KOLAR Document ID: 1750424

For KCC Use	For	KCC	Use:
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Distric	:t #	

SGA? Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

Form C-1 March 2010 Form must be Typed Form must be Signed All blanks must be Filled

NOTICE OF INTENT TO DRILL

Expected Spud Date:	Spot Description:
month day year	
OPERATOR: License#	
Name:	feet from E / W Line of Section
Address 1:	Is SECTION: Regular Irregular?
Address 2:	(Note: Locate well on the Section Plat on reverse side)
City: State: Zip: +	County:
Contact Person:	Lease Name: Well #:
Phone:	Field Name:
CONTRACTOR: License#	Is this a Prorated / Spaced Field?
Name:	Target Formation(s):
Well Drilled For: Well Class: Type Equipment:	Nearest Lease or unit boundary line (in footage):
	Ground Surface Elevation:feet MSL
Gas Storage Pool Ext Air Rotary	Water well within one-quarter mile:
	Public water supply well within one mile:
Seismic : # of Holes Other	Depth to bottom of fresh water:
Other:	Depth to bottom of usable water:
	Surface Pipe by Alternate:
If OWWO: old well information as follows:	Length of Surface Pipe Planned to be set:
Operator:	Length of Conductor Pipe (if any):
Well Name:	Projected Total Depth:
Original Completion Date: Original Total Depth:	Formation at Total Depth:
	Water Source for Drilling Operations:
Directional, Deviated or Horizontal wellbore?	Well Farm Pond Other:
If Yes, true vertical depth:	DWR Permit #:
Bottom Hole Location:	(Note: Apply for Permit with DWR)
	Will Cores be taken?
	If Yes, proposed zone:

AFFIDAVIT

The undersigned hereby affirms that the drilling, completion and eventual plugging of this well will comply with K.S.A. 55 et. seq.

It is agreed that the following minimum requirements will be met:

- 1. Notify the appropriate district office *prior* to spudding of well;
- 2. A copy of the approved notice of intent to drill shall be posted on each drilling rig;
- 3. The minimum amount of surface pipe as specified below shall be set by circulating cement to the top; in all cases surface pipe shall be set through all unconsolidated materials plus a minimum of 20 feet into the underlying formation.
- 4. If the well is dry hole, an agreement between the operator and the district office on plug length and placement is necessary prior to plugging;
- 5. The appropriate district office will be notified before well is either plugged or production casing is cemented in;
- 6. If an ALTERNATE II COMPLETION, production pipe shall be cemented from below any usable water to surface within 120 DAYS of spud date. Or pursuant to Appendix "B" - Eastern Kansas surface casing order #133,891-C, which applies to the KCC District 3 area, alternate II cementing must be completed within 30 days of the spud date or the well shall be plugged. In all cases, NOTIFY district office prior to any cementing.

Submitted E	Electronically
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For KCC Use ONLY		
API # 15		
Conductor pipe required	feet	
Minimum surface pipe required	feet per ALT. I III	
Approved by:		
This authorization expires:		
Spud date:	Agent:	

Remember to:

- File Certification of Compliance with the Kansas Surface Owner Notification Act (KSONA-1) with Intent to Drill;
- File Drill Pit Application (form CDP-1) with Intent to Drill;
- File Completion Form ACO-1 within 120 days of spud date;
- File acreage attribution plat according to field proration orders;
- Notify appropriate district office 48 hours prior to workover or re-entry;
- Submit plugging report (CP-4) after plugging is completed (within 60 days);
- Obtain written approval before disposing or injecting salt water.
- If well will not be drilled or permit has expired (See: authorized expiration date) please check the box below and return to the address below.

ш

Well will not be drilled or Permit Expired Date: _ Signature of Operator or Agent:

For KCC Use ONLY

API # 15 - ____

IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

In all cases, please fully complete this side of the form. Include items 1 through 5 at the bottom of this page.

Operator:	Location of Well: County:
Lease:	feet from N / S Line of Section
Well Number:	feet from E / W Line of Section
Field:	Sec Twp S. R E 📃 W
Number of Acres attributable to well: QTR/QTR/QTR/QTR of acreage:	Is Section: Regular or Irregular
	If Section is Irregular, locate well from nearest corner boundary.
	Section corner used: NE NW SE SW

PLAT

Show location of the well. Show footage to the nearest lease or unit boundary line. Show the predicted locations of lease roads, tank batteries, pipelines and electrical lines, as required by the Kansas Surface Owner Notice Act (House Bill 2032). You may attach a separate plat if desired.



In plotting the proposed location of the well, you must show:

- 1. The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.
- 2. The distance of the proposed drilling location from the south / north and east / west outside section lines.
- 3. The distance to the nearest lease or unit boundary line (in footage).
- 4. If proposed location is located within a prorated or spaced field a certificate of acreage attribution plat must be attached: (C0-7 for oil wells; CG-8 for gas wells).
- 5. The predicted locations of lease roads, tank batteries, pipelines, and electrical lines.

KOLAR Document ID: 1750424

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form CDP-1 May 2010 Form must be Typed

APPLICATION FOR SURFACE PIT

Submit in Duplicate				
Operator Name:		License Number:		
Operator Address:				
Contact Person:		Phone Number:		
Lease Name & Well No.:		Pit Location (QQQQ):		
Type of Pit:	Pit is:			
Emergency Pit Burn Pit	Proposed Existing		SecTwpR East West	
Settling Pit Drilling Pit	If Existing, date constructed:		Feet from North / South Line of Section	
Workover Pit Haul-Off Pit	Pit capacity:		Feet from East / West Line of Section	
		(bbls)	County	
Is the pit located in a Sensitive Ground Water A	rea? Yes	No	Chloride concentration: mg/l (For Emergency Pits and Settling Pits only)	
Is the bottom below ground level?	Artificial Liner?		How is the pit lined if a plastic liner is not used?	
	Yes N	No		
Pit dimensions (all but working pits):	Length (fe	et)	Width (feet)N/A: Steel Pits	
Depth fro	m ground level to dee	epest point:	(feet) No Pit	
material, thickness and installation procedure.			cluding any special monitoring.	
Distance to nearest water well within one-mile of	of pit:	Depth to shallo Source of infor	west fresh water feet. nation:	
feet Depth of water well	feet	measured	well owner electric log KDWR	
Emergency, Settling and Burn Pits ONLY:		Drilling, Worko	over and Haul-Off Pits ONLY:	
Producing Formation:		Type of materia	al utilized in drilling/workover:	
Number of producing wells on lease: Number of wor		working pits to be utilized:		
Barrels of fluid produced daily:		Abandonment	procedure:	
Does the slope from the tank battery allow all spilled fluids to		t be closed within 365 days of spud date.		
Submitted Electronically				
Date Received: Permit Num	oer:	Permi	t Date: Lease Inspection: Yes No	

KOLAR Document ID: 1750424

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

CERTIFICATION OF COMPLIANCE WITH THE KANSAS SURFACE OWNER NOTIFICATION ACT

Form KSONA-
July 202
Form Must Be Typed
Form must be Signed
All blanks must be Filled

This form must be submitted with all Forms C-1 (Notice of Intent to Drill); CB-1 (Cathodic Protection Borehole Intent); T-1 (Request for Change of Operator Transfer of Injection or Surface Pit Permit); and CP-1 (Well Plugging Application). Any such form submitted without an accompanying Form KSONA-1 will be returned.

Select the corresponding form being filed: C-1 (Intent) CB-1 (Cathodic Protection Borehole Intent) T-1 (Transfer) CP-1 (Plugging Application)

OPERATOR: License #	Well Location:	
Name:	Sec TwpS. R East 🗌 West	
Address 1:	County:	
Address 2:	Lease Name: Well #:	
City: State: Zip:+	If filing a Form T-1 for multiple wells on a lease, enter the legal description of the lease below:	
Contact Person:		
Phone: () Fax: ()		
Email Address:		
Surface Owner Information:		
Name:	When filing a Form T-1 involving multiple surface owners, attach an additional	
Address 1:	sheet listing all of the information to the left for each surface owner. Surface owner information can be found in the records of the register of deeds for the	
Address 2:	county, and in the real estate property tax records of the county treasurer.	
City: State: Zip:+		

If this form is being submitted with a Form C-1 (Intent) or CB-1 (Cathodic Protection Borehole Intent), you must supply the surface owners and the KCC with a plat showing the predicted locations of lease roads, tank batteries, pipelines, and electrical lines. The locations shown on the plat are preliminary non-binding estimates. The locations may be entered on the Form C-1 plat, Form CB-1 plat, or a separate plat may be submitted.

Select one of the following:

□ I certify that, pursuant to the Kansas Surface Owner Notice Act (see Chapter 55 of the Kansas Statutes Annotated), I have provided the following to the surface owner(s) of the land upon which the subject well is or will be located: 1) a copy of the Form C-1, Form CB-1, Form T-1, or Form CP-1 that I am filing in connection with this form; 2) if the form being filed is a Form C-1 or Form CB-1, the plat(s) required by this form; and 3) my operator name, address, phone number, fax, and email address.

□ I have not provided this information to the surface owner(s). I acknowledge that, because I have not provided this information, the KCC will be required to send this information to the surface owner(s). To mitigate the additional cost of the KCC performing this task, I acknowledge that I must provide the name and address of the surface owner by filling out the top section of this form and that I am being charged a \$30.00 handling fee, payable to the KCC, which is enclosed with this form.

If choosing the second option, submit payment of the \$30.00 handling fee with this form. If the fee is not received with this form, the KSONA-1 form and the associated Form C-1, Form CB-1, Form T-1, or Form CP-1 will be returned.

Submitted Electronically



Mach Resources Jahay 1-34-11 1H Drilling Procedure

Phase Descriptions

Hole Section	Activity	Beginning	End
MOB	MIRU	RR of previous well	On bottom ready to drill out
Surf	Drill	New hole drilled past conductor	TD reached in hole section
	Cond/Trip	Start CUC	Finish LD BHA
	Csg	Start RU csg crew	Complete drill out of csg shoe
Int Deep	Drill	New hole drilled past Int Shallow Csg shoe	TD reached at KOP
	Cond/Trip	Start CUC	On bottom w/curve assembly
	Drill - Curve	New hole drilled w/curve assembly	TD reached at end of curve
	Cond/Trip - Curve	Start CUC	Finish LD BHA
	Csg	Start RU csg crew	Complete drill out of csg shoe
Prod	Drill - Lat	New hole drilled beyond 7" Csg shoe	Lateral TD Reached
	Cond/Trip	Start CUC	Finish LD BHA
	Csg	Start RU csg crew	Rig Release

Well Control Best Practices

Under no circumstance is the drilling team to risk their safety in order to recover a well control situation. The protection of human life is the paramount concern in any well control situation.

Always CBU at least one time prior to tripping out of the hole, regardless of previous drilling speed or mud weight variations. Check for flow on a regular basis. Make note on daily report for every trip.

Co Man in charge of the rig is to personally ensure that the flow and pit level alarms are functional prior to all trips, and that they are in use on a daily basis while drilling.

Confirmation of this check should be added to the daily report. Do not transfer mud during trips, this is to ensure an accurate trip sheet.

The PVT equipment is critical and pit volumes/gain-loss should be in working order. Performing a pit drill is a great way to test equipment and response.

Make sure alarms are not being by-passed. Make note on daily report when equipment is checked.

Maintain a trip sheet while tripping out and in the hole. It is the Co Man's responsibility to ensure the correct fill/displacement volumes are being used and the fill/displacement volumes are being accurately monitored.

Install and test the BOP, choke manifold, gas buster, and flare line prior to drill out of the surface casing. The Co Man is to document in the morning report that this action has been completed

Install slip on riser to conductor

Drill surface w/ FW Perform pre-spud inspection and maintenance

MU the following BHA OD (in) ID (in) Total Length (ft) No. **Component Description** Component Length (ft) 1 TBD (same as drill out) 12 1/4 NA 1.5 1.5 3 XO sub 2 1/4 2.5 4.0 8 4 1.6 FB motor, 0.23 rpg 6 3/4 NA 34.7 38.7 5 UBHO sub 6 3/4 2 3/4 3.0 41.7 6 NMDC's (2) 6 1/2 3 1/4 61.3 103.0 X/O sub 6 1/2 2 3/4 104.9 7 1.9 8 4" HWDP 2 9/16 195.2 300.0 4

Surface Hole (12.25"): 0'- 300' MD

Drill surface hole to 300'. Minimum set depth is 247'. Use the following parameters:

- Pump Rate: 400-600 gpm
- WOB: 5-10k (run light weight to keep hole straight, achieve ROP through rpm's and gpm's)
- Rotary: 90+ rpm

Notes:

- Pump sweep a minimum of every connection or as needed, use lots of soap to prevent bit balling (2-3 vis cups/connection)

- Take survey at TD

Once at TD, pump sweep. Continue sweeping hole until cutting volume coming across shakers with sweep returns to normal - Ensure only one sweep is in wellbore at a time.

Make wiper trip to NMDC's, noting any tight spots. Do not pull more than 20k over string weight if tight spots are seen. - Ensure slips and tong dies are in working order prior to starting trip

Rack back dir tools and 4" HWDP

RU Csg Crew to run 9.625" 40# J55 BTC csg

- Contact JD Rush at least three days prior to running to order csg. All efforts should be made to call on weekdays during business hours to avoid overtime charges. Matt Parrish (724) 766-1487, mattp@jdrushcorp.com

- Order surface casing to arrive same day as rig move, rig is ready to spud within 24 hours!

- Once csg is on location clean and drift csg (8.75")

- Contact cementers at least 8 hrs prior to cmt'ing

RIH w/9.625" 40# J55 BTC csg as follows:

- Guide shoe (Weatherford no valve)
- 1 joint of 9.625" 40# J55 BTC csg
- Float collar, PDC drillable (Use Weatherford wiper plug)
- 9.625" 40# J55 BTC csg to surface

Notes:

- Baker lock shoe, shoe track, and collar
- Once shoe track is MU, pump through prior to cont. RIH
- Run bow-spring centralizer on first jt only
- Do not run any cement baskets
- Tag bottom with csg and space out so cmt head is 5' above rig floor

Circulate csg capacity at 8 bpm while RD csg crew and RD lay down machine

RU cmt crew and test lines to 3000 psi. Have 1" tubing, 100 sks of 15.6# neat cmt, sodium silicate (Flow Stop), and calcium chloride available for top out if we lose returns while drilling

Cmt the 9.625" csg w/the following cmt slurries, using pump schedule below: - Lead Slurry (To Surface)

	Weight	11.40 ppg
	Yield	2.94 cuft/sk
	Mix Water	18.10 gal/sk
	Excess	225%
	Lead Cmt Volume	75 sacks
- Tail Slurry (200')		
	Weight	13.20 ppg
	Yield	1.85 cuft/sk
	Mix Water	9.95 gal/sk
	Excess	225%
	Open hole cmt volume	85 sacks
	Shoe track volume	10 sacks
	Tail Cmt Volume	95 sacks

Pump Schedule						
Fluid Volume (bbls) Rate (bp						
Fresh Water Spacer	30.0	5				
Lead Slurry	39.3	5				
Tail Slurry	31.3	5				
Plug						
Fresh Water	19.7	8				

Adjust volumes for actual depths

- Slow pump rate down to 2-3 bpm 10 bbls prior to bumping the plug. Bump plug w/500 psi over final circulating pressure.

- Do not over displace by more than 1/2 shoe track volume (1.6 bbls)

- Release pressure and check if flt is holding. If flt does not hold, pressure up and check again. If flt still does not hold, trap final displacement pressure +500 psi and wait for 4 hrs. Release cementers if floats don't hold to avoid extra charges.

- Generate cmt and casing report in WellView

- Record cmt details on morning report, include the following: slurries (yield & volumes), displacement fluid and volume, volume of cmt circulated to surface, lift and final pressure, and if returns were full or partial

Cut off conductor and weld on 9-5/8" SOW x 11" 5M head, test head to 1285 psi (limit to 50% of csg collapse).

NU BOP's and related well control equipment

- Ensure all necessary well control equipment is rigged up prior to drilling out of the surface csg

Test BOP rams/manifold to 250/5000 psi and annular to 250/3000 psi. Test all floor valves and back to pumps to 5000 psi Test 9.625" Surface casing to 500 psi or 0.2 psi/ft (whichever is greater) and hold for 30 mins. Install wear bushing - company man needs to be present to verify

MU the following BHA w/o bit (please confirm BHA w/engineer)

No.	Component Description	OD (in) ID (in)		Component	Total Length (ft)
				Length (ft)	
1	Taurex 516	8.75	NA	1.0	1.0
2	1.6 FB motor, 0.23 rpg	6.75	NA	34.7	35.7
3	UBHO Sub	6.50	2.84	2.7	38.4
4	NMDC	6.57	3.25	30.5	68.9
5	FLEX NMDC	6.56	2.83	28.8	97.7
6	X/O Sub	5.00	2.50	1.7	99.4
7	4" HWDP - 15 stands	4.00	2.56	1395.0	1494.4
8	4" DP	4.00	2.56	2517.6	4012.0

- Close blind rams when working with BHA above rotary, always check for pressure prior to opening blind rams again - Run 8-1/2" IBS 1000' back from the bit

Test MWD and MU bit

TIH, tag flt collar

If you haven't already, test Csg to **500 psi/hold for 30 mins**. If pressure drops more than 10% during test contact drlg supt/eng Drill out shoe track 10' of new formation, and CBU until mud is free of cuttings and is of uniformed density.

Test shoe to 12# EMW using guide lines below:

- Pull the bit up into the casing shoe

- Install TIW, close valve and test lines with drilling fluid to a minimum of 1000 psi above the maximum pressure anticipated.

Ensure that there are no surface leaks. Bleed off pressure. Open valve and break circulation. Shut down

- Close annular preventer or pipe rams. Verify that chokes are closed.

- Pump down the drill pipe at a constant rate throughout the test, using the lowest rate possible

- Continue pumping until the maximum specified FIT limit is achieved or until a definitive break-over in pressure is observed, whichever comes first

Calculate the test pressure as follows P = (FIT - MW)(.052*TVD)FIT or LOT = Formation Integrity Test/Leak Off Test (ppge) MW = Mud Weight (ppg) P = Maximum Test Pressure (psi) or Leak Off Pressure (psi) TVD = TVD of csg shoe (ft) 0.052 = Conversion Factor

- Shut down the pump immediately and record the ISIP (instantaneous shut-in pressure).

- Record the shut-in pressures every minute thereafter for a minimum of ten minutes.

- Bleed off pressure and measure fluid volume recovered, if possible. If shoe does not test then contact drlg supt/eng prior to drilling ahead

Offset Well Issues

No issues

Intermediate (8.75"): 300'- 4917' MD

Drill from 300' to 4012', which is 30' above KOP using the following parameters: (Confirm KOP and all other depths w/ directional plan) - Pump Rate: 500-600 gpm

- Differential: 1340 psi
- Rotary: 40-100 rpm
- WOB: 10-35

Notes:

- Maintain MW of 8.7-9.6 ppg
- Catch surveys on the fly, don't wait for them to pump up. If you miss a survey in the straight hole just skip it and catch the next one.
- Start logging with gamma as soon as you drill out from surface casing
- Pump sweep every connection or as needed
- Shut down and displace at ~3000' (let's discuss)
- Maintain MW of 8.7-9.6 ppg w/45-60 vis, and WL of 4-6 cc/30 min
- Have pump pop offs set for max liner rating allowed by contractor

TOOH 30' above KOP, pump two (80) bbl sweeps before TOOH (total of 3+ BU's), if you have to backream circulate a BU before trying to pull on elevators. PU curve assy, swap out MWD tool, run 2.38 motor w/ near bit kick pad (0.49 rpg). Run PDC Bit (Taurex 513), rearrange HWDP to put push pipe on bottom (let's discuss), and drill curve per directional plan. Once we TD we will NOT wiper trip back to KOP before TOOH to run csg. Take surveys every 45' if possible

- Do not back ream curve motor unless forced to do so, pick up with rotary off and ream back to bottom if you are working the pipe

- Once we TD the curve we need to perform a clean-up cycle (CUC) and pump 1 sweep around

- Once we finish the CUC we will prepare to come out and run 7" casing, no wiper trip. High side motor and pump out to KOP, circulate 1 sweep around before starting to TOOH. Make sure MW is at least 9.3 before TOOH.

LD directional BHA, and pull wear bushing - company man needs to be present to verify

- Close blind rams when working with BHA above rotary, always check for pressure prior to opening blind rams again

RU Csg Crew to run 7" 26# P110 TCBC csg

- Contact **B&L Pipeco** at least three days prior to running to order csg. All efforts should be made to call on weekdays during business hours to avoid overtime charges. **Derek Smith (832) 718-2930, Derek.Smith@blpipeco.com**

- Once csg is on location clean and drift csg w/API drift (6.151"), 29# needs to special drift
- Contact cementers at least 8 hrs prior to cmt'ing

RIH w/ 7" csg as follows:

- Float shoe (Weatherford bull nose)
- 1 flt joint of 7" 26# P110 TCBC csg
- Float collar, PDC drillable (Use Weatherford wiper plug)
- 7" 26# P110 TCBC csg to surface.

Notes:

- Baker lock all connections to 2 jts above the flt collar
- Once shoe track is MU, pump through prior to cont. RIH
- Have enough fresh water at rig for cmt job
- Fill pipe and break circulation every 30 to 40 jts or if displacement stops or becomes weak

- MU 6 1/8" BHA while building the curve and rack it back (if possible)

- Once we start running our 7" casing we need to utilize the CRT tool, especially once we get into the curve. We are running TCBC casing that we will make up to ~22000 ft-lbs (confirm torque specs) so we have the option to rotate the casing if we start to have issues running pipe.

- Land out casing and circulate 1.5x casing capacity Cont to circulate, while RU cmt crew and test lines to 5000 psi.

Cmt the 7" csg w/the following, using pump schedule below:

 Lead Slurry (TOC 3670') 	
---	--

Weight	10.20 ppg
Yield	5.49 cuft/sk
Mix Water	35.89 gal/sk
Excess	30%
Calculated Lead Cmt Volume	65 sacks
Pump Time	TBD hrs (typical pump time 3.5 - 5 hrs)
Tail Slurry (Tail height is ~1000')	
Weight	13.80 ppg
Yield	1.39 cuft/sk
Mix Water	6.57 gal/sk
Excess	30%
Open hole cmt volume	144 sacks
Shoe track volume	6 sacks
Tail Cmt Volume	150 sacks
Pump Time	TBD hrs (typical pump time 3.5 - 5 hrs)

Pump Schedule						
Fluid Volume (bbls) Rate (bpm						
Fresh Water Spacer	40.0	5				
Lead Slurry	63.6	5				
Tail Slurry	37.1	6				
Plug						
Fresh water	186.1	6				

Adjust volumes for actual depths

- Slow pump rate down to 2-3 bpm 10 bbls prior to bumping plug. Bump plug 500 psi over final circulating pressure.

- Do not over displace by more than 1/2 shoe track volume (0.75 bbls)

-After we bump plug @ 500 psi over, pressure up to 1500 psi and hold for 30 min for casing test. If pressure drops more than 10% contact drilling supt/eng

- Release pressure and check that flt is holding. If flt does not hold, pressure up and check again. If flt still does not hold, trap final displacement pressure +500 psi and wait for 4 hrs. Release cementers if floats don't hold to avoid extra charges.

- Generate cmt and casing report in Wellview

- Record cmt details on morning report, include the following: slurries (yield & volumes), displacement fluid and volume, volume of cmt circulated to surface, lift and final pressure, and if returns were full or partial

Run pack off and tighten down lock screws, test to 5000 psi

MU the following BHA w/o bit while bui	ng the curve (please confirm BHA w/engineer)
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No.	Component Description		ID (in)	Component	Total Length (ft)
				Length (ft)	
1	Taurex 513	6.13	NA	1.0	1.0
2	1.75 AKO motor, 0.66 rpg motor w/ top sub	4.75	NA	31.2	32.2
3	UBHO Sub	4.75	2.50	2.6	34.8
4	(2) NMDC's	4.75	2.75	60.0	94.8
5	X/O Sub	4.75	2.50	2.0	96.9
6	(1 jt) 4" DP	4.00	2.56	31.0	127.9
7	NOV DL Reamer	5.19	2.69	4.0	131.8
8	4" DP	4.00	2.56	2368.2	2500.0
9	NOV Agitator	4.75	NA	27.0	2527.0
10	4" DP	4.00	3.00	3034.3	5561.3
11	4" HWDP	5.00	2.60	1395.0	6956.3
12	4" DP	4.00	2.56	2647.0	9603.3

-Arrange HWDP so that bottom is @ KOP when at TD

- PU NOV agitator and run 2500' behind the BHA

- Close blind rams when working with BHA above rotary, **always check for pressure prior to opening blind rams again** Test MWD and MU bit

TIH, tag flt collar

Drill out cmt and flt equipment.

Offset Well Issues

Ricke lost returns @ 3362', be prepared for losses, possibly slow down pump rate to 450-500 gpm's 3 stands before and 3 stands after 3362' and possibly need to be prepared for LCM sweep. **Do not drill past 80 degrees in the curve until Tammy confirms the Miss Top**

Production (6.125"): 4917'- 9603.29' MD

Drill lateral per dir plan from 4917'-9603.29' staying within target box (+/-5' TVD and +/-50' E/W). Using the following drilling parameters:

- Pump Rate: 215-315 gpm

- Differential: TBD based on motor selection
- WOB: Up to 35k
- Rotary: 60-100 rpm
- ROP Target: 100 fph

Notes:

- Drill interval with 8.4-8.6 ppg FW

- Catch surveys on the fly, don't wait for them to pump up. Take surveys minimum of every 45'. Target window is +/- 5' TVD
- When you cement your 7" casing be sure to displace your cement with FW
- Jet your pits and fill them with FW. Utilize WBM from intermediate hole for sweeps in the lateral.

- Before any TOOH in the lateral we need to perform a clean-up cycle (CUC) and circulate 1 sweep (20 bbls) per 1000'

drilled or 2 sweeps, whichever is greater

o These are minimum requirements for the # of sweeps, if they are still bringing up cuttings then continue to sweep the hole until it cleans up

o Max out the rotary during these CUC's, 100 rpm's is desired

- o Max out your flow rate based on the motor's limitations, 300 gpm's is desired
- o Work the stand at 3 min up and 3 min down
- o Only one sweep in the hole at a time

- Before we run the liner we will follow the same CUC procedures as listed above but we will add a short trip with our NOV DL reamer. PU DC's on the short trip if possible (keeping them in the vertical) and TIH as far as we can with reamer, and ream to bottom once we tag up. Short trip back above the depth we tagged up at.

o Spot a lube pill before the short trip.

o If we trip straight to bottom then turn around and come out of the hole, don't pump a bottoms up. Check for flow at the 7" shoe.

o If we tag up and have to ream to bottom we will circulate sweeps until the hole cleans up (minimum of 2 sweeps) and try to short trip again

TD well at approximately 9603.29', keeping BHL 330' from lease line.

- Once we TD and perform a CUC/short trip back to bottom on elevators we will TOOH to run liner with 10 stage OH packers

- Liner top will be set at approx 4792', which is 125' inside the 7" casing shoe. I will send out packer spacing once we get close to TD.

-When running liner, run enough push pipe to position 4.75" DCs @ KOP. Position 4" HWDP directly on top of DCs.

Once we finish TOOH, LD directional BHA and pull wear bushing - company man needs to be present to verify - Close blind rams when working with BHA above rotary, **always check for pressure prior to opening blind rams again**

RU Csg Crew to run 4.5" 11.60# P110 BTC csg

Contact JD Rush at least three days prior to running to order csg. All efforts should be made to call on weekdays during business hours to avoid overtime charges. Matt Parrish (724) 766-1487, mattp@idrushcorp.com
 Once csg is on location clean and drift csg w/API drift (3.875")

- Run liner with OH packers per approved workbook, set & test liner top to 1500 psi for 15 min, then LDDP & prep to RR

Offset Well Issues

Possible losses, if we lose returns minimize flow rate and keep a pump on the backside



February 1, 2024

Kansas Corporation Commission Oil & Gas Conservation Division 130 S. Market, Rm. 2078 Wichita, KS 67202

Re: BCE-Mach III LLC's – JAHAY 1-34-11 1H Section 1-34S-11W Barber County, Kansas

To whom it may concern:

BCE-Mach III LLC intends to drill the subject well to an approximate true vertical depth of between 4,650' and 4,700' in the Mississippi Formation. The producing wellbore will be in a 322.84-acre production unit consisting of the E/2 of Sect. 1-34S-11W, Barber County, Kansas. The nearest lease or unit boundary will be no less than 330' from any portion of the effective completion interval. The estimated length of the effective completion interval will be 4,688'.

Should you have any questions, you may contact the undersigned at (405) 410-6082.

Respectively,

BCE-Mach III LLC

Lance Reid







	WELL DETAILS: JAHAY 1-34-11 1H									
					14	45.00				
+N/-S	+E/	′-W	Nort	hing	Ea	sting	Latit	tude	L	0
0.00 0.00		166367.00 20 ²		2010	2010187.00		37.12356400		.4	
SECTION DETAILS										
	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
	637.02	4.74	277.38	636.75	1.26	-9.72	2.00	277.38	-1.26	
4	3383.84	4.74	277.38	3374.18	30.40	-234.84	0.00	0.00	-30.40	
	3541.86	0.00	0.00	3532.01	31.24	-241.32	3.00	180.00	-31.24	
4	4041.86	0.00	0.00	4032.01	31.24	-241.32	0.00	0.00	-31.24	
4	4641.86	60.00	179.61	4528.21	-255.23	-239.38	10.00	179.61	255.23	
4	4791.86	60.00	179.61	4603.21	-385.13	-238.50	0.00	0.00	385.13	
4	4916.86	80.00	179.61	4645.74	-502.00	-237.71	16.00	-0.01	502.00	
L	4978.61	89.88	179.61	4651.18	-563.43	-237.29	16.00	0.01	563.43	
9	9603.29	89.88	179.61	4660.87	-5188.00	-206.00	0.00	0.00	5188.00	



JAHAY 1-34-11 1H

TVD	+N/-S	+E/-W	Northing	Easting	La
1.00	-929.40	-1037.28	165437.60	2009149.72	37.12 ⁻
1.00	-3222.81	391.42	163144.19	2010578.42	37.114
1.00	-2204.31	48.13	164162.69	2010235.13	37.117
1.00	-513.85	367.44	165853.15	2010554.44	37.122
1.00	-2206.96	55.97	164160.04	2010242.97	37.117
1.00	-2161.33	77.21	164205.67	2010264.21	37.117
1.00	-2207.00	-48.10	164160.00	2010138.90	37.117
4032.01	31.24	-241.32	166398.24	2009945.68	37.123
4645.79	-502.00	-238.00	165865.00	2009949.00	37.122
4660.87	-5188.00	-206.00	161179.00	2009981.00	37.109



Vertical Section at 180.00° (200 usft/in)

ATLAS RIG 3



200 400 600 800 1000 1200 1400









SECTION 36, T 33 S - R 11 W, 6TH P.M., BARBER COUNTY, KANSAS





MACH. RESOURCES	
Gateway Services Group, LLC	ST., STE 400 OK 73034 285-5884 285-5886 4091 (LS) 6-30-2022
EXHIBIT "A" PRELIMINARY JAHAY 1-34-11 1H 173' FSL - 2021' FEL SECTION 36, T 33 S - R 11 W 6TH P. BARBER COUNTY, KANSAS	м.,
DRAWN BY: JE DATE: 2/15/22 CHK'	D: CLC
GATEWAY NO.: 22-0046-105R1 SCALE:	N.T.S.
LINE NO.: AFE:	
REV. DWN. DESCRIPTION	DATE
1 CLC SHL MOVE	3/16/22





THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

Before Commissioners:

Dwight D. Keen, Chair Susan K. Duffy Andrew J. French

In the matter of the application of BCE-Mach III LLC for a well location exception for the Jahay 1-34-11 1H well in Section 1, Township 34 South, Range 11 West, Barber County, Kansas. Docket No. 22-CONS-3314-CWLE CONSERVATION DIVISION License No. 35906

ORDER GRANTING APPLICATION

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BCE Mach III LLC (Operator) seeks authority to drill the captioned well and asks for the assignment of a full production allowable. The Commission grants Operator's Application, in the manner and for the reasons described below.

1. The Commission finds that its exclusive jurisdiction and authority under K.S.A. 74- 623 to regulate oil and gas activities in Kansas provides it jurisdiction regarding this matter.

2. Operator proposes to drill the captioned well as a horizontal Mississippian well. Operator shall spud the well 189 feet from the south line and 2,046 feet from the east line of Section 36, Township 33 South,¹ enter the Mississippian formation at 330 feet from the north line and 380 feet west of the centerline of Section 1, Range 34 South, and continue in the Mississippian to a bottom-hole location 330 feet from the south line and 2,269 feet from the east line of Section 1.²

3. K.A.R. 82-3-108 requires that Barber County vertical wellbores completed into the same formation be located at least 660 feet away from each other; K.A.R. 82-3-1302(b) applies these setback requirements to the entire completion interval of horizontal wellbores.³

¹ See Application, ¶ 2.

² See Supplement To Application, ¶¶ 2-3, Exhibit B.

³ See also K.A.R. 82-3-207 and K.A.R. 82-3-312, establishing drilling units.

4. To drill the captioned well, Operator needs a well location exception because the completion interval of the captioned well will be less than 660 feet from various vertical wellbores on its lease that are also completed into the Mississippian formation.⁴

5. There is one procedural wrinkle. K.A.R. 82-3-103a(b) requires an operator to file an application and publish notice to drill a horizontal well. The Commission's December 16, 2011, Order Granting Application in Docket 12-CONS-117-CEXC provided an exception to this rule for horizontal wells drilled into the Mississippian formation – but only where the well meets all statewide or special field-rule setback requirements.⁵ Operator's proposed well does not, which is why Operator seeks a well location exception. And Operator's Application did not explicitly identify the need to file an application under K.A.R. 82-3-103a(b).

6. The Commission finds Operator properly published notice of its Application in The Wichita Eagle and Gyp Hill Premiere, and that the Application is sufficient to make a well-reasoned, informed determination. But this procedural wrinkle matters because although Operator provided notice to all parties required by K.A.R. 82-3-108 for a well location exception, it did not give notice to all parties required by K.A.R. 82-3-103a(b).

7. The Commission believes those making decisions in Docket 12-117, in December 2011, did not intend for an operator to need to identify K.A.R. 82-3-103a(b) – and more importantly, publish notice under K.A.R. 82-3-103a(b) – in a situation such as this. Here, the need for a well location exception is based upon drilling-unit boundary lines within an operator's own lease, not upon a proposed well encroaching upon a lease or unit boundary line shared with adjacent operators or unleased mineral owners. The Commission's belief is furthered by a review

⁴ See Application, ¶ 3. The Commission also takes administrative notice of its records. See K.A.R. 82-1-230(h). Operator states that some of the *perforations* may be located less than 660 feet away. See Application ¶ 4. But the necessary regulatory analysis pertains to the completion interval. See K.A.R. 82-3-1302(b).

⁵ See Docket 12-CONS-117-CEXC, Order Granting Application, ¶ 14, Ordering Clause B (Dec. 16, 2011).

of multiple dockets resolved near-contemporaneously with the decision in Docket 12-117, wherein applicants in Operator's same situation were granted well location exceptions without identifying K.A.R. 82-3-103a(b) or publishing notice as required therein.⁶

8. Still, the plain language of K.A.R. 82-3-103a(b) and the Order Granting Application in Docket 12-117 say what they say, regardless of intention and past practice. At the same time, the Commission is cognizant of the economic waste that will accrue by delay and acknowledges it was reasonable for Operator to assume, based upon past practice, that the Commission would find notice only under K.A.R. 82-3-108 to be acceptable.

9. In light of all this, based upon the facts presented in Operator's Application and Supplement To Application, the Commission finds that the captioned well will prevent waste and protect correlative rights, and that granting Operator's Application raises no pollution issues.⁷

10. The Commission shall grant Operator's Application via this Order, but require Operator to subsequently provide notice under K.A.R. 82-3-103a(b). The Commission shall hear any appropriate protest stemming from such provision of notice, and the outcome of this matter will not be final until all such protests are resolved.

THEREFORE, THE COMMISSION ORDERS:

A. Operator's Application to drill the captioned well is granted. The well shall be drilled in the manner described in this Order, and the captioned well is granted a full allowable.

B. Operator shall mail this Order, within ten days of this Order being issued, to all operators or lessees of record within one-half mile radius of the proposed completion interval of the captioned well and to each owner of record of the minerals in unleased acreage within a one-

⁶ See Docket Nos. 13-CONS-466-CWLE, 14-CONS-124-CWLE, and 15-CONS-044-CWLE.

⁷ See K.A.R. 82-3-100(b); K.A.R. 82-3-108(c).

half mile radius of the same. Operator shall then file notice in this docket, identifying who was served, and when.

C. <u>The Commission shall consider any protest against the granting of Operator's</u> <u>Application, so long as it is filed with the Commission within 15 days of Operator serving</u> <u>notice of this Order upon such protester, so long as the protest meets the requirements of</u> <u>K.A.R. 82-3-135b(a), (b), and (d).</u>

D. Operator is authorized to drill the captioned well prior to this Order taking effect, but does so at the risk of future proceedings impacting the final outcome of this mater.

E. <u>Operator's Application is being granted via summary proceeding; thus, this Order</u> <u>does not take effect until after the time for requesting a hearing has expired.</u>⁸ Any party may request a hearing on the above issues by submitting a written request setting forth the specific grounds upon which relief is sought, to the Commission at 266 N. Main, Suite 220, Wichita, Kansas 67202, within 15 days from the date of service of this Order.⁹ If a hearing is not requested, then this Order shall become effective upon expiration of the time for requesting hearing.¹⁰

F. If this Order becomes effective, then any party may file and serve a petition for reconsideration pursuant to the requirements and time limits established by K.S.A. 77-529(a)(1).¹¹

BY THE COMMISSION IT IS SO ORDERED.

Keen, Chair; Duffy; Commissioner, French, Commissioner.

Dated: 03/22/2022

Lynn M. Ref

Lynn M. Retz Executive Secretary

Mailed Date: <u>03/22/2022</u> JRM

⁸ See K.S.A. 77-537.

⁹ See K.S.A. 77-542.

¹⁰ See K.S.A. 77-537.

¹¹ See K.S.A. 55-606; K.S.A. 77-503(c); K.S.A. 77-531(b).

CERTIFICATE OF SERVICE

22-CONS-3314-CWLE

I, the undersigned, certify that a true copy of the attached Order has been served to the following by means of

first class mail and electronic service on 03/22/2022

DAVID BENGSTON STINSON LLP STINSON LEONARD STREET LLP 1625 N. Waterfront Parkway, Ste 300 Wichita, KS 67206 david.bengston@stinson.com

KELCEY MARSH, LITIGATION COUNSEL KANSAS CORPORATION COMMISSION CENTRAL OFFICE 266 N. MAIN ST, STE 220 WICHITA, KS 67202-1513 k.marsh@kcc.ks.gov

KENNY SULLIVAN, DISTRICT #1 SUPERVISOR KANSAS CORPORATION COMMISSION DISTRICT OFFICE NO. 1 210 E. FRONTVIEW SUITE A DODGE CITY, KS 67801 k.sullivan@kcc.ks.gov JAKE EASTES, GEOLOGIST SPECIALIST KANSAS CORPORATION COMMISSION 266 N. Main St., Ste. 220 WICHITA, KS 67202-1513 j.eastes@kcc.ks.gov

MICHELE PENNINGTON KANSAS CORPORATION COMMISSION DISTRICT OFFICE NO. 1 210 E. FRONTVIEW SUITE A DODGE CITY, KS 67801 m.pennington@kcc.ks.gov

/S/ DeeAnn Shupe DeeAnn Shupe



Mach Resources Jahay 1-34-11 1H API #:15-007-##### Sec 36, T33N, R11W Barber County, Kansas Proposal #32090001 Service point El Reno, Oklahoma 3/10/2022

Rig - Atlas 3

Price Book Version 020422-1

Prepared for:	Prepared by:
Lance Reid - Drilling Manager	Dillon Bellamy
Mach Resources	Operations Engineer I
Ireid@machresources.com	dillon.bellamy@spinnakeroil.com
405-410-6082	(405) 328-1026

Contact:

Michael Rallo Cementing Operations Coordinator michael.rallo@spinnakeroil.com (405) 808-5364

Contact:

Clint Symes Cementing Operations Coordinator clint.symes@spinnakeroil.com (405) 808-1162

Contact:

Scott Walton El Reno - Area Field Manager scotty.walton@spinnakeroil.com (405) 535-6561

El Reno Central Coordinators phone - (405) 420-3534

Thank You For Your Business!!!



Spinnaker - Primary Cementing Best Practices

Primary cement job failures are predominately due to a breakdown in the "displacement process." This results in poor zonal isolation manifested by channeling or non-uniform displacement of the annular fluid(s) by the cementing fluid(s). These guidelines will enhance the displacement process and improve the probability of successful primary cementing.

1) Flow Rate: Regardless of the flow regime, high-energy displacement rates are most effective for ensuring good displacement. Turbulent flow conditions are usually more desirable, but frequently cannot be achieved or are not always required. When turbulent flow is not a viable option for a situation, use the highest pump rate that is feasible for the wellbore conditions. The best results are obtained when (1) the spacer and/or cement is pumped in such a way as to deliver maximum energy to the annulus, (2) the spacer or flush is appropriately designed to remove the drilling fluid, (3) and a competent cement is used.

2) Conditioning the Drilling Fluid: The condition of the drilling fluid is one of the most important variables in achieving good displacement during a cement job. A fluid that has excellent properties for drilling may be inappropriate for cementing purposes. Regaining and maintaining good mobility is the key. An easily displaced drilling fluid will have low, non-progressive gel strengths and low fluid loss. Pockets of gelled fluid, which commonly exist following the drilling of a wellbore, make displacement difficult. These volumes of gelled fluid must be broken up and mobilized.

Industry experience has indicated that it may be necessary to circulate up to ten complete hole volumes prior to the cement job in order to ensure that the hole is well conditioned and clean. A minimum of two bottoms-up is recommended in all scenarios prior to pumping.

3) Spacers and Flushes: Spacers and flushes are effective displacement aids because they separate unlike fluids such as cement and drilling fluid, and enhance the removal of gelled mud allowing a better cement bond. Spacers can be designed to serve various needs. For example, weighted spacers can help with well control, and reactive spacers can provide increased mud-removal benefits. Flushes are used for thinning and dispersing drilling fluid particles. Typically, 8 to 10 minutes contact time or 1000 feet of annular space with spacers or flushes, whichever is greater, are adequate.

4. Pipe Centralization: Centralizing the casing with mechanical centralizers across the intervals to be isolated helps optimize drilling fluid displacement. Good pipe standoff insures a uniform flow pattern around the casing and helps equalize the force that the flowing cement exerts around the casing, increasing drilling fluid removal. In a deviated wellbore, standoff is even more critical to prevent a solids bed from accumulating on the low-side of the annulus. Generally, the industry strives for about 70% standoff.

5) Pipe Movement: Pipe movement is one of the most effective methods of transferring energy downhole. Pipe rotation or reciprocation before and during cementing helps break up gelled, stationary pockets of drilling fluid and loosens cuttings trapped in the gelled drilling fluid. If the pipe is poorly centralized, pipe movement can compensate by changing the flow path through the annulus and allowing the slurry to circulate completely around the casing. The industry does not specify a minimum requirement for pipe movement, however it is acknowledged the even a small amount of pipe movement will enhance the displacement process.

6) Hole Size: Best mud displacement under optimum rates is achieved when annular tolerances are approximately 1.5 to 2 inches. Centralization of very small annuli is very difficult, and pipe movement and displacement rates may be severely restricted. Very large annuli may require extreme displacement rates to generate enough flow energy to remove the drilling fluid and cuttings.

7) Wiper Plugs: Top & bottom wiper plugs are recommended on every primary cementing job unless prohibited by mechanical or other special restrictions. The bottom plug serves to minimize contamination of the cement as it is pumped, in some cases it may be prudent to use multiple bottom plugs to separate mud/spacer and spacer/cement interfaces. The top plug is used to prevent any contamination of the cement slurry by the displacement fluid and minimize the chances of leaving a cement sheath inside the casing. Top plug also gives a positive indication that the cement has been displaced.

8) Rat Hole: When applicable, a weighted, viscous pill in the rat hole prevents cement from swapping with lighter weight mud during the cement job or when displacement stops.

9) Shoe Joint: A shoe joint is recommended on all primary casing/liner jobs. The length of the shoe joint will vary. The absolute minimum length is one joint of pipe. If conditions exist, such as not running a bottom plug, two joints of pipe is a minimum requirement.

Mach Resources Jahay 1-34-11 1H Barber County, Kansas



Job Data

JOB TYPE CASING SIZE HOLE SIZE

TOTAL DEPTH EXCESS FILL REQUIRED BHST BHCT 9.625 in., 40 lbs, J55 LTC 12.25 in. 300 Feet

225% 300 Feet 83 Degrees 80 Degrees

Surface

FLUID REQUIREMENTS

SPACER

LEAD CEMENT SLURRY

WEIGHT YIELD WATER TOC BBLS of Slurry

TAIL CEMENT SLURRY

WEIGHT YIELD WATER TOC BBLS of Slurry

DISPLACEMENT

30 bbls H20

75 Sacks Oilwell Standard Cement, 3% Gypsum, 0.5% SMS, 2.5% Calcium Chloride, 0.25 lbs Poly Flake

11.4 ppg 2.94 cu.ft./sk 18.1 gals/sk **Surface** 39.28 bbls

95 Sacks Oilwell Standard Cement, 3% Gypsum, 0.5% SMS, 2.5% Calcium Chloride, 0.25 lbs Poly Flake

13.2 ppg 1.85 cu.ft./sk 9.95 gals/sk 150 ft 31.31 bbls

19.72 bbls H20

Ref. #	Description	Quantity	Unit Price	Sub Total	Total
	********* Cementing Service and Materials *********				
MLPU1	Pickup Mileage 1 unit (roundtrip miles)	300	\$3.94	\$1,182.00	\$591.00
MLHE2	Heavy Vehicle Mileage 2 units (roundtrip miles)	300	\$13.56	\$4,068.00	\$2,034.00
MLTN	Bulk Cement Delivery/Return (per Ton-Mile)	1,274	\$2.73	\$3,478.02	\$1,739.01
MXBK	Bulk Material Mixing Service Charge (Per cu.ft.)	170	\$3.03	\$515.10	\$257.55
CMTHD	Cement Head with manifold (per Job)	1	\$1,895.00	\$1,895.00	\$947.50
PC1K	Pump Charge 0-1000' (Per 4 hrs)	1	\$1,887.60	\$1,887.60	\$943.80
DAQ	Data Acquisition System	1	\$1,331.00	\$1,331.00	\$665.50
FLSCG	Fuel Surcharge (per unit/per job)	3	\$605.00	\$1,815.00	\$907.50
ENVFEE	Environmental Fee	1	\$211.75	\$211.75	\$105.88
DAMSS	Data Monitoring System/Supervisor	1	\$800.00	\$800.00	\$400.00
CIRON	Circulation Equipment (40' of equipment per job)	1	\$1,512.50	\$1,512.50	\$756.25
CSTD	Class A Type Standard Cement (per sack)	170	\$31.81	\$5,407.70	\$2,703.85
CEXTGYP	Gypsum (per lb)	480	\$0.54	\$259.20	\$129.60
CACCSMS	SMS (per lb)	80	\$3.86	\$308.80	\$154.40
CACCCC	Calcium Chloride (per lb)	400	\$1.45	\$580.00	\$290.00
CLCMPF	Poly Flake (per lb)	43	\$3.23	\$138.89	\$69.45
	Additional Items if used				
PCADD	Primary Pump Unit Addl Hours	0	\$594.50	\$0.00	\$0.00
RESTK	Product Restocking Fee (per truck)	0	\$1,250.00	\$0.00	\$0.00
DERKC	Derrick Charge (Cement Head Stabbing Above 8 ft)	0	\$726.00	\$0.00	\$0.00
CDFDIAL	ATF Cement Defoamer (per gal)	0	\$29.50	\$0.00	\$0.00
FTRP958	9 5/8" Top Rubber Plug	0	\$220.00	\$0.00	\$0.00
ADDHOSE	Additional HOSES (above 120 ft/per ft)	0	\$3.55	\$0.00	\$0.00
				* ~= ~~~ =~	
	Book Price			\$25,390.56	
	Estimated Total (Exclusive of Sales Tax)				\$12,695.28

Mach Resources Jahay 1-34-11 1H **Barber County, Kansas**



JOB TYPE CASING SIZE HOLE SIZE MUD TVD MD **EXCESS**

BHST BHCT

Job Data

Intermediate 7 in., 26 lbs, P-110 TCBC 8.75 in. 8.7-9.6 ppg WBM 4668 ft 4902 ft 30% 132 Degrees

105 Degrees

FLUID REQUIREMENTS

SPACER

LEAD CEMENT SLURRY

WEIGHT YIELD WATER TOC **BBLS OF SLURRY**

TAIL CEMENT SLURRY

WEIGHT YIELD WATER TOC **BBLS OF SLURRY**

DISPLACEMENT

40 bbls Fresh Water

60 Sacks 65/35 Oilwell Standard Cement/Poz, 12% GEL, 12% Gypsum, 1.5% SA-2, 12% SFA, 0.3 lbs Poly Flake

10.2 ppg 5.49 cu.ft./sk 35.89 gals/sk 3664 feet 58.67 bbls

150 Sacks 50/50 Oilwell Standard Cement/Poz, 3% GEL, 2% Gypsum, 0.35% SFL-5

13.8 ppg 1.39 cu.ft./sk 6.57 gals/sk 3902 feet 37.14 bbls

185.85 bbls H20

Ref. #	Description	Quantity	Unit Price	Sub Total	Total
	********* Cementing Service and Materials *********				
MLPU1	Pickup Mileage 1 unit (roundtrip miles)	300	\$3.94	\$1,182.00	\$472.80
MLHE3	Heavy Vehicle Mileage 3 units (roundtrip miles)	300	\$20.34	\$6,102.00	\$2,440.80
MLTN	Bulk Cement Delivery/Return (per Ton-Mile)	1,536	\$2.73	\$4,193.28	\$1,677.31
MXBK	Bulk Material Mixing Service Charge (Per cu.ft.)	210	\$3.03	\$636.30	\$254.52
CMTHD	Cement Head with manifold (per Job)	1	\$1,895.00	\$1,895.00	\$758.00
PC5K	Pump Charge 4001-5000' (Per 5 hrs)	1	\$3,811.50	\$3,811.50	\$1,524.60
DAQ	Data Acquisition System	1	\$1,331.00	\$1,331.00	\$532.40
FLSCG	Fuel Surcharge (per unit/per job)	3	\$605.00	\$1,815.00	\$726.00
ENVFEE	Environmental Fee	1	\$211.75	\$211.75	\$84.70
DAMSS	Data Monitoring System/Supervisor	1	\$800.00	\$800.00	\$320.00
CIRON	Circulation Equipment (40' of equipment per job)	1	\$1,512.50	\$1,512.50	\$605.00
CSTD	Class A Type Standard Cement (per sack)	114	\$31.81	\$3,626.34	\$1,450.54
CPOZF	POZ (per sack)	96	\$17.35	\$1,665.60	\$666.24
CEXTGEL	GEL (per lb)	1,100	\$0.63	\$693.00	\$277.20
CEXTGYP	Gypsum (per lb)	879	\$0.54	\$474.66	\$189.86
CEXTSFA	SFA (per lb)	627	\$1.21	\$758.67	\$303.47
CFL5	SFL-5 (per lb)	45	\$18.56	\$835.20	\$334.08
CFWCSA1	SA-2 (per lb)	79	\$19.52	\$1,542.08	\$616.83
CLCMPF	Poly Flake (per lb)	18	\$3.23	\$58.14	\$23.26
	Additional Items if used				
STBYPU	Standby Pump Unit	0	\$5,850.00	\$0.00	\$0.00
PCADD	Primary Pump Unit Addl Hours	0	\$594.50	\$0.00	\$0.00
PCADD1	Standby Pump Unit Addl Hours	0	\$450.50	\$0.00	\$0.00
DERKC	Derrick Charge (Cement Head Stabbing Above 8 ft)	0	\$726.00	\$0.00	\$0.00
CDFDIAL	ATF Cement Defoamer (per gal)	0	\$29.50	\$0.00	\$0.00
FTRP7	7" Top Rubber Plug	0	\$140.00	\$0.00	\$0.00
CSUGAR	Sugar (per lb)	0	\$1.47	\$0.00	\$0.00
	Book Price			\$33,144.02	
	Estimated Total (Exclusive of Sales Tax)				\$13,257.61

Conservation Division 266 N. Main St., Ste. 220 Wichita, KS 67202-1513

Andrew J. French, Chairperson Dwight D. Keen, Commissioner Annie Kuether, Commissioner

February 06, 2024

Tami Laird BCE-Mach III LLC 14201 WIRELESS WAY SUITE 300 OKLAHOMA CITY, OK 73134-2521

Re: Drilling Pit Application Jahay 1-34-11 1H SE/4 Sec.36-33S-11W Barber County, Kansas

Dear Tami Laird:

According to the drilling pit application referenced above, no earthen pits will be used at this location. Steel pits will be used. Please inform the Commission in writing as to which disposal well you utilized to dispose of the contents in the steel pits and the amount of fluid that was disposed. Please file form CDP-5 (August 2008), Exploration and Production Waste Transfer, within 30 days of fluid removal.

Should a haul-off pit be necessary please file form CDP-1 (April 2004), Application for Surface Pit, through KOLAR. This location will have to be inspected prior to approval of the haul-off pit application.

A copy of this letter should be posted in the doghouse along with the approved Intent to Drill. If you have any questions or concerns please feel free to contact the District Office at (620) 682-7933.



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Laura Kelly, Governor

Andrew J. French, Chairperson Dwight D. Keen, Commissioner Annie Kuether, Commissioner

(a)



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Laura Kelly, Governor

HAUL-OFF PIT APPLICATION FILING REQUIREMENTS

82-3-607. DISPOSAL OF DIKE AND PIT CONTENTS.

- Each operator shall perform one of the following when disposing of dike or pit contents:
- Remove the liquid contents to a disposal well or other oil and gas operation approved by the commission or to road maintenance or construction locations approved by the department;
- (2) dispose of reserve pit waste down the annular space of a well completed according to the alternate I requirements of K.A.R. 82-3-106, if the waste to be disposed of was generated during the drilling and completion of the well; or
- (3) dispose of the remaining solid contents in any manner required by the commission. The requirements may include any of the following:
 - (A) Burial in place, in accordance with the grading and restoration requirements in K.A.R. 82-3-602 (f);
 - (B) removal and placement of the contents in an on-site disposal area approved by the commission;
 - (C) removal and placement of the contents in an off-site disposal area on acreage owned by the same landowner or to another producing lease or unit operated by the same operator, if prior written permission from the landowner has been obtained; or
 - (D) removal of the contents to a permitted off-site disposal area approved by the department.
- (b) Each violation of this regulation shall be punishable by the following:
 - (1) A \$1,000 penalty for the first violation;
 - (2) a \$2,500 penalty for the second violation; and
 - (3) a \$5,000 penalty and an operator license review for the third violation.

<u>File Haul-Off Pit Application in KOLAR. Review the information below and attach all required</u> <u>documents to the pit application when submitting through KOLAR. This form will</u> automatically generate and fill in from questions asked in KOLAR.

Haul-off pit will be located in an on-site disposal area: ____Yes ____No

Haul-off pit is located in an off-site disposal area on acreage owned by the same landowner: ____Yes ____No If yes, written permission from the land owner must be obtained. Attach written permission to haul-off pit application.

Haul-off pit is located in an off-site disposal area on another **producing** lease or unit operated by the same operator: ____Yes ____No If yes, written permission from the land owner must be obtained. Attach permission and a copy of the lease assignment that covers the acreage where the haul-off pit is to be located, to the haul-off pit application.