



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1249838
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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 SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- 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 ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1249838

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 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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 929

Date	3-11-15	Sec.	14	Twp.	16	Range	12	County	Barton	State	KS	On Location		Finish	2:00 AM
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Lease Hoffman
Well No. 1
Location D. b. 1W 2S 1/2 F S 1/4

Contractor	Royal #1	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
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Type Job	Plug	Charge To	Gr. F.
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Hole Size	7 7/8	T.D.	
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Csg.	Drill Pipe	Depth	
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Tbg. Size		Depth	
-----------	--	-------	--

Tool		Depth	
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Cement Left in Csg.		Shoe Joint	
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Meas Line		Displace	
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EQUIPMENT			Common
Pumptrk	16	No. Cementer Helper	Poz. Mix
Bulktrk	4	No. Driver	Gel.
Bulktrk	PU	No. Driver	Calcium

JOB SERVICES & REMARKS			Hulls
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Remarks:		Salt
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Rat Hole	30 SI	Flowseal
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Mouse Hole	15 SI	Kol-Seal
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Centralizers		Mud CLR 48
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Baskets		CFL-117 or CD110 CAF 38
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D/V or Port Collar		Sand
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1st Plug @ 3400' w/ 150 SI		Handling
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2nd Plug @ 910 w/ 150 SI		Mileage
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3rd Plug @ 470 w/ 100 SI		8 5/8 FLOAT EQUIPMENT
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4th Plug @ 40 w/ 10 SI		Guide Shoe
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		Centralizer
--	--	-------------

		Baskets
--	--	---------

		AFU Inserts
--	--	-------------

		Float Shoe
--	--	------------

		Latch Down
--	--	------------

		Wood Plug 1
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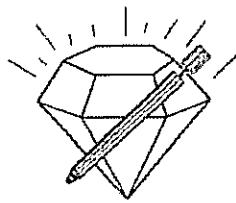
		Pumptrk Charge
--	--	----------------

		Mileage
--	--	---------

		Tax
--	--	-----

X Signature	Doug Budig	Discount	
		Total Charge	
		Net	

J Burk - Peterra @ SBC Global



DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
HOFFMAN1DST1

Company GRA EX, LLC Lease & Well No. Hoffman No. 1
Elevation 1922 KB Formation Lansing/Kansas City "L" Effective Pay Ft. Ticket No. A151
Date 3-10-15 Sec. 14 Twp. 16S Range 12W County Barton State Kansas
Test Approved By Eli Felts Diamond Representative Andy Carreira

Formation Test No. 1 Interval Tested from 3,338 ft. to 3,356 ft. Total Depth 3,356 ft.
Packer Depth 3,333 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,338 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,321 ft. Recorder Number 5585 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,340 ft. Recorder Number 8471 Cap. 10,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Royal Drilling, Inc. - Rig 1 Drill Collar Length ft. I.D. in.
Mud Type Chemical Viscosity 54 Weight Pipe Length ft. I.D. in.
Weight 9.1 Water Loss 8.8 cc. Drill Pipe Length 3,306 ft. I.D. 3 1/2 in.
Chlorides 3,000 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number 9 Anchor Length 18 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Surface blow. Died in 2 mins. Flushed tool. Surged. Died in 5 mins. No blow back during shut-in.
2nd Open: No blow. No blow back during shut-in.

Recovered 1 ft. of mud = .014230 bbls.
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks Tool Sample Grind Out: <1%-oil; >99%-mud

Time Set Packer(s) 6:00 P.M. Time Started off Bottom 8:30 P.M. Maximum Temperature 100°
Initial Hydrostatic Pressure.....(A) 1624 P.S.I.
Initial Flow Period.....Minutes 30 (B) 4 P.S.I. to (C) 7 P.S.I.
Initial Closed In Period.....Minutes 45 (D) 18 P.S.I.
Final Flow Period.....Minutes 30 (E) 6 P.S.I. to (F) 8 P.S.I.
Final Closed In Period.....Minutes 45 (G) 10 P.S.I.
Final Hydrostatic Pressure.....(H) 1615 P.S.I.

DIAMOND TESTING, LLC

TESTER : ANDY CARREIRA
CELL # 620-617-7202

General Information

Company Name	GRA EX LLC	DONALD GRABER	Job Number	A151
Contact		HOFFMAN #1	Representative	ANDY CARREIRA
Well Name		DST 1 LKC "L" 3338-3356	Well Operator	GRA EX LLC
Unique Well ID			Report Date	2015/03/10
Surface Location	SEC 14-16S-12W BARTON CNTY, KS		Prepared By	ANDY CARREIRA
Well License Number				
Field		KRAFT-PRUSA		
Well Type		Vertical		

Test Information

Test Type	CONVENTIONAL
Formation	DST 1 LKC "L" 3338-3356
Well Fluid Type	01 Oil
Test Purpose	Initial Test

Start Test Date	2015/03/10	Start Test Time	16:25:00
Final Test Date	2015/03/10	Final Test Time	22:02:00

Gauge Name 5585

Test Results

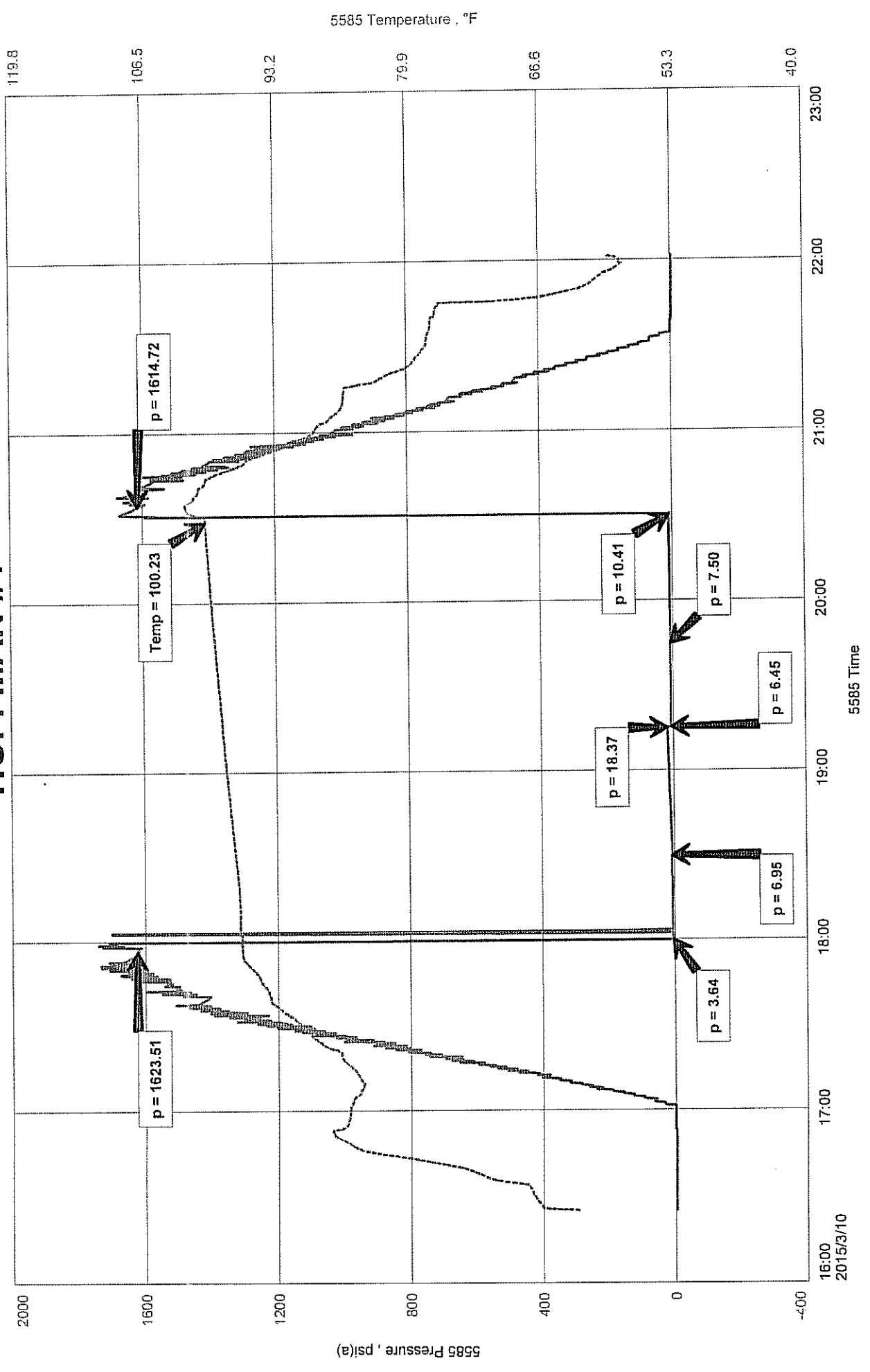
RECOVERY: 1' MUD

TOOL SAMPLE: <1% OIL, >99% MUD

HOFFMAN #1
 Formation: DST 1 LKC "L" 3338-3356
 Pool: Infield
 Job Number: A151

GRA EX LLC
 DST 1 LKC "L" 3338-3356
 Start Test Date: 2015/03/10
 Final Test Date: 2015/03/10

HOFFMAN #1

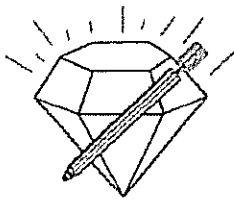


5585 Temperature, °F

5585 Pressure, psi(a)

2015/3/10

5585 Time



DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
HOFFMAN1DST2

Company GRA EX, LLC Lease & Well No. Hoffman No. 1
Elevation 1922 KB Formation Arbuckle Effective Pay _____ Ft. Ticket No. A152
Date 3-11-15 Sec. 14 Twp. 16S Range 12W County Barton State Kansas
Test Approved By Eli Felts Diamond Representative Andy Carreira

Formation Test No. 2 Interval Tested from 3,413 ft. to 3,421 ft. Total Depth 3,421 ft.
Packer Depth 3,408 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 3,413 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____ ft.

Top Recorder Depth (Inside) 3,396 ft. Recorder Number 5585 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,415 ft. Recorder Number 8471 Cap. 10,000 psi.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ psi.

Drilling Contractor Royal Drilling, Inc. - Rig 1 Drill Collar Length _____ ft I.D. _____ in.
Mud Type Chemical Viscosity 54 Weight Pipe Length _____ ft I.D. _____ in.
Weight 9.1 Water Loss 8.8 cc. Drill Pipe Length 3,381 ft I.D. 3 1/2 in.
Chlorides 3,000 P.P.M. Test Tool Length 32 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number 9 Anchor Length 8 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Strong blow increasing. Off bottom of bucket in 1 min. No blow back during shut-in.
2nd Open: Strong blow increasing. Off bottom of bucket in 5 mins. No blow back during shut-in.

Recovered 2,330 ft. of slightly oil specked water = 33.155900 bbls. (Grind out: <1%-oil; >99%-water)
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Remarks Tool Sample Grind Out: 100%-water (Chlorides: 16,000 Ppm PH: 7.0 RW: .45 @ 66°)

Time Set Packer(s) 1:00 P.M. Time Started off Bottom 3:45 P.M. Maximum Temperature 111°
Initial Hydrostatic Pressure.....(A) 1650 P.S.I.
Initial Flow Period.....Minutes 30 (B) 199 P.S.I. to (C) 800 P.S.I.
Initial Closed In Period.....Minutes 45 (D) 1057 P.S.I.
Final Flow Period.....Minutes 30 (E) 817 P.S.I. to (F) 1011 P.S.I.
Final Closed In Period.....Minutes 60 (G) 1059 P.S.I.
Final Hydrostatic Pressure.....(H) 1631 P.S.I.

DIAMOND TESTING, LLC

TESTER : ANDY CARREIRA
CELL # 620-617-7202

General Information

Company Name	GRA EX LLC	DONALD GRABER	Job Number	A152
Contact		HOFFMAN #1	Representative	ANDY CARREIRA
Well Name		DST 2 ARBUCKLE 3413-3421	Well Operator	GRA EX LLC
Unique Well ID		SEC 14-16S-12W BARTON CNTY, KS	Report Date	2015/03/11
Surface Location			Prepared By	ANDY CARREIRA
Well License Number		KRAFT-PRUSA		
Field		Vertical		
Well Type				

Test Information

Test Type	CONVENTIONAL
Formation	DST 2 ARBUCKLE 3413-3421
Well Fluid Type	01 Oil
Test Purpose	Initial Test

Start Test Date	2015/03/11	Start Test Time	11:35:00
Final Test Date	2015/03/11	Final Test Time	18:06:00

Gauge Name 5585

Test Results

RECOVERY: 2330' SOSW <1% OIL, >99% WATER

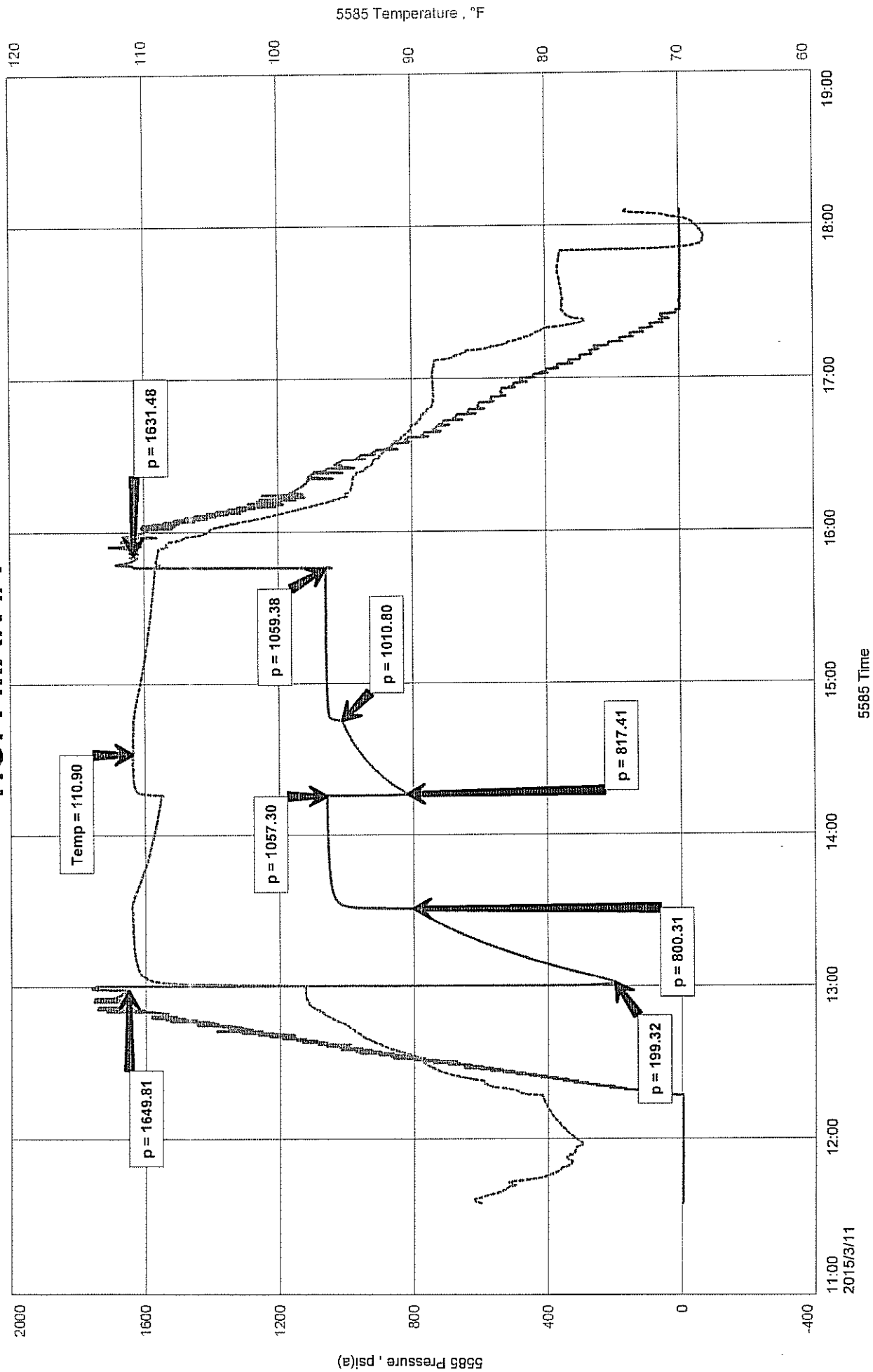
CHLORIDES: 16,000 PPM
PH: 7
RW: .45 @ 66

TOOL SAMPLE: 100% WATER

HOFFMAN #1
Formation: DST 2 ARBUCKLE 3413-3421
Pool: Infield
Job Number: A152

GRA EX LLC
DST 2 ARBUCKLE 3413-3421
Start Test Date: 2015/03/11
Final Test Date: 2015/03/11

HOFFMAN #1





Oil and Gas
Well
Database

Specific Well—15-167-21007-0001

Oil & Gas

All Well Data

API: 15-167-21007-0001 KID: 1037233016 Lease: DUNKEL Well 1 Original operator: Current operator: Royal Drilling Inc Field: Trapp Location: T15S R13W, Sec. 15 NW SE SE 990 North, 990 West, from SE corner Longitude: -98.7477562 Latitude: 38.7430416 Lat-long calculated from footages County: Russell	Permit Date: Spud Date: Completion Date: Plugging Date: Well Type: EOR Status: Authorized Injection Well Total Depth: 3350 Elevation: 1857 GL Producing Formation: IP Oil (bbl): IP Water (bbl): IP GAS (MCF): KCC Docket No.: E28697.1
View well on interactive map	

Kansas Geological Survey, Oil and Gas Well Database

Comments to webadmin@kgs.ku.edu

URL=<http://www.kgs.ku.edu/Magellan/Qualified/index.html>

Well Display Program Updated Jan. 2008. Data added continuously.

This is the information on where the drilling fluids were disposed.

KOLAR did not recognize the Permit #.