

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](mailto: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
--	---

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
---	---	------------------------------------

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:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Pioneer Oil Company, Inc.
Well Name	LORTSCHER 8-17
Doc ID	1601799

Tops

Name	Top	Datum
Lansing A	4210	-950
B	4266	-1006
C	4324	-1064
D	4368	-1108
E	4413	-1153
Stark	4426	-1166
F	4452	-1192
Hushpuckney	4460	-1200
G	4471	-1211
B/KC	4484	-1224
Marm-Lenapah	4518	-1258
Altamont	4566	-1306
Pawnee	4600	-1340
Ft Scott	4668	-1408
CHK-SH	4689	-1429
Morrow SD	4884	-1624
Congl	4922	-1662
Miss LM	4951	-1691



		Key Well A - South						Key Well B - North	
		BEREXCO HOWARD 1			LORTSCHER 8-17			BEREXCO MOSER 2	
		KB=3263			KB= 3260			KB=3253	
FORMATION	LOG DEPTH	DATUM	DIF	LOG DEPTH	DATUM	DIF	LOG DEPTH	DATUM	
ANHYDRITE	3192	71	-3	3192	68	-3	3182	71	
NEVA	3668	-404	2	3662	-402	-2	3654	-400	
RED EAGLE	3734	-471	2	3729	-469	-2	3720	-467	
FORAKER	3782	-519	1	3778	-518	-3	3768	-515	
TOPEKA	4002	-739	4	3995	-735	0	3988	-735	
DEER CREEK	4063	-800	0	4060	-800	0	4053	-800	
OREAD	4122	-859	12	4107	-847	1	4101	-848	
HEEBNER	4164	-901	3	4158	-898	-5	4146	-893	
TORONTO	4170	-907	3	4164	-904	-1	4156	-903	
LANSING A	4214	-951	1	4210	-950	-5	4198	-945	
B	4270	-1008	2	4266	-1006	-1	4208	-1005	
C	4330	-1067	3	4324	-1064	-5	4310	-1059	
D	4372	-1109	1	4368	-1108	-3	4358	-1105	
E	4416	-1153	0	4413	-1153	-5	4402	-1148	
STARK	4432	-1169	3	4426	-1166	-2	4417	-1164	
F	4458	-1195	3	4452	-1192	-3	4442	-1189	
HUSHPUCKNEY	4466	-1203	3	4460	-1200	-1	4452	-1199	
G	4478	-1215	4	4471	-1211	-4	4460	-1207	
B/KC	4490	-1227	3	4484	-1224	-2	4475	-1222	
MARM-LENAPAH	4522	-1259	1	4518	-1258	-1	4510	-1257	
ALTAMONT	4555	TD		4566	-1306	1	4560	-1307	
PAWNEE				4600	-1340	-1	4592	-1339	
FT SCOTT				4668	-1408	3	4664	-1411	
CHK-SH				4689	-1429	0	4682	-1429	
MORROW SD				4884	-1624	9	4886	-1633	
CONGL				4922	-1662	-5	4910	-1657	
MISS LM				4951	-1691	2	4946	-1693	
				4992	TD		4951	TD	



**HURRICANE SERVICES INC**

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

Customer:

PIONEER OIL COMPANY  
PO BOX 237  
VINCENNES, IN 47501-0237

Invoice Date: 12/1/2021  
Invoice #: 0357462  
Lease Name: Lortscher  
Well #: 8-17  
County: Rawlins, Ks  
Job Number: WP2157  
District: Oakley

Date/Description	HRS/QTY	Rate	Total
PTA	0.000	0.000	0.00
H-Plug	240.000	11.700	2,808.00
Light Eq Mileage	90.000	1.800	162.00
Heavy Eq Mileage	90.000	3.600	324.00
Ton Mileage	932.000	1.350	1,258.20
Depth Charge 1001'-2000'	1.000	1,350.000	1,350.00
8 5/8" Top rubber plug	1.000	157.500	157.50

Net Invoice	6,059.70
Sales Tax:	341.05
<b>Total</b>	<b>6,400.75</b>

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

**SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

**WE APPRECIATE YOUR BUSINESS!**

Hurricane Services, Inc.  
 250 N. Water St., Suite #200  
 Wichita, KS 67202



<b>Customer</b>	Pioneer Oil Co		<b>Lease &amp; Well #</b>	Lortscher # 6-17		<b>Date</b>	12/1/2021	
<b>Service District</b>	Oakley KS		<b>County &amp; State</b>	Rawlin KS		<b>Legals S/T/R</b>	17-1S-36W	
<b>Job Type</b>	PTA	<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	<b>New Well?</b>	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No	<b>Job #</b>
<b>Equipment #</b>	<b>Driver</b>	<b>Job Safety Analysis - A Discussion of Hazards &amp; Safety Procedures</b>						
78	Jesse J	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging			
180/520	Michael R	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection			
205	Kale O	<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 checked="" type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations			
		<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below				
<b>Comments</b>								
<b>Product/Service Code</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Quantity</b>	<b>Net Amount</b>				
CP055	H-Plug	sack	240.00	\$2,808.00				
M015	Light Equipment Mileage	mi	90.00	\$162.00				
M010	Heavy Equipment Mileage	mi	90.00	\$324.00				
M020	Ton Mileage	lm	932.00	\$1,258.20				
D012	Depth Charge: 100'-2000'	job	1.00	\$1,350.00				
FE285	Ø 5/8" Rubber Plug	ea	1.00	\$157.50				
Customer Section: On the following scale how would you rate Hurricane Services, Inc.?								
Based on this job, how likely is it you would recommend HSI to a colleague?						<b>Total Taxable</b>	\$ -	<b>Tax Rate:</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Safe Tax:</b>	\$ -	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Total:</b>	\$ 6,059.70	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>HSI Representative:</b> <i>Jesse Jones</i>		

**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: Pioneer Oil Co	Well: Lortscher # 8-17	Ticket: WP-2157
City, State: Oakley KS	County: Rawlin KS	Date: 12/1/2021
Field Rep: Rick Popp	S-T-R: 17-1S-36W	Service: PTA

Downhole Information	
Hole Size:	7 7/8 In
Hole Depth:	ft
Casing Size:	In
Casing Depth:	ft
Tubing / Liner:	In
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blends:	H-Plug
Weights:	13.8 ppg
Water / Sk:	6.9 gal / sk
Yield:	1.42 ft <sup>3</sup> / sk
Annular Bbls / Ft.:	0.0142 bbs / ft.
Depth:	3200 ft
Annular Volume:	45.4 bbls
Excess:	
Total Slurry:	60.5 bbls
Total Sacks:	240 sk

Calculated Slurry - Tail	
Blends:	
Weights:	ppg
Water / Sk:	gal / sk
Yield:	ft <sup>3</sup> / sk
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sk

TIME	RATE	PSI	BBLs	TOTAL BBLs	REMARKS
12:10p			-	-	Arrival
12:15p				-	Safety meeting
12:20p				-	Rig up
12:47p	4.0	250.0	5.0	5.0	H2O ahead
12:50p	4.5	300.0	8.0	13.0	Mixed 50 sks @ 13.8 ppg @ 3200'
12:52p	3.6	130.0	10.0	23.0	Displaced H2O with truck
12:58p				23.0	Displaced mud with rig for 3 minutes
1:04p				23.0	Pulled pipe to 2200'
1:45p	4.0	200.0	5.0	28.0	H2O ahead
1:48p	4.6	160.0	16.0	44.0	Mixed 100 sks @ 13.8 ppg @ 2200'
1:52p	4.7	120.0	22.4	66.4	Displaced H2O with truck
1:58p					Pulled pipe to 300'
3:11p	4.0	110.0	5.0	69.4	H2O ahead
3:14p	4.3	130.0	8.0		Mixed 50 sks @ 13.8 ppg @ 300'
3:17p	2.0	50.0	1.5		Displaced H2O
3:21p					Pull pipe to surface
3:32p	3.0	70.0	1.6		Top 40 mixed 10 sks @ 13.8 ppg
3:40p	3.0	70.0	4.9		Rat hole Mixed 30 sks @ 13.8 ppg
3:42p					Plug down
3:47p					Wash up
4:00p					Rig down
4:17p					Depart location

CREW		UNIT	SUMMARY		
Cementer:	Jesse J	78	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Michael R	180/520	3.8 bpm	145 psi	87 bbls
Bulk #1:	Kale O	205			
Bulk #2:					





Customer	Pioneer Oil Company, Inc	Lease & Well #	Lortscher # 8-17	Date	11/23/2021
Service District	Oakley KS	County & State	Rawlins KS	Legals S/T/R	17-1S-36W
Job Type	Surface	<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	Job #
					Ticket #
				New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No
					WP 2124

Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
73	Josh	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input checked="" type="checkbox"/> Lockout/Tagout	<input checked="" type="checkbox"/> Warning Signs & Flagging
180/520	Jimmie	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input checked="" type="checkbox"/> Required Permits	<input checked="" type="checkbox"/> Fall Protection
242	John	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
		<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input checked="" type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations
		<input checked="" type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	

Product/Service Code	Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount
D010	Depth Charge: 0'-500'	job	1.00				\$900.00
M010	Heavy Equipment Mileage	mi	90.00				\$324.00
M015	Light Equipment Mileage	mi	90.00				\$162.00
M020	Ton Mileage	lm	882.00				\$1,190.70
CP015	H-325	sack	200.00				\$3,600.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Gross:	Net:	\$6,176.70
Based on this job, how likely is it you would recommend HSI to a colleague?		Total Taxable	\$ -	Tax Rate:
<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"/>		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:
Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely		Total:		\$ 6,176.70
		HSI Representative: <i>Josh Mosier</i>		

**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 1/4% 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:	Pioneer Oil Company, Inc	Well:	Lortscher # 8-17	Ticket:	WP 2124
City, State:	Oakley KS	County:	Rawlins KS	Date:	11/23/2021
Field Rep:	Josh Mosier	S-T-R:	17-1S-36W	Service:	Surface

Downhole Information	
Hole Size:	12.25 in
Hole Depth:	217 ft
Casing Size:	8 5/8 in
Casing Depth:	217 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	12.6 bbls

Calculated Slurry - Lead	
Blend:	H-325
Weight:	14.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.41 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	0.0735 bbs / ft.
Depth:	217 ft
Annular Volume:	15.9 bbls
Excess:	
Total Slurry:	50.2 bbls
Total Sacks:	200 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	BBLs	TOTAL BBLs	REMARKS
1230P			-	-	GOT TO LOCATION/ RIG WAS RUNNING A WIPER TRIP
1235P				-	SAFETY MEETING
1240P				-	RIGGED UP TRUCKS
520P				-	LANDED CASING
325P				-	CIRCULATED HOLE
331P	3.0	250.0	5.0	5.0	H2O AHEAD
333P	7.1	300.0	50.2	55.2	PUMPED 200 SKS OF H- 235 @ 217 FT
345P	2.5	250.0	12.6	67.8	DISPLACED WITH H2O
350P				67.8	PLUG DOWN
352P				67.8	WASHED UP PUMP TRUCK
400P				67.8	RIGGED DOWN TRUCKS
420P					OFF LOCATION
					CIRCULATE 5 BBLs CEMENT TO PIT

Crew	UNIT	SUMMARY		
		Average Rate	Average Pressure	Total Fluid
Cementer:	Josh	73		
Pump Operator:	Jimmie	180/520	4.2 bpm	267 psi
Bulk #1:	John	242		68 bbls
Bulk #2:				