1304	4011
7,088.00	90.33	0.21	4,865.68	2,393.34	11.53	2,393.34	0.28	5573	2581	1304	4011
7,182.00	90.02	2.19	4,865.40	2,487.32	13.50	2,487.32	2.13	5479	2675	1305	4010
7,276.00	90.46	2.54	4,865.00	2,581.24	17.38	2,581.24	0.60	5385	2769	1308	4006
7,370.00	91.08	2.27	4,863.74	2,675.14	21.32	2,675.14	0.72	5291	2863	1310	4003
7,464.00	91.47	2.41	4,861.65	2,769.04	25.16	2,769.04	0.44	5197	2957	1313	4000
7,558.00	91.47	1.92	4,859.24	2,862.94	28.71	2,862.94	0.52	5103	3051	1316	3997
7,652.00	91.91	1.66	4,856.46	2,956.86	31.64	2,956.86	0.54	5010	3145	1317	3994
7,746.00	90.02	0.78	4,854.88	3,050.82	33.64	3,050.82	2.22	4916	3239	1318	3993
7,840.00	90.02	0.30	4,854.85	3,144.81	34.53	3,144.81	0.51	4822	3333	1318	3992
7,934.00	92.31	1.48	4,852.94	3,238.77	35.99	3,238.77	2.74	4728	3427	1319	3991
8,029.00	89.54	0.34	4,851.40	3,333.74	37.50	3,333.74	3.15	4633	3522	1319	3990
8,124.00	92.31	0.52	4,849.87	3,428.71	38.21	3,428.71	2.92	4538	3617	1319	3990
8,217.00	91.25	359.94	4,846.98	3,521.67	38.58	3,521.67	1.30	4445	3710	1318	3990
8,312.00	90.07	0.65	4,845.89	3,616.66	39.07	3,616.66	1.45	4350	3805	1317	3990
8,402.00	89.76	1.31	4,846.02	3,706.64	40.61	3,706.64	0.81	4260	3895	1318	3989
8,493.00	90.29	0.87	4,845.98	3,797.63	42.34	3,797.63	0.76	4169	3986	1318	3988
8,582.00	89.76	1.09	4,845.94	3,886.61	43.86	3,886.61	0.64	4080	4075	1319	3987
8,672.00	89.41	0.87	4,846.59	3,976.60	45.40	3,976.60	0.46	3990	4165	1319	3986
8,762.00	90.29	0.60	4,846.83	4,066.59	46.56	4,066.59	1.02	3900	4255	1320	3986
8,853.00	89.58	0.82	4,846.93	4,157.58	47.69	4,157.58	0.82	3809	4346	1320	3985
8,941.00	91.12	0.82	4,846.40	4,245.57	48.95	4,245.57	1.75	3721	4434	1320	3984
9,031.00	91.52	2.01	4,844.32	4,335.51	51.17	4,335.51	1.39	3631	4524	1321	3982
9,120.00	89.32	1.13	4,843.67	4,424.47	53.61	4,424.47	2.66	3542	4613	1323	3981
9,210.00	90.37	0.96	4,843.91	4,514.46	55.25	4,514.46	1.18	3452	4703	1323	3979

9,299.00	91.12	0.43	4,842.76	4,603.44	56.33	4,603.44	1.03	3363	4792	1323	3979
9,390.00	90.77	359.99	4,841.25	4,694.43	56.66	4,694.43	0.62	3272	4883	1322	3979
9,480.00	90.37	359.20	4,840.36	4,784.42	56.02	4,784.42	0.98	3182	4973	1321	3980
9,570.00	92.88	358.80	4,837.81	4,874.36	54.45	4,874.36	2.82	3092	5062	1318	3982
9,660.00	89.23	359.86	4,836.15	4,964.32	53.40	4,964.32	4.22	3002	5152	1316	3984
9,748.00	89.27	359.51	4,837.30	5,052.32	52.92	5,052.32	0.40	2914	5240	1315	3985
9,837.00	90.33	359.46	4,837.61	5,141.31	52.12	5,141.31	1.19	2825	5329	1313	3986
9,927.00	90.33	0.30	4,837.09	5,231.31	51.93	5,231.31	0.93	2735	5419	1312	3987
10,017.00	90.29	359.86	4,836.61	5,321.31	52.06	5,321.31	0.49	2645	5509	1311	3987
10,107.00	92.22	359.90	4,834.64	5,411.28	51.87	5,411.28	2.14	2555	5599	1309	3988
10,201.00	88.40	359.68	4,834.13	5,505.26	51.52	5,505.26	4.07	2461	5693	1308	3989
10,295.00	89.41	0.21	4,835.92	5,599.24	51.43	5,599.24	1.21	2367	5787	1307	3989
10,389.00	91.25	0.21	4,835.38	5,693.24	51.78	5,693.24	1.96	2273	5881	1306	3990
10,485.00	90.73	0.30	4,833.72	5,789.22	52.20	5,789.22	0.55	2177	5977	1305	3990
10,580.00	90.11	0.30	4,833.03	5,884.22	52.70	5,884.22	0.65	2082	6072	1305	3990
10,674.00	90.59	0.21	4,832.45	5,978.21	53.12	5,978.21	0.52	1988	6166	1304	3990
10,768.00	91.52	0.21	4,830.72	6,072.20	53.46	6,072.20	0.99	1894	6260	1303	3990
10,863.00	89.19	0.56	4,830.13	6,167.18	54.10	6,167.18	2.48	1799	6355	1303	3990
10,956.00	91.60	1.40	4,829.49	6,260.16	55.69	6,260.16	2.74	1706	6448	1303	3989
11,051.00	92.44	1.66	4,826.14	6,355.07	58.23	6,355.07	0.93	1611	6543	1305	3987
11,145.00	89.58	1.13	4,824.49	6,449.01	60.52	6,449.01	3.09	1517	6637	1306	3985
11,333.00	92.79	0.34	4,820.60	6,636.93	62.93	6,636.93	1.76	1329	6825	1306	3984
11,425.00	91.21	0.52	4,817.39	6,728.87	63.62	6,728.87	1.73	1237	6917	1306	3984
11,519.00	91.16	1.00	4,815.45	6,822.84	64.86	6,822.84	0.51	1143	7011	1306	3983
11,613.00	90.51	0.78	4,814.08	6,916.82	66.32	6,916.82	0.73	1049	7105	1307	3982
11,707.00	91.43	0.30	4,812.48	7,010.80	67.21	7,010.80	1.10	955	7199	1306	3982
11,801.00	93.05	359.33	4,808.81	7,104.73	66.91	7,104.73	2.01	861	7293	1305	3982
11,895.00	90.99	357.92	4,805.50	7,198.63	64.65	7,198.63	2.66	768	7387	1302	3985
11,989.00	89.63	358.54	4,804.99	7,292.58	61.75	7,292.58	1.59	674	7481	1298	3989
12,084.00	90.86	359.02	4,804.58	7,387.56	59.73	7,387.56	1.39	579	7576	1294	3991
12,177.00	89.19	358.36	4,804.54	7,480.53	57.60	7,480.53	1.93	486	7669	1291	3994
12,265.00	90.73	358.14	4,804.60	7,568.49	54.91	7,568.49	1.77	398	7757	1288	3997
12,322.00	90.73	358.14	4,803.88	7,625.45	53.06	7,625.45	0.00	341	7814	1285	3999

MACH RESOURCES

BARBER CO. KANSAS (NAD27)
SEC 14-T35S-R12W
ACHENBACH 14/11-35-12 1H

ORIGINAL WELLPATH

Design: ORIGINAL WELLPATH

Standard Survey Report

15 January, 2024

Company:	MACH RESOURCES	**Local Co-ordinate Reference:**	Well ACHENBACH 14/11-35-12 1H
Project:	BARBER CO. KANSAS (NAD27)	**TVD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Site:	SEC 14-T35S-R12W	**MD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Well:	ACHENBACH 14/11-35-12 1H	**North Reference:**	Grid
Wellbore:	ORIGINAL WELLPATH	**Survey Calculation Method:**	Minimum Curvature
Design:	ORIGINAL WELLPATH	**Database:**	1 - EDM Production

Project BARBER CO. KANSAS (NAD27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Kansas South 1502		

Site SEC 14-T35S-R12W

Site Position:		**Northing:**	121,149.00 usft	**Latitude:**	36.99933962
From:	Map	**Easting:**	1,971,006.00 usft	**Longitude:**	-98.59927394
Position Uncertainty:	0.50 usft	**Slot Radius:**	13-3/16 "		

Well ACHENBACH 14/11-35-12 1H

Well Position	**+N/-S**	0.00 usft	**Northing:**	121,149.00 usft	**Latitude:**	36.99933962
	+E/-W	0.00 usft	**Easting:**	1,971,006.00 usft	**Longitude:**	-98.59927394
Position Uncertainty		0.50 usft	**Wellhead Elevation:**	usft	**Ground Level:**	1,368.00 usft
Grid Convergence:		-0.06 °				

Wellbore ORIGINAL WELLPATH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/13/2023	3.83	64.52	50,400.79374009

Design ORIGINAL WELLPATH

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	0.00

Survey Program **Date** 1/15/2024

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
136.00	12,322.00	MWD SURVEYS (ORIGINAL WELLPATH)	MWD+IGRF	OWSG MWD + IGRF or WMM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136.00	0.40	272.45	136.00	0.02	-0.47	0.02	0.29	0.29	0.00
227.00	0.75	276.32	226.99	0.10	-1.38	0.10	0.39	0.38	4.25
283.00	0.70	288.05	282.99	0.25	-2.07	0.25	0.28	-0.09	20.95
350.00	0.70	276.62	349.98	0.42	-2.87	0.42	0.21	0.00	-17.06
405.00	1.63	203.28	404.98	-0.26	-3.51	-0.26	2.87	1.69	-133.35
495.00	4.40	191.85	494.84	-4.82	-4.73	-4.82	3.13	3.08	-12.70
586.00	7.47	179.64	585.35	-14.15	-5.41	-14.15	3.63	3.37	-13.42

Company:	MACH RESOURCES	**Local Co-ordinate Reference:**	Well ACHENBACH 14/11-35-12 1H
Project:	BARBER CO. KANSAS (NAD27)	**TVD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Site:	SEC 14-T35S-R12W	**MD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Well:	ACHENBACH 14/11-35-12 1H	**North Reference:**	Grid
Wellbore:	ORIGINAL WELLPATH	**Survey Calculation Method:**	Minimum Curvature
Design:	ORIGINAL WELLPATH	**Database:**	1 - EDM Production

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
675.00	8.70	175.33	673.46	-26.64	-4.82	-26.64	1.54	1.38	-4.84
764.00	8.18	175.64	761.50	-39.67	-3.79	-39.67	0.59	-0.58	0.35
854.00	8.18	173.40	850.58	-52.41	-2.57	-52.41	0.35	0.00	-2.49
948.00	8.31	180.91	943.61	-65.85	-1.91	-65.85	1.15	0.14	7.99
1,037.00	7.82	178.80	1,031.73	-78.33	-1.88	-78.33	0.64	-0.55	-2.37
1,128.00	7.08	170.85	1,121.97	-90.06	-0.86	-90.06	1.39	-0.81	-8.74
1,218.00	6.95	185.48	1,211.30	-100.95	-0.50	-100.95	1.99	-0.14	16.26
1,307.00	6.86	185.35	1,299.65	-111.61	-1.51	-111.61	0.10	-0.10	-0.15
1,397.00	6.29	183.50	1,389.06	-121.88	-2.31	-121.88	0.68	-0.63	-2.06
1,486.00	4.70	178.45	1,477.65	-130.39	-2.51	-130.39	1.87	-1.79	-5.67
1,574.00	3.87	176.52	1,565.40	-136.96	-2.23	-136.96	0.96	-0.94	-2.19
1,664.00	3.12	172.39	1,655.24	-142.42	-1.73	-142.42	0.88	-0.83	-4.59
1,754.00	1.93	197.13	1,745.15	-146.29	-1.85	-146.29	1.76	-1.32	27.49
1,845.00	0.40	155.03	1,836.13	-148.05	-2.17	-148.05	1.82	-1.68	-46.26
1,940.00	0.48	92.85	1,931.13	-148.37	-1.63	-148.37	0.48	0.08	-65.45
2,036.00	0.70	80.45	2,027.12	-148.29	-0.65	-148.29	0.26	0.23	-12.92
2,131.00	0.66	73.51	2,122.12	-148.04	0.45	-148.04	0.10	-0.04	-7.31
2,226.00	0.66	77.55	2,217.11	-147.77	1.51	-147.77	0.05	0.00	4.25
2,322.00	0.53	71.14	2,313.10	-147.50	2.47	-147.50	0.15	-0.14	-6.68
2,418.00	0.53	42.40	2,409.10	-147.03	3.19	-147.03	0.27	0.00	-29.94
2,513.00	0.62	30.79	2,504.09	-146.27	3.75	-146.27	0.15	0.09	-12.22
2,609.00	0.57	36.64	2,600.09	-145.44	4.30	-145.44	0.08	-0.05	6.09
2,704.00	0.66	48.90	2,695.08	-144.70	4.99	-144.70	0.17	0.09	12.91
2,799.00	0.79	66.13	2,790.08	-144.07	6.00	-144.07	0.27	0.14	18.14
2,894.00	0.84	47.41	2,885.07	-143.34	7.12	-143.34	0.28	0.05	-19.71
2,989.00	0.88	25.78	2,980.06	-142.21	7.95	-142.21	0.34	0.04	-22.77
3,084.00	0.84	23.81	3,075.05	-140.91	8.54	-140.91	0.05	-0.04	-2.07
3,178.00	0.84	25.21	3,169.04	-139.66	9.12	-139.66	0.02	0.00	1.49
3,273.00	0.53	36.33	3,264.03	-138.68	9.67	-138.68	0.35	-0.33	11.71
3,368.00	0.70	54.61	3,359.02	-137.99	10.41	-137.99	0.27	0.18	19.24
3,461.00	0.48	51.32	3,452.02	-137.41	11.17	-137.41	0.24	-0.24	-3.54
3,555.00	0.40	346.28	3,546.02	-136.85	11.40	-136.85	0.51	-0.09	-69.19
3,649.00	0.22	91.48	3,640.02	-136.53	11.50	-136.53	0.54	-0.19	111.91
3,744.00	0.53	170.98	3,735.01	-136.97	11.76	-136.97	0.56	0.33	83.68
3,840.00	0.44	189.00	3,831.01	-137.78	11.77	-137.78	0.18	-0.09	18.77
3,935.00	0.53	221.25	3,926.01	-138.47	11.42	-138.47	0.30	0.09	33.95
4,030.00	0.31	244.41	4,021.00	-138.91	10.90	-138.91	0.29	-0.23	24.38
4,121.00	0.40	294.55	4,112.00	-138.88	10.39	-138.88	0.34	0.10	55.10
4,158.00	0.53	288.05	4,149.00	-138.78	10.11	-138.78	0.38	0.35	-17.57
4,205.00	1.89	319.60	4,195.99	-138.12	9.40	-138.12	3.12	2.89	67.13
4,217.00	2.64	328.66	4,207.98	-137.73	9.13	-137.73	6.91	6.25	75.50
4,238.00	5.41	337.01	4,228.93	-136.41	8.49	-136.41	13.45	13.19	39.76

Company:	MACH RESOURCES	**Local Co-ordinate Reference:**	Well ACHENBACH 14/11-35-12 1H
Project:	BARBER CO. KANSAS (NAD27)	**TVD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Site:	SEC 14-T35S-R12W	**MD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Well:	ACHENBACH 14/11-35-12 1H	**North Reference:**	Grid
Wellbore:	ORIGINAL WELLPATH	**Survey Calculation Method:**	Minimum Curvature
Design:	ORIGINAL WELLPATH	**Database:**	1 - EDM Production

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,264.00	7.96	342.10	4,254.75	-133.56	7.46	-133.56	10.06	9.81	19.58
4,312.00	12.22	345.22	4,302.00	-125.49	5.14	-125.49	8.94	8.88	6.50
4,359.00	16.70	349.62	4,347.50	-114.03	2.65	-114.03	9.81	9.53	9.36
4,407.00	20.84	352.61	4,392.94	-98.77	0.31	-98.77	8.85	8.63	6.23
4,454.00	26.51	357.40	4,435.97	-79.98	-1.24	-79.98	12.73	12.06	10.19
4,501.00	31.78	359.73	4,477.00	-57.11	-1.78	-57.11	11.47	11.21	4.96
4,548.00	35.96	2.19	4,516.02	-30.93	-1.31	-30.93	9.36	8.89	5.23
4,596.00	39.03	3.55	4,554.10	-1.76	0.17	-1.76	6.62	6.40	2.83
4,643.00	41.10	3.15	4,590.07	28.44	1.93	28.44	4.44	4.40	-0.85
4,690.00	45.67	1.97	4,624.22	60.68	3.36	60.68	9.87	9.72	-2.51
4,737.00	50.11	1.66	4,655.72	95.52	4.46	95.52	9.46	9.45	-0.66
4,784.00	52.97	1.00	4,684.95	132.31	5.31	132.31	6.18	6.09	-1.40
4,831.00	57.45	359.55	4,711.77	170.90	5.48	170.90	9.86	9.53	-3.09
4,878.00	61.54	359.51	4,735.62	211.38	5.15	211.38	8.70	8.70	-0.09
4,925.00	62.73	358.89	4,757.59	252.93	4.57	252.93	2.79	2.53	-1.32
4,973.00	63.56	358.93	4,779.27	295.75	3.75	295.75	1.73	1.73	0.08
5,023.00	64.18	358.85	4,801.29	340.63	2.88	340.63	1.25	1.24	-0.16
5,031.00	64.18	358.54	4,804.77	347.83	2.72	347.83	3.49	0.00	-3.88
5,068.00	65.01	358.80	4,820.65	381.24	1.94	381.24	2.33	2.24	0.70
5,078.00	66.02	358.89	4,824.79	390.34	1.76	390.34	10.13	10.10	0.90
5,101.00	68.66	359.33	4,833.65	411.56	1.43	411.56	11.61	11.48	1.91
5,115.00	70.59	359.37	4,838.53	424.68	1.28	424.68	13.79	13.79	0.29
5,164.00	75.34	0.16	4,852.88	471.52	1.10	471.52	9.82	9.69	1.61
5,171.00	76.13	0.52	4,854.60	478.30	1.14	478.30	12.34	11.29	5.14
5,215.00	79.96	0.96	4,863.71	521.33	1.69	521.33	8.76	8.70	1.00
5,268.00	84.48	0.82	4,870.89	573.83	2.51	573.83	8.53	8.53	-0.26
5,300.00	84.66	0.65	4,873.91	605.68	2.92	605.68	0.77	0.56	-0.53
5,331.00	86.37	0.30	4,876.34	636.58	3.17	636.58	5.63	5.52	-1.13
5,362.00	88.79	0.43	4,877.65	667.55	3.37	667.55	7.82	7.81	0.42
5,394.00	89.23	1.22	4,878.20	699.54	3.83	699.54	2.83	1.38	2.47
5,488.00	90.02	0.69	4,878.82	793.53	5.40	793.53	1.01	0.84	-0.56
5,582.00	90.29	0.52	4,878.56	887.52	6.39	887.52	0.34	0.29	-0.18
5,677.00	90.68	0.47	4,877.76	982.51	7.21	982.51	0.41	0.41	-0.05
5,770.00	91.16	0.52	4,876.26	1,075.50	8.01	1,075.50	0.52	0.52	0.05
5,864.00	90.51	1.44	4,874.89	1,169.47	9.62	1,169.47	1.20	-0.69	0.98
5,958.00	91.52	0.69	4,873.23	1,263.44	11.37	1,263.44	1.34	1.07	-0.80
6,051.00	90.15	0.52	4,871.87	1,356.42	12.35	1,356.42	1.48	-1.47	-0.18
6,145.00	90.07	0.69	4,871.69	1,450.42	13.34	1,450.42	0.20	-0.09	0.18
6,239.00	90.11	0.38	4,871.55	1,544.41	14.22	1,544.41	0.33	0.04	-0.33
6,333.00	90.42	359.77	4,871.11	1,638.41	14.34	1,638.41	0.73	0.33	-0.65
6,427.00	90.90	359.33	4,870.03	1,732.40	13.61	1,732.40	0.69	0.51	-0.47
6,520.00	91.21	359.24	4,868.32	1,825.38	12.44	1,825.38	0.35	0.33	-0.10

Company:	MACH RESOURCES	**Local Co-ordinate Reference:**	Well ACHENBACH 14/11-35-12 1H
Project:	BARBER CO. KANSAS (NAD27)	**TVD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Site:	SEC 14-T35S-R12W	**MD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Well:	ACHENBACH 14/11-35-12 1H	**North Reference:**	Grid
Wellbore:	ORIGINAL WELLPATH	**Survey Calculation Method:**	Minimum Curvature
Design:	ORIGINAL WELLPATH	**Database:**	1 - EDM Production

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,614.00	89.85	359.64	4,867.45	1,919.37	11.53	1,919.37	1.51	-1.45	0.43
6,708.00	90.15	359.68	4,867.45	2,013.37	10.97	2,013.37	0.32	0.32	0.04
6,803.00	90.90	359.24	4,866.58	2,108.36	10.07	2,108.36	0.92	0.79	-0.46
6,899.00	89.63	0.69	4,866.13	2,204.35	10.01	2,204.35	2.01	-1.32	1.51
6,993.00	90.29	0.47	4,866.20	2,298.35	10.97	2,298.35	0.74	0.70	-0.23
7,088.00	90.33	0.21	4,865.68	2,393.34	11.53	2,393.34	0.28	0.04	-0.27
7,182.00	90.02	2.19	4,865.40	2,487.32	13.50	2,487.32	2.13	-0.33	2.11
7,276.00	90.46	2.54	4,865.00	2,581.24	17.38	2,581.24	0.60	0.47	0.37
7,370.00	91.08	2.27	4,863.74	2,675.14	21.32	2,675.14	0.72	0.66	-0.29
7,464.00	91.47	2.41	4,861.65	2,769.04	25.16	2,769.04	0.44	0.41	0.15
7,558.00	91.47	1.92	4,859.24	2,862.94	28.71	2,862.94	0.52	0.00	-0.52
7,652.00	91.91	1.66	4,856.46	2,956.86	31.64	2,956.86	0.54	0.47	-0.28
7,746.00	90.02	0.78	4,854.88	3,050.82	33.64	3,050.82	2.22	-2.01	-0.94
7,840.00	90.02	0.30	4,854.85	3,144.81	34.53	3,144.81	0.51	0.00	-0.51
7,934.00	92.31	1.48	4,852.94	3,238.77	35.99	3,238.77	2.74	2.44	1.26
8,029.00	89.54	0.34	4,851.40	3,333.74	37.50	3,333.74	3.15	-2.92	-1.20
8,124.00	92.31	0.52	4,849.87	3,428.71	38.21	3,428.71	2.92	2.92	0.19
8,217.00	91.25	359.94	4,846.98	3,521.67	38.58	3,521.67	1.30	-1.14	-0.62
8,312.00	90.07	0.65	4,845.89	3,616.66	39.07	3,616.66	1.45	-1.24	0.75
8,402.00	89.76	1.31	4,846.02	3,706.64	40.61	3,706.64	0.81	-0.34	0.73
8,493.00	90.29	0.87	4,845.98	3,797.63	42.34	3,797.63	0.76	0.58	-0.48
8,582.00	89.76	1.09	4,845.94	3,886.61	43.86	3,886.61	0.64	-0.60	0.25
8,672.00	89.41	0.87	4,846.59	3,976.60	45.40	3,976.60	0.46	-0.39	-0.24
8,762.00	90.29	0.60	4,846.83	4,066.59	46.56	4,066.59	1.02	0.98	-0.30
8,853.00	89.58	0.82	4,846.93	4,157.58	47.69	4,157.58	0.82	-0.78	0.24
8,941.00	91.12	0.82	4,846.40	4,245.57	48.95	4,245.57	1.75	1.75	0.00
9,031.00	91.52	2.01	4,844.32	4,335.51	51.17	4,335.51	1.39	0.44	1.32
9,120.00	89.32	1.13	4,843.67	4,424.47	53.61	4,424.47	2.66	-2.47	-0.99
9,210.00	90.37	0.96	4,843.91	4,514.46	55.25	4,514.46	1.18	1.17	-0.19
9,299.00	91.12	0.43	4,842.76	4,603.44	56.33	4,603.44	1.03	0.84	-0.60
9,390.00	90.77	359.99	4,841.25	4,694.43	56.66	4,694.43	0.62	-0.38	-0.48
9,480.00	90.37	359.20	4,840.36	4,784.42	56.02	4,784.42	0.98	-0.44	-0.88
9,570.00	92.88	358.80	4,837.81	4,874.36	54.45	4,874.36	2.82	2.79	-0.44
9,660.00	89.23	359.86	4,836.15	4,964.32	53.40	4,964.32	4.22	-4.06	1.18
9,748.00	89.27	359.51	4,837.30	5,052.32	52.92	5,052.32	0.40	0.05	-0.40
9,837.00	90.33	359.46	4,837.61	5,141.31	52.12	5,141.31	1.19	1.19	-0.06
9,927.00	90.33	0.30	4,837.09	5,231.31	51.93	5,231.31	0.93	0.00	0.93
10,017.00	90.29	359.86	4,836.61	5,321.31	52.06	5,321.31	0.49	-0.04	-0.49
10,107.00	92.22	359.90	4,834.64	5,411.28	51.87	5,411.28	2.14	2.14	0.04
10,201.00	88.40	359.68	4,834.13	5,505.26	51.52	5,505.26	4.07	-4.06	-0.23
10,295.00	89.41	0.21	4,835.92	5,599.24	51.43	5,599.24	1.21	1.07	0.56
10,389.00	91.25	0.21	4,835.38	5,693.24	51.78	5,693.24	1.96	1.96	0.00

Company:	MACH RESOURCES	**Local Co-ordinate Reference:**	Well ACHENBACH 14/11-35-12 1H
Project:	BARBER CO. KANSAS (NAD27)	**TVD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Site:	SEC 14-T35S-R12W	**MD Reference:**	1368' GL + 16' KB @ 1384.00usft (Original Well Elev)
Well:	ACHENBACH 14/11-35-12 1H	**North Reference:**	Grid
Wellbore:	ORIGINAL WELLPATH	**Survey Calculation Method:**	Minimum Curvature
Design:	ORIGINAL WELLPATH	**Database:**	1 - EDM Production

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,485.00	90.73	0.30	4,833.72	5,789.22	52.20	5,789.22	0.55	-0.54	0.09
10,580.00	90.11	0.30	4,833.03	5,884.22	52.70	5,884.22	0.65	-0.65	0.00
10,674.00	90.59	0.21	4,832.45	5,978.21	53.12	5,978.21	0.52	0.51	-0.10
10,768.00	91.52	0.21	4,830.72	6,072.20	53.46	6,072.20	0.99	0.99	0.00
10,863.00	89.19	0.56	4,830.13	6,167.18	54.10	6,167.18	2.48	-2.45	0.37
10,956.00	91.60	1.40	4,829.49	6,260.16	55.69	6,260.16	2.74	2.59	0.90
11,051.00	92.44	1.66	4,826.15	6,355.07	58.23	6,355.07	0.93	0.88	0.27
11,145.00	89.58	1.13	4,824.49	6,449.01	60.52	6,449.01	3.09	-3.04	-0.56
11,333.00	92.79	0.34	4,820.60	6,636.93	62.93	6,636.93	1.76	1.71	-0.42
11,425.00	91.21	0.52	4,817.39	6,728.87	63.62	6,728.87	1.73	-1.72	0.20
11,519.00	91.16	1.00	4,815.45	6,822.84	64.86	6,822.84	0.51	-0.05	0.51
11,613.00	90.51	0.78	4,814.08	6,916.82	66.32	6,916.82	0.73	-0.69	-0.23
11,707.00	91.43	0.30	4,812.48	7,010.80	67.21	7,010.80	1.10	0.98	-0.51
11,801.00	93.05	359.33	4,808.81	7,104.73	66.91	7,104.73	2.01	1.72	-1.03
11,895.00	90.99	357.92	4,805.50	7,198.63	64.65	7,198.63	2.66	-2.19	-1.50
11,989.00	89.63	358.54	4,804.99	7,292.58	61.75	7,292.58	1.59	-1.45	0.66
12,084.00	90.86	359.02	4,804.58	7,387.56	59.73	7,387.56	1.39	1.29	0.51
12,177.00	89.19	358.36	4,804.54	7,480.53	57.60	7,480.53	1.93	-1.80	-0.71
12,265.00	90.73	358.14	4,804.60	7,568.49	54.91	7,568.49	1.77	1.75	-0.25
LS: 12265' MD 4804.6' TVD									
12,322.00	90.73	358.14	4,803.88	7,625.45	53.06	7,625.45	0.00	0.00	0.00
PTB: 12322' MD 4803.88' TVD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
12,265.00	4,804.60	7,568.49	54.91	LS: 12265' MD 4804.6' TVD
12,322.00	4,803.88	7,625.45	53.06	PTB: 12322' MD 4803.88' TVD

Checked By: _____ Approved By: _____ Date: _____

FINAL AS-DRILLED PLAT

ACHENBACH 14/11-35-12 1H
BCE-MACH III LLC
SECTION 14, TOWNSHIP 35S, RANGE 12W, 6TH P.M.
BARBER COUNTY, KANSAS

SCALE: 1" = 2000'
0' 1000' 2000'

GRID
NAD-27
KS-SOUTH
US FEET

NOTE:

EXISTING WELLS ARE PLATTED PER RECORDS
PROVIDED BY THE CLIENT, NOT SURVEYED IN THE FIELD.

LEGEND

- SECTION LINE
- COUNTY LINE
- TOWNSHIP LINE
- STATE LINE
- QUARTER SECTION LINE
- 16TH LINE
- WELL BORE
- PLUGGED WELL
- ACTIVE WELL

BOTTOM PERF
341' FNL & 1286' FWL-SEC. 11
MD: ±12322'
NAD-27
X= 1971059
Y= 128774
LAT.: 37°01'13.0" N
LONG.: 98°35'56.8" W
LAT.: 37.020282° N
LONG.: 98.599121° W

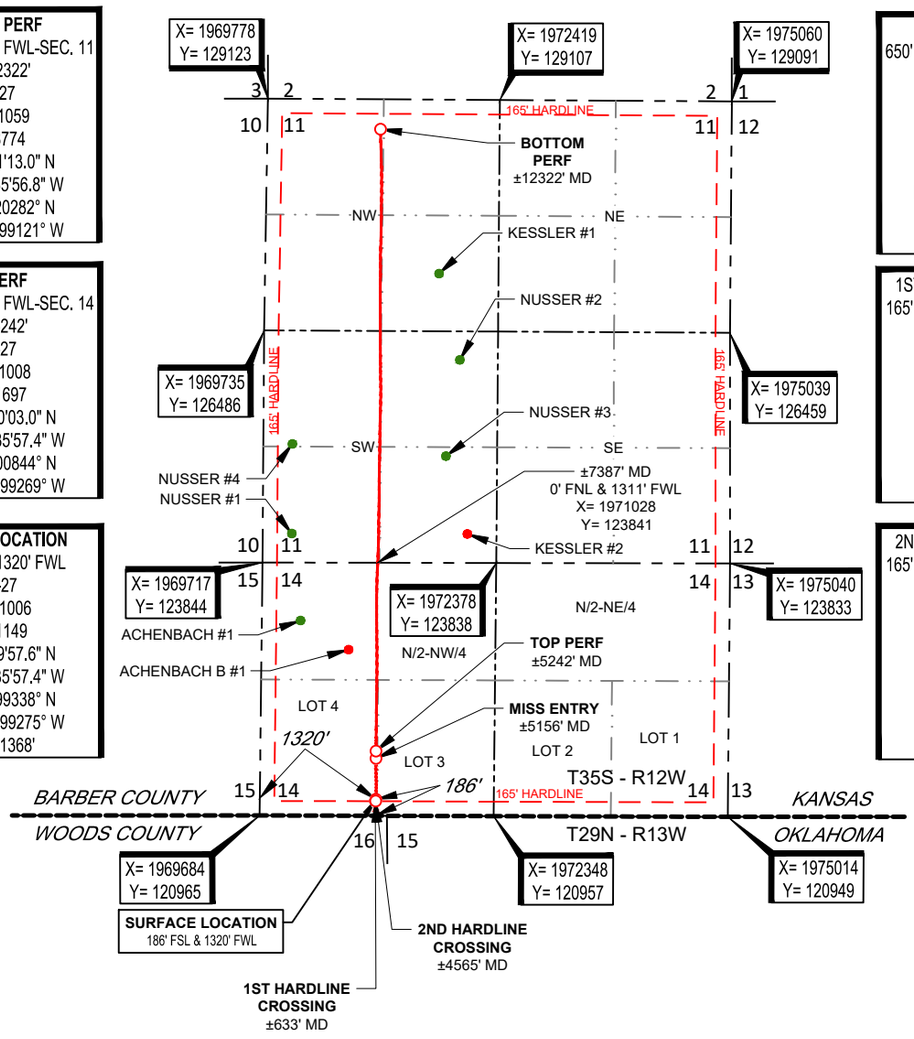
TOP PERF
734' FSL & 1316' FWL-SEC. 14
MD: ±5242'
NAD-27
X= 1971008
Y= 121697
LAT.: 37°00'03.0" N
LONG.: 98°35'57.4" W
LAT.: 37.000844° N
LONG.: 98.599269° W

SURFACE LOCATION
186' FSL & 1320' FWL
NAD-27
X= 1971006
Y= 121149
LAT.: 36°59'57.6" N
LONG.: 98°35'57.4" W
LAT.: 36.999338° N
LONG.: 98.599275° W
ELEV.: 1368'

MISS ENTRY
650' FSL & 1316' FWL-SEC. 14
MD: ±5156'
NAD-27
X= 1971007
Y= 121613
LAT.: 37°00'02.2" N
LONG.: 98°35'57.4" W
LAT.: 37.000613° N
LONG.: 98.599273° W

1ST HARDLINE CROSSING
165' FSL & 1315' FWL-SEC. 14
MD: ±633'
NAD-27
X= 1971001
Y= 121128
LAT.: 36°59'57.4" N
LONG.: 98°35'57.5" W
LAT.: 36.999281° N
LONG.: 98.599292° W

2ND HARDLINE CROSSING
165' FSL & 1320' FWL-SEC. 14
MD: ±4565'
NAD-27
X= 1971005
Y= 121128
LAT.: 36°59'57.4" N
LONG.: 98°35'57.4" W
LAT.: 36.999281° N
LONG.: 98.599277° W



SURVEYOR'S CERTIFICATE:

I, STAN W. LLOYD, A KANSAS LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC, CO., DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.

STAN W. LLOYD LICENSED LS-827 02-07-2024 KANSAS LAND SURVEYOR

Stan W. Lloyd

Stan W. Lloyd, P.L.S. No. 827
Authorized Agent of Topographic, Co.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1900 NORTHWEST EXPY, Ste. 1500 • OKLAHOMA CITY, OKLAHOMA 73118
TELEPHONE: (405) 843-4847 OR (800) 654-3219
FAX: (405) 843-0975
CERTIFICATE OF AUTHORIZATION NO. LS-318
WWW.TOPOGRAPHIC.COM

LEASE NAME & WELL NO. ACHENBACH 14/11-35-12 1H

SECTION 14 TWP 35S RGE 12W MERIDIAN 6TH P.M.
COUNTY BARBER STATE KANSAS
DESCRIPTION 186' FSL & 1320' FWL

ACHENBACH 14/11-35-12 1H	REVISION:	
	INT	DATE
DATE: 02/06/2024		
FILE: AD_ACHENBACH_14-11-35-12_1H		
DRAWN BY: JPH		
SHEET: 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
2. ALL BEARINGS SHOWN HEREON ARE GRID ACCORDING TO THE RESULTS OF STATIC GPS OBSERVATIONS PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO KANSAS, SOUTH ZONE, NAD 27 - HORIZONTAL AND THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT/LOCATION, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY BCE-MACH III LLC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT/LOCATION, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
4. LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR AS SHOWN AND ARE NOT SURVEYED LOCATIONS.
5. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/6/2024
Surface

Ticket # P-6445

SPINNAKER OILFIELD SERVICES

COMPANY	PROJECT NUMBER	AFE/WORK ORDER	DATE
BCE-Mach III LLC	P-6445		1/6/2024

CONTRACTOR	Owner	LEGAL DESCRIPTION	API
Spinnaker Oil	Same	Sec 14, T35S, R12W	15-007-24489

LEASE & WELL #	COUNTY	STATE	MILEAGE
Achenbach 14/11-35-12 1H	Barber	OK	280

DIRECTIONS

From Alva, OK - Go North 13.5 miles to E0010 Rd. Turn East and go 2.7 miles. North into. Atlas 3

Pumping Services

☑ Surface ☐ Intermediate ☐ Long String ☐ Plug Back
☐ Squeeze ☐ Acid ☐ PTA ☐ Other

Casing Size	Casing Weig	Thread	Csng Grade	Thread	Plug. Cont.	Swage	Top Plug	Bottom Plug	% Excess
9 5/8	36.00	LTC	J-55		Yes	Yes	Yes	N/A	225%

Number and Type Units	BHST - F	Casing Depth	Depth - TVD - FT	Hole Size - Inches
Pump Truck, 1 ea. 660 Bulk Truck	83	300	300	12 1/4

Remarks	BHCT - F	Previous Csg	Depth - MD - FT	Mud Weight/Type - PPG
9 5/8" Top Plug, Head , 200 lbs Sugar	80	Conductor	300	

Materials

	Qty - BBLS	Type	
Spacer	40	H2O	SPACER: H2O

BBL OF LEAD	# of Sacks	Type		LEAD CEMENT
49.9	95	Class A		95 Sacks Class A, 3% Gypsum, 1% SMS, 2.5% Calcium Chloride, 0.25 lb/sk Poly
H2O REQUIRED	Weight PPG	Yield Ft3/Sk	Water Gal/S	
41.1	11.40	2.95	18.16	

BBL OF TAIL	# of Sacks	Type		TAIL CEMENT
21.5	65	Class A		65 Sacks Class A, 3% Gypsum, 1% SMS, 2.5% Calcium Chloride, 0.25 lb/sk Poly
H2O REQUIRED	Weight PPG	Yield Ft3/Sk	Water Gal/S	
15.4	13.20	1.86	9.98	

	Qty - BBLS	Type	
Displace-ment	20	H2O	DISPLACEMENT H2O

Notes:

SINGLE Variable Density Slurry.* *Please go by bbl counter for the lead. All Cement in front pot
Lead - 6 hrs; Tail - 2.5 hrs
****Make sure your H2S monitor is charged and bump tested****

Sales Items

Casing Size	Casing Weight	Thread	
9 5/8	36.00	LTC	
Guide Shoe	Float Shoe	Float Collar	Insert Float Valve
Centralizers - Number	Size	Type	
Wall Cleaners - Number	Type	MSC (DV Tool)	MSC Plug Set
Limit Clamps	Thread lock	Other	

Remarks: 300 lbs Sugar, CC for prime up if needed

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/6/2024
Surface

Ticket # P-6445

SPINNAKER OILFIELD SERVICES

Customer: BCE-Mach III LLC
Customer Rep:
Mobile:
Well Name: Achenbach 14/11-35-12 1H
Job Type: Surface
County: Barber
Casing: 9 5/8
State: Kansas
Field Supervisor: JON HALL
API #: 15-007-24489
Date: 1/6/2024
Legals: Sec. 14-T35S-R12W
Proposal #: 46690002

Ref. #	Description	Quantity	Unit Price	Sub Total	Total
	********** **Cementing Services** **********				
MLPU1	Pickup Mileage 1 unit (roundtrip miles)	280	$3.94	$1,103.20	$529.54
MLHE2	Heavy Vehicle Mileage 2 units (roundtrip miles)	280	$13.56	$3,796.80	$1,822.46
MLTN	Bulk Cement Delivery/Return (per Ton-Mile)	1,125	$2.73	$3,071.25	$1,474.20
MXBK	Bulk Material Mixing Service Charge (Per cu.ft.)	160	$3.03	$484.80	$232.70
CMTHD	Cement Head with manifold (per Job)	1	$1,895.00	$1,895.00	$909.60
PC1K	Pump Charge 0-1000' (Per 4 hrs)	1	$1,887.60	$1,887.60	$906.05
DAQ	Data Acquisition System	1	$1,331.00	$1,331.00	$638.88
FLSCG	Fuel Surcharge (per unit/per job)	2	$605.00	$1,210.00	$580.80
ENVFEE	Environmental Fee	1	$211.75	$211.75	$101.64
DAMSS	Data Monitoring System/Supervisor	1	$800.00	$800.00	$384.00
CIRON	Circulation Equipment (40' of equipment per job)	2	$1,512.50	$3,025.00	$1,452.00
	********** **Cementing Materials** **********				
CSTD	Class A Type Standard Cement (per sack)	160	$31.81	$5,089.60	$2,443.01
CEXTGYP	Gypsum (per lb)	452	$0.54	$244.08	$117.16
CACCSMS	SMS (per lb)	151	$3.86	$582.86	$279.77
CACCCC	Calcium Chloride (per lb)	376	$1.45	$545.20	$261.70
CLCMPF	Poly Flake (per lb)	40	$3.23	$129.20	$62.02
	Additional Items (As Required)				
PCADD	Primary Pump Unit Addl Hours	0.0	$594.50	$0.00	$0.00
BKADD	Bulk Unit Additional Hours (per unit/per hour)	0.0	$121.00	$0.00	$0.00
VALV12	1" to 2" valves	1	$393.25	$393.25	$188.76
SG36	Swage, 4 1/2" - 13 3/8" (per day)	1	$423.50	$423.50	$203.28
H2SMON	H2S/Gas Monitors (per job)	1	$135.00	$135.00	$64.80
FTRP958	9 5/8" Top Rubber Plug	0	$220.00	$0.00	$0.00
CSUGAR	Sugar (per lb)	200	$1.47	$294.00	$294.00
CDFDIAL	ATF Cement Defoamer (per gal)	10	$29.50	$295.00	$295.00
DERKC	Derrick Charge (Cement Head Stabbing Above 8 ft)	0	$726.00	$0.00	$0.00
WTCMT	Waiting on Cement Head after job (per hours)	0	$95.00	$0.00	$0.00
CACCCC	Calcium Chloride (per lb)	0	$1.45	$0.00	$0.00
	Book Price			$26,948.09	
	Estimated Job Cost (Exclusive of Sales Tax)				**$13,241.36**

Signature: Jonathan Hall
Field Supervisor:

Signature:
Customer Rep:

AFE # AC 23121
WELL NAME Achenbach 14/11-35-12H
COST CODE 2050 2800
AMOUNT $13,241.36
DATE 1-6-24
Jim Mull

1/6/2024

Thank You For Your Business!!!

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/6/2024
Surface

Ticket # P-6445

SPINNAKER OILFIELD SERVICES

COMPANY		PROJECT NUMBER	CUSTOMER REP:	DATE
BCE-Mach III LLC		P-6445		1/6/2024
CONTRACTOR	Owner		LEGAL DESCRIPTION	
Spinnaker Oil	Same		Sec 14, T35S, R12W	
LEASE & WELL #	COUNTY		STATE	MILEAGE
Achenbach 14/11-35-12 1H	Barber		OK	280

Customer Job Satisfaction Sheet

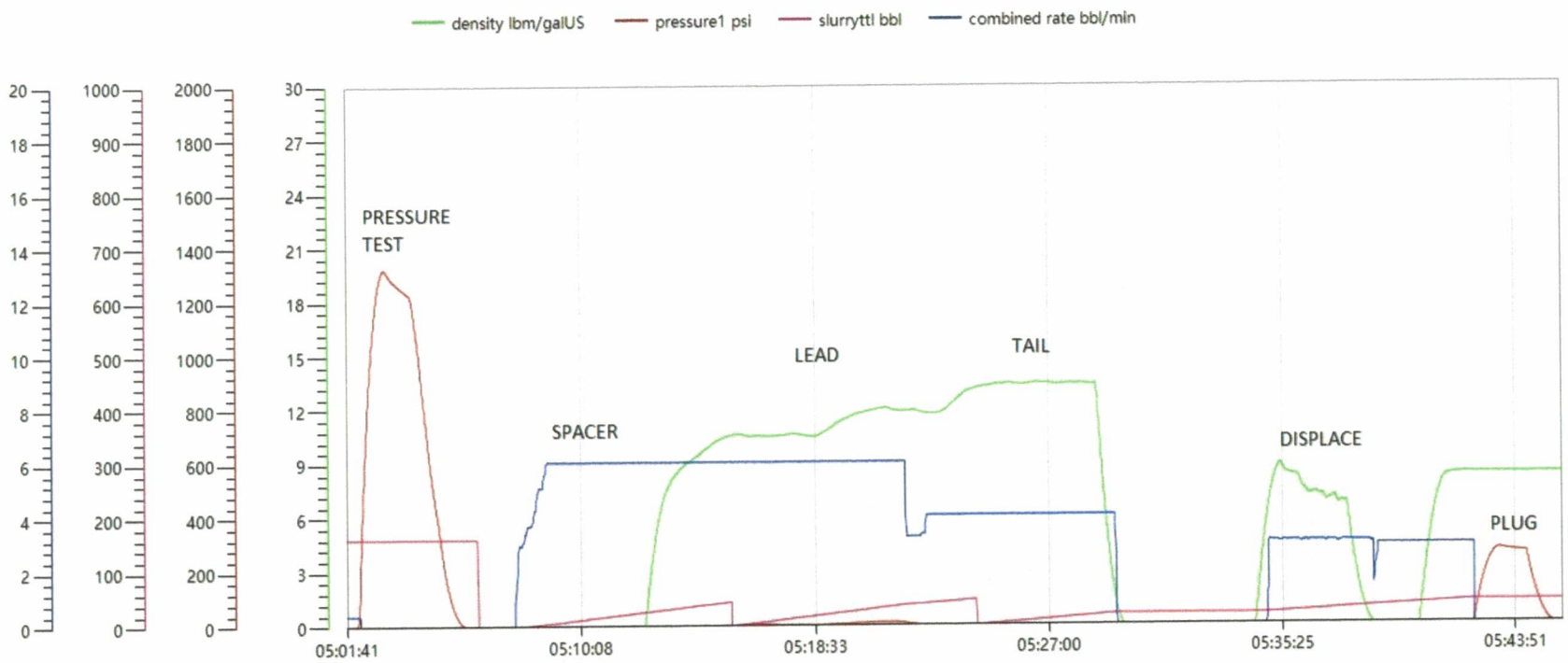
We will greatly appreciate if you can fill out a short survey regarding our performance today. Safety and service quality are our top priorities and we want to ensure that we are continually providing the best service possible in the safest manner as possible. These surveys are regularly reviewed and we highly value your opinion. Thank you for your business.

	Poor	Fair	Satisfactory	Great	Outstanding
HSE					
Performance of Crew					
Performance of Equipment					
Service Quality					
Job Completed as Agreed					

Customer Name (Printed) Tim Mell

Customer Signature Tim Mell Date: 1-6-24

Chart Report



Date:1/6/2024 Well Name:ACHENBACH 14-11-35-12 1H Location:BARBER COUNTY Country:OKLAHOMA Operators:MACH III Supervisor:JON HALL Jobtype:SURFACE Address: Comment:

SPINNAKER OILFIELD SERVICES

JOB LOG

PROJECT NUMBER	TICKET DATE
P-6445	01/06/24

COMPANY	COUNTRY	STATE	COUNTY
BCE-Mach III LLC	USA	OK	Barber

LEASE NAME / Well No.	EMPLOYEE NAME	CUSTOMER REP
Achenbach 14/11-35-12 1H	JON HALL	

FIELD	SEC / TWP / RNG	TICKET AMOUNT
	Sec 14, T35S, R12W	

API/UWI #	JOB PURPOSE	WELL TYPE
15-007-24489	Surface	

PUMP #1	317
PUMP #2	
PUMP #3	

Date	Time	Rate (BPM)	Volume (BBL)(GAL)		Press.(PSI) CSG.	Press.(PSI) Tbg	Job Description / Remarks
1/6/24	3:00 AM						ARRIVE ON LOCATION SPOT IN RIG UP
	4:40						SAFTEY MEETING WITH ALL PARTIES
	5:00				1,500		PRESSURE TEST TO 1,500 PSI
	5:05	6.0	40BBL		10		PUMP 40BBL H2O SPACER
	5:12	6.0	50BBL		10		PUMP 50BBL LEAD CEMENT @ 11.4 PPG
	5:21	4.0	22BBL		10		PUMP 22BBL TAIL CEMENT @ 13.2 PPG
	5:26						SHUT DOWN WASH UP DROP PLUG
	5:40	3.0	22BBL		290		22BBL GONE LAND PLUG @ 40-290 PSI
	5:45						CHECK FLOATS 1/2 BBL BACK
							HOT 323' TOT SURFACE 35BBL CEMENT BACK

Supervisor Signature: Jonathan Hall

Print Name: Jon Hall

Thank You For Using
Spinnaker Oilfield Services

SERVICE ORDER CONTRACT

Customer Name **BCE-Mach III LLC** Ticket Number P-6445

Lease & Well Number Achenbach 14/11-35-12 1H Date 1/6/2024

As consideration, The Above Named customer Agrees:
Spinnaker Oilfield Services Company LLC ("Spinnaker") shall not be responsible for and customer shall secure Spinnaker against any liability for damage to property of customer and of the well owner (if different from customer), unless caused by the willful misconduct or gross negligence of Spinnaker, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage, unless an MSA between Spinnaker and above named customer specifies otherwise.

Spinnaker makes no guarantee to the effectiveness of the products, supplies, or materials, nor of the results of any treatment or services. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Spinnaker personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others except where due to Spinnaker gross negligence or willful misconduct in the preparation or furnishing it.

Invoices payable NET 10 days following the date on the invoice.

Upon customers default in payment of the customers account 15 days past due.
Customer agrees to pay interest thereon after at the highest lawful contract rate applicable but never to exceed 18% per annum in the event it becomes necessary to employ an attorney to enforce collection of said account.
Customer agrees to pay all collection costs and attorney fees in the amount of 25% of the unpaid account.

Service order: I authorize work to begin per service instructions in accordance with terms and conditions printed on this form and represent that I have authority to accept and sign this order.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMERS AGENT.

Customer Authorized Agent: Jim Mitt

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/6/2024
Surface

Ticket # P-6445

SPINNAKER OILFIELD SERVICES

LOCATION WATER TEST

General Information

Customer: **BCE-Mach III LLC** Date: 1/6/2024

Ticket # : P-6445 Time: 4:00AM

Lease Name & # : Achenbach 14/11-35-12 1H Water Source: FRAC

Cementer: JON HALL

Test Results	Sample #1		Standard Range
Temp	74	° F	50° to 100° F
pH	7.0		6.0 - 8.0
Sulfates	200	mg/L	Less Than 1500 mg/L
Chlorides	1,000	mg/L	Less Than 3000 mg/L
Lignins & Tannins	NO	Yes/No	No

Test Results	Sample #2		Standard Range
Temp		° F	50° to 100° F
pH			6.0 - 8.0
Sulfates		mg/L	Less Than 1500 mg/L
Chlorides		mg/L	Less Than 3000 mg/L
Lignins & Tannins		Yes/No	No

Remarks:

EQUIPMENT CHECKLIST

UNIT # 317

1. BEFORE THE JOB – PREPARE

- [x] Power up the unit, ensuring all electronics are functioning, and recalibrate all console pressure gauges to atmospheric pressure
- [x] Check the cement head (visually inspect), vacuum breakers, and dry cement line.
- [x] Prime the truck up and pressure test. Test for Global kick-out, and check martin decker gauges. Note any difference between console and martin decker pressures.
- [x] Function test and pump through the entire plumbing, checking all lines as well as centrifugal and triplex pumps. Check for any packing leaks on the pumping unit. Chart the test.
- [x] Check the bulk equipment; compressors, valves, pop-offs, to make sure it airs up and hold pressure.
- [x] Check the casing cement head, O-rings, adapters (sizes and thread types).
- [x] Check the bulk paperwork, ensuring all correct cement and volumes are on location.
- [x] Check to make sure all chemicals and plugs are on location. Check the auxiliary boost pump, if any.
- [x] Perform a Water Analysis.

2. DURING THE JOB

- [x] Note any pumping issues or any discrepancies on outputs
- [x] Check for any leaks and contain accordingly if any

3. AFTER THE JOB

- [x] Turn in the check list to customer, if requested, and include a copy with packet, and make detailed note of any issues

Supervisor Comments:

Jonathan Hall

(Supervisor Name and Signature)

(Operator Name and Signature)

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/6/2024
Surface

Ticket # P-6445

SPINNAKER OILFIELD SERVICES

COMPANY	PROJECT NUMBE	CUSTOMER REP:	DATE
BCE-Mach III LLC	P-6445		1/6/2024

CONTRACTOR	Owner	LEGAL DESCRIPTION	
Spinnaker Oil	Same	Sec. 14-T35S-R12W	

LEASE & WELL #	COUNTY	STATE	MILEAGE
Achenbach 14/11-35-12 1H	Barber	OK	280

Safety Meeting Attendance Sign-In Sheet

Date: 1/6/24

Topic: SURFACE CEMENT

Date	Printed Name	Signature
	JON HALL	
	JOSH HARDIN	
	TONY EVENS	
	Jaime Alvarez	
	Kevin Lee	
	David Nebe	
	Juan Cancino	Juan Cancino
	Tim Mills	Tim Mills

SPINNAKER

JOB SAFETY ANALYSIS (JSA)

DATE	TICKET NUMBER	CUSTOMER	LEASE AND WELL NO.
1/6/2024	P-6445	BCE-Mach III LLC	Achenbach 14/11-35-12 1H

List of Employees on site (In case of evacuation, check boxes as employees are accounted for - use additional paper if needed)

☐ JON HALL	☐	☐	☐
☐ JOSH HARDIN	☐	☐	☐
☐ TONY EVENS	☐	☐	☐
☐	☐	☐	☐

2. Discussion of Hazards Found at the Job Site

- [X] **Electrical** Discuss location of electrical lines and power sources in relation to equipment and lines. PSW, QA. Light Plant.
- [X] **Chemicals** Discuss possible exposures to substances such as dusts, Chemicals , vapors, radioactive materials, explosives, and Fla./combustible materials. Provide MSDS sheets, H2S, Gas Flammable gasses. SEE MSDS
- [X] **Overhead** Discuss overhead hazards (e.g. guy wires, DME, chains, pulleys hazards while on the rig floor or under the rig floor).Rig guy wires.
- [X] **Cranes, Masts, Booms** Discuss hazards associated with overhead lifting devices. CRANE TRUCK.
- [X] **Weather** Discuss weather conditions (e.g. heat, cold, ice, snow, rain, wind, dust, visibility, etc.)
- [X] **Chemical spills & releases** Tote tanks, frac tanks, drums, hose connections and pumps. USE DIAPERS.
- [X] **Ignition Sources** Discuss possible ignition sources (e.g. engines, electrical equipment, open flames, smoking, etc.) SMOKING, EQUIP, DIESEL.
- [X] **Well bore fluids or gasses** Discuss shale shaker, frac tanks, return lines and vent lines.
- [ ] **Explosives Handling** Discuss hazards of working with and around explosive materials. Restrict the work area to those that have proaper training. Follow approved procedures.
- [X] **Confined Spaces** Discuss any required entry into confined spaces (e.g. cellars, tanks, pits.). TANKS, Mt. Mover.LGC Bldr.
- [X] **Noise** Discuss areas with high noise levels and avoid these areas or provide hearing protection. EQUIP.
- [X] **Walking / working surfaces** Discuss the terrain where the rig up and job will occur (e.g. boards, limestone, mud, stairways, walkways, the derrick, and the rig floor). HOSES, IRON, EQUIP.
- [X] **Lifting** Discuss proper lifting techniques and ways to eliminate or reduce heavy lifting such as forklifts, cranes, and sharing the load. CRANE, BUDDY SYS.
- [X] **Falling** Discuss job procedures requiring work at heights greater than 10 ft. (3.3 m). FALL PROTECTION.Fall protection for tanks.
- [X] **Pressure** Discuss pressure hazards such as DME and bulk tanks. 10.000 psi
- [X] **LO / TO** Discuss equipment that has been locked or tagged out.
- [ ] **RA Handling** Discuss hazards working around different types of radiation. Restrict the work area to those with the proper training. Follow approved Procedures

3. Hazard Controls

- [X] **Personal protective equipment** Discuss required PPE such as respirators, head protection, hearing protection, protective footwear, hand and skin protection, and fall protection. PROPER PPE.
- [X] **Physical barriers** Discuss items such as hose covers, line tiedowns, guards, railings, and inert gas blankets.
- [X] **Weather** Discuss control measures for weather factors such as temperature, wind, ice, rain, snow, etc.
- [X] **Ignition source controls** Discuss control measures for ignition sources such as the use of spark arrestors, emergency shutdown procedures, and NO SMOKING rules.Equip. & Smoking.
- [X] **Crane, Masts, Booms** Safe working capacities have been calculated per charts on equipment and will not be overloaded.
- [X] **Safety equipment** Discuss safety items such as pop-off valves, fire extinguishers, and communication devices. FIRE EXT. AIR PACKS.
- [X] **Vents** Discuss vent lines for frac tanks and bulk tanks.
- [X] **Equipment monitored for leaks** during job and contained
- [X] **Equipment wash-up** per customers instructions.
- [X] **Equipment drain pans** drained in approved containers prior to leaving location.
- [X] **All empty containers** must be returned to facility I.e. empty sacks, pails, and drums.
- [X] **Waste handling** Discussion of chemical and waste handling procedures.

4. Contingency Plans for Emergencies

- [X] **Location of eyewash/safety shower station** Discuss the location of the eyewash/safety shower station and how to use it.PU, QA, PSW.
- [X] **Assembly points** Discuss where to gather in the event of an emergency. LEASE ROAD.
- [X] **Fire fighting** Discuss fire fighting responsibilities with the appropriate personnel (trained and equipped personnel only).
- [X] **Wind direction** Discuss the wind direction and how it may change the contingency plan such as the assembly area location, and discuss how to detect wind direction on the job site (e.g. windsocks, streamers, etc.).
- [X] **First aid station** Point out the location of the first aid kit and who is responsible for administering first aid. PU, QA, PSW.
- [X] **Reporting Spills** Discuss measures used for spill reporting.
- [X] **Spill Response Kit** Review location of Spill Response Kit.
- [X] **Contaminated soil** Discuss procedures for spill / leak cleanup.
- [X] **Injury and accident procedures** Discuss personnel responsibilities and procedures in the event of an injury or accident.NOTIFY IMMIDIATELY.
- [X] **Rescue procedures** Discuss rescue procedures with the appropriate personnel (trained and equipped).
- [X] **Emergency shut down procedures** Discuss when, how, and what to shut down in the event of an emergency.
- [X] **Recovery procedures** Discuss how to return to normal operating procedures after an emergency.
- [X] **Nearest hospital** The best rout of travel along with everyone understanding which vehicle will be used as the ambulance.

Head count

Employees	3
Other	0
Total	3

5. Roles and Responsibilities

[X] Communicated [X] Assigned

6. Emergency Escape Procedures (Communicate the following information with all employees on location).

Safe Refuge Area and / or Meeting Point:

Entrance to Location

Note: If wind direction changes do not proceed to gathering point, but rather proceed upwind after observing wind direction indicator.

Evacuation may occur on site because of: (Check appropriate boxes)	**The following equipment is required on location:** (Check appropriate boxes)
[ ] Release of H2S above 10 ppm	[ ] H2S monitors
[X] Blowout	[ ] Combustible gas monitors
[X] Release of flammable gasses	[X] Wind direction indicator (windsocks, streamers, etc.)
[X] Release of other gasses	[X] Escape respirators (one for each employee)
[X] Fire	[X] Full facepiece positive pressure SCBA

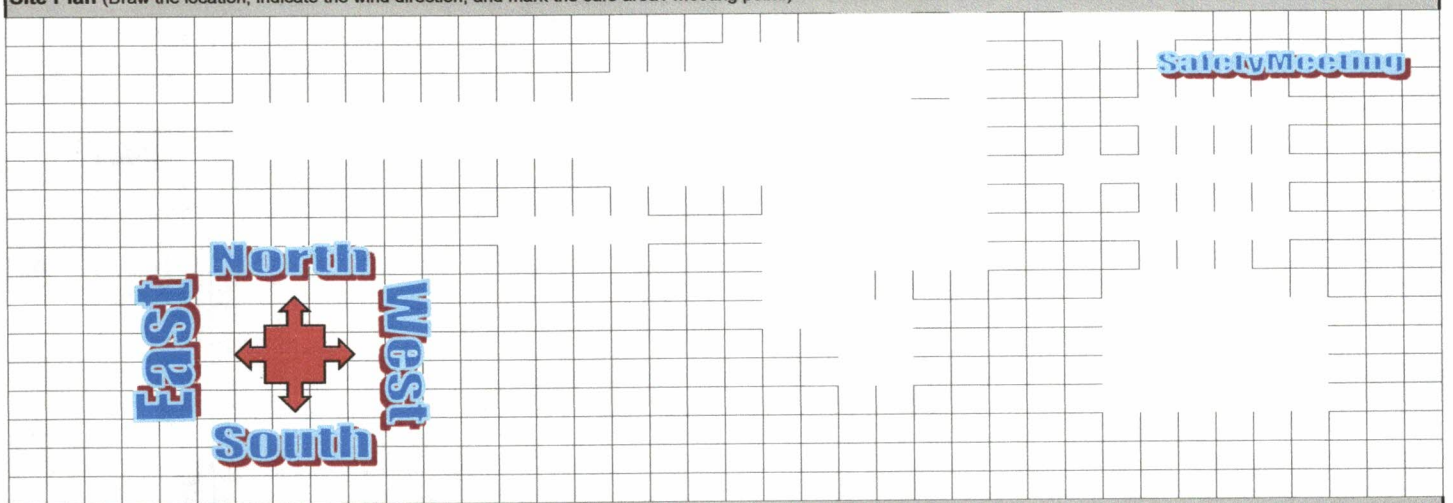
7. Emergency Telephone Numbers and / or Method of Contact

Sheriff:	Hospital (Actual phone numbers other than 911):
Supervisor:	Customer: **BCE-Mach III LLC**
First Aid Responders on this site (Names):	Designated emergency vehicle & mobile phone # Supervisor PU

Rescue Procedures *If emergency rescue is necessary, the following is required:* (Check appropriate boxes)

[X] Full facepiece SCBA (30 Minute)	[X] Escape respirators
[X] Protective clothing:	[ ] Monitoring Equipment:
List: **Hard Hat,Steel Toe Boots,Safety Glasses,Ear Plugs,Coveralls, & Gloves**	List:

Site Plan (Draw the location, indicate the wind direction, and mark the safe area / meeting point.)



10. Postjob Safety Meeting (Note: Enter information into IJR) Date: Time:

Check Appropriate box for each incident event [ ] Vehicle Accident [X] No Vehicle Accident

[ ] Injury [X] No Injury [ ] Spill [ ] Near Miss [X] No Near Miss

[ ] Location is as clean as when we arrived.

Is follow up with customer needed? [ ] Yes [X] No

COMMENTS

Customer Representative	Spinnaker Representative

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/9/2024
Intermediate

Ticket # P-6450

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

COMPANY	PROJECT NUMBER	AFE/WORK ORDER	DATE
BCE-Mach III LLC	P-6450		1/9/2024

CONTRACTOR	Owner	LEGAL DESCRIPTION	API
Spinnaker Oil	Same	Sec 14, T35S, R12W	15-007-24489

LEASE & WELL #	COUNTY	STATE	MILEAGE
Achenbach 14/11-35-12 1H	Barber	KS	280

DIRECTIONS

From Alva, OK - Go North 13.5 miles to E0010 Rd. Turn East and go 2.7 miles. North into. Atlas 3

Pumping Services

☐ Surface ☑ Intermediate ☐ Long String ☐ Plug Back
☐ Squeeze ☐ Acid ☐ PTA ☐ Other ( ) H2S

Casing Size	Casing Weig	Thread	CSG Grade	Plug. Cont.	Swage	Top Plug	Bottom Plug	% Excess
7	26.00	TCBC-HT	P-110	Yes	Yes	Yes	Yes	30%

Number and Type Units	BHST - F	Casing Depth	Depth - TVD - FT	Hole Size - Inches
Pump Truck, 1 ea. 660 Bulk	132	5151	4811	8 3/4

Remarks	BHCT - F	Pvs Csg	Depth - MD - FT	Mud Weight/Type - PPG
7" Top & Bottom Plugs, Head, manifold, circulating iron & both adapters	105	9-5/8" at 300'	5151	WBM ~9.2

BBL OF SPACER	Type	SPACER
40	Fresh Water	Fresh Water

BBL OF LEAD	# of Sacks	Type		LEAD CEMENT
63.7	65	Class A/POZ		65 Sacks 65/35 A/POZ, 12% Gel, 12% Gypsum, 12% SFA, 1.5% SA-2, 0.4 lb/sk Poly Flakes, 0.2% Fine Super Fibers
H2O REQUIRED	Weight PPG	Yield Ft3/Sk	Water Gal/S	
55.5	10.20	5.50	35.87	

BBL OF TAIL	# of Sacks	Type		TAIL CEMENT
37.1	150	Class A/POZ		150 Sacks 50/50 A/POZ, 3% Gel, 2% Gypsum, 0.35% SFL-5, 0.25 lb/sk Poly Flakes, 0.1% Fine Super Fibers
H2O REQUIRED	Weight PPG	Yield Ft3/Sk	Water Gal/S	
23.6	13.80	1.39	6.61	

	Qty - BBLS	Type	Procedure
Displacement	199.1	Water	Water

NOTES:

LEAD - BACK POT | TAIL - FRONT POT
Pump time: LEAD - 6:00 hrs. TAIL - 4:00 hrs
**** 5 bpm Max ****

Sales Items

Casing Size	Casing Weight	Thread	
7	26.00		
Guide Shoe	Float Shoe	Float Collar	Insert Float Valve

Remarks
Defoamer, Plugs

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/10/2024
Intermediate

Ticket # P-6450

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

Customer: BCE-Mach III LLC
Customer Rep:
Mobile:
Well Name: Achenbach 14/11-35-12 1H
Job Type: Intermediate
County: Barber
Casing: 7
State: Kansas
Field Supervisor: Daniel Wells
API #: 15-007-24489
Date: 1/10/2024
Legals: Sec 14, T35S, R12W
Proposal #: 46690002

Ref. #	Description	Quantity	Unit Price	Sub Total	Total
	******** Cementing Service and Materials ********				
MLPU1	Pickup Mileage 1 unit (roundtrip miles)	280	$3.94	$1,103.20	$462.00
MLHE2	Heavy Vehicle Mileage 2 units (roundtrip miles)	280	$13.56	$3,796.80	$1,596.00
MLTN	Bulk Cement Delivery/Return (per Ton-Mile)	1,480	$2.73	$4,040.40	$1,702.00
MXBK	Bulk Material Mixing Service Charge (Per cu.ft.)	215	$3.03	$651.45	$273.05
CMTHD	Cement Head with manifold (per Job)	1	$1,895.00	$1,895.00	$795.90
PC6K	Pump Charge 5001-6000' (Per 5 hrs)	1	$4,325.75	$4,325.75	$1,816.82
DAQ	Data Acquisition System	1	$1,331.00	$1,331.00	$559.02
FLSCG	Fuel Surcharge (per unit/per job)	2	$605.00	$1,210.00	$508.20
ENVFEE	Environmental Fee	1	$211.75	$211.75	$88.94
DAMSS	Data Monitoring System/Supervisor	1	$800.00	$800.00	$336.00
CIRON	Circulation Equipment (40' of equipment per job)	2	$1,512.50	$3,025.00	$1,270.50
CSTD	Class A Type Standard Cement (per sack)	118	$31.81	$3,753.58	$1,576.48
CPOZF	POZ (per sack)	98	$17.35	$1,700.30	$714.42
CEXTGEL	GEL (per lb)	1,100	$0.63	$693.00	$286.00
CEXTGYP	Gypsum (per lb)	931	$0.54	$502.74	$214.13
CEXTSFA	SFA (per lb)	679	$1.21	$821.59	$346.29
CFL5	SFL-5 (per lb)	45	$18.56	$835.20	$351.00
CFWCSA1	SA-2 (per lb)	85	$19.52	$1,659.20	$697.00
CLCMPF	Poly Flake (per lb)	64	$3.23	$206.72	$87.04
CLCMFBR	Fine Super Fiber (per lb)	24	$19.28	$462.72	$194.40
	Additional Items if used				
PCADD	Primary Pump Unit Addl Hours	1.0	$594.50	$594.50	$594.50
BKADD	Bulk Unit Additional Hours (per unit/per hour)	1.0	$121.00	$121.00	$121.00
FTRP7	7" Top Rubber Plug	0	$140.00	$0.00	$0.00
FBRP7	7" Bottom Rubber Plug	0	$150.00	$0.00	$0.00
SG36	Swage, 4 1/2" - 13 3/8" (per day)	1	$423.50	$423.50	$177.87
VALV12	1" to 2" valves	1	$393.25	$393.25	$165.17
RADIO	Radios (per job)	1	$135.00	$135.00	$135.00
CACCCC	Calcium Chloride (per lb)	0	$1.45	$0.00	$0.00
CSUGAR	Sugar (per lb)	0	$1.47	$0.00	$0.00
CDFDIAL	ATF Cement Defoamer (per gal)	5	$29.50	$147.50	$147.50
DERKC	Derrick Charge (Cement Head Stabbing Above 8 ft)	0	$726.00	$0.00	$0.00
WTCMT	Waiting on Cement Head after job (per hours)	0	$95.00	$0.00	$0.00
	Book Price			$34,840.15	
	Estimated Job Cost (Exclusive of Sales Tax)				**$15,216.23**

Signature: Daniel Wells
Field Supervisor: Daniel Wells

Signature:
Customer Rep:

AFE # DC23121
WELL NAME Achenbach 14/11-35-12 1H
COST CODE 2050 - 3000
AMOUNT 15,216.23
DATE 1/10/24

1/10/2024

Thank You For Your Business!!!

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/9/2024
Intermediate

Ticket # P-6450

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

COMPANY		PROJECT NUMBER	CUSTOMER REP:		DATE
BCE-Mach III LLC		P-6450	0		1/9/2024
CONTRACTOR	Owner		LEGAL DESCRIPTION		
Spinnaker Oil	Same		Sec 14, T35S, R12W		
LEASE & WELL #	COUNTY		STATE	MILEAGE	
Achenbach 14/11-35-12 1H	Barber		KS	280	

Customer Job Satisfaction Sheet

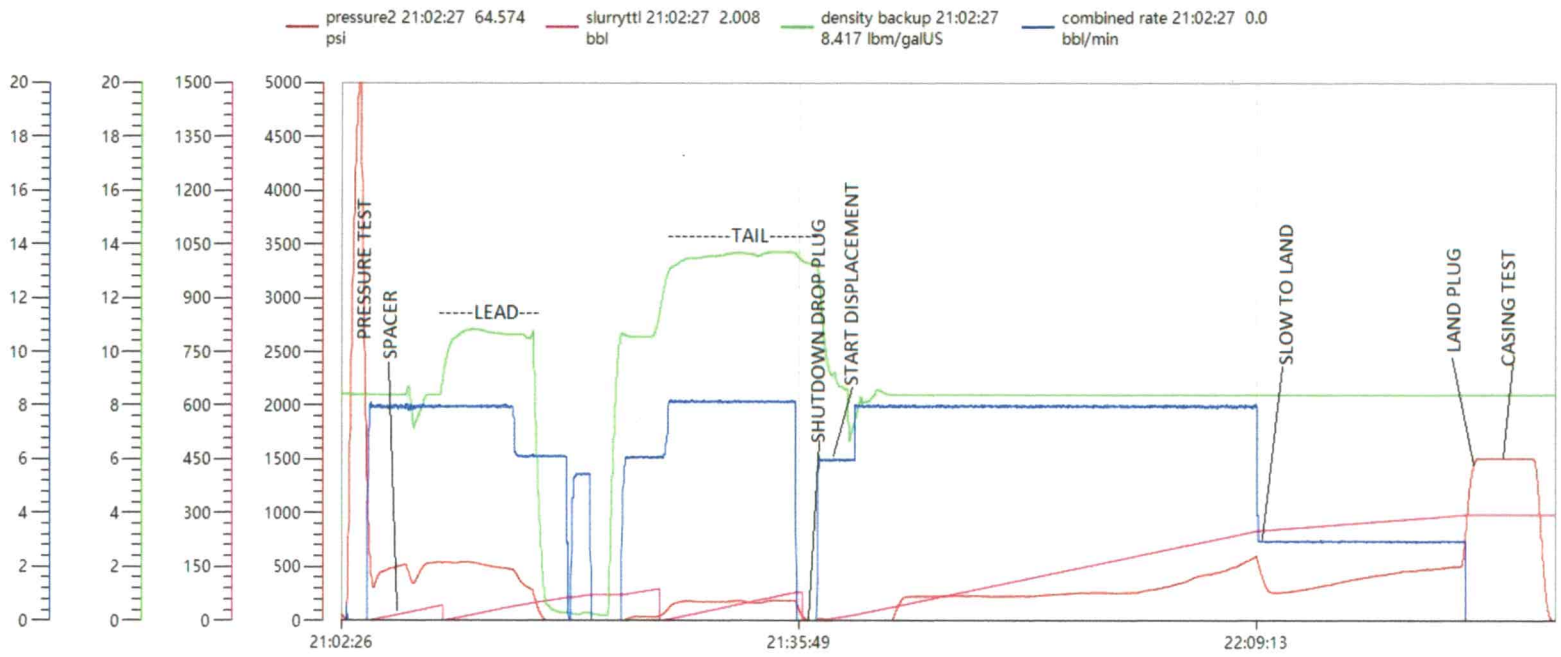
We will greatly appreciate if you can fill out a short survey regarding our performance today. Safety and service quality are our top priorities and we want to ensure that we are continually providing the best service possible in the safest manner as possible. These surveys are regularly reviewed and we highly value your opinion. Thank you for your business.

	Poor	Fair	Satisfactory	Great	Outstanding
HSE					
Performance of Crew					
Performance of Equipment					
Service Quality					
Job Completed as Agreed					

Customer Name (Printed)

Customer Signature: Carlos Rondon Date: 1/10/24

Chart Report



Date:1/02/2024 Well Name:winterfell 1304 9-22#8bhr Location:Oklahoma County, OK Country:USA Operators:Preston Reynolds Supervisor:Ben Wagner Jobtype:Production Address:Formentera Comment:

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

JOB LOG

PROJECT NUMBER	TICKET DATE
P-6450	01/10/24

COMPANY	COUNTRY	STATE	COUNTY
BCE-Mach III LLC	USA	KS	Barber

LEASE NAME / Well No.	EMPLOYEE NAME	CUSTOMER REP
Achenbach 14/11-35-12 1H	Daniel Wells	

FIELD	SEC / TWP / RNG	TICKET AMOUNT
	Sec 14, T35S, R12W	

API/UWI #	JOB PURPOSE	WELL TYPE
15-007-24489	Intermediate	

PUMP #1	313
PUMP #2	
PUMP #3	

Date	Time	Rate (BPM)	Volume (BBL)(GAL)		Press.(PSI) CSG.	Tbg	Job Description / Remarks
1/9/2024	17:00						Customer Called and Requested Crew On Location @ 00:00
1/9/2024	19:00						Conduct Pre-Departure Meeting with Crew
1/9/2024	22:00						Arrive On Location @ 22:00
1/9/2024	22:05						Conduct Pre- Rig Up Meeting with Crew
1/9/2024	22:10						Rig-Up Iron, Hoses and Standpipe
1/10/2024	04:00						Conduct Pre-Job safety Meeting with All Personnel
1/10/2024	04:15						Stab Head and Make Up Iron Loops to Standpipe
1/10/2024	04:45				5000		Pressure Test Pumps and Lines to 5000psi
1/10/2024	04:47	6.0	40.0		330		Pump 40bbls of Fresh Water Ahead of Cement
1/10/2024	04:51	6.0	63.7		300		Mix and Pump 65sks of Lead @ 10.2ppg
1/10/2024	05:04	6.0	37.1		390		Mix and Pump 150sks of Tail @ 13.8ppg
1/10/2024	05:11						Shutdown Drop Plug
1/10/2024	05:12	7.0			150		Start Displacement for 199.1bbls of Fresh Water

Supervisor Signature: Daniel Wells

Print Name: Daniel Wells

Thank You For Using
Spinnaker Oilfield Services

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

JOB LOG

PROJECT NUMBER	TICKET DATE
P-6450	01/10/24

COMPANY	COUNTRY	STATE	COUNTY
BCE-Mach III LLC	USA	KS	Barber

LEASE NAME / Well No.	EMPLOYEE NAME	CUSTOMER REP
Achenbach 14/11-35-12 1H	Daniel Wells	

FIELD	SEC / TWP / RNG	TICKET AMOUNT
	Sec 14, T35S, R12W	

API/UWI #	JOB PURPOSE	WELL TYPE
15-007-24489	Intermediate	

Date	Time	Rate (BPM)	Volume (BBL)(GAL)		Press.(PSI) CSG.	Tbg	Job Description / Remarks
1/10/2024	05:22	7.0	50.0		280		50bbls Gone
1/10/2024	05:29	7.0	100.0		360		100bbls Gone
1/10/2024	05:36	7.0	150.0		570		150bbls Gone
1/10/2024	05:40	3.0	185.0		550		Slow Rate @ 185bbls to Land Plug
1/10/2024	05:44		199.1		1150		Land Plug On Time @ 199.1bbls of Displacement
1/10/2024	05:45				1590		Bring Pressure Up to 1500psi and Hold for 30mins for Casing Test
1/10/2024	06:15						Release Pressure and Check Floats (HELD) Bled Back 2bbls
1/10/2024	06:20						Conduct Pre-Rig Down Meeting with Crew
1/10/2024	06:25						Rig Down All Equipment
1/10/2024	06:55						Conduct Pre-Departure Meeting with Crew
1/10/2024	07:00						Leave Location
							HOC: 3698' HOT: 1317' HOL: 2377' TOT: 3909 TOC/TOL: 1532'

Supervisor Signature: Daniel K. Wells

Print Name: Daniel Wells

Thank You For Using
Spinnaker Oilfield Services

SERVICE ORDER CONTRACT

Customer Name **BCE-Mach III LLC** Ticket Number P-6450

Lease & Well Number Achenbach 14/11-35-12 1H Date 1/9/2024

As consideration, The Above Named customer Agrees:
Spinnaker Oilfield Services Company LLC ("Spinnaker") shall not be responsible for and customer shall secure Spinnaker against any liability for damage to property of customer and of the well owner (if different from customer), unless caused by the willful misconduct or gross negligence of Spinnaker, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage, unless an MSA between Spinnaker and above named customer specifies otherwise.

Spinnaker makes no guarantee to the effectiveness of the products, supplies, or materials, nor of the results of any treatment or services. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Spinnaker personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others except where due to Spinnaker gross negligence or willful misconduct in the preparation or furnishing it.

Invoices payable NET 10 days following the date on the invoice.

Upon customers default in payment of the customers account 15 days past due.
Customer agrees to pay interest thereon after at the highest lawful contract rate applicable but never to exceed 18% per annum in the event it becomes necessary to employ an attorney to enforce collection of said account.
Customer agrees to pay all collection costs and attorney fees in the amount of 25% of the unpaid account.

Service order: I authorize work to begin per service instructions in accordance with terms and conditions printed on this form and represent that I have authority to accept and sign this order.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMERS AGENT.

Customer Authorized Agent: Carlos Rendon

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/9/2024
Intermediate

Ticket # P-6450

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

LOCATION WATER TEST

General Information

Customer: **BCE-Mach III LLC** Date: 1/9/2023

Sales Order # : P-6450 Time: 22:00

Lease Name & # : Achenbach 14/11-35-12 1H Water Source: Frac Tank

Tested By : Daniel Wells

Test Results **Sample #1**

			Standard Range
Temp	55	° F	50° to 100° F
pH	8.0		6.0 - 8.0
Sulfates	800	mg/L	Less Than 1500 mg/L
Chlorides	1700	mg/L	Less Than 3000 mg/L
Lignins & Tannins	No	Yes/No	No

Test Results **Sample #2**

			Standard Range
Temp		° F	50° to 100° F
pH			6.0 - 8.0
Sulfates		mg/L	Less Than 1500 mg/L
Chlorides		mg/L	Less Than 3000 mg/L
Lignins & Tannins		Yes/No	No

Remarks:

EQUIPMENT CHECKLIST

UNIT # 313

1. BEFORE THE JOB – PREPARE

- [x] Power up the unit, ensuring all electronics are functioning, and recalibrate all console pressure gauges to atmospheric pressure
- [x] Check the cement head (visually inspect), vacuum breakers, and dry cement line.
- [x] Prime the truck up and pressure test. Test for Global kick-out, and check martin decker gauges. Note any difference between console and martin decker pressures.
- [x] Function test and pump through the entire plumbing, checking all lines as well as centrifugal and triplex pumps. Check for any packing leaks on the pumping unit. Chart the test.
- [x] Check the bulk equipment; compressors, valves, pop-offs, to make sure it airs up and hold pressure.
- [x] Check the casing cement head, O-rings, adapters (sizes and thread types).
- [x] Check the bulk paperwork, ensuring all correct cement and volumes are on location.
- [x] Check to make sure all chemicals and plugs are on location. Check the auxiliary boost pump, if any.
- [x] Perform a Water Analysis.

2. DURING THE JOB

- [x] Note any pumping issues or any discrepancies on outputs
- [x] Check for any leaks and contain accordingly if any

3. AFTER THE JOB

- [x] Turn in the check list to customer, if requested, and include a copy with packet, and make detailed note of any issues

Supervisor Comments:

Daryl Wilkes
(Supervisor Name and Signature)

Preston Reynolds
(Operator Name and Signature)

BCE-Mach III LLC
Achenbach 14/11-35-12 1H
Barber
1/9/2024
Intermediate

Ticket # P-6450

SPINNAKER CEMENTING SOLUTIONS
A Division of Cudd Energy Services

COMPANY		PROJECT NUMBE	CUSTOMER REP:		DATE
BCE-Mach III LLC		P-6450	0		1/9/2024
CONTRACTOR	Owner		LEGAL DESCRIPTION		
Spinnaker Oil	Same				
LEASE & WELL #	COUNTY		STATE	MILEAGE	
Achenbach 14/11-35-12 1H	Barber		KS	280	

Safety Meeting Attendance Sign-In Sheet

Date: 1/10/2024

Topic: Safety and Job Procedure

Date	Printed Name	Signature
1/10/2024	Daniel Wells	
1/10/2024	Preston Reynolds	
1/10/2024	Bill Fowler	
1/10/2024	Lonnie Coleman	
1/10/2024	Mike Melvin	
1/10/2024	Jose Arreguin	
1/10/2024	Steve Garbizo	
1/10/2024	Daniel Groff	
1/10/2024	Fily Moreno	
1/10/2024	DUSTY MARSH	
1/10/2024		
1/10/2024		
1/10/2024		
1/10/2024		

SPINNAKER CEMENTING SOLUTIONS
A Division of Diamondback Energy Services

JOB SAFETY ANALYSIS (JSA)

DATE	TICKET NUMBER	CUSTOMER	LEASE AND WELL NO.
1/9/2024	46690002	BCE-Mach III LLC	Achenbach 14/11-35-12 1H

List of Employees on site (In case of evacuation, check boxes as employees are accounted for - use additional paper if needed)

☐ Daniel Wells	☐	☐	☐
☐ Preston Reynolds	☐	☐	☐
☐ Bill Fowler	☐	☐	☐
☐ Lonnie Coleman	☐	☐	☐

2. Discussion of Hazards Found at the Job Site

- [X] **Electrical** Discuss location of electrical lines and power sources in relation to equipment and lines. PSW, QA. Light Plant.
- [X] **Chemicals** Discuss possible exposures to substances such as dusts, Chemicals , vapors, radioactive materials, explosives, and Fla./combustible materials. Provide MSDS sheets, H2S, Gas Flammable gasses. SEE MSDS
- [X] **Overhead** Discuss overhead hazards (e.g. guy wires, DME, chains, pulleys hazards while on the rig floor or under the rig floor).Rig guy wires.
- [X] **Cranes, Masts, Booms** Discuss hazards associated with overhead lifting devices. CRANE TRUCK.
- [X] **Weather** Discuss weather conditions (e.g. heat, cold, ice, snow, rain, wind, dust, visibility, etc.)
- [X] **Chemical spills & releases** Tote tanks, frac tanks, drums, hose connections and pumps. USE DIAPERS.
- [X] **Ignition Sources** Discuss possible ignition sources (e.g. engines, electrical equipment, open flames, smoking, etc.) SMOKING, EQUIP, DIESEL.
- [X] **Well bore fluids or gasses** Discuss shale shaker, frac tanks, return lines and vent lines.
- [ ] **Explosives Handling** Discuss hazards of working with and around explosive materials. Restrict the work area to those that have proaper training. Follow approved procedures.
- [X] **Confined Spaces** Discuss any required entry into confined spaces (e.g. cellars, tanks, pits.). TANKS, Mt. Mover.LGC Bldr.
- [X] **Noise** Discuss areas with high noise levels and avoid these areas or provide hearing protection. EQUIP.
- [X] **Walking / working surfaces** Discuss the terrain where the rig up and job will occur (e.g. boards, limestone, mud, stairways, walkways, the derrick, and the rig floor). HOSES, IRON, EQUIP.
- [X] **Lifting** Discuss proper lifting techniques and ways to eliminate or reduce heavy lifting such as forklifts, cranes, and sharing the load. CRANE, BUDDY SYS.
- [X] **Falling** Discuss job procedures requiring work at heights greater than 10 ft. (3.3 m). FALL PROTECTION.Fall protection for tanks.
- [X] **Pressure** Discuss pressure hazards such as DME and bulk tanks.
- [X] **LO / TO** Discuss equipment that has been locked or tagged out.
- [ ] **RA Handling** Discuss hazards working around different types of radiation. Restrict the work area to those with the proper training. Follow approved Procedures

3. Hazard Controls

- [X] **Personal protective equipment** Discuss required PPE such as respirators, head protection, hearing protection, protective footwear, hand and skin protection, and fall protection. PROPER PPE.
- [X] **Physical barriers** Discuss items such as hose covers, line tiedowns, guards, railings, and inert gas blankets.
- [X] **Weather** Discuss control measures for weather factors such as temperature, wind, ice, rain, snow, etc.
- [X] **Ignition source controls** Discuss control measures for ignition sources such as the use of spark arrestors, emergency shutdown procedures, and NO SMOKING rules.Equip. & Smoking.
- [X] **Crane, Masts, Booms** Safe working capacities have been calculated per charts on equipment and will not be overloaded.
- [X] **Safety equipment** Discuss safety items such as pop-off valves, fire extinguishers, and communication devices. FIRE EXT. AIR PACKS.
- [X] **Vents** Discuss vent lines for frac tanks and bulk tanks.
- [X] **Equipment monitored for leaks** during job and contained
- [X] **Equipment wash-up** per customers instructions.
- [X] **Equipment drain pans** drained in approved containers prior to leaving location.
- [X] **All empty containers** must be returned to facility I.e. empty sacks, pails, and drums.
- [X] **Waste handling** Discussion of chemical and waste handling procedures.

4. Contingency Plans for Emergencies

- [X] **Location of eyewash/safety shower station** Discuss the location of the eyewash/safety shower station and how to use it.PU, QA, PSW.
- [X] **Assembly points** Discuss where to gather in the event of an emergency. LEASE ROAD.
- [X] **Fire fighting** Discuss fire fighting responsibilities with the appropriate personnel (trained and equipped personnel only).
- [X] **Wind direction** Discuss the wind direction and how it may change the contingency plan such as the assembly area location, and discuss how to detect wind direction on the job site (e.g. windsocks, streamers, etc.).
- [X] **First aid station** Point out the location of the first aid kit and who is responsible for administering first aid. PU, QA, PSW.
- [X] **Reporting Spills** Discuss measures used for spill reporting.
- [X] **Spill Response Kit** Review location of Spill Response Kit.
- [X] **Contaminated soil** Discuss procedures for spill / leak cleanup.
- [X] **Injury and accident procedures** Discuss personnel responsibilities and procedures in the event of an injury or accident.NOTIFY IMMIDIATELY.
- [X] **Rescue procedures** Discuss rescue procedures with the appropriate personnel (trained and equipped).
- [X] **Emergency shut down procedures** Discuss when, how, and what to shut down in the event of an emergency.
- [X] **Recovery procedures** Discuss how to return to normal operating procedures after an emergency.
- [X] **Nearest hospital** The best rout of travel along with everyone understanding which vehicle will be used as the ambulance.

Head count

Employees	4
Other	1
Total	5

5. Roles and Responsibilities

[X] **Communicated** [X] **Assigned**

6. Emergency Escape Procedures (Communicate the following information with all employees on location).

Safe Refuge Area and / or Meeting Point:

Entrance to Location

Note: If wind direction changes do not proceed to gathering point, but rather proceed upwind after observing wind direction indicator.

Evacuation may occur on site because of: (Check appropriate boxes)	**The following equipment is required on location:** (Check appropriate boxes)
[ ] Release of H2S above 10 ppm	[ ] H2S monitors
[X] Blowout	[ ] Combustible gas monitors
[X] Release of flammable gasses	[X] Wind direction indicator (windsocks, streamers, etc.)
[X] Release of other gasses	[X] Escape respirators (one for each employee)
[X] Fire	[X] Full facepiece positive pressure SCBA

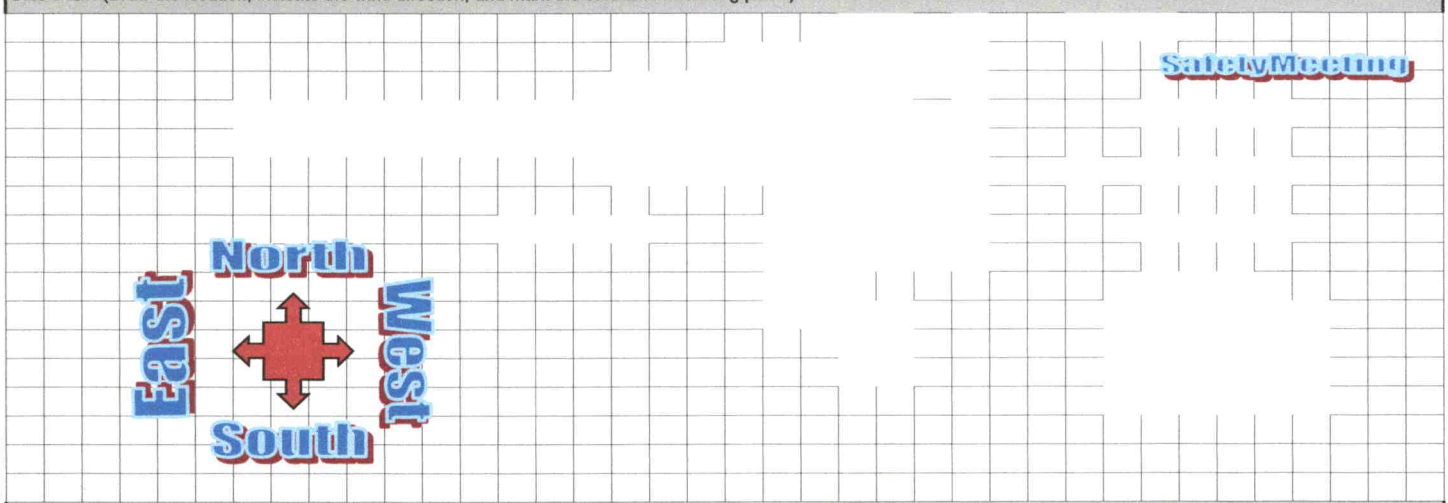
7. Emergency Telephone Numbers and / or Method of Contact

Sheriff:	Hospital (Actual phone numbers other than 911):
Supervisor:	Customer: **BCE-Mach III LLC**
First Aid Responders on this site (Names):	Designated emergency vehicle & mobile phone # **Supervisor PU**

Rescue Procedures *If emergency rescue is necessary, the following is required:* (Check appropriate boxes)

[X] Full facepiece SCBA (30 Minute)	[X] Escape respirators
[X] Protective clothing:	[ ] Monitoring Equipment:
List: **Hard Hat,Steel Toe Boots,Safety Glasses,Ear Plugs,Coveralls, & Gloves**	List:

Site Plan (Draw the location, indicate the wind direction, and mark the safe area / meeting point.)



10. Postjob Safety Meeting (Note: Enter information into IJR) Date: Time:

Check Appropriate box for each incident event [ ] Vehicle Accident [X] No Vehicle Accident

[ ] Injury [X] No Injury [ ] Spill [ ] Near Miss [X] No Near Miss

[ ] Location is as clean as when we arrived.

Is follow up with customer needed? [ ] Yes [X] No

COMMENTS

Customer Representative	Spinnaker Representative
	Daniel Wells