



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1148679  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_



1148679

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	HESS 1-23
Doc ID	1148679

All Electric Logs Run

CPDCN Micro Log
AI Shallow Focused Elect Log
Comp Sonic w/Integrated Transit Time
Comp Neutron Acoustic Porosity Overlay
Micro Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	HESS 1-23
Doc ID	1148679

Tops

Name	Top	Datum
Stone Corral	2550	+470
Bs/Stone Corral	2572	+448
Heebner	4010	-990
Muncie Creek	4193	-1173
Stark	4273	-1253
Excello	4525	-1505
Mississippian	4639	-1619
LTD	4690	



# Diamond Testing General Report

**JAKE  
FAHRENBRUCH - TESTER  
Cell: (620) 282-8977**

P.O. Box 157  
Hoisington KS 67544  
Office: (800) 542-7313

## General Information

**Company Name** Grand Mesa Operating Co.  
**Well Operator** Grand Mesa Operating Co.  
**Contact** Steve Stribling  
**Site Contact** Kent Matson  
**Field** Wildcat  
**Well Type** Vertical  
**Prepared By** Jake Fahrenbruch

**Well Name** Hess #1-23  
**Unique Well ID** DST #1 Lansing "E" 4122'-4150'  
**Surface Location** Sec 23-12s-32w-Logan Co.-KS  
**Test Unit** #5  
**Pool** Wildcat  
**Job Number** F122  
**Qualified By** Kent Matson

## Test Information

**Test Type** Conventional Bottom-Hole  
**Formation** Lansing "E" 4122'-4150'  
**Start Test Date** 2014/04/27  
**Final Test Date** 2013/04/28

**Test Purpose** Initial Test  
**Gauge Name** 0062  
**Start Test Time** 17:36:00  
**Final Test Time** 01:42:00

## Test Results

30 min initial flow: Surface blow, increased to 2.25".  
45 min initial shut-in: No blow-back.  
45 min final flow: Surface blow, increased to 2".  
60 min final shut-in: No blow-back.

Recovered: 140' Muddy Water 57% wtr, 43% mud  
----- No GIP  
----- Tool Sample: MCW, 74% wtr, 26% mud  
----- Chlorides: 30,000 ppm  
----- RW: .22 ohm @ 51 deg F  
----- PH: 7.5  
----- Bottom-Hole Temperature: 122 deg F

Pressures: IHP: 2029  
IFP: 10-40  
ISIP: 1270  
FFP: 43-96  
FSIP: 1259  
FHP: 2021



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: \_\_\_\_\_

TIME ON: \_\_\_\_\_  
TIME OFF: \_\_\_\_\_

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
Contractor \_\_\_\_\_ Charge to \_\_\_\_\_  
Elevation \_\_\_\_\_ Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Range \_\_\_\_\_ W County \_\_\_\_\_ State **KANSAS**  
Test Approved By \_\_\_\_\_ Diamond Representative \_\_\_\_\_

Formation Test No. \_\_\_\_\_ Interval Tested from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Total Depth \_\_\_\_\_ ft.  
Packer Depth \_\_\_\_\_ ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth \_\_\_\_\_ ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.  
Weight \_\_\_\_\_ Water Loss \_\_\_\_\_ cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. 2 7/8 in.  
Chlorides \_\_\_\_\_ P.P.M. Drill Pipe Length \_\_\_\_\_ ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number \_\_\_\_\_ Test Tool Length \_\_\_\_\_ ft. Tool Size 3 1/2-IF in.  
Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_ Anchor Length \_\_\_\_\_ ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: \_\_\_\_\_  
2nd Open: \_\_\_\_\_

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

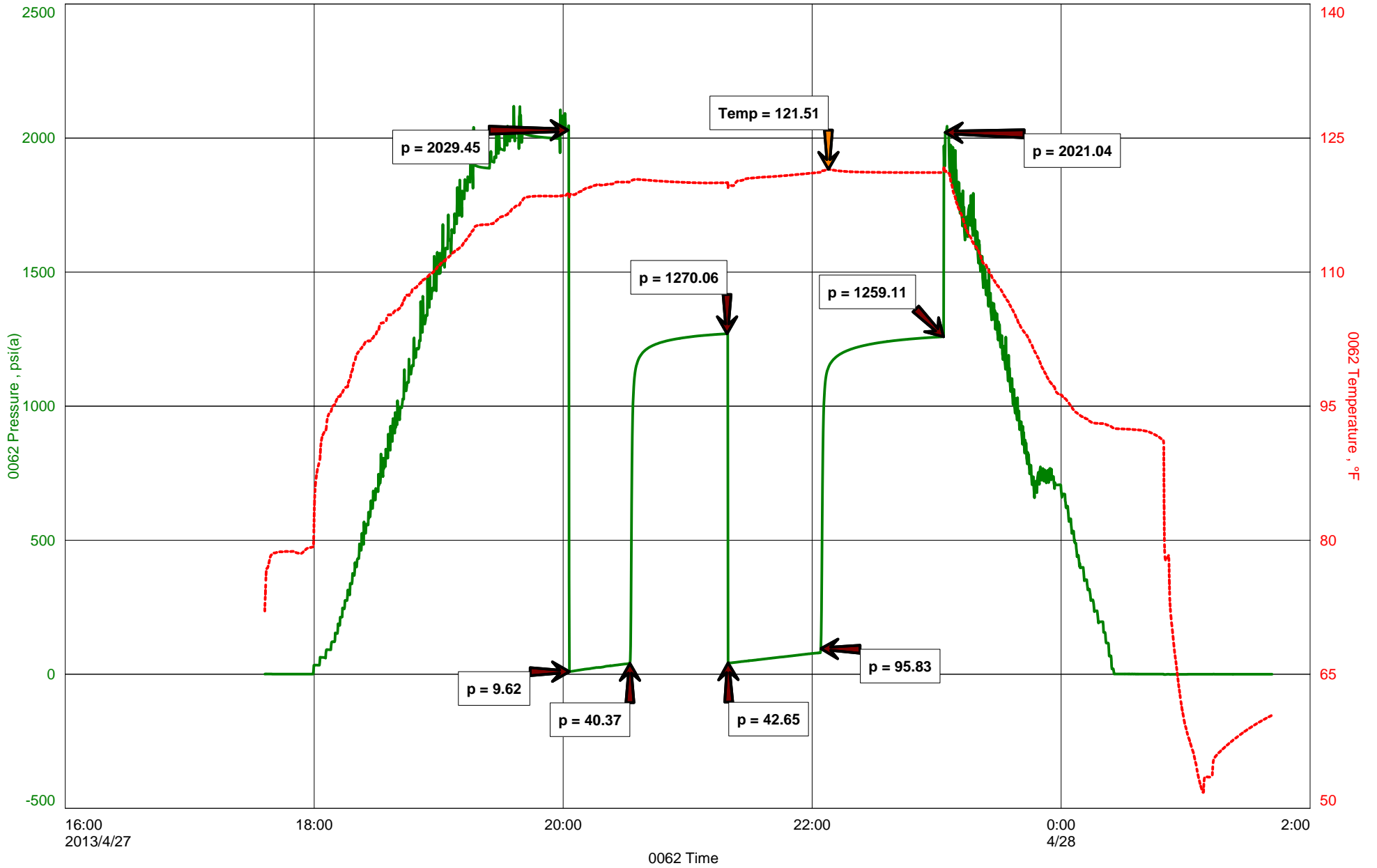
Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_  
Initial Hydrostatic Pressure..... (A) \_\_\_\_\_ P.S.I.  
Initial Flow Period..... Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.  
Initial Closed In Period..... Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.  
Final Flow Period..... Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period..... Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure..... (H) \_\_\_\_\_ P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Grand Mesa Operating Co.  
DST #1 Lansing "E" 4122'-4150'  
Start Test Date: 2014/04/27  
Final Test Date: 2013/04/28

Hess #1-23  
Formation: Lansing "E" 4122'-4150'  
Pool: Wildcat  
Job Number: F122

# Hess #1-23





# Diamond Testing General Report

**JAKE  
FAHRENBRUCH - TESTER  
Cell: (620) 282-8977**

P.O. Box 157  
Hoisington KS 67544  
Office: (800) 542-7313

## General Information

<b>Company Name</b>	Grand Mesa Operating Co.	<b>Well Name</b>	Hess #1-23
<b>Well Operator</b>	Grand Mesa Operating Co.	<b>Unique Well ID</b>	DST #2 Drum (H) 4190'-4239'
<b>Contact</b>	Steve Stribling	<b>Surface Location</b>	Sec 23-12s-32w-Logan Co.-KS
<b>Site Contact</b>	Kent Matson	<b>Test Unit</b>	#5
<b>Field</b>	Wildcat	<b>Pool</b>	Wildcat
<b>Well Type</b>	Vertical	<b>Job Number</b>	F123
<b>Prepared By</b>	Jake Fahrenbruch	<b>Qualified By</b>	Kent Matson

## Test Information

<b>Test Type</b>	Conventional Bottom-Hole	<b>Test Purpose</b>	Initial Test
<b>Formation</b>	Drum (H) 4190'-4239'	<b>Gauge Name</b>	0062
<b>Start Test Date</b>	2013/04/28	<b>Start Test Time</b>	15:40:00
<b>Final Test Date</b>	2013/04/29	<b>Final Test Time</b>	03:22:00

## Test Results

30 min initial flow:	Strong blow, BOB 1 minute 30 seconds.
45 min initial shut-in:	Blowback @ BOB in 30 minutes.
60 min final flow:	Strong blow, BOB 2 minutes 40 seconds.
90 min final shut-in:	No blowback.

Recovered: 1800' (~25.56 BBL) Clean Oil 100% oil  
 440' (~4.30 BBL) Gassy Muddy Oil, 20% gas, 50% oil, 30% mud  
 ----- 630' Gas In Pipe  
 ----- Gravity: 36 (corrected)  
 ----- Tool Sample: Clean Oil  
 ----- Total Recovered Fluid: 2,240' (~29.86 BBL)  
 ----- Bottom-Hole Temperature: 126 Deg F

Pressures: IHP: 2057  
 IFP: 175-580  
 ISIP: 1046  
 FFP: 594-824  
 FSIP: 965  
 FHP: 2054





**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: \_\_\_\_\_

TIME ON: \_\_\_\_\_  
TIME OFF: \_\_\_\_\_

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
Contractor \_\_\_\_\_ Charge to \_\_\_\_\_  
Elevation \_\_\_\_\_ Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Range \_\_\_\_\_ W County \_\_\_\_\_ State **KANSAS**  
Test Approved By \_\_\_\_\_ Diamond Representative \_\_\_\_\_

Formation Test No. \_\_\_\_\_ Interval Tested from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Total Depth \_\_\_\_\_ ft.  
Packer Depth \_\_\_\_\_ ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth \_\_\_\_\_ ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.  
Weight \_\_\_\_\_ Water Loss \_\_\_\_\_ cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. 2 7/8 in.  
Chlorides \_\_\_\_\_ P.P.M. Drill Pipe Length \_\_\_\_\_ ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number \_\_\_\_\_ Test Tool Length \_\_\_\_\_ ft. Tool Size 3 1/2-IF in.  
Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_ Anchor Length \_\_\_\_\_ ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: \_\_\_\_\_  
2nd Open: \_\_\_\_\_

Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
	Total

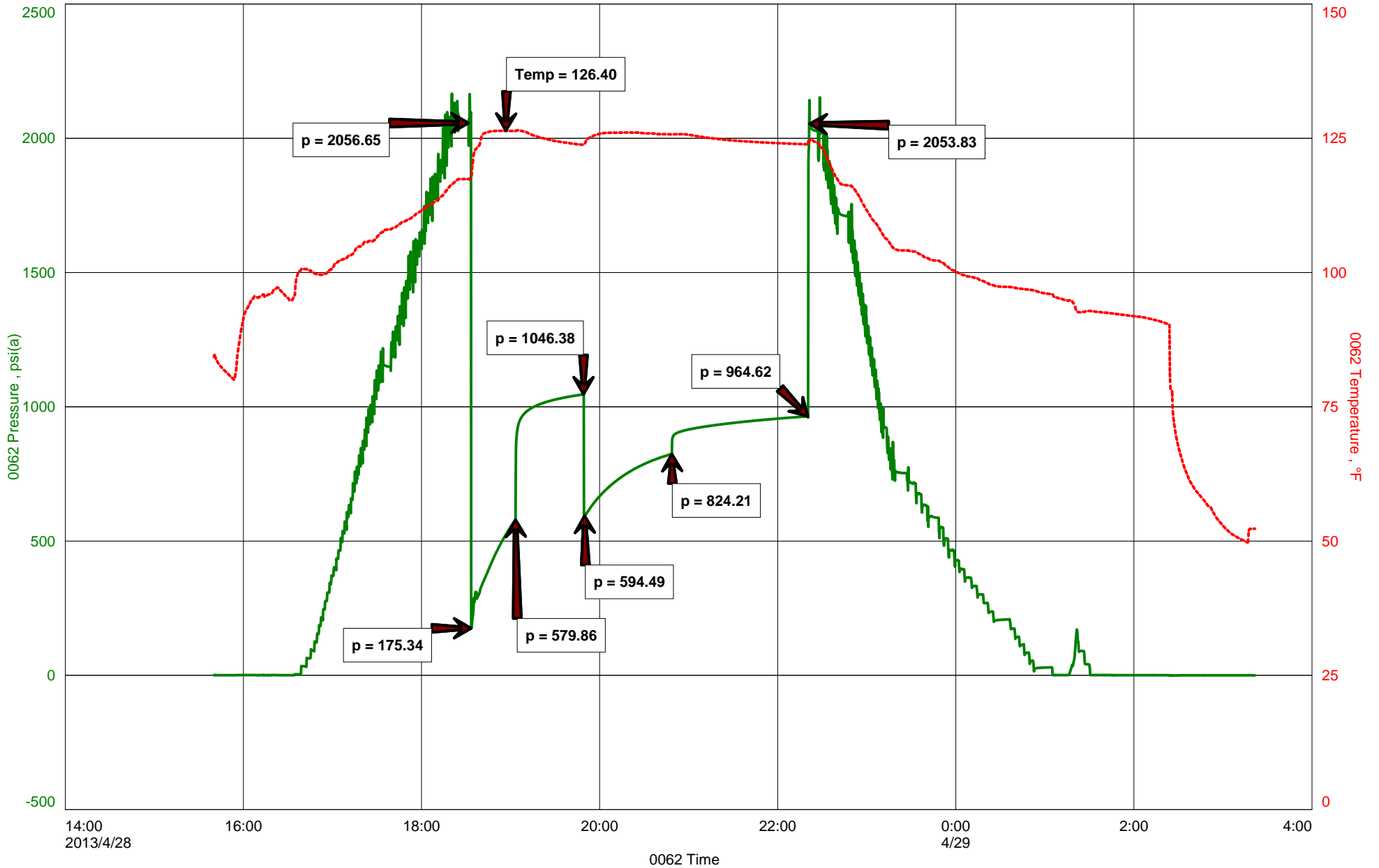
Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_  
Initial Hydrostatic Pressure..... (A) \_\_\_\_\_ P.S.I.  
Initial Flow Period..... Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.  
Initial Closed In Period..... Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.  
Final Flow Period..... Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period..... Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure..... (H) \_\_\_\_\_ P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Grand Mesa Operating Co.  
DST #2 Drum (H) 4190'-4239'  
Start Test Date: 2013/04/28  
Final Test Date: 2013/04/29

Hess #1-23  
Formation: Drum (H) 4190'-4239'  
Pool: Wildcat  
Job Number: F123

# Hess #1-23



(316) 265-3000  
FAX: (316) 265-3455

1700 N. WATERFRONT PARKWAY  
BLDG. 600  
WICHITA, KANSAS 67206-5514

### Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Hess 1-23  
Location: 1867' FNL, 330' FWL, 23-12s-32w, Logan County, Kansas  
License Number: API: 15-109-21174  
Spud Date: 04/23/2013  
Surface Coordinates: Lat: 38.9985235 Long: -100.8494455  
Bottom Hole Coordinates: Vertical hole  
Ground Elevation (ft): 3009'  
Logged Interval (ft): 3800'  
Formation: Mississippian at RTD  
Type of Drilling Fluid: Chemical

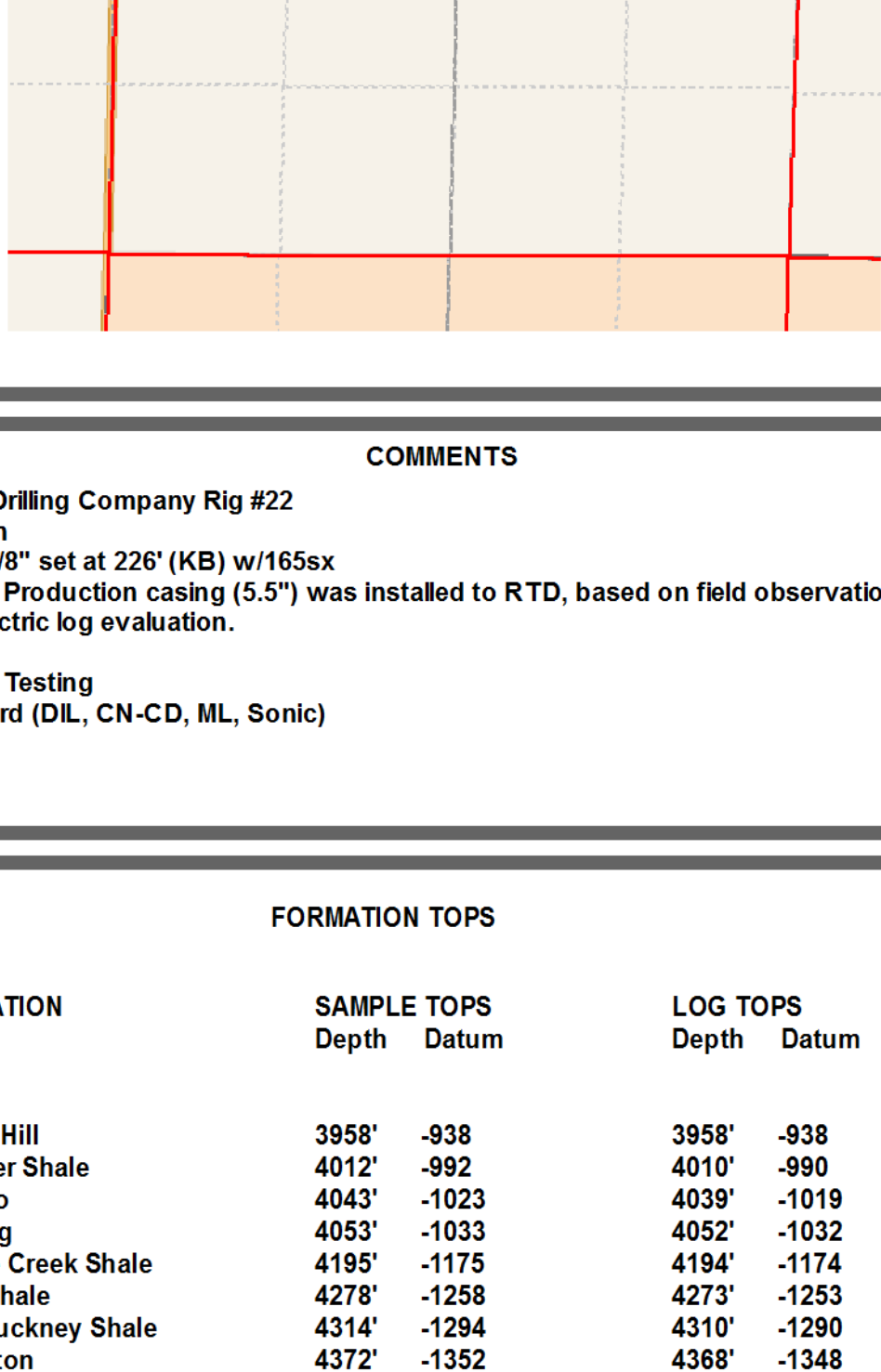
K.B. Elevation (ft): 3020'  
Total Depth (ft): 4691'

Region: Logan County  
Drilling Completed: 05/06/2013

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

### GEOLOGIST

Name: Kent R. Matson  
Company: Matson Geological Services, LLC  
Address: 33300 W. 15th Street S.  
Garden Plain, Kansas 67050  
316-644-1975



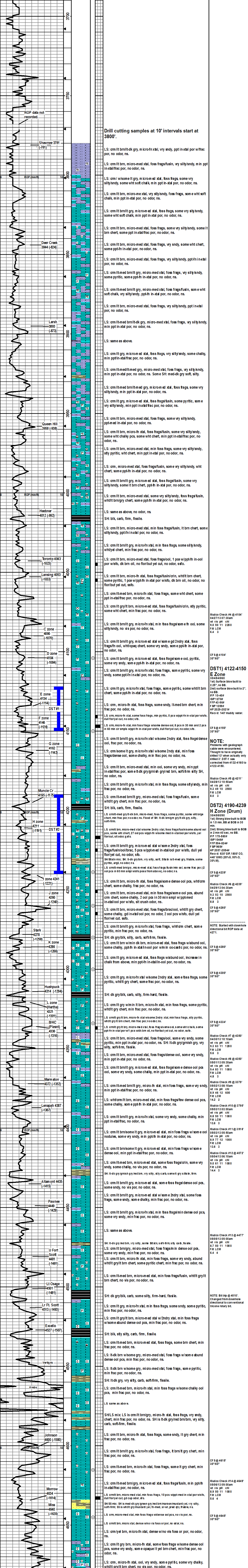
### COMMENTS

Contractor: Murfin Drilling Company Rig #22  
Pusher: Kelly Wilson  
Surface Casing: 8 5/8" set at 226' (KB) w/165xx  
Production casing: production casing (5.5") was installed to RTD, based on field observations of drill cuttings, DST results and electric log evaluation.  
Mud by: MudCo  
DST's by: Diamond Testing  
Logs by: Weatherford (DL, CN-CD, ML, Sonic)  
RTD = 4691'  
LTD = 4690'

### FORMATION TOPS

FORMATION	SAMPLE TOPS Depth Datum	LOG TOPS Depth Datum
-----------	----------------------------	-------------------------

Queen Hill	3958' -938	3958' -938
Heebner Shale	4012' -992	4010' -990
Toronto	4043' -1023	4039' -1019
Lansing	4053' -1033	4052' -1032
Muncie Creek Shale	4195' -1175	4194' -1174
Stark Shale	4278' -1258	4273' -1253
Hushpuckney Shale	4314' -1294	4310' -1290
Marmaton	4372' -1352	4368' -1348
Upper Fort Scott	4481' -1461	4477' -1457
Little Osage Shale	4501' -1481	4498' -1478
Excello Shale	4527' -1507	4525' -1505
Johnson Zone	4600' -1580	4597' -1577
Morrow	4634' -1614	4633' -1613
Mississippian	4640' -1620	4640' -1620
RTD	4640' -1620	4640' -1620
LTD	4690' -1670	4690' -1670



RTD 4691', -1671  
LTD 4690', -1670



**CONSOLIDATED**  
Oil Well Services, LLC

258252

TICKET NUMBER 39901

LOCATION Oakley, KS

FOREMAN Kelly Gabel

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
4-23-13	3372	Hess 1-23	23	12	32	Logan	
CUSTOMER		Mailing Address		TRUCK #		DRIVER	
Grand Mesa		Oakley		405		Jerry P	
CITY		STATE		460		Ed	
ZIP CODE							

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 227 CASING SIZE & WEIGHT 8 3/8 24#  
 CASING DEPTH 227 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 148 SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 13 bbl DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: safety meeting rigged up on Murfin #22, hooked up to circulate, mixed 165 lbs com 3% cc 2% gel & displaced with 13 bbl water, shut in, washed out pumps & lines, rigged down

Cement did circulate

Approx 4 bbl to pit

Thank You Kelly & Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54013	1	PUMP CHARGE	1150.00	1150.00
5406	10	MILEAGE	52.50	525.00
11045	165 sks	Class A Cement	18.55	3060.75
1102	465 #	Calcium chloride	.94	437.10
11813	310 #	Bentonite	.27	83.70
5407	7.76	Ton Mileage delivery	175	420.00
<b>completed</b>				
				5214.95
				5214.95
				41692.61
SALES TAX				251.42
ESTIMATED TOTAL				4944.06

7:00 PM AUTHORIZATION Kelly Wilson TITLE \_\_\_\_\_ DATE 4-23-13

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

# SWIFT Services, Inc. in

Meso Operating	WELL NO. # 1-23	LEASE Hess	JOB TYPE Longstring	
----------------	-----------------	------------	---------------------	--

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0630							on loc w/ FE
								RTD 4650'
								5 1/2" x 15.5" x 4648' x 11'
								Centralizers 2, 4, 6, 8, 10, 12, 14, 16, 51
								Back 4, 52
								P.C. 52 @ 2550'
	0945							start FE rehang Tags
	1240							Break Circulation
								200 SKS
	1300	2.5	7/4					Plug RHYMH 30/15 sks EA-2
	1308	5	0			200		start Mud Flush 500 gal
	1310	5	12/0			200		start KCL Flush 20 bbl
	1314	5	20/0			200		start 155 sks EA-2 Cement
	1321	5	37					End Cement
								Wash P & L
								Drop L.D. Plug
	1326	6	0			200		Start Displacement
	1339	5	80			250		Catch Cement
	1345		110.3			650 1300		Land Plug
								Release Pressure
								Floater Held
								Thank you
								Nick, David E. + Flint

**JOB LOG**

**SWIFT Services, Inc.**

DATE 5-14-13 PAGE NO.

CUSTOMER Grand Mesa WELL NO. 1-23 LEASE Hess JOB TYPE 5 1/2 Port Collar TICKET NO. 24414

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1000							on location
								Start Port Collar operation
	1130							locate Port Collar @ 2503
	1145				✓		1000	Pressure test
								open Port Collar
		3			✓		400	Injection Rate
	1200			✓				Start Cement
			3	✓				set circulation
			110	✓				Circulate Cement 200 sks SMD
			115	✓				Bring weight up 25 sks SMD
	1235		13.5	✓				Start displacement
	1240							close Port Collar
					✓		1000	Pressure test Hold
								Run 5 joints
	1250		60	✓				Reverse out clean
	1400							Job complete Thank You Josh, Brian, Isaac
								mixed 225 sks 30 to pit

# Pro-Stim Chemicals LLC

Date 5/22/13

## Acidizing Report

Customer <u>Grand Mesa</u>	Pro-Stim Chemical Yard <u>Dighton</u>	Pro-Stim Number <u>A6</u>
Well Name & Number <u>Hess 1-23</u>	Field	Formation <u>Spot</u> <u>4.0</u>
County <u>Logan</u> State <u>KS</u>	BHT	YO
		Interval <u>4598-4603</u>

Well Type: <input checked="" type="checkbox"/> Completion <input type="checkbox"/> Recompletion <input type="checkbox"/> Workover <input type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Water <input type="checkbox"/> Disposal <input type="checkbox"/> Perf <input type="checkbox"/> OH <input type="checkbox"/>
Job Pumped Via: <input checked="" type="checkbox"/> Tubing <input type="checkbox"/> Casing <input type="checkbox"/> Annulus <input type="checkbox"/> CTU <input type="checkbox"/> Combination <input type="checkbox"/> Plug Depth
Packer Depth <u>4525</u>
Casing Size: <u>5 1/2</u> GRD WT Depth Tubing Size: <u>2 7/8</u> GRD WT Spot <u>4625</u>
Casing Vol. <u>2.0</u> Tbg Vol <u>26.2</u> Ann Vol OH Vol Total Displacement <u>28.2</u>
Maximum Pressure Tubing Casing Proposed Pump Time AOL Leave Loc

Special Instructions:

750 gals HC-1 Acid; 24 gals S-3000;  
12 gal Renak; 3 gal. AR-1030; 3 gal S-2102;  
3 gal. AC-307; 3 gal. AI-150, 30 lbs KCl  
Biocide

### Treatment Record

Time	Type Fluid	Rate BPM	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
							Safety Meeting
							Prs Test to _____ psi
<u>1</u>	<u>Acid</u>						
<u>14</u>	<u>Acid</u>	<u>3.2</u>		<u>5</u>	<u>30</u>		<u>start to load hole</u>
<u>18</u>	<u>Acid</u>	<u>3.5</u>		<u>18</u>	<u>40</u>		<u>Acid gone</u>
<u>22</u>	<u>Flush</u>	<u>0</u>		<u>28.3</u>	<u>100</u>		<u>loaded</u>
<u>24</u>	<u>Flush</u>	<u>1.5</u>		<u>28.8</u>	<u>350</u>		
<u>24</u>	<u>Flush</u>	<u>1.0</u>		<u>29.3</u>	<u>350</u>		
<u>25</u>	<u>Flush</u>	<u>1.5</u>		<u>30.2</u>	<u>480</u>		
<u>27</u>	<u>Flush</u>	<u>2.0</u>		<u>33.1</u>	<u>500</u>		<u>max</u>
<u>28</u>	<u>Flush</u>	<u>2.0</u>		<u>36.2</u>	<u>470</u>		
<u>33</u>	<u>Flush</u>	<u>2.0</u>		<u>46.2</u>	<u>500</u>		<u>Total load</u>

### Treatment Synopsis

Avg Inj Rate	Fluid BPM	Total Injected	H2O <u>18</u>	Acid <u>28.2</u>	Oil
Treating Prs	Max: <u>500</u>	Final <u>500</u>	Avg.	ISIP <u>450</u>	5'SI <u>170</u>
Customer Representative				10'SI <u>90</u>	15'SI <u>VAC</u>
				Pro-Stim Supervisor	<u>Shannon M.</u>

# Pro-Stim Chemicals LLC

Date **5/23/13**

## Acidizing Report

Customer <b>Grand Mesa</b>	Pro-Stim Chemical Yard <b>Oighton</b>	Pro-Stim Number <b>A#9</b>
Well Name & Number <b>Hess #1-23</b>	Field	Formation <b>Johnson</b> Spot
County <b>Logan</b> State <b>KS</b>	BHT	YD
Well Type: Completion <input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> Workover <input type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Water <input type="checkbox"/> Disposal <input type="checkbox"/> Perf <input type="checkbox"/> OH <input type="checkbox"/>	Interval <b>4598-4603</b>	
Job Pumped Via: Tubing <input checked="" type="checkbox"/> Casing <input type="checkbox"/> Annulus <input type="checkbox"/> CTU <input type="checkbox"/> Combination <input type="checkbox"/> Plug Depth	Packer Depth <b>4525</b>	
Casing Size: <b>5 1/2</b>	GRD	WT
Casing Vol.	Tbg Vol	Ann Vol
Maximum Pressure	Tubing	Casing

Special Instructions:  
**1000 gal 15% RWR-1**  
**28 BBLs 2% KCL**  
**3 gal AR-600**

### Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
							Safety Meeting
							Prs Test to _____ psi
1	Acid	6.5		18	0		
4	Acid	6.5		24	0		Acid done
5	Flush	5.5		28	0		Well Load
6	Flush	3.0		30	600		
7	Flush	3.0		32	650		
8	Flush	3.0		34	675		
9	Flush	3.0		35.5	640		
10	Flush	3.5		38	700		
11	Flush	3.5		41	680		
12	Flush	4.0		45	750		
13	Flush	4.0		48	700		
14	Flush	4.0		52	700		

### Treatment Synopsis

Avg Inj Rate	Fluid BPM <b>3.0</b>	Total Injected	H2O <b>28</b>	Acid <b>24</b>	Oil
Treating Prs	Max <b>750</b>	Final <b>700</b>	Avg <b>600</b>	ISIP <b>600</b>	5'SI <b>200</b>
Customer Representative				10'SI <b>140</b>	15'SI <b>490</b>
				Pro-Stim Supervisor	



# Pro-Stim Chemicals LLC

## Acidizing Report

Date **5-29-13**

Customer <b>Grand Mesa</b>	Pro-Stim Chemical Yard <b>Dighton</b>	Pro-Stim Number <b>A-11</b>
Well Name & Number <b>Hess 1-23</b>	Field	Formation Spot <b>B/235</b>
County <b>Logan</b>	State <b>KS</b>	BHT
	YD	Interval <b>4210-16</b>

Well Type: Completion  Recompletion  Workover  Oil  Gas  Water  Disposal  Perf  OH

Job Pumped Via: Tubing  Casing  Annulus  CTU  Combination  Plug Depth

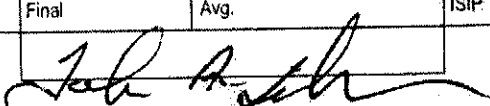
Casing Size: <b>5 1/2</b>	GRD	WT	Depth	Tubing Size: <b>2 7/8</b>	GRD	WT	Spot
Casing Vol. <b>1.09</b>	Tbg Vol <b>24.14</b>	Ann Vol	OH Vol	Total Displacement <b>25.23</b>			
Maximum Pressure	Tubing	Casing	Proposed Pump Time	AOL	Leave Loc		

Special Instructions: **500gal 15% HC<sup>16</sup> 5200 8 RenAB 30bbls KCL 220 Biocide**  
**2ARG30 25262**  
**2AC307 2A160**

### Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
							Safety Meeting
							Prs Test to _____ psi
	Acid	2.3	2.0		0		Spot
	"	2.4	5.5		0		
	"	2.5	12.9		0		
	Flush	2.5	12.0		0		
	"	1.0	26.1		30		Loaded
	"	2.0	27.3		370		
	"	2.0	30		400		
	"	2.0	32		400		
	"	2.0	35		390		
	"	2.0	37.1		380		

### Treatment Synopsis

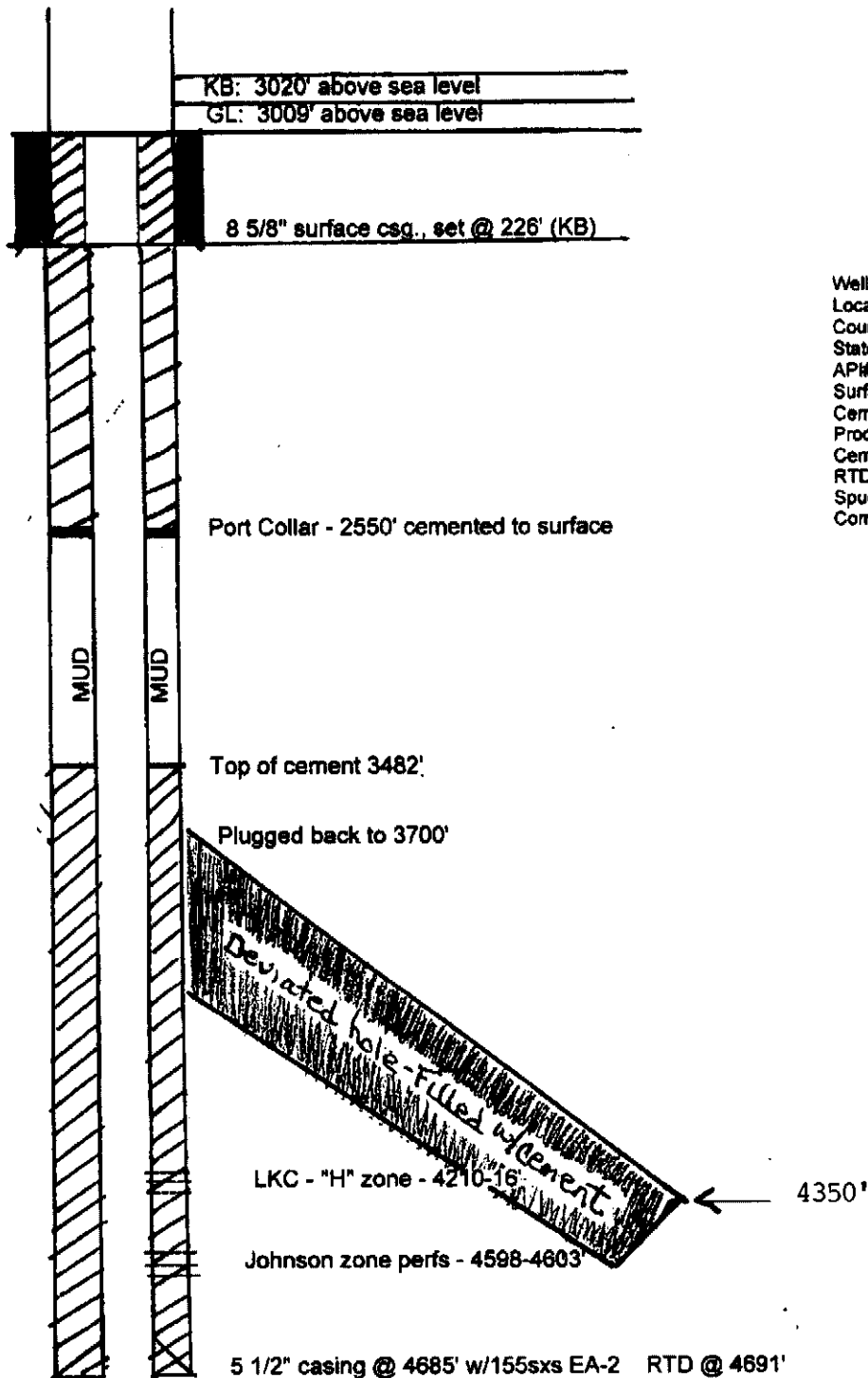
Avg Inj Rate	Fluid BPM	Total Injected	H2O <b>25.2</b>	Acid <b>11.9</b>	Oil
Treating Prs	Max	Final	Avg.	ISIP <b>150</b>	<b>20 su + 0 psi</b>
Customer Representative				Pro-Stim Supervisor	

**GRAND  
MEGA**

**OPERATING COMPANY**

(316) 285-3000  
FAX: (316) 285-3455

1700 N. WATERFRONT PARKWAY  
BLDG. 800  
WICHITA, KANSAS 67208-5614



Well name: Hess #1-23  
Location: NW/4 Sec. 23-12S-32W  
County: Logan  
State: Kansas  
API#: 15-109-21174-00-00  
Surface csg: 24# - 8 5/8" @ 226'  
Cemented w/: 185sxs Common  
Production csg: 15.5# - 5 1/2" @ 4685'  
Cemented w/: 155sxs EA-2  
RTD: 4691' LTD: 4690'  
Spud Date: 04/23/2013  
Comp. Date: 05/07/2013



Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



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

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

July 01, 2013

Michael J. Reilly  
Grand Mesa Operating Company  
1700 N WATERFRONT PKWY BLDG 600  
WICHITA, KS 67206-5514

Re: ACO1  
API 15-109-21174-00-00  
HESS 1-23  
NW/4 Sec.23-12S-32W  
Logan County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Michael J. Reilly