

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1267080
OIL & GAS CONSERVATION DIVISION

Form ACO-1
November 2016

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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 #: _____

Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

1267080



Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Job Data Sheet



COMPANY Tapstone Energy				PROJECT NUMBER SOK 5294		AFEWK ORDER 0		DATE 8/20/2015		
CONTRACTOR Nomac #7			Owner Same			LEGAL DESCRIPTION 17/34S/7W		API 15-077-22152-01-00		
LEASE & WELL # Salsberry 20-34-7 1H				COUNTY Harper		STATE Kansas		MILEAGE 100		
DIRECTIONS MANCHESTER - NORTH TO CR 60 - 4 MILES WEST - 1 MILE NORTH ON CR 40 - EAST INTO										
Pumping Services	<input checked="" type="checkbox"/> Surface		<input type="checkbox"/> Intermediate		<input type="checkbox"/> Long String		<input type="checkbox"/> Plug Back			
	<input type="checkbox"/> Squeeze		<input type="checkbox"/> Acid		<input type="checkbox"/> PTA		<input type="checkbox"/> Other			
							() H2S			
	Casing Size	Casing Weight	Thread	Tbng/DP Size	Thread	Plug. Cont.	Swage	Top Plug	Bottom Plug	% Excess
	9 5/8"	36#	LTC			YES	YES	YES	NO	150%
Number and Type Units							Casing Depth	Hole Depth	Hole Size	
Pump Truck & Bulk Materials							800'	800'	12 1/4"	
Remarks					Est. BHST	Tubing Depth	Depth-TVD	Mud Weight/Type		
					80°					
Materials	LEAD	# of Sacks	Type		Additives					
	112.17	470	Premium Plus (Class C)		2% Calcium Chloride - 1/4pps Cello-Flake					
	H2O TO MIX	Weight PPG	Yield Ft3/Sk	Water Gal/Sk						
	70.95	14.80	1.34	6.34						
	TAIL	# of Sacks	Type		Additives					
	0.00									
	H2O TO MIX	Weight PPG	Yield Ft3/Sk	Water Gal/Sk						
	0.00									
	TOP OUT	# of Sacks	Type		Additives					
H2O TO MIX	Weight PPG	Yield Ft3/Sk	Water Gal/Sk							
	ACID	Type		Additives						
	Inhibitor	Surfactant	clay cont.	TAKE 50 # Sugar						
	Spacer or Flush	Quantity	Type		Additives					
		10 BBL	Fresh Water							
	Spacer or Flush	Quantity	Type		Additives					
	Other	Quantity	Type		Additives					
Crew Called	Cementer		Pumper		Bulky		Bulky		Bulky	
CEOL	9 5/8" SWAGE, SW, DW, BALE RACK (TAKE 7" SWAGE, BRING BACK 9 5/8")									
Sales Items	Casing Size	9 5/8"	Casing Weight	36#	Thread	BTC				
	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									
Customer Rep.	0	Cell Phone	0	Office Phone	Fax	Time of Call				
Call Taken By	Jared Sisco					Date Ready	Location Time			
Crew Called						Yard Time				
						0				

SERVICE COMPANY: O-Tex Pumping
 TICKET NO: 0
 CUSTOMER NAME: Tapstone Energy
 WELL NAME: Salsberry 17347 1H
 WELL LOCATION: Harper, CO/KS

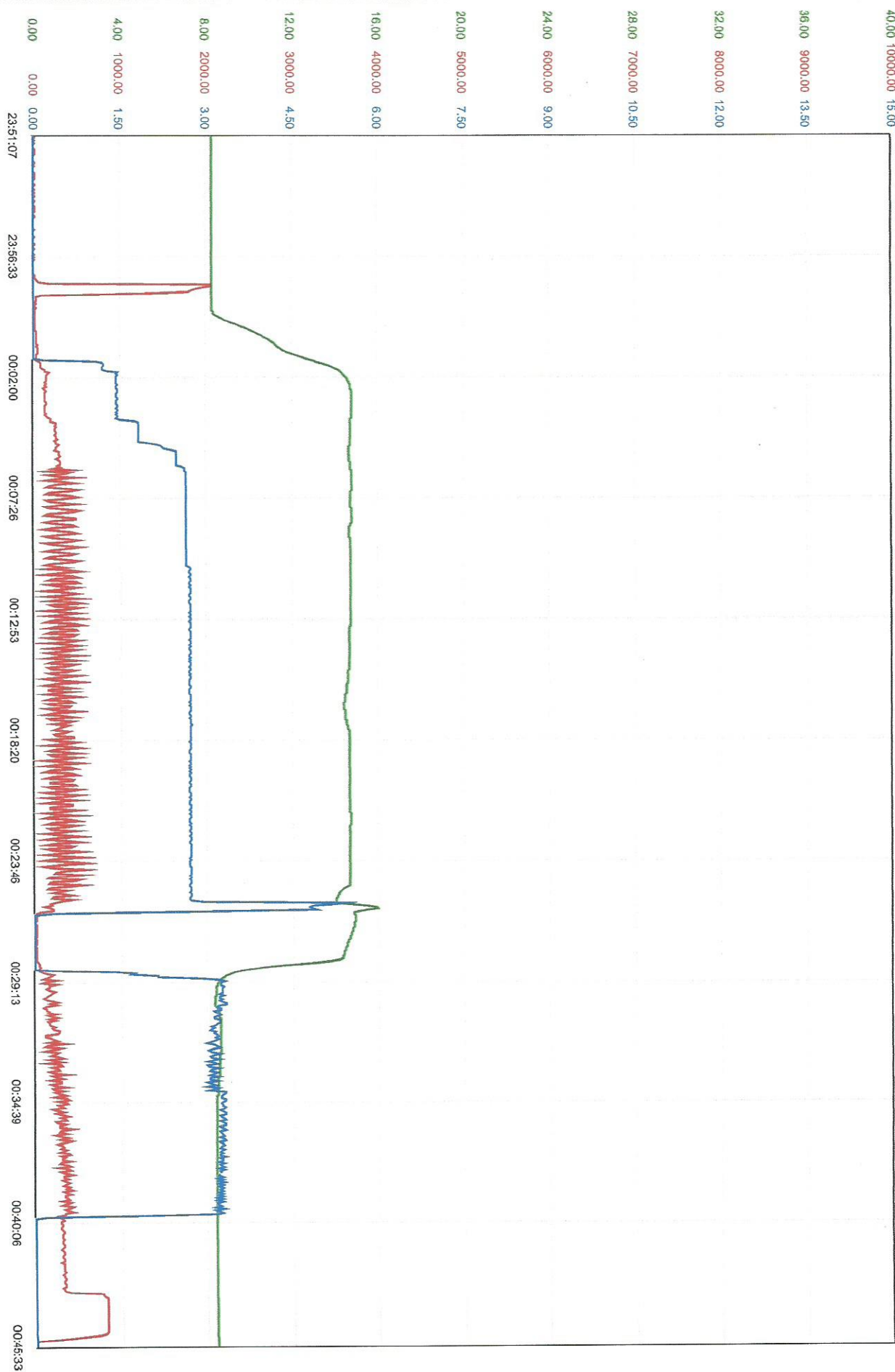
DATE RECORDED: 08/23/2015
 JOB NO: SOK 5294
 UNIT DESCRIPTION: Nomac #7
 UNIT NOTES: Intermediate 7"
 FILE NAME: Tapstone Energy_Salsberry 17347 1H_15_08_23_#1.csv



Pen 1: Density 1 (lb/gal)
 Pen 1 40.00
 Pen 2 10000.00
 Pen 3 15.00

Pen 2: Pressure 2 (Density: lb/gal)

Pen 3: Flowrate 1 (Pressure: psi)



JOB SUMMARY			PROJECT NUMBER SOK 5294	TICKET DATE 08/24/15
COUNTY Harper	State Kansas	COMPANY Tapstone Energy	CUSTOMER REP 0	
LEASE NAME Salsberry 17-34-7	Well No. 1H	JOB TYPE Surface	EMPLOYEE NAME John Hall	

EMP NAME John Hall	0				
0.00					
Donnie Brown					
Roy Morris					

Form. Name _____ Type: _____
Packer Type _____ Set At **0**
Bottom Hole Temp. **80** Pressure _____
Retainer Depth _____ Total Depth **800**

Date	Called Out 8/23/2015	On Location 8/23/2015	Job Started 8/23/2015	Job Completed 8/24/2015
Time	700pm	800pm	1130pm	200am

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		36#	9 5/8"		Surface	843	1,500
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			12 1/4"		Surface	835	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	
Spacer type	Fresh Water BBL.	10	8.33
Spacer type	BBL.		
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
8/23	4.0	8/24	2.5	Surface
Total	4.0	Total	2.5	

Perpac Balls _____ Qty. _____
Other _____
Other _____
Other _____
Other _____

Pressures	
MAX 2,000 PSI	AVG. 200 psi
Average Rates in BPM	
MAX 6 BPM	AVG 5 bpm
Cement Left in Pipe	
Feet 45	Reason SHOE JOINT

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	470	Premium Plus (Class C)	2% Calcium Chloride - 1/4pps Cello-Flake	6.34	1.34	14.80
2	0	0		0	0.00	0.00
3	0	0		0	0.00	0.00

Summary			
Preflush Breakdown	Type: _____	Preflush: BBI 10.00	Type: Fresh Water
	MAXIMUM 1,500 PSI	Load & Bkdn: Gal - BBI N/A	Pad:Bbl -Gal N/A
	Lost Returns-# NO/FULL	Excess /Return BBI 40	Calc.Disp Bbl 62
	Actual TOC SURFACE	Calc. TOC: SURFACE	Actual Disp. 61.70
Average	Bump Plug PSI: 850	Final Circ. PSI: 350	Disp:Bbl 61.70
ISIP 5 Min.	10 Min.	Cement Slurry BBI 112.1	
	15 Min.	Total Volume BBI 183.80	

CUSTOMER REPRESENTATIVE _____ SIGNATURE _____

SERVICE ORDER CONTRACT

Customer Name Tapstone Energy Ticket Number SOK 5294

Lease & Well Number Salsberry 17-34-7 1H Date 8/23/2015

As consideration, The Above Named customer Agrees:

O-TEX Pumping L.L.C. shall not be responsible for and customer shall secure O-TEX pumping 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 O-TEX pumping, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.

O-TEX 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, O-TEX 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 O-TEX gross negligence or willful misconduct in the preparation or furnishing it.

Invoices payable NET 30 days following the date on the invoice.

Upon customers default in payment of the customers account by the last day of the month following the month in which the invoice is dated.

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: _____

O-TTEX PUMPING LLC

Service Location: Fairview, Oklahoma
 Service Address: 601 Industrial Blvd 73737

Phone number: 580-227-2727

FIELD RECEIPT

Project Number:

SOK 5294

Service Date: 8/23/2015
 Customer: Tapstone Energy

Well Name: Salsberry 17-34-7
 Well Number: 1H
 County: Harper
 State: Kansas
 API #: 15-077-22152-01-00
 AFE #: 0
 PERMIT #

JOB TYPE: CASING SIZE

Job Type: Surface
 Serv. Supp.: John Hall
 Page 1 of 1

City: St
 Customer Rep: 0
 Phone: 0

PERMIT #

Pump #
 Pump 2 #

980022
 0

REF #	DESCRIPTION	U OF MEAS.	UNIT PRICE	QUAN	GROSS	%DISC	disc	NET
ML001	Pickup Mileage	per mile/ per Unit	4.26	100.0	\$426.00	78%	\$332.28	\$93.72
ML002	Pump Truck/Heavy Vehicle Mileage	per mile/ per Unit	7.32	100.0	\$732.00	78%	\$570.96	\$161.04
ML003	Bulk Cement Delivery/Return	per Ton-Mile	2.95	1,130.0	\$3,333.50	78%	\$2,600.13	\$733.37
MX001	Bulk Material Mixing Service Charge	per cuft	3.27	496.0	\$1,621.92	78%	\$1,265.10	\$356.82
CC001	Pump Charge 0-1000'	(per 4 hrs)	2,038.61	1.0	\$2,038.61	78%	\$1,590.12	\$448.49
ML014	Fuel Surcharge *	per unit perjob	653.40	1.0	\$653.40	100%	\$653.40	\$0.00
AE014	Environmental Fee*	per job	228.69	1.0	\$228.69	100%	\$228.69	\$0.00
PC003	Employee/Supervisor Retention/perdiem	per job	1,306.80	4.0	\$5,227.20	78%	\$4,077.22	\$1,149.98
JM001	Data Acquisition System	Per Job	1,437.48	1.0	\$1,437.48	78%	\$1,121.23	\$316.25
AE002	Cement Head with manifold	per job	1,176.12	1.0	\$1,176.12	78%	\$917.37	\$258.75
AE003	Circulation Equipment(40' of equipment)	per job	1,633.50	1.0	\$1,633.50	78%	\$1,274.13	\$359.37
CL017	9 5/8" Top Rubber Plug	Each	338.80	1.0	\$338.80	35%	\$118.58	\$220.22
CP001	C (Premium Plus Cement) (94 lbs/ft3)	per sk	30.80	470.0	\$14,476.00	78%	\$11,291.28	\$3,184.72
CP010	Cello Flake	per lb	4.20	118.0	\$495.60	78%	\$386.57	\$109.03
CP018	Calcium Chloride	per lb	1.22	884.0	\$1,078.48	78%	\$841.21	\$237.27
CP031	Sugar	per lb	3.39	50.0	\$169.50	0%	\$0.00	\$169.50
CC015	Pump Charge Additional Hours	per hour/per unit	588.06	-	\$0.00	75%	\$0.00	\$0.00
AE012	Bulk Unit Additional Hours	Per unit/per hour	130.68	-	\$0.00	75%	\$0.00	\$0.00
ML003	Bulk Cement Delivery/Return	per Ton-Mile	2.95	-	\$0.00	78%	\$0.00	\$0.00
MX001	Bulk Material Mixing Service Charge	per cuft	3.27	-	\$0.00	78%	\$0.00	\$0.00
CP001	C (Premium Plus Cement) (94 lbs/ft3)	per sk	30.80	-	\$0.00	78%	\$0.00	\$0.00
CP018	Calcium Chloride	per lb	1.22	-	\$0.00	78%	\$0.00	\$0.00
AE022	1" Pipe for Top-Out*	per ft	7.90	-	\$0.00	20%	\$0.00	\$0.00
AE000	Circulating hose (replacement)	per hose	1,375.00	-	\$0.00	0%	\$0.00	\$0.00
					\$35,066.80		\$27,268.27	\$7,798.53

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

Customer Authorized Agent: _____

Job Data Sheet



COMPANY Tapstone Energy		PROJECT NUMBER SOK 5308	AFE/WORK ORDER 0	DATE 8/27/2015
CONTRACTOR Nomac #7		Owner Same	LEGAL DESCRIPTION 17/34S/7W	API 15-077-22152-01-00
LEASE & WELL # Salsberry 17-34-7 1H		COUNTY Harper	STATE Kansas	MILEAGE 100

DIRECTIONS
MANCHESTER - NORTH TO CR 60 - 4 MILES WEST - 1 MILE NORTH ON CR 40
- EAST INTO

Pumping Services	<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Long String <input type="checkbox"/> Plug Back <input type="checkbox"/> Squeeze <input type="checkbox"/> Acid <input type="checkbox"/> PTA <input type="checkbox"/> Other () H2S									
	Casing Size	Casing Weight	Thread	Tbng/DP Size	Thread	Plug. Cont.	Swage	Top Plug	Bottom Plug	% Excess
	7"	26#	LTC			YES	YES	YES	NO	40%
	Number and Type Units							Casing Depth	Hole Depth	Hole Size
	Pump Truck & Bulk Materials							5,283'	5,283'	8 3/4"

Materials	TAKE 7" TOP & BOTTOM PLUG									
	LEAD	# of Sacks	Type	Additives						
	35.66	140	50/50 POZ PREMIUM	4% Gel - 0.4% FL-17						
	H2O TO MIX	Weight PPG	Yield Ft3/Sk	Water Gal/Sk						
	23.10	13.60	1.43	6.93						
	TAIL	# of Sacks	Type	Additives						
	19.07	90	Premium	0.4% FL-17						
	H2O TO MIX	Weight PPG	Yield Ft3/Sk	Water Gal/Sk						
	11.12	15.60	1.19	5.19						
		# of Sacks	Type	Additives						
	Weight PPG	Yield Ft3/Sk	Water Gal/Sk							
	ACID	Type	Additives							
	Inhibitor	Surfactant	clay cont.							
Spacer or Flush	Quantity	Type	Additives							
	20 bbls	Mud Wash	200#s SAPP - 5 Gallons Plexaid 803							
Displace	Quantity	Type	Additives							
Other	Quantity	Type	Additives							

Crew Called	Cementer	Pumper	Bulky	Bulky	Bulky

CEOL **7" 8RD SWAGE, SW, DW, BALE RACK**

Sales Items	Casing Size	7"	Casing Weight	26#	Thread	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	TAKE 7" TOP & BOTTOM PLUG				

Customer Rep. 0	Cell Phone 0	Office Phone	Fax	Time of Call
Call Taken By Jared Sisco				Date Ready
Crew Called				Location Time
				Yard Time 0

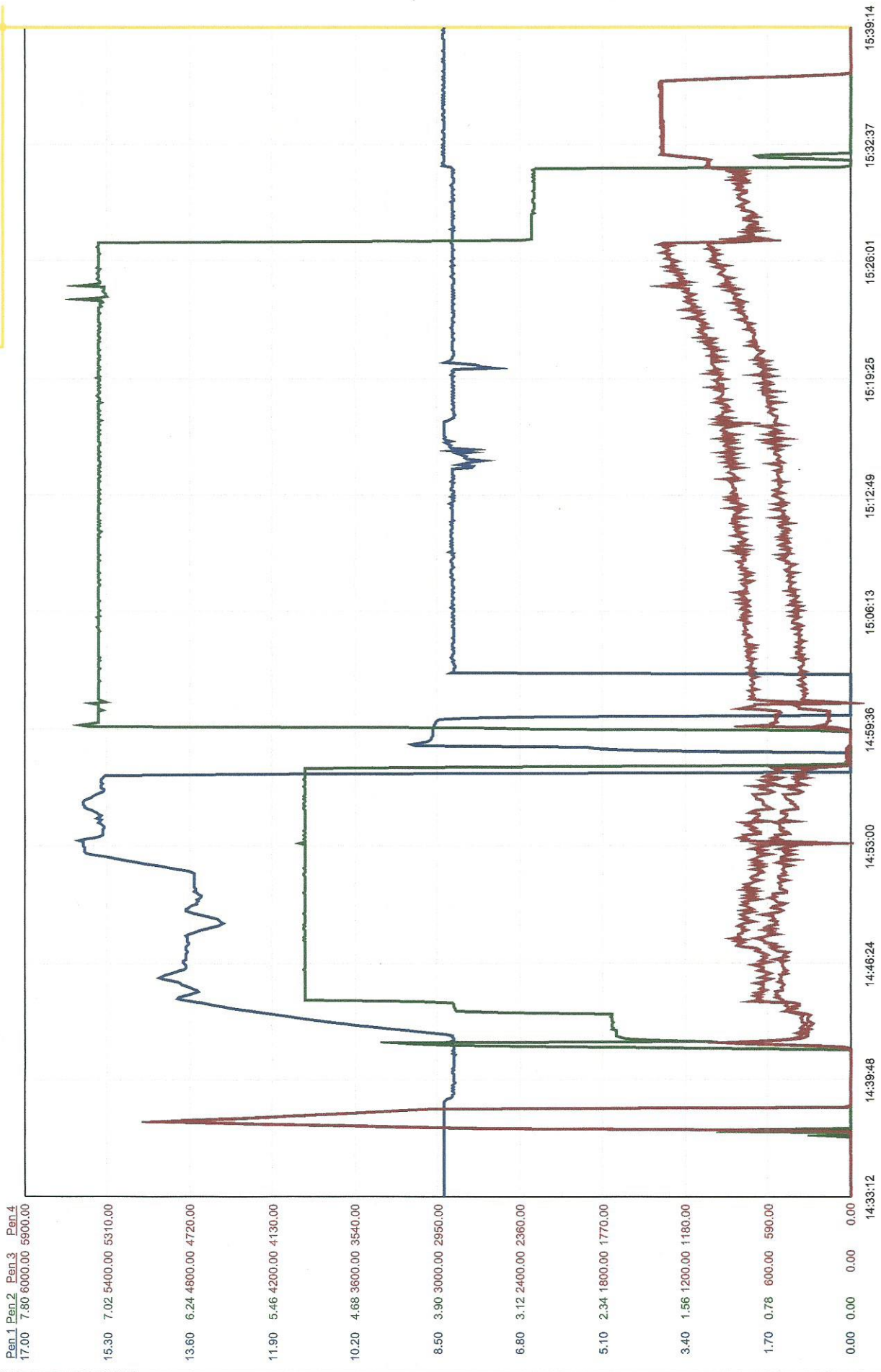


SERVICE COMPANY: O-Tex
TICKET NO: SOK 5308
CUSTOMER NAME: Tapstone Energy
WELL NAME: Salsberry 17347 1H
WELL LOCATION: Harper County

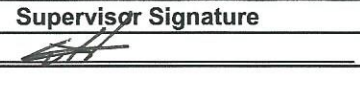
DATE RECORDED: 08/28/2015
JOB NO: SOK 5308
UNIT DESCRIPTION: Nomac 7
UNIT NOTES: 7" Intermediate
FILE NAME: Tapstone Energy_Salsberry 17347 1H_15_08_28_#1.csv

Pen 1: Density 1 (Density : lb/gal)
 Pen 2: Calc. SlurryRate (Density : lb/gal)
 Pen 3: Pressure 1 (Pressure : psi)
 Pen 4: Pressure 2 (Pressure : psi)

15:39:14 PC Data Recording Stopped



JOB LOG				PROJECT NUMBER	TICKET DATE
COMPANY Tapstone Energy		COUNTRY USA		STATE Kansas	COUNTY Harper
LEASE NAME Salsberry 17-34-7 1H		EMPLOYEE NAME Mike Hall		CUSTOMER REP	
WELL No.		SEC / TWP / RNG 17/34S/7W		TICKET AMOUNT 7,148.20	
FIELD		JOB PURPOSE Intermediate		WELL TYPE Oil & Gas	
API/UWI # 15-077-22152-01-00					

	Time	Rate (BPM)	Volume (BBL)(GAL)	Press.(PSI)		Job Description / Remarks
				CSG.	Tbg	
8/28/15	0900					Arrived On Location
	1000					Safety Meeting
	1440			5,000		Test Pumps & Lines
	1442	5.0	20	700		Mix & Pump Mudwash Spacer
	1448	5.0	35.0	800		Mix & Pump Lead Cement @ 13.6 ppg.
	1455	5.0	19.0	700		Mix & Pump Tail Cement @ 15.6 ppg.
	1458					Shut Down/Drop Plug
	1500	7.0		700		Start Displacement
	1528	3.0	190.0	700		Slow To Land Plug
	1533	3.0	202.0	1,300		Land Plug
	1540					Check Floats W/ 1BBL. Back
8/28/15	1600					Job Complete
						Full Returns Entire Job
						Top Of Cement @ 3,423'
						Top Of Tail Cement @ 4,755'
						Supervisor Signature
Bumped Plug	Final lift Psi	Floats Held	PSI ON CSG	CEMENT SURFACE	X	
YES	700	YES	1300.0			

JOB SUMMARY			PROJECT NUMBER SOK 5308	TICKET DATE 08/28/15
COUNTY Harper	State Kansas	COMPANY Tapstone Energy	CUSTOMER REP 0	
LEASE NAME Salsberry 20-34-7	Well No. 1H	JOB TYPE Intermediate	EMPLOYEE NAME Mike Hall	

EMP NAME	Mike Hall	0			
Joe Colonnese					
Donnie Brown					
Jason Williams					

Form. Name _____ Type: _____

Packer Type _____ Set At **3,840'**

Bottom Hole Temp. **155** Pressure _____

Retainer Depth _____ Total Depth **5,283'**

Date	Called Out 8/28/2015	On Location 8/28/2015	Job Started 8/28/2015	Job Completed 8/28/2015
Time		0900	1440	1600

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		26#	7"		Surface		5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8 1/4"		Surface	5,283'	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	Fresh Water BBL.		20 8.33
Spacer type	Caustic BBL.	10	8.40
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
8/28	7.0	8/28	1.0	Intermediate
Total	7.0	Total	1.0	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

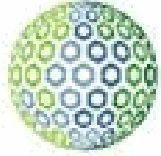
Other _____

Pressures	
MAX 5,000 PSI	AVG. 500
Average Rates in BPM	
MAX 8 BPM	AVG 4.5
Cement Left in Pipe	
Feet 91'	Reason SHOE JOINT

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	140	50/50 POZ PREMIUM	4% Gel - 0.4% FL-17	6.93	1.43	13.60
2	90	Premium	0.4% FL-17	5.19	1.19	15.60
3	0	0		0	0.00	0.00

Summary			
Preflush Breakdown	10	Type: Caustic	Preflush: BBI 30.00 Type: Mud Wash
		MAXIMUM 5,000 PSI	Load & Bkdn: Gal - BBI N/A Pad:Bbl -Gal N/A
		Lost Returns- N/FULL	Excess /Return BBI N/A Calc.Disp Bbl 201
		Actual TOC 3,423'	Calc. TOC: 3,423' Actual Disp. 202.00
Average		Bump Plug PSI: 1,300	Final Circ. PSI: 700 Disp:Bbl 202.00
ISIP 5 Min.		10 Min 15 Min	Cement Slurry BBI 54.0
			Total Volume BBI 286.00

CUSTOMER REPRESENTATIVE _____ SIGNATURE _____



tapstone
ENERGY

TAPSTONE ENERGY

Harper County, KS
Salsberry 17-34-7 1H
Salsberry 17-34-7 1H
Original Hole

Survey: ProDirectional

Survey Report

06 September, 2015





Professional Directional Survey Report



Company: TAPSTONE ENERGY	Local Co-ordinate Reference: Site Salsberry 17-34-7 1H
Project: Harper County, KS	TVD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Site: Salsberry 17-34-7 1H	MD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well: Salsberry 17-34-7 1H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

Project Harper County, KS		
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 Salsberry 17-34-7 1H		
Site Position:	Northing: 150,809.00 usft	Latitude: 37° 4' 48.63 N
From: Map	Easting: 2,114,918.00 usft	Longitude: 98° 6' 21.96 W
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.24 °

Well Salsberry 17-34-7 1H		
Well Position	Northing: 150,809.00 usft	Latitude: 37° 4' 48.63 N
+N/-S 0.00 usft	Easting: 2,114,918.00 usft	Longitude: 98° 6' 21.96 W
+E/-W 0.00 usft	Wellhead Elevation: 1,403.00 usft	Ground Level: 1,381.00 usft
Position Uncertainty 0.00 usft		

Wellbore Original Hole		
Magnetics	Model Name	Sample Date
	Declination (°)	Dip Angle (°)
	Field Strength (nT)	
	HDGM	8/20/2015
	3.82	65.27
	51,476	

Design Original Hole		
Audit Notes:		
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	Direction (°)
	0.00	350.67

Survey Program	Date 9/6/2015	
From (usft)	To (usft)	Survey (Wellbore)
893.00	9,212.00	ProDirectional (Original Hole)
		Tool Name
		ProMWD
		Description
		MWD - Standard



Professional Directional Survey Report



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Site: Salsberry 17-34-7 1H	MD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well: Salsberry 17-34-7 1H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150,809.00	2,114,918.00	
893.00	0.20	278.60	893.00	0.48	0.23	-1.54	1.56	278.60	150,809.23	2,114,916.46	
1,082.00	0.20	213.50	1,082.00	0.34	0.01	-2.05	2.05	270.20	150,809.01	2,114,915.95	
1,272.00	0.30	291.00	1,272.00	0.35	-0.09	-2.70	2.70	268.07	150,808.91	2,114,915.30	
1,461.00	0.20	195.40	1,460.99	0.30	-0.23	-3.25	3.25	265.92	150,808.77	2,114,914.75	
1,650.00	0.60	281.20	1,649.99	0.35	-0.36	-4.30	4.32	265.25	150,808.64	2,114,913.70	
1,838.00	0.60	302.80	1,837.98	1.35	0.37	-6.10	6.11	273.44	150,809.37	2,114,911.90	
2,027.00	0.60	291.90	2,026.97	2.53	1.27	-7.85	7.95	279.21	150,810.27	2,114,910.15	
2,217.00	1.20	209.90	2,216.95	1.50	-0.08	-9.76	9.76	269.52	150,808.92	2,114,908.24	
2,406.00	1.30	207.90	2,405.91	-1.74	-3.69	-11.75	12.32	252.56	150,805.31	2,114,906.25	
2,595.00	1.30	189.50	2,594.86	-5.47	-7.70	-13.11	15.20	239.57	150,801.30	2,114,904.89	
2,782.00	1.20	213.50	2,781.82	-8.92	-11.43	-14.54	18.49	231.84	150,797.57	2,114,903.46	
2,970.00	1.40	201.20	2,969.77	-12.34	-15.21	-16.46	22.41	227.26	150,793.79	2,114,901.54	
3,155.00	0.70	207.80	3,154.74	-15.19	-18.32	-17.80	25.54	224.18	150,790.68	2,114,900.20	
3,345.00	0.20	33.30	3,344.73	-15.87	-19.07	-18.16	26.33	223.61	150,789.93	2,114,899.84	
3,533.00	0.80	57.50	3,532.72	-15.11	-18.09	-16.87	24.74	223.01	150,790.91	2,114,901.13	
3,720.00	0.60	26.70	3,719.71	-13.81	-16.51	-15.33	22.53	222.88	150,792.49	2,114,902.67	
3,907.00	0.60	66.50	3,906.70	-12.77	-15.24	-13.99	20.69	222.55	150,793.76	2,114,904.01	
3,939.00	0.80	20.40	3,938.70	-12.54	-14.97	-13.76	20.33	222.60	150,794.03	2,114,904.24	
3,969.00	3.80	354.60	3,968.67	-11.37	-13.78	-13.78	19.49	225.00	150,795.22	2,114,904.22	
4,000.00	7.40	354.90	3,999.52	-8.35	-10.77	-14.06	17.71	232.54	150,798.23	2,114,903.94	
4,032.00	10.70	354.80	4,031.12	-3.33	-5.76	-14.51	15.61	248.36	150,803.24	2,114,903.49	
4,064.00	13.50	354.40	4,062.40	3.36	0.92	-15.14	15.17	273.47	150,809.92	2,114,902.86	
4,095.00	15.70	352.60	4,092.40	11.17	8.68	-16.04	18.24	298.43	150,817.68	2,114,901.96	
4,127.00	17.60	349.60	4,123.06	20.33	17.73	-17.47	24.89	315.43	150,826.73	2,114,900.53	
4,159.00	20.00	348.60	4,153.35	30.64	27.86	-19.42	33.96	325.11	150,836.86	2,114,898.58	
4,190.00	22.80	348.50	4,182.21	41.94	38.94	-21.67	44.57	330.91	150,847.94	2,114,896.33	



Professional Directional Survey Report



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Site: Salsberry 17-34-7 1H	MD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well: Salsberry 17-34-7 1H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
4,222.00	25.20	349.30	4,211.44	54.95	51.71	-24.17	57.08	334.95	150,860.71	2,114,893.83	
4,253.00	27.20	351.00	4,239.25	68.63	65.20	-26.51	70.38	337.88	150,874.20	2,114,891.49	
4,284.00	29.50	352.30	4,266.53	83.35	79.76	-28.64	84.75	340.25	150,888.76	2,114,889.36	
4,315.00	31.40	352.50	4,293.26	99.05	95.33	-30.71	100.16	342.14	150,904.33	2,114,887.29	
4,347.00	32.80	352.20	4,320.36	116.05	112.19	-32.98	116.93	343.62	150,921.19	2,114,885.02	
4,378.00	34.50	351.90	4,346.17	133.22	129.20	-35.35	133.95	344.70	150,938.20	2,114,882.65	
4,409.00	36.80	351.10	4,371.36	151.29	147.07	-38.03	151.90	345.50	150,956.07	2,114,879.97	
4,440.00	39.20	350.70	4,395.78	170.37	165.91	-41.05	170.91	346.10	150,974.91	2,114,876.95	
4,471.00	40.90	350.50	4,419.51	190.32	185.59	-44.31	190.80	346.57	150,994.59	2,114,873.69	
4,502.00	43.20	351.40	4,442.53	211.08	206.09	-47.57	211.51	347.00	151,015.09	2,114,870.43	
4,533.00	45.00	351.80	4,464.79	232.65	227.43	-50.72	233.02	347.43	151,036.43	2,114,867.28	
4,564.00	47.00	352.00	4,486.33	254.94	249.51	-53.86	255.26	347.82	151,058.51	2,114,864.14	
4,595.00	48.80	351.20	4,507.11	277.94	272.26	-57.22	278.21	348.13	151,081.26	2,114,860.78	
4,627.00	50.90	350.30	4,527.74	302.39	296.40	-61.16	302.64	348.34	151,105.40	2,114,856.84	
4,658.00	53.30	350.00	4,546.78	326.85	320.50	-65.34	327.09	348.48	151,129.50	2,114,852.66	
4,689.00	56.00	350.20	4,564.72	352.13	345.41	-69.69	352.37	348.59	151,154.41	2,114,848.31	
4,721.00	59.00	350.30	4,581.91	379.12	372.00	-74.26	379.34	348.71	151,181.00	2,114,843.74	
4,752.00	61.80	350.20	4,597.22	406.07	398.56	-78.82	406.28	348.81	151,207.56	2,114,839.18	
4,783.00	62.00	349.60	4,611.82	433.41	425.49	-83.62	433.62	348.88	151,234.49	2,114,834.38	
4,815.00	62.20	349.80	4,626.79	461.69	453.31	-88.67	461.90	348.93	151,262.31	2,114,829.33	
4,846.00	62.20	349.50	4,641.25	489.11	480.29	-93.60	489.32	348.97	151,289.29	2,114,824.40	
4,877.00	61.90	349.00	4,655.78	516.48	507.19	-98.71	516.71	348.99	151,316.19	2,114,819.29	
4,908.00	62.40	348.70	4,670.26	543.88	534.08	-104.01	544.11	348.98	151,343.08	2,114,813.99	
4,940.00	63.00	348.50	4,684.94	572.30	561.96	-109.63	572.55	348.96	151,370.96	2,114,808.37	
4,972.00	64.70	348.70	4,699.04	601.00	590.11	-115.31	601.27	348.94	151,399.11	2,114,802.69	
5,003.00	68.30	349.20	4,711.40	629.41	618.01	-120.75	629.70	348.94	151,427.01	2,114,797.25	
5,034.00	70.70	350.00	4,722.26	658.44	646.57	-125.99	658.73	348.97	151,455.57	2,114,792.01	



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Site:	Salsberry 17-34-7 1H	MD Reference:	GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well:	Salsberry 17-34-7 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
5,065.00	72.30	350.40	4,732.09	687.84	675.54	-131.00	688.12	349.03	151,484.54	2,114,787.00	
5,097.00	75.40	350.00	4,740.99	718.57	705.82	-136.23	718.85	349.08	151,514.82	2,114,781.77	
5,128.00	78.90	350.00	4,747.89	748.79	735.58	-141.48	749.06	349.11	151,544.58	2,114,776.52	
5,159.00	81.50	350.30	4,753.16	779.33	765.68	-146.70	779.60	349.15	151,574.68	2,114,771.30	
5,189.00	82.40	350.00	4,757.36	809.03	794.94	-151.78	809.30	349.19	151,603.94	2,114,766.22	
5,221.00	82.90	350.10	4,761.46	840.77	826.20	-157.27	841.04	349.22	151,635.20	2,114,760.73	
5,252.00	84.30	350.40	4,764.91	871.57	856.56	-162.48	871.84	349.26	151,665.56	2,114,755.52	
5,283.00	84.80	350.90	4,767.86	902.43	887.01	-167.50	902.69	349.31	151,696.01	2,114,750.50	
5,290.00	84.90	351.20	4,768.49	909.40	893.90	-168.58	909.66	349.32	151,702.90	2,114,749.42	
5,343.00	85.20	351.10	4,773.06	962.20	946.07	-176.70	962.43	349.42	151,755.07	2,114,741.30	
5,375.00	85.90	351.10	4,775.54	994.11	977.59	-181.64	994.32	349.47	151,786.59	2,114,736.36	
5,407.00	86.30	351.20	4,777.72	1,026.03	1,009.14	-186.55	1,026.24	349.53	151,818.14	2,114,731.45	
5,439.00	87.20	351.50	4,779.53	1,057.98	1,040.72	-191.36	1,058.17	349.58	151,849.72	2,114,726.64	
5,470.00	88.50	351.50	4,780.70	1,088.95	1,071.36	-195.94	1,089.13	349.64	151,880.36	2,114,722.06	
5,500.00	89.90	351.50	4,781.11	1,118.94	1,101.03	-200.37	1,119.11	349.69	151,910.03	2,114,717.63	
5,529.00	90.40	351.60	4,781.04	1,147.94	1,129.71	-204.63	1,148.09	349.73	151,938.71	2,114,713.37	
5,560.00	90.60	351.50	4,780.77	1,178.94	1,160.37	-209.19	1,179.08	349.78	151,969.37	2,114,708.81	
5,591.00	91.00	351.70	4,780.33	1,209.93	1,191.04	-213.71	1,210.06	349.83	152,000.04	2,114,704.29	
5,621.00	90.90	351.60	4,779.84	1,239.92	1,220.72	-218.07	1,240.04	349.87	152,029.72	2,114,699.93	
5,651.00	89.80	351.30	4,779.65	1,269.92	1,250.38	-222.53	1,270.03	349.91	152,059.38	2,114,695.47	
5,681.00	89.60	351.50	4,779.81	1,299.91	1,280.04	-227.02	1,300.02	349.94	152,089.04	2,114,690.98	
5,711.00	89.80	351.80	4,779.97	1,329.91	1,309.73	-231.37	1,330.01	349.98	152,118.73	2,114,686.63	
5,742.00	90.40	351.70	4,779.91	1,360.90	1,340.40	-235.82	1,360.99	350.02	152,149.40	2,114,682.18	
5,773.00	90.70	351.50	4,779.62	1,391.90	1,371.07	-240.35	1,391.98	350.06	152,180.07	2,114,677.65	
5,803.00	90.90	351.40	4,779.20	1,421.89	1,400.73	-244.81	1,421.97	350.09	152,209.73	2,114,673.19	
5,833.00	91.40	351.60	4,778.60	1,451.88	1,430.40	-249.24	1,451.95	350.12	152,239.40	2,114,668.76	
5,863.00	91.00	351.80	4,777.97	1,481.87	1,460.08	-253.57	1,481.93	350.15	152,269.08	2,114,664.43	



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Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
5,893.00	90.60	351.70	4,777.55	1,511.86	1,489.76	-257.88	1,511.92	350.18	152,298.76	2,114,660.12
5,923.00	90.00	351.40	4,777.39	1,541.86	1,519.44	-262.28	1,541.91	350.21	152,328.44	2,114,655.72
5,954.00	90.20	351.30	4,777.34	1,572.86	1,550.09	-266.95	1,572.90	350.23	152,359.09	2,114,651.05
5,984.00	90.30	351.30	4,777.21	1,602.85	1,579.74	-271.49	1,602.90	350.25	152,388.74	2,114,646.51
6,014.00	90.50	351.40	4,777.00	1,632.85	1,609.40	-276.00	1,632.89	350.27	152,418.40	2,114,642.00
6,045.00	90.70	351.20	4,776.67	1,663.85	1,640.04	-280.69	1,663.88	350.29	152,449.04	2,114,637.31
6,075.00	90.20	351.20	4,776.44	1,693.85	1,669.69	-285.28	1,693.88	350.30	152,478.69	2,114,632.72
6,106.00	90.00	351.10	4,776.38	1,724.84	1,700.32	-290.04	1,724.88	350.32	152,509.32	2,114,627.96
6,136.00	90.00	351.40	4,776.38	1,754.84	1,729.97	-294.61	1,754.87	350.34	152,538.97	2,114,623.39
6,166.00	89.80	352.20	4,776.43	1,784.84	1,759.66	-298.89	1,784.86	350.36	152,568.66	2,114,619.11
6,196.00	90.10	352.20	4,776.46	1,814.83	1,789.38	-302.96	1,814.85	350.39	152,598.38	2,114,615.04
6,226.00	90.20	352.10	4,776.38	1,844.82	1,819.10	-307.06	1,844.83	350.42	152,628.10	2,114,610.94
6,255.00	90.40	352.50	4,776.23	1,873.80	1,847.84	-310.94	1,873.82	350.45	152,656.84	2,114,607.06
6,285.00	90.70	352.60	4,775.94	1,903.79	1,877.58	-314.83	1,903.80	350.48	152,686.58	2,114,603.17
6,315.00	90.50	352.50	4,775.63	1,933.77	1,907.33	-318.72	1,933.78	350.51	152,716.33	2,114,599.28
6,346.00	89.70	352.30	4,775.57	1,964.75	1,938.06	-322.82	1,964.76	350.54	152,747.06	2,114,595.18
6,376.00	89.00	351.90	4,775.91	1,994.74	1,967.77	-326.94	1,994.75	350.57	152,776.77	2,114,591.06
6,407.00	88.70	351.70	4,776.54	2,025.73	1,998.45	-331.36	2,025.73	350.59	152,807.45	2,114,586.64
6,437.00	88.80	351.70	4,777.19	2,055.72	2,028.13	-335.69	2,055.72	350.60	152,837.13	2,114,582.31
6,467.00	88.80	352.10	4,777.82	2,085.70	2,057.82	-339.92	2,085.71	350.62	152,866.82	2,114,578.08
6,496.00	88.90	352.30	4,778.40	2,114.69	2,086.55	-343.85	2,114.69	350.64	152,895.55	2,114,574.15
6,527.00	89.10	352.20	4,778.94	2,145.67	2,117.26	-348.03	2,145.67	350.67	152,926.26	2,114,569.97
6,558.00	89.30	352.10	4,779.38	2,176.66	2,147.96	-352.27	2,176.66	350.69	152,956.96	2,114,565.73
6,588.00	89.80	351.60	4,779.61	2,206.65	2,177.66	-356.52	2,206.65	350.70	152,986.66	2,114,561.48
6,619.00	90.00	351.40	4,779.67	2,237.65	2,208.32	-361.10	2,237.65	350.71	153,017.32	2,114,556.90
6,649.00	90.10	351.50	4,779.64	2,267.64	2,237.99	-365.56	2,267.65	350.72	153,046.99	2,114,552.44
6,679.00	90.30	351.90	4,779.53	2,297.64	2,267.67	-369.89	2,297.64	350.74	153,076.67	2,114,548.11



Professional Directional Survey Report



Company: TAPSTONE ENERGY	Local Co-ordinate Reference: Site Salsberry 17-34-7 1H
Project: Harper County, KS	TVD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Site: Salsberry 17-34-7 1H	MD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well: Salsberry 17-34-7 1H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
6,709.00	90.60	351.50	4,779.30	2,327.63	2,297.36	-374.22	2,327.64	350.75	153,106.36	2,114,543.78	
6,740.00	90.60	351.60	4,778.97	2,358.63	2,328.02	-378.78	2,358.63	350.76	153,137.02	2,114,539.22	
6,769.00	90.60	351.20	4,778.67	2,387.62	2,356.69	-383.12	2,387.63	350.77	153,165.69	2,114,534.88	
6,800.00	90.30	350.60	4,778.43	2,418.62	2,387.30	-388.02	2,418.63	350.77	153,196.30	2,114,529.98	
6,831.00	90.20	350.70	4,778.29	2,449.62	2,417.89	-393.05	2,449.63	350.77	153,226.89	2,114,524.95	
6,861.00	90.40	350.80	4,778.13	2,479.62	2,447.50	-397.88	2,479.63	350.77	153,256.50	2,114,520.12	
6,891.00	90.70	350.60	4,777.85	2,509.62	2,477.10	-402.72	2,509.62	350.77	153,286.10	2,114,515.28	
6,921.00	90.80	350.40	4,777.45	2,539.62	2,506.69	-407.68	2,539.62	350.76	153,315.69	2,114,510.32	
6,951.00	90.30	350.00	4,777.17	2,569.62	2,536.25	-412.78	2,569.62	350.76	153,345.25	2,114,505.22	
6,981.00	89.90	350.10	4,777.11	2,599.61	2,565.80	-417.97	2,599.62	350.75	153,374.80	2,114,500.03	
7,012.00	90.40	350.00	4,777.03	2,630.61	2,596.33	-423.32	2,630.61	350.74	153,405.33	2,114,494.68	
7,042.00	90.90	350.10	4,776.69	2,660.61	2,625.88	-428.51	2,660.61	350.73	153,434.88	2,114,489.49	
7,073.00	90.70	350.00	4,776.26	2,691.60	2,656.41	-433.86	2,691.60	350.72	153,465.41	2,114,484.14	
7,104.00	90.40	349.80	4,775.96	2,722.60	2,686.93	-439.30	2,722.60	350.71	153,495.93	2,114,478.70	
7,134.00	89.60	350.00	4,775.96	2,752.60	2,716.46	-444.56	2,752.60	350.71	153,525.46	2,114,473.44	
7,163.00	89.50	350.10	4,776.19	2,781.59	2,745.02	-449.57	2,781.59	350.70	153,554.02	2,114,468.43	
7,193.00	90.00	350.20	4,776.32	2,811.59	2,774.58	-454.70	2,811.59	350.69	153,583.58	2,114,463.30	
7,223.00	90.50	350.50	4,776.19	2,841.59	2,804.16	-459.73	2,841.59	350.69	153,613.16	2,114,458.27	
7,253.00	91.00	350.60	4,775.80	2,871.59	2,833.75	-464.66	2,871.59	350.69	153,642.75	2,114,453.34	
7,284.00	91.00	350.70	4,775.26	2,902.58	2,864.33	-469.69	2,902.58	350.69	153,673.33	2,114,448.31	
7,314.00	90.30	350.50	4,774.92	2,932.58	2,893.92	-474.59	2,932.58	350.69	153,702.92	2,114,443.41	
7,345.00	89.10	350.30	4,775.08	2,963.58	2,924.49	-479.76	2,963.58	350.68	153,733.49	2,114,438.24	
7,375.00	88.90	350.10	4,775.60	2,993.57	2,954.05	-484.87	2,993.57	350.68	153,763.05	2,114,433.13	
7,406.00	88.70	349.60	4,776.25	3,024.56	2,984.55	-490.33	3,024.56	350.67	153,793.55	2,114,427.67	
7,436.00	88.60	349.30	4,776.96	3,054.55	3,014.04	-495.82	3,054.55	350.66	153,823.04	2,114,422.18	
7,466.00	89.10	349.40	4,777.56	3,084.53	3,043.52	-501.36	3,084.54	350.65	153,852.52	2,114,416.64	
7,496.00	89.60	349.40	4,777.90	3,114.53	3,073.00	-506.88	3,114.53	350.63	153,882.00	2,114,411.12	



Professional Directional Survey Report



Company:	TAPSTONE ENERGY	Local Co-ordinate Reference:	Site Salsberry 17-34-7 1H
Project:	Harper County, KS	TVD Reference:	GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Site:	Salsberry 17-34-7 1H	MD Reference:	GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well:	Salsberry 17-34-7 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
7,527.00	90.40	349.80	4,777.90	3,145.52	3,103.49	-512.48	3,145.52	350.62	153,912.49	2,114,405.52	
7,557.00	90.90	349.70	4,777.56	3,175.51	3,133.01	-517.81	3,175.52	350.62	153,942.01	2,114,400.19	
7,587.00	91.30	349.50	4,776.98	3,205.50	3,162.51	-523.23	3,205.50	350.61	153,971.51	2,114,394.77	
7,616.00	91.70	349.80	4,776.22	3,234.49	3,191.03	-528.44	3,234.49	350.60	154,000.03	2,114,389.56	
7,647.00	91.80	350.20	4,775.28	3,265.47	3,221.55	-533.82	3,265.47	350.59	154,030.55	2,114,384.18	
7,678.00	90.00	350.00	4,774.79	3,296.47	3,252.08	-539.15	3,296.47	350.59	154,061.08	2,114,378.85	
7,708.00	89.00	350.00	4,775.05	3,326.46	3,281.62	-544.36	3,326.47	350.58	154,090.62	2,114,373.64	
7,739.00	89.30	349.90	4,775.51	3,357.46	3,312.14	-549.76	3,357.46	350.58	154,121.14	2,114,368.24	
7,771.00	90.10	349.80	4,775.68	3,389.45	3,343.64	-555.40	3,389.46	350.57	154,152.64	2,114,362.60	
7,802.00	90.60	349.70	4,775.49	3,420.45	3,374.15	-560.92	3,420.45	350.56	154,183.15	2,114,357.08	
7,833.00	90.90	349.90	4,775.08	3,451.44	3,404.65	-566.41	3,451.45	350.55	154,213.65	2,114,351.59	
7,865.00	91.10	349.90	4,774.53	3,483.43	3,436.15	-572.02	3,483.44	350.55	154,245.15	2,114,345.98	
7,897.00	91.70	350.40	4,773.74	3,515.42	3,467.67	-577.49	3,515.43	350.54	154,276.67	2,114,340.51	
7,928.00	92.00	350.80	4,772.74	3,546.41	3,498.24	-582.55	3,546.41	350.55	154,307.24	2,114,335.45	
7,960.00	90.80	350.40	4,771.96	3,578.40	3,529.80	-587.78	3,578.40	350.55	154,338.80	2,114,330.22	
7,991.00	90.10	350.30	4,771.72	3,609.39	3,560.36	-592.97	3,609.40	350.54	154,369.36	2,114,325.03	
8,023.00	90.60	350.20	4,771.52	3,641.39	3,591.90	-598.39	3,641.40	350.54	154,400.90	2,114,319.61	
8,054.00	91.00	350.30	4,771.09	3,672.39	3,622.45	-603.64	3,672.40	350.54	154,431.45	2,114,314.36	
8,086.00	91.10	350.30	4,770.50	3,704.38	3,653.98	-609.03	3,704.39	350.54	154,462.98	2,114,308.97	
8,118.00	91.30	350.60	4,769.83	3,736.37	3,685.53	-614.34	3,736.38	350.54	154,494.53	2,114,303.66	
8,149.00	91.20	350.50	4,769.16	3,767.37	3,716.11	-619.43	3,767.38	350.54	154,525.11	2,114,298.57	
8,181.00	91.70	350.50	4,768.35	3,799.36	3,747.66	-624.71	3,799.37	350.54	154,556.66	2,114,293.29	
8,212.00	92.10	350.60	4,767.32	3,830.34	3,778.22	-629.80	3,830.35	350.54	154,587.22	2,114,288.20	
8,244.00	92.30	350.90	4,766.09	3,862.32	3,809.78	-634.94	3,862.33	350.54	154,618.78	2,114,283.06	
8,275.00	92.40	350.90	4,764.82	3,893.29	3,840.36	-639.83	3,893.30	350.54	154,649.36	2,114,278.17	
8,307.00	92.30	350.90	4,763.51	3,925.26	3,871.93	-644.89	3,925.27	350.54	154,680.93	2,114,273.11	
8,339.00	90.60	350.90	4,762.70	3,957.25	3,903.52	-649.95	3,957.26	350.55	154,712.52	2,114,268.05	



Professional Directional Survey Report



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Project:	Harper County, KS	TVD Reference:	GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Site:	Salsberry 17-34-7 1H	MD Reference:	GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well:	Salsberry 17-34-7 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
8,371.00	89.10	351.00	4,762.78	3,989.25	3,935.12	-654.98	3,989.26	350.55	154,744.12	2,114,263.02	
8,402.00	89.30	351.20	4,763.22	4,020.25	3,965.74	-659.78	4,020.25	350.55	154,774.74	2,114,258.22	
8,434.00	90.30	351.30	4,763.33	4,052.24	3,997.37	-664.65	4,052.25	350.56	154,806.37	2,114,253.35	
8,465.00	90.30	351.10	4,763.16	4,083.24	4,028.01	-669.39	4,083.25	350.56	154,837.01	2,114,248.61	
8,497.00	89.60	351.00	4,763.19	4,115.24	4,059.62	-674.37	4,115.25	350.57	154,868.62	2,114,243.63	
8,528.00	89.00	350.90	4,763.57	4,146.24	4,090.23	-679.24	4,146.24	350.57	154,899.23	2,114,238.76	
8,560.00	89.70	350.90	4,763.93	4,178.24	4,121.82	-684.30	4,178.24	350.57	154,930.82	2,114,233.70	
8,592.00	89.50	350.10	4,764.16	4,210.23	4,153.38	-689.59	4,210.24	350.57	154,962.38	2,114,228.41	
8,623.00	89.80	350.20	4,764.35	4,241.23	4,183.93	-694.89	4,241.24	350.57	154,992.93	2,114,223.11	
8,654.00	90.00	350.00	4,764.40	4,272.23	4,214.46	-700.22	4,272.24	350.57	155,023.46	2,114,217.78	
8,686.00	90.20	350.20	4,764.35	4,304.23	4,245.99	-705.72	4,304.24	350.56	155,054.99	2,114,212.28	
8,717.00	90.60	350.70	4,764.13	4,335.23	4,276.56	-710.86	4,335.24	350.56	155,085.56	2,114,207.14	
8,749.00	91.00	350.70	4,763.68	4,367.22	4,308.13	-716.03	4,367.23	350.56	155,117.13	2,114,201.97	
8,780.00	91.70	351.00	4,762.95	4,398.22	4,338.73	-720.96	4,398.22	350.57	155,147.73	2,114,197.04	
8,812.00	92.20	351.10	4,761.86	4,430.20	4,370.32	-725.94	4,430.20	350.57	155,179.32	2,114,192.06	
8,843.00	92.10	350.80	4,760.70	4,461.17	4,400.91	-730.81	4,461.18	350.57	155,209.91	2,114,187.19	
8,875.00	91.70	350.70	4,759.64	4,493.16	4,432.48	-735.95	4,493.16	350.57	155,241.48	2,114,182.05	
8,907.00	91.80	351.00	4,758.66	4,525.14	4,464.06	-741.04	4,525.15	350.57	155,273.06	2,114,176.96	
8,938.00	92.40	351.30	4,757.53	4,556.12	4,494.67	-745.80	4,556.12	350.58	155,303.67	2,114,172.20	
8,970.00	92.50	351.30	4,756.16	4,588.09	4,526.27	-750.64	4,588.09	350.58	155,335.27	2,114,167.36	
9,001.00	92.40	351.40	4,754.83	4,619.06	4,556.89	-755.30	4,619.06	350.59	155,365.89	2,114,162.70	
9,033.00	91.40	351.30	4,753.77	4,651.04	4,588.51	-760.11	4,651.04	350.59	155,397.51	2,114,157.89	
9,064.00	90.40	351.30	4,753.28	4,682.03	4,619.15	-764.80	4,682.03	350.60	155,428.15	2,114,153.20	
9,096.00	90.30	351.20	4,753.09	4,714.03	4,650.78	-769.66	4,714.03	350.60	155,459.78	2,114,148.34	
9,128.00	90.60	351.20	4,752.84	4,746.03	4,682.40	-774.56	4,746.03	350.61	155,491.40	2,114,143.44	
9,157.00	90.70	351.40	4,752.51	4,775.02	4,711.06	-778.95	4,775.03	350.61	155,520.06	2,114,139.05	

Last Survey: 9157'MD / 4752.51'TVD



Professional Directional Survey Report



Company: TAPSTONE ENERGY	Local Co-ordinate Reference: Site Salsberry 17-34-7 1H
Project: Harper County, KS	TVD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Site: Salsberry 17-34-7 1H	MD Reference: GL 1381' + 22' KB @ 1403.00usft (Nomac 7)
Well: Salsberry 17-34-7 1H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
9,212.00	90.70	351.40	4,751.84	4,830.01	4,765.44	-787.17	4,830.02	350.62	155,574.44	2,114,130.83	
PTB: 9212'MD											

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
9,157.00	4,752.51	4,711.06	-778.95	Last Survey: 9157'MD / 4752.51'TVD	
9,212.00	4,751.84	4,765.44	-787.17	PTB: 9212'MD	

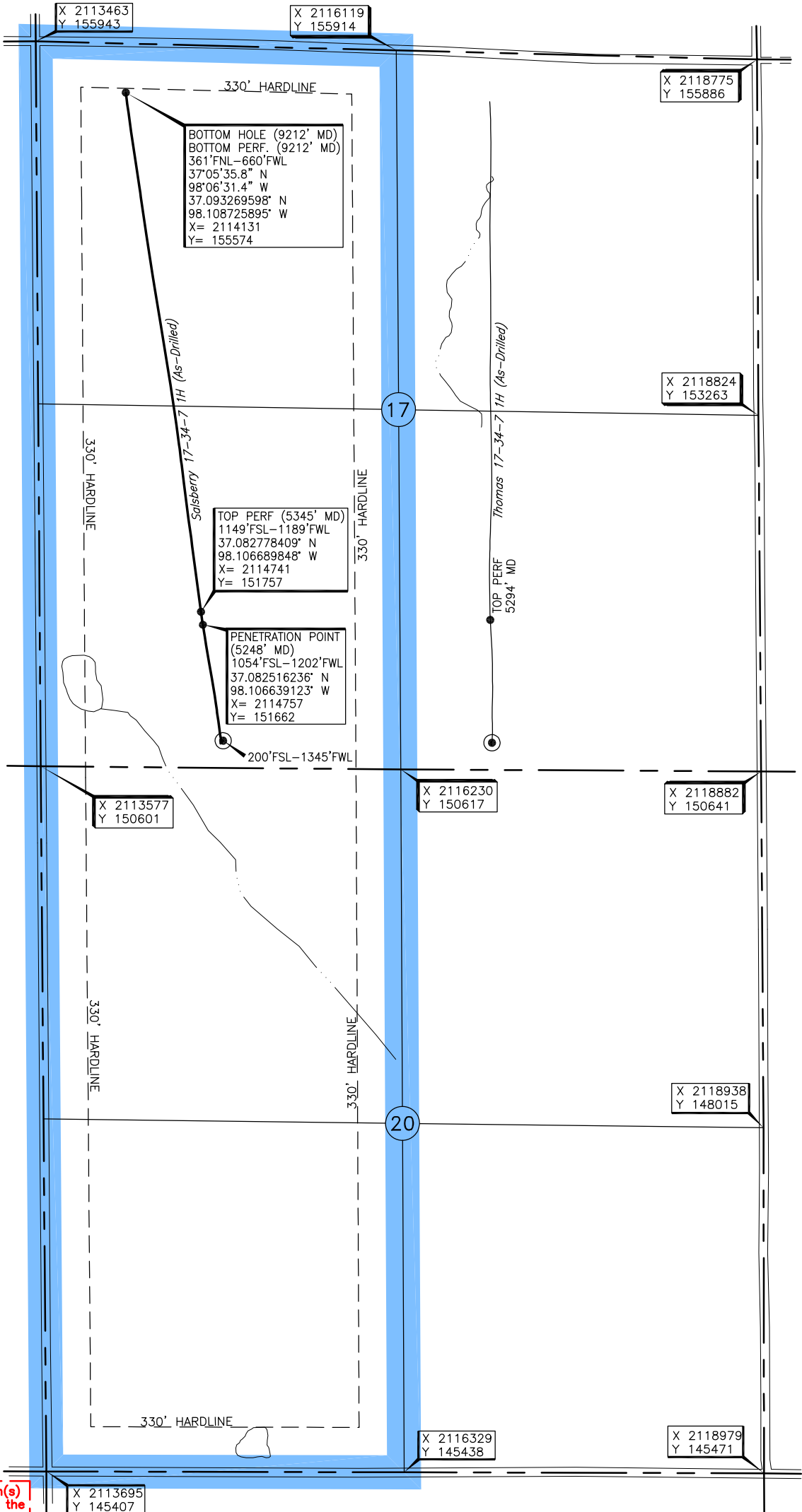
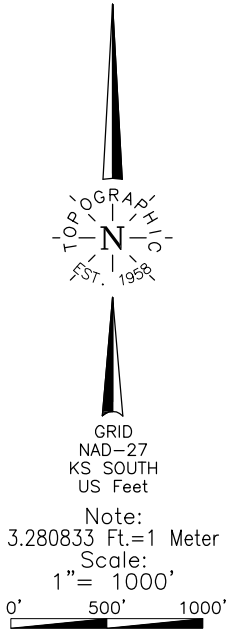
TOPOGRAPHIC LAND SURVEYORS

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. LS-99, Exp. Dec. 31, 2015

HARPER

County, Kansas

200'FSL - 1345'FWL Section 17 Township 34S Range 7W P.M.



Operator: TAPSTONE ENERGY
 Lease Name: SALSBERY 17-34-7
 Topography & Vegetation: Loc. fell in sloped terraced pasture, ±10' East of fence
 Good Drill Site? Yes No
 Reference Stakes or Alternate Location: Stakes Set None
 Best Accessibility to Location: From West of county road
 Distance & Direction from Hwy Jct or Town: From Anthony, KS, go ±4.0 mi. West on St. Hwy. 2, then ±5.0 mi. South to the SW Cor. of Sec. 17-T34S-R7W.
 Well No.: 1H
 ELEVATION: 1381' Gr. at Stake

A boundary survey of the said section(s) shown hereon was not performed per the request of the operator shown hereon.

DATUM: NAD-27
 LAT: 37°04'48.6"N
 LONG: 98°06'21.9"W
 LAT: 37.080172668° N
 LONG: 98.106096837° W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: KS SOUTH
 X: 2114918
 Y: 150809

251350 Date of Drawing: Sep 30, 2015
 Invoice # 243979 Date Staked: May 05, 2015 JP

FINAL AS-DRILLED PLAT

AS-DRILLED INFORMATION
 FURNISHED BY TAPSTONE ENERGY