

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

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

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: _____

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)</i> <i>(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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OPERATOR

Company: MM Exploration, Inc.
 Address: 4257 Main Street
 Westminster, CO 80031

Contact Geologist: Mike Austin
 Contact Phone Nbr:
 Well Name: Guthrie #1 OWWO
 Location:
 API:
 Pool: Disposal
 State: KANSAS

Field: Braddock
 Country: USA

Scale 1:240 Imperial

Well Name: Guthrie #1 OWWO
 Surface Location:
 Bottom Location:
 API:
 License Number:
 Spud Date: 6/8/2020 Time: 3:15 AM
 Region:
 Drilling Completed: 6/20/2020 Time: 3:30 AM
 Surface Coordinates: 1670' FNL & 330' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 1479.00ft
 K.B. Elevation: 1491.00ft
 Logged Interval: 0.00ft To: 0.00ft
 Total Depth: 0.00ft
 Formation: Arbuckle
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: 38.155697
 Latitude: -97.226004
 N/S Co-ord: 1670' FNL
 E/W Co-ord: 330' FWL

LOGGED BY

Company:
 Address: 7863 S. State Road 14
 Kingman, KS 67068

Phone Nbr:
 Logged By: Geologist Name: Derek Rebel

CONTRACTOR

Contractor: Lighthouse Drilling
 Rig #: #1
 Rig Type: Mud Rotary
 Spud Date: 6/8/2020 Time: 3:15 AM
 TD Date: 6/20/2020 Time: 3:30 AM
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 1491.00ft Ground Elevation: 1479.00ft
 K.B. to Ground: 12.00ft

NOTES**Bit Record**

ROCK TYPES

	Cht		Dolsec		shale, gry
	Dolprim		shale, grn		Ss

ACCESSORIES

MINERAL





P Pyrite

OTHER SYMBOLS

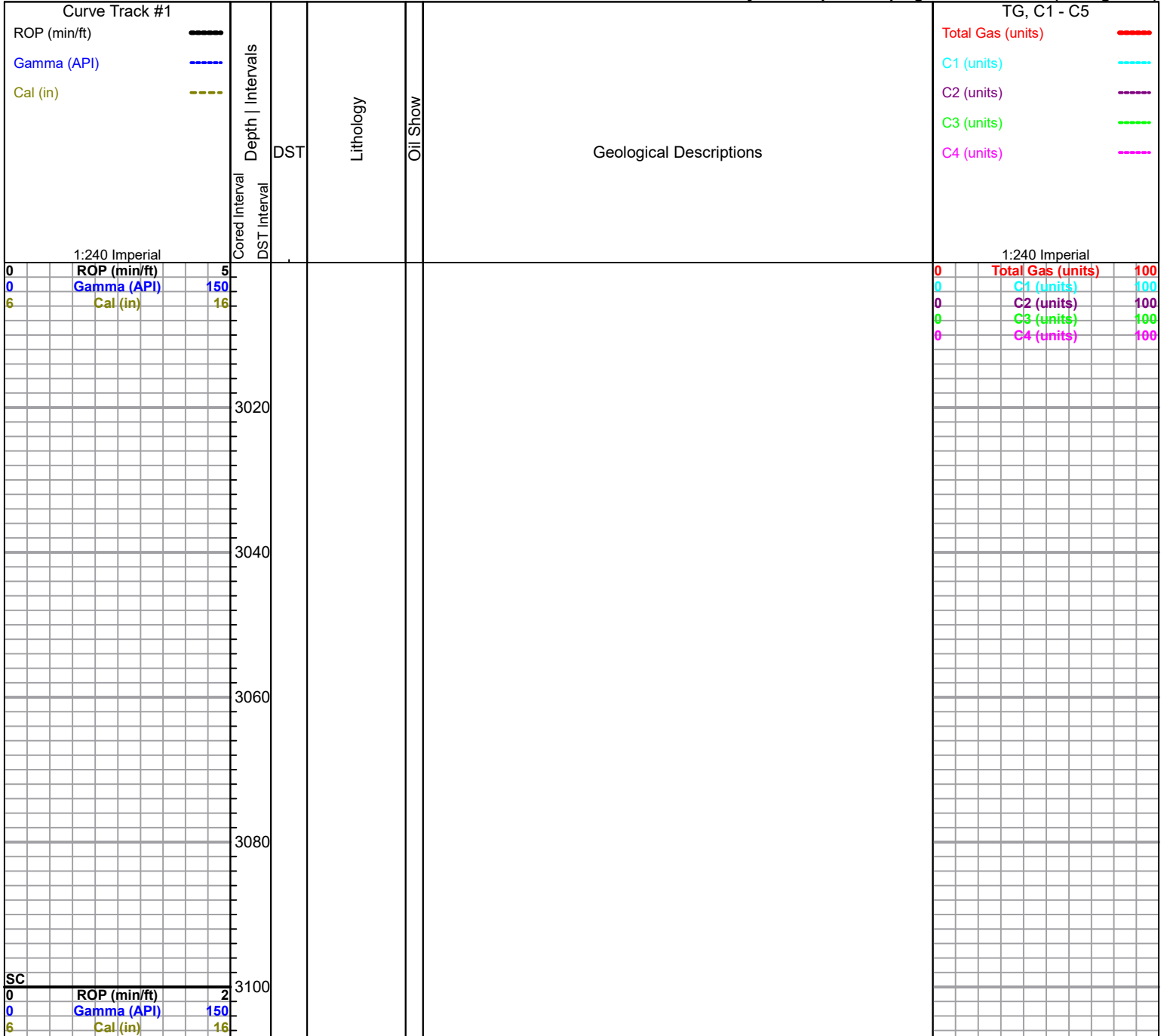
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

-  DST Int
-  DST alt
-  Core
-  tail pipe

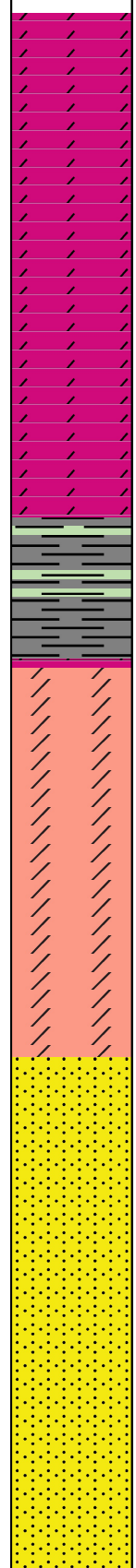
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3120
3140
3160
3180
3200
3220
3240
3260
3280
3300
3320

3,151' - Drill Time Started

0 2
6 150
Cal (in) C



Dol - Off Wht to tan, Fne to Mdm xtl, vuggy porosity in part, dense Pyrite in samples, very faint odor, w/ edge staining.

Dol. - White to buff, fine xtl, vuggy porosity w/ interpart, porosity, not as dense, faint odor, no show free oil

Dol. - white to buff, medium xtl, mostly same as above with an abundance of green gray silty shale

Sh - Gray, green, dense and soft, with some siltstones, a few pyrite in place

Viola - 3,223' (-1,732')

Dol. - Off White to Tan, Md to Crse Xtl, Dense, with poor visible porosity. Glau, in place, with dark mica banding, No Odor

Dol. - mostly same as above with an shale

Dol. - Tan to off white, coarse xtl, dark carbonte material intermixed, poor porosity

Simpson - 3,271' (-1,780')

Ss - Clear to white, med grain, well sorted, sub rounded, with inter reddish color, no odor, no show free oil

SS - White, medium to crse grain, mod. sorted, sub rounded to sub angular, inter drk card material, dirty ss clusters

SS - White, clr, medium grain, sub angular, mod sorting, dark material within sandstones. A few pieces of L.S. brown, dense, with

(3,161') Wiper Trip/Bit Trip

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

material within sandstones. A few pieces of LS, brown, dense, with no porosity

3340
C
3360
C
3380
C
3400
C
3420
C
3440
C
3460
C
3480
C
3500
C
3520
C
3540



SH- Grey Green, blk, with some siltstone colored

Arbuckle - 3,349' (-1,858')

Dol. - Tan to buff, fine xtn, pinpoint porosity, breaks easily with pressure, no show no odor

Dol. - Tan to brown, fine to micro xtn, pinpoint porosity, dense, no show no odor

Dol - Same as above, poor visible porosity, tight,

Dolo - Tan to gray, fine xtn, pinpoint and vuggy porosity, dead oil stain, with drk black carb. No show no odor

Sh - Black carb

Dol - Tan to gray, fine xtn, vuggy porosity, no show no odori, a couple of piece of chert, off white, ool

Dol - Mostly same as above, with very vuggy porosity

Dol - Brown, fine to medium xtn, dense, no visible porosity, no show no odor

Dol - Tan and white, micro to fine xtn, with no visible porosity, Chert - Translucent and White, fresh with no porosity, pyrite in chert

Dol - Tan to Brown, Micro and Fine xtn, mostly dense with some vug por., Chert - White, Fresh, Dense

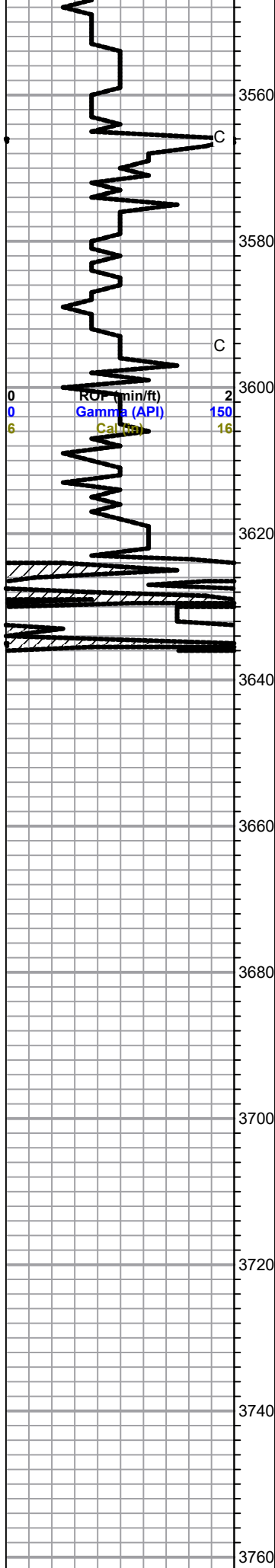
Dol. - Tan, micro xtn, pinpoint porosity, no show no odor

Dol. - Same A/s

0
0
6
ROP (min/ft)
Gamma (API)
Cal (in)

2
150
16

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



Dol. - Same As above, with pyrite throughout

Dol. - Tan, fine xtlm, some vug porosity, pinpoint porosity, no show no odor

Dol. - Same as above with Chert - White, Fresh, Dense, and scattered pyrite

Missed Sample - Tallying Pipe

Dol. - Mostly same as above, with an abundance of pyrite and white fresh chert

RTD @ 3,636' @ 7:42 PM

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

3780
3800
3820
3840
3860
3880
3900
3920
3940
3960
3980

0	ROP (min/ft)	2
0	Gamma (API)	150
6	Cal (in)	16

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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Customer	M & M EXPLORATION	Lease & Well #	GUTHERIE #1		Date	1/1/2021	
Service District	PRATT, KS	County & State	HARVEY, KS	Legals S/T/R	9-22S-02E	Job #	
Job Type	5 1/2 LONGSTRING <input type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input checked="" type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> No	Ticket #
							WP 1058

Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
916	M. BRUNGARDT	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
265	K. NOELS	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
527-533	K. LESLEY	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input checked="" type="checkbox"/> Specific Job Sequence/Expectations
		<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
Comments					

Product/ Service Code	Description	Unit of Measure	Quantity	Net Amount
CP030	H-Long	sack	200.00	\$4,200.00
CP055	H-Plug	sack	100.00	\$975.00
FE175	5 1/2" Type A Packer Shoe	ea	1.00	\$1,177.50
FE170	5 1/2" Latch Down Plug & Baffle	ea	1.00	\$262.50
FE130	5 1/2" Cement Basket	ea	3.00	\$675.00
FE135	5 1/2 Turbolizer	ea	8.00	\$480.00
M015	Light Equipment Mileage	mi	40.00	\$60.00
M010	Heavy Equipment Mileage	mi	40.00	\$120.00
M020	Ton Mileage	tm	544.00	\$612.00
C015	Cement Pump Service	ea	1.00	\$1,125.00
C050	Cement Plug Container	job	1.00	\$187.50

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Net:	\$9,874.50
		Total Taxable	\$ -
		Tax Rate:	
Based on this job, how likely is it you would recommend HSI to a colleague?		State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.	Sale Tax:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unlikely	1	2	3
	4	5	6
	7	8	9
	10	Extremely Likely	
		Total:	\$ 9,874.50

HSI Representative: *Kevin Lesley*

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

X _____ **CUSTOMER AUTHORIZATION SIGNATURE**



CEMENT TREATMENT REPORT

Customer:	M & M EXPLORATION	Well:	GUTHERIE #1	Ticket:	WP 1058
City, State:		County:	HARVEY, KS	Date:	1/1/2021
Field Rep:	ALAN VRATIL	S-T-R:	9-22S-02E	Service:	5 1/2 LONGSTRING

Downhole Information		15.5#	Calculated Slurry - Lead		Calculated Slurry - Tail	
Hole Size:	7 1/4 in		Blend:	SCAVENGER	Blend:	H- LONG
Hole Depth:	3650' ft		Weight:	13.0 ppg	Weight:	15 ppg
Casing Size:	5 1/2" in		Water / Sx:	gal / sx	Water / Sx:	6.0 gal / sx
Casing Depth:	ft		Yield:	ft ³ / sx	Yield:	1.42 ft ³ / sx
Tubing / Liner:	in		Annular Bbls / Ft.:	bbs / ft.	Annular Bbls / Ft.:	bbs / ft.
PLUG Depth:	3593 ft		Depth:	ft	Depth:	ft
Tool / Packer:			Annular Volume:	0.0 bbls	Annular Volume:	0 bbls
Tool Depth:	ft		Excess:		Excess:	
Displacement:	85.5 bbls		Total Slurry:	0.0 bbls	Total Slurry:	50.5 bbls
		Total Sacks:	#DIV/0! sx	Total Sacks:	200 sx	

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
8:00PM			-	-	ON LOCATION
12:45AM				-	RUN 5 1/2"x 15.5" CASING
				-	PACKER SHOE ON BOTTOM
				-	TURBOLIZERS- 1,2,3,4,5,6,9,10
				-	BASKETS- 8, 11
4:15AM				-	CASING ON BOTTOM
4:30AM				-	HOOK UP TO CASING AND BREAK CIRC. WITH RIG PUMP AND MUD - SET PACKER SHOE
5:10AM	5.0	300.0	5.0	5.0	H2o AHEAD
5:12AM	5.0	300.0	10.0	15.0	MIX 50 SKS SCAVENGER CEMENT @ 13 PPG
5:14AM	5.0	200.0	50.5	65.5	MIX 200 SKS H- LONG CEMENT @ 15 PPG
5:24AM				65.5	SHUT DOWN- CLEAR PUMP AND LINES
5:30AM	6.0	-	-	65.5	START DISPLACEMENT
5:36AM	5.0	300.0	45.0	110.5	LIFT PRESSURE
5:42AM	4.0	700.0	75.0	185.5	SLOW RATE
5:45AM	3.0	1,500.0	85.5	271.0	PLUG DOWN- HELD
				271.0	CIRCULATION THRU JOB
6:30AM			7.0	278.0	PLUG RH W/ 30 SKS
6:40AM			5.0	283.0	PLUG MH W/ 20 SKS
6:45AM				283.0	WASH UP PUMP TRUCK
7:00AM				283.0	JOB COMPLETE,
				283.0	THANKS- KEVEN, MARK, KEVIN
				283.0	
				283.0	
				283.0	
				283.0	
				283.0	
				283.0	

CREW		UNIT	SUMMARY		
Cementor:	M. BRUNGARDT	916	Average Rate	Average Pressure	Total Fluid
Pump Operator:	K. NOELS	265	4.7 bpm	471 psi	283 bbls
Bulk #1:	K. LESLEY	527-533			
Bulk #2:					