



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1124737
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: _____



1124737

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
--	---

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

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"/> Commingled <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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CONSOLIDATED
Oil Well Services, LLC

256826

TICKET NUMBER 39336
LOCATION Oakley, KS
FOREMAN Fuzzy

PO Box 884, Chanute, KS 66720
820-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-16-13	3372	DF-120	20	17	24	Ness
CUSTOMER Grand Mesa Operations			Ransom W- Rd N			
MAILING ADDRESS			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY			55-2210	463	Tim W	
STATE			3/4 W			
ZIP CODE			54			

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 221' CASING SIZE & WEIGHT 8 5/8
 CASING DEPTH 221' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 14.7 SLURRY VOL 1.36 WATER gal/sk 6.5 CEMENT LEFT IN CASING 20'
 DISPLACEMENT 12.8 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting on Murkin # 24. Rig up and circulate
Mix 175sks class 'A' 3 2/3 cc 2 2/3 gal. Displace 12 3/4 BBL and shut in
Cement did circulate approx 4 BBLs to pit

Thanks Fuzzy & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5405	1	PUMP CHARGE	1085 ⁰⁰	1085 ⁰⁰
5406	20 miles	MILEAGE	5 ⁰⁰	100 ⁰⁰
5407	8.2 ton	Tow mileage delivery (min)	410 ⁰⁰	410 ⁰⁰
11045	175sks	Class 'A' cement	12 ⁶⁵	3088 ⁷⁵
1118B	329#	Bentonite	.25	82 ²⁵
1102	494#	Calcium Chloride	.89	439 ⁶⁰
		sub total		5265 ⁶⁰
		less 1096		520 ⁵⁷
		sub total		4685 ⁰⁹
		SALES TAX		204.72
		ESTIMATED TOTAL		4889.81

completed

Ravin 3737

AUTHORIZATION

Anthony Martin

TITLE

Pusher Rig #24

DATE

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.



CONSOLIDATED
Oil Well Services, LLC

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

257207

TICKET NUMBER 39327
LOCATION Oakley, KS
FOREMAN Kelly Gabe

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3-3-13	3372	DF-120	20	17	24	KS Ness
CUSTOMER			TRUCK #			
Mailing Address			DRIVER			
City			TRUCK #			
STATE			DRIVER			
ZIP CODE						
Ransom west rd Row 5 South To Rd 120 3/4 W S into						

JOB TYPE PTA HOLE SIZE 7 7/8 HOLE DEPTH _____ CASING SIZE & WEIGHT _____
CASING DEPTH _____ DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 142 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT IN CASING _____
DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: safety meeting, rigged up on Martin #24, mixed cement
Plugs & displaced

- 50 SKS @ 1500
- 80 SKS @ 950
- 30 SKS @ 600
- 50 SKS @ 240
- 20 SKS @ 60
- 30 RH
- 20 MH

Thank you Kelly & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	1325.00	2950.00
5406	20 mi	MILEAGE	500	10000
1131	280 SKS	60/40 Poz	15.10	4228.00
118B	963#	Bentonite	1.25	2407.50
1107	70#	Flo-seal	2.72	1974.00
5407	12.04	Fon Mileage delivery	1.67	4000
411	100#	salt		N/C
				8126.15
				812.62
				7313.52
				264.57
SALES TAX				
ESTIMATED TOTAL				17578.10

completed

Rev'n 3737

7:00 AM

AUTHORIZATION

[Signature]

TITLE

rig #24

DATE 3-3-13

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.



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 Company	Well Name	D-F #1-20
Well Operator	Grand Mesa Operating Company	Unique Well ID	DST #1 Mississippian 4363'- 4380'
Contact	Steve Stribling	Surface Location	Sec 20-17s-24w-Ness Co.-KS
Site Contact	John Goldsmith	Test Unit	#5
Field		Pool	
Well Type	Vertical	Job Number	F100
Prepared By	Jake Fahrenbruch	Qualified By	John Goldsmith

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Mississippian 4363' - 4380'	Gauge Name	0062
Start Test Date	2013/03/01	Start Test Time	14:31:00
Final Test Date	2013/03/01	Final Test Time	20:02:00

Test Results

Mis-run due to packer failure, Dropped bar on 2300' of drilling mud.



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.

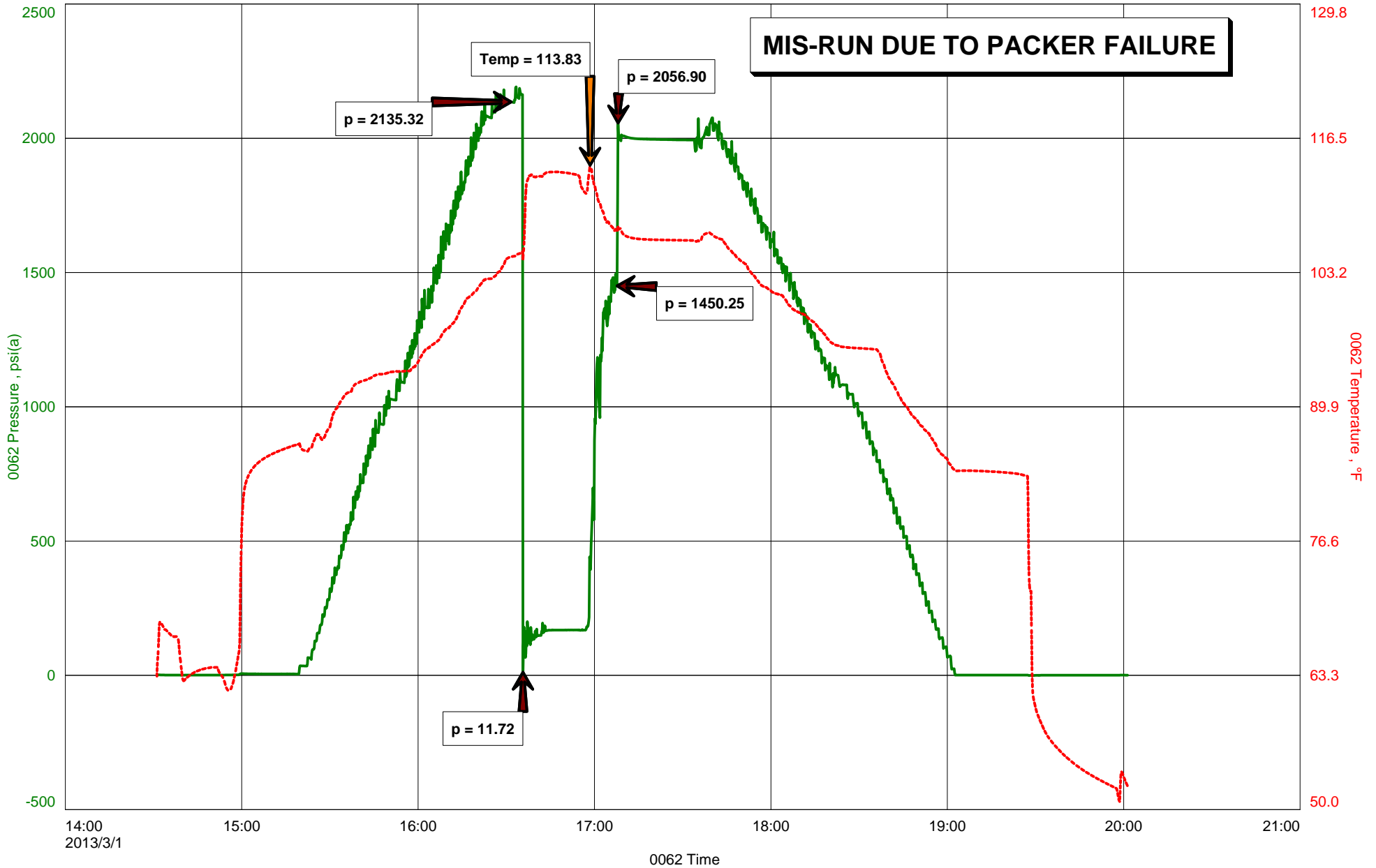
Blow: 1st Open: _____
2nd Open: _____

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.

D-F #1-20





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 Company	Well Name	D-F #1-20
Well Operator	Grand Mesa Operating Company	Unique Well ID	DST #2 Mississippian 4272'-4380'
Contact	Steve Stribling	Surface Location	Sec 20-17s-24w-Ness Co.-KS
Site Contact	John Goldsmith	Test Unit	#5
Field		Pool	
Well Type	Vertical	Job Number	F101
Prepared By	Jake Fahrenbruch	Qualified By	John Goldsmith

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Mississippian 4272'-4380'	Gauge Name	0062
Start Test Date	2013/03/01	Start Test Time	20:10:00
Final Test Date	2013/03/02	Final Test Time	05:24:00

Test Results

Recovered: 65' OCM 7% oil, 93% mud

Pressures:

IHP:	2087
IFP:	16-30
ISIP:	928
FFP:	33-43
FSIP:	1006
FHP:	2086

Bottom Hole Temperature: 114 Deg F



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.

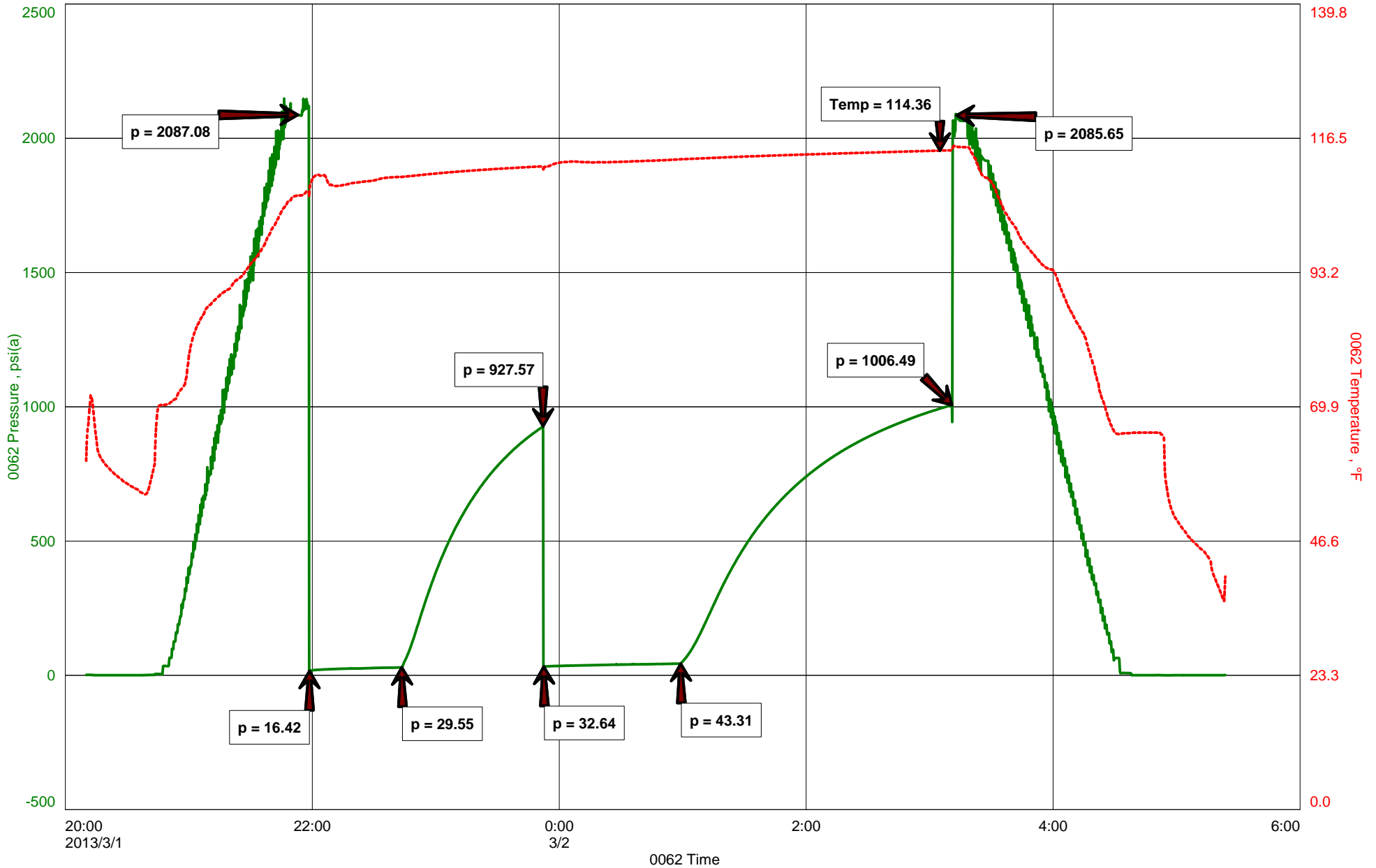
Blow: 1st Open: _____
2nd Open: _____

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.

D-F #1-20





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 Company	Well Name	D-F #1-20
Well Operator	Grand Mesa Operating Company	Unique Well ID	DST #3 Mississippian 4264'-4390'
Contact	Steve Stribling	Surface Location	Sec 20-17s-24w-Ness Co.-KS
Site Contact	John Goldsmith	Test Unit	#5
Field		Pool	
Well Type	Vertical	Job Number	F102
Prepared By	Jake Fahrenbruch	Qualified By	John Goldsmith

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Mississippian 4264'-4390'	Gauge Name	0062
Start Test Date	2013/03/02	Start Test Time	11:31:00
Final Test Date	2013/03/02	Final Test Time	21:33:00

Test Results

Recovered:

1'	Clean Oil	100% oil
209'	SO&WCM	4% oil, 6% wtr, 90% mud
70'	SOC HWCM	5% oil, 30% wtr, 65% mud
----	Tool Sample:	SOCHWCM 5% oil, 35% wtr, 60% mud
----	Total Recovered Fluid: 280'	
----	Bottom Hole Temp: 110 Deg F	
----	Chlorides: 13,000 ppm	
----	RW: .62 ohm @ 42 Deg F	
----	PH: 7.0	

Pressures:

IHP:	2082
IFP:	27-93
ISIP:	1189
FFP:	96-145
FSIP:	1198
FHP:	2080



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.

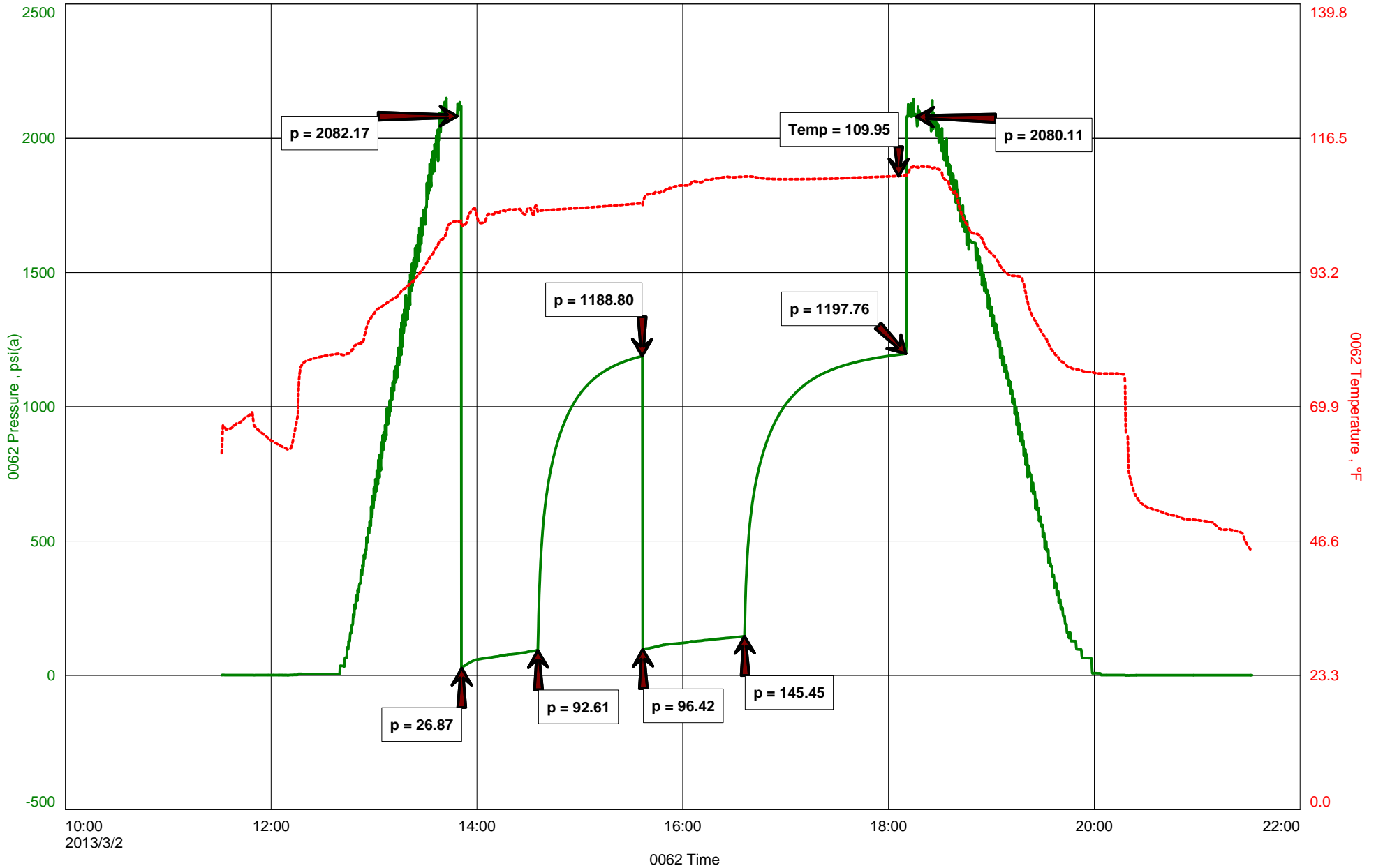
Blow: 1st Open: _____
2nd Open: _____

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.

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D-F #1-20



John Goldsmith Wellsite Service

Cell and Home Phone:
316-640-0236

427 Roosevelt St.
Cheney, KS 67025

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

Well Name: #1-20 D-F
Location: 135' FNL, 515' FWL, SECTION 20-17S-24W, NE/NW/NW/NW
License Number: API: 15-135-25541 Region: Ness County
Spud Date: 02/15/2013 Drilling Completed: 03/02/2013
Surface Coordinates: LAT 38.5653406
LONG -100.0086022
Bottom Hole Coordinates: Vertical hole
Ground Elevation (ft): 2403' K.B. Elevation (ft): 2408'
Logged Interval (ft): 3500' To: RTD Total Depth (ft): 4390'
Formation: Mississippi at RTD
Type of Drilling Fluid: Chemical

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

OPERATOR

Company: Grand Mesa Operating Company
Address: 1700 N. Waterfront Parkway, Bldg 600
Wichita, KS 67205
(316) 265-3000

GEOLOGIST

Name: John Goldsmith
Company: John Goldsmith Wellsite Service
Address: 427 Roosevelt St.
Cheney, KS 67025
316-640-0236

COMMENTS

Contractor: Murfin Drilling Rig #24
Pusher: Tony Martin
Surface Casing: 5 joints of 8 5/8" set at 221'
Production Casing: No Production Casing was installed.
Mud by: Mud-Co
DST's by: Diamond Testing
Logs by: No Logs were ran.
RTD=4390'

FORMATION TOPS	SAMPLE TOPS	
FORMATION	Depth	Datum
Heebner Shale	3721'	-1313
Lansing	3762'	-1354
Muncie Creek Shale	3916'	-1508
Stark Shale	3997'	-1589
Hushpuckney Shale	4033'	-1625
Base of KC	4058'	-1650
Marmaton	4108'	-1700
Pawnee	4154'	-1746
Excello Shale	4258'	-1850
Cherokee Shale	4290'	-1882
Mississippian	4364'	-1956
RTD	4390'	-1982

DSTs

DST #1 "Mississippi" 03-01-2013 4363'-4380' 32 min Open
1st Open = Mis-run due to packer failure. Dropped the bar on 2300' of drilling mud.

DST #2 "Mississippi" 03-02-2013 4272'-4380' 45-60-75-120
1st Open = Surf Blw Built to 2" (No BB)
2nd Open = Wk Surf Blw (No BB)
IFP = 16-30# ISIP = 928# FFP = 33-43# FSIP = 1006#
HYDP = 2087-2086#
65' Total Fluid, 65' OCM (7% Oil)

DST #3 "Mississippi" 03-02-2013 4274'-4390' 45-60-60-90
1st Open = Surf Blw Built to 11" (Wk Surf BB)

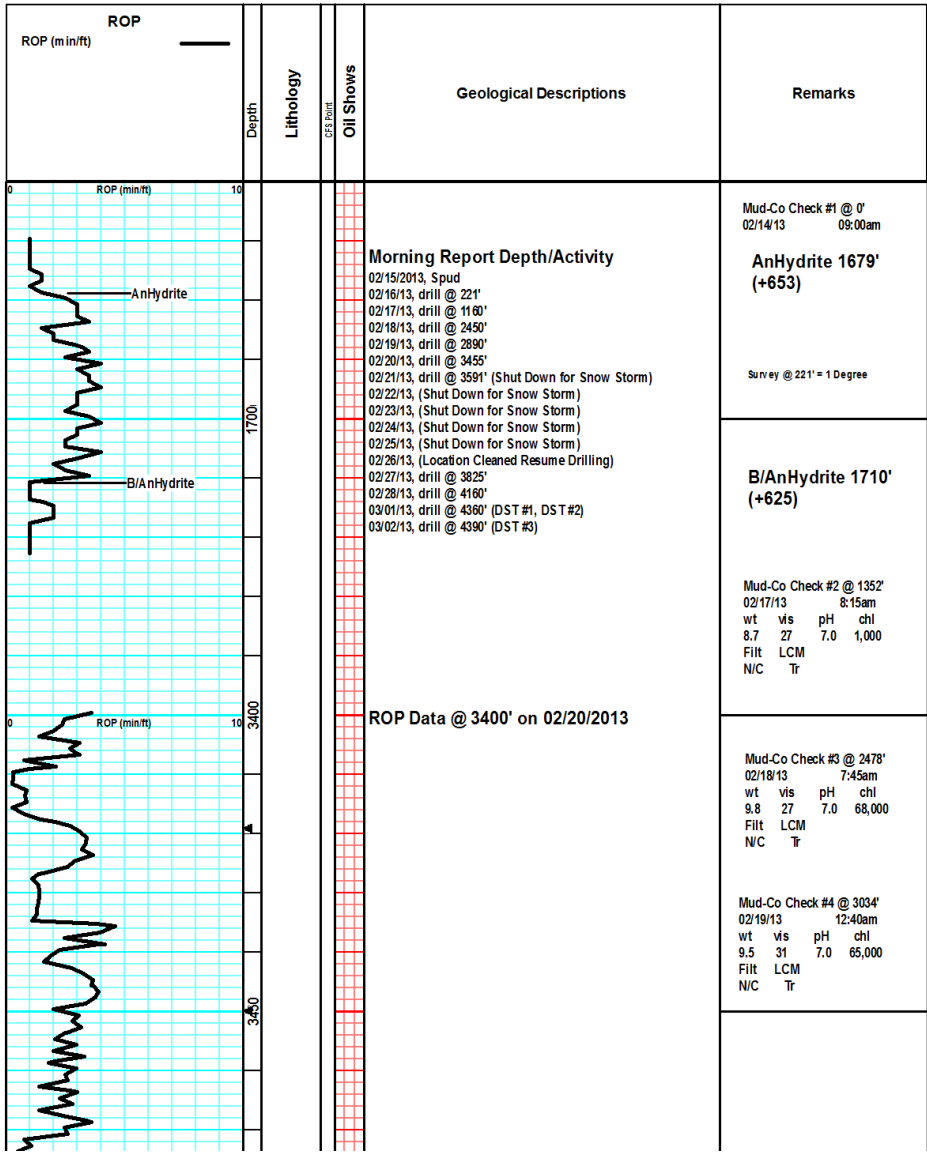
2nd Open = Surf BW Built to 10.5 (NO BS)
 IFP = 27-93# ISIP = 1189# FFP = 96-145# FSIP = 1198#
 HYDP = 2082-2080#
 280' Total Fluid, 1' CO, 209' SO&WCM (4% Oil, 6% WTR), 70' SOC&HWCM (5% Oil, 30% WTR)

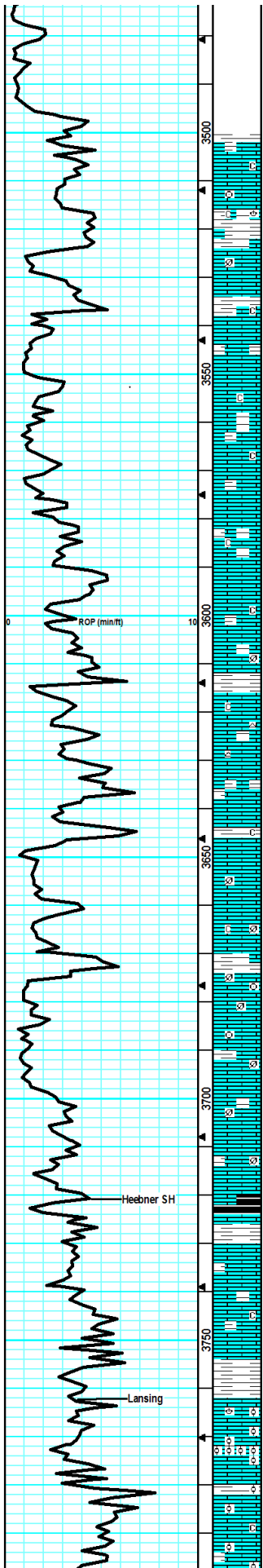
ROCK TYPES

Anhy	Salt	Dol	Stlysh
Cht	Shale	Dtd	Sdy dolo
Coal	Shcol	Gry sh	Silty dolo
Congl	Shgy	Sandylms	Shy dolo
Dol	Sltst	Shale	Shaly ls
Gyp	Ss	Sltstn	
Lmst	Carb sh	Shlysts	

ACCESSORIES

FOSSIL	<input type="checkbox"/> Plant	<input type="checkbox"/> Glau	STRINGER
<input type="checkbox"/> Algae	<input type="checkbox"/> Strom	<input type="checkbox"/> Gyp	Anhy
<input type="checkbox"/> Amph	<input type="checkbox"/> Fuss	<input type="checkbox"/> Hvymin	Arg
<input type="checkbox"/> Belm	<input type="checkbox"/> Oomold	<input type="checkbox"/> Kaol	Bent
<input type="checkbox"/> Bioclst		<input type="checkbox"/> Marl	Coal
<input type="checkbox"/> Brach	MINERAL	<input type="checkbox"/> Minxl	Dol
<input type="checkbox"/> Bryozoa	<input type="checkbox"/> Anhy	<input type="checkbox"/> Nodule	Gyp
<input type="checkbox"/> Cephal	<input type="checkbox"/> Arggrn	<input type="checkbox"/> Phos	Ls
<input type="checkbox"/> Coral	<input type="checkbox"/> Arg	<input type="checkbox"/> Pyr	Mrst
<input type="checkbox"/> Crin	<input type="checkbox"/> Bent	<input type="checkbox"/> Salt	Sltstrg
<input type="checkbox"/> Echin	<input type="checkbox"/> Bit	<input type="checkbox"/> Sandy	Ssstrg
<input type="checkbox"/> Fish	<input type="checkbox"/> Breclrag	<input type="checkbox"/> Silt	Carbsh
<input type="checkbox"/> Foram	<input type="checkbox"/> Calc	<input type="checkbox"/> Sil	Clystn
<input type="checkbox"/> Fossil	<input type="checkbox"/> Carb	<input type="checkbox"/> Sulphur	Dol
<input type="checkbox"/> Gastro	<input type="checkbox"/> Chtdk	<input type="checkbox"/> Tuff	Grysh
<input type="checkbox"/> Oolite	<input type="checkbox"/> Chtt	<input type="checkbox"/> Chlorite	Gryslt
<input type="checkbox"/> Ostra	<input type="checkbox"/> Dol	<input type="checkbox"/> Dol	Lms
<input type="checkbox"/> Pelec	<input type="checkbox"/> Feldspar	<input type="checkbox"/> Sand	Sandylms
<input type="checkbox"/> Pellet	<input type="checkbox"/> Ferrpel	<input type="checkbox"/> Sity	Sh
<input type="checkbox"/> Pisolite	<input type="checkbox"/> Ferr		Sltstn





Drilling Samples @ 3500' on 02/20/2013

LS: gry/tan, sm mott, fn xln, sm dense, mostly brittle/frangible, fw chky, tr-nvp, fw SH: gry/gry, silty, fw waxy, easy-med crush, no cup odr, ns.

LS: gry/tan, fw mott, fn xln, sm dense, mostly brittle, sm chky, tr-nvp, fw SH: gry/blu, silty, sm soft, easy-med crush, no cup odr, ns.

LS: gry/tan, sm mott, fn xln, sm foss brach/crin/frags, sm dense, mostly brittle, fw chky, tr-nvp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/gry, fw mott, fn-crs xln, fw foss frags, sm sandy/gritty, sm dense, fw brittle, tr-nvp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/lt gry, fn-crs xln, fw foss frags, sm sandy/gritty, sm dense, fw brittle, tr-nvp, fw pcs pur chlk, fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/lt gry, fn xln, sm dense, fw brittle, fw sandy/gritty, sm chky, tr-nvp, sm SH: gry/brn, silty, fw fissile, med crush, no cup odr, ns.

LS: gry/tan, fw mott, fn xln, sm dense, sm brittle, fw sandy/gritty, sm chky, tr-nvp, svrl SH: gry/brn, silty, fw fissile, med crush, no cup odr, ns.

LS: lt tan/gry, fw mott, fn xln, fw dense, mostly brittle, sm chky, tr-nvp, sm SH: gry/blu/grn, silty, easy-med crush, no cup odr, ns.

LS: gry/tan, fn xln, sm dense, mostly brittle, sm chky, tr-nvp, fw SH: gry/grn, silty, fw waxy, easy-med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, mostly dense, sm brittle, sm chky, tr-nvp, fw pcs pur chlk, sm SH: gry/grn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: lt gry/lt tan, micro-fn xln, mostly dense, sm brittle, sm chky, tr-nvp, fw pcs pur chlk, sm SH: gry/grn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: lt gry/lt tan, micro-fn xln, mostly uniform, mostly dense, mostly brittle, sm chky, tr-nvp, fw SH: gry/grn, silty, fw fissile, med crush, no cup odr, ns.

LS: gry/lt tan, micro-fn xln, fw foss frags, mostly dense, sm brittle, fw chky, tr-nvp, sm SH: gry/brn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: gry/lt tan, micro-fn xln, fw foss frags, mostly dense, sm brittle, sm chky, tr-nvp, fw Chert gry, foss, sharp, svrl SH: gry/brn, silty, sm fissile, no cup odr, ns.

SH: gry/drk gry, silty, fissile, easy-med crush, fw LS: gry/lt tan, fn xln, mostly dense, sm brittle, sm chky, tr-nvp, no cup odr, ns.

SH: gry/drk gry, silty, fissile, easy-med crush, fw LS: gry/lt tan, fn xln, dense, brittle, sm chky, tr-nvp, no cup odr, ns.

LS: gry/lt tan, fn xln, sm foss frags, sm dense, sm brittle, sm chky, tr-nvp, abund SH: gry/drk gry/grn, silty, sm fissile, easy-med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, sm foss frags, sm dense, mostly brittle, sm chky, tr-nvp, fw pcs pur chlk, abund SH: gry/drk gry/grn, silty, no cup odr, ns.

LS: tan/lt gry, fn xln, foss crin/frags, fw dense, mostly brittle, sm chky, tr-nvp, sm SH: gry/grn/blu, silty, easy-med crush, no cup odr, ns.

LS: tan/lt gry, fn xln, foss crin/frags, fw dense, mostly brittle, sm chky, fw sandy/gritty, tr-nvp, fw SH: gry/grn/blu, silty, no cup odr, ns.

LS: gry/lt tan, sm mott, fn xln, sm foss frags, fw dense, mostly brittle, sm chky, tr-nvp, fw pcs pur chlk, sm SH: gry/grn, silty, no cup odr, ns.

LS: gry/lt tan, sm mott, fn xln, sm foss frags, fw dense, mostly brittle, sm chky, tr-nvp, sm SH: gry/grn, silty, easy-med crush, no cup odr, ns.

LS: gry/lt tan, fw mott, fn xln, sm foss frags, fw dense, mostly brittle, tr-nvp, svrl SH: gry/grn/blk, silty, fw fissile, sm carb, easy-med crush, no cup odr, ns.

SH: blk/drk gry, silty, fw fissile, mostly carb, fw LS: lt gry/tan, fn xln, fw foss frags, fw ool, mostly dense, sm brittle, sm chky, tr-nvp, no cup odr, ns.

LS: tan/lt gry, fn-crs xln, fw dense, sm brittle, fw sandy/gritty like, tr-nvp, sm SH: gry/grn/brn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: tan/gry, fn-crs xln, fw dense, sm brittle, sm 2nd rxln, sm chky, tr-? intxn por in sm, fw SH: gry/grn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, sm dense, mostly brittle, sm chky, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, fw fissile, med crush, no cup odr, ns.

LS: tan/lt tan, fn xln, sm foss brach/frags, fw ool, fw dense, mostly brittle, sm chky, tr-nvp, sm SH: brn/gry, silty, fw fissile, med crush, no cup odr, ns.

LS: lt tan/lt gry, fn xln, sm profus ool, sm dense, mostly brittle, fw chky, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, fw fissile, no cup odr, ns.

LS: lt tan/gry, fn xln, sm ool, fw dense, mostly brittle, fw chky, tr-nvp, fw SH: gry/brn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: tan/gry, fn xln, fw foss frags, fw ool, fw dense, mostly brittle, sm chky, tr-? intxn por in sm, fw SH: gry/grn, silty, easy-med crush, no cup odr, ns.

Mud-Co Check #5 @ 3586'
02/20/13 12:50pm

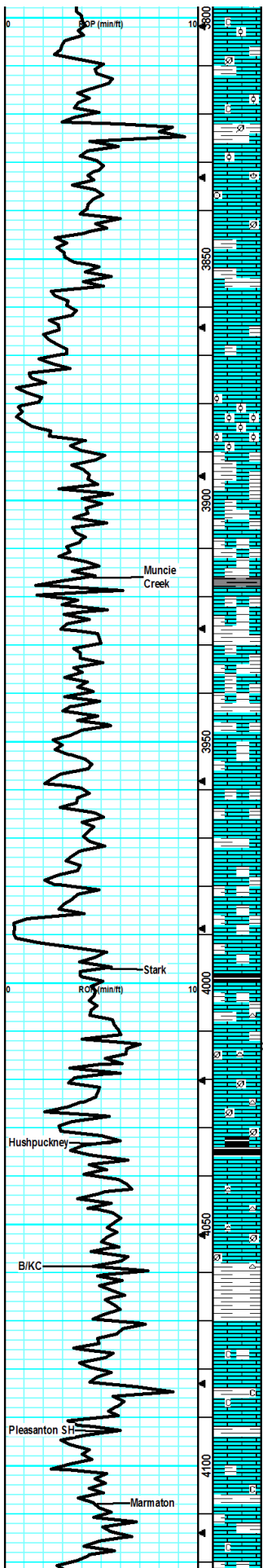
wt	vis	pH	chl
8.6	56	10.5	4,100
Flt	LCM		
6.0	2#		

Mud-Co Check #6 @ 3591'
02/26/13 2:45pm

wt	vis	pH	chl
8.7	45	8.8	9,000
Flt	LCM		
8.8	Tr		

Heebner 3721' (-1313)

Lansing 3762' (-1354)



easy-med crush, no cup odr, ns

LS: gry/lt tan, fn-crs xln, sm ool, sm sucrosic like, mostly brittle, fw chiky, tr-? intkn por in sm, fw SH gry, silty, med crush, no cup odr, ns

LS: tan/lt gry, fn-crs xln, fw foss frags, fw ool, mostly brittle sm chiky, tr-nvp, fw SH gry/brn, silty, easy-med crush, no cup odr, ns

LS: lt tan/lt gry, fn-crs xln, fw foss frags, fw ool, fw dense, mostly brittle, sm chiky, tr-nvp, fw SH: gry/grn, silty, easy-med crush, no cup odr, ns

LS: lt tan/lt gry, fn xln, sm foss crin/brachfrags, fw dense, mostly brittle, sm chiky, tr-nvp, fw SH: gry/grn/brn, silty, fw fissile, no cup odr, ns

LS: tan/lt gry, fn xln, sm foss frags, fw dense, mostly brittle sm chiky, tr-? intkn por in some, sm SH gry/grn/brn, silty, med crush, no cup odr, ns

SH: gry/brn/grm, silty, sm fissile fw waxy, med crush, fw LS: gry/tan, fn xln, fw dense, sm brittle, tr-nvp, no cup odr, ns

SH: gry/grn/brn, silty, sm waxy, fw fissile, easy-med crush, sm LS: lt tan/lt gry, fn xln, fw dense sm brittle fw chiky, tr-nvp, no cup odr, ns

SH: gry/brn/grm, silty, sm fissile fw waxy, med crush, fw LS: lt tan, fn xln, fw foss frags, sm ool, mostly dense, sm brittle, fw chiky, tr-nvp, no cup odr, ns

LS: tan/lt tan, fn xln, sm profuss ool, fw dense, mostly brittle, fw chiky, tr-nvp, svrl SH: gry/brn/grm, silty, fw waxy, easy-med crush, no cup odr, ns

LS: tan/lt gry, fn-crs xln, fw dense sm brittle fw hard, fw chiky, tr-? intkn por, svrl SH: gry/brn/olv, silty, sm wethrd, fw fissile, no cup odr, ns

SH: gry/brn, silty, fw fissile fw waxy, med crush, svrl LS: lt tan/tan, fn xln, sm dense, mostly brittle, sm chiky, tr-nvp, no cup odr, ns

SH: gry/brn/grm, silty, sm fissile fw waxy, easy-med crush, sm LS: tan/lt tan, fn xln, fw dense, mostly brittle, sm chiky, tr-nvp, no cup odr, ns

SH: gry/brn/grm, silty, sm waxy, fw fissile, easy-med crush, sm LS: tan/lt gry, fn xln, sm dense, mostly brittle, sm chiky, tr-nvp, no cup odr, ns

SH: gry/brn/grm, silty, fw fissile, sm waxy, easy-med crush, v fw LS: lt tan/lt gry, fn xln, mostly brittle sm chiky, tr-nvp, no cup odr, ns

SH: gry/brn, silty, sm fissile, fw waxy, easy-med crush, fw LS: tan/lt gry, fn-crs xln, sm dense, sm brittle tr-nvp, no cup odr, ns

SH: gry/grn/brn, silty, fw waxy, sm soft, easy-med crush, v fw LS: lt tan/lt gry, micro-fn xln, mostly dense sm brittle, tr-nvp, no cup odr, ns

SH: gry/drk gry/brn, silty, sm soft, easy-med crush, fw fissile v fw LS: lt tan/lt gry, fn xln, sm dense, sm brittle, tr-nvp, no cup odr, ns

SH: gry/brn/drk gry, silty, sm soft, fw fissile, sm soft, easy-med crush, v fw LS: lt tan, fn xln, sm dense, mostly brittle, fw chiky, tr-nvp, no cup odr, ns

SH: gry/grn/brn, silty, fw fissile, easy-med crush, fw LS: gry/tan/brn, fn-crs xln, sm sandy/gritty like, sm wethrd, mostly brittle, tr-nvp, no cup odr, ns

SH: gry/brn/gry, silty, sm fissile, easy-med crush, sm LS: tan/lt tan, micro-fn xln, sm profuss ool, fw dense, mostly brittle, sm v gd oolcast por, no cup odr, ns

SH: gry/brn/grm/blk, silty, fw fissile sm carb, easy-med crush, fw LS: tan/lt tan, fn xln, sm v ool, mostly brittle, sm v gd oolcast por, no cup odr, ns

LS: tan/lt gry, fn xln, fw foss frags, mostly dense sm brittle fw chiky, tr-nvp, fw Chert gry/smoke, foss, sharp, svrl SH: gry/brn, silty, no cup odr, ns

LS: tan/lt gry, fn xln, fw foss frags, mostly dense mostly brittle, sm chiky, tr-nvp, fw Chert gry, foss fuss/crin, sharp, sm SH: gry/brn, fissile, no cup odr, ns

LS tan/lt gry, fn xln, v fw foss frags mostly dense, mostly brittle, sm chiky, tr-nvp, sm SH: gry/brn/grm, silty, sm fissile, med crush, no cup odr, ns

LS: tan/lt gry, fn xln, mostly dense, mostly brittle sm chiky, fw Chert: wht, sharp, fw SH: brn/gry/grm, silty, fw fissile, med crush, no cup odr, ns

LS: gry/tan, fn xln, fw foss frags, sm dense, sm brittle, fw chiky, tr-nvp, fw Chert gry, foss, sharp, fw SH: gry/grn, silty, fw fissile, no cup odr, ns

LS: tan/lt gry, fn xln, mostly dense, sm brittle, fw flakey/mealy, sm chiky, tr-nvp, sm SH: gry/brn, silty, med crush, no cup odr, ns

LS: tan/lt gry, fn xln, mostly dense, fw brittle, fw flakey/mealy, fw chiky, tr-nvp, sm SH: gry/brn, silty, easy-med crush, no cup odr, ns

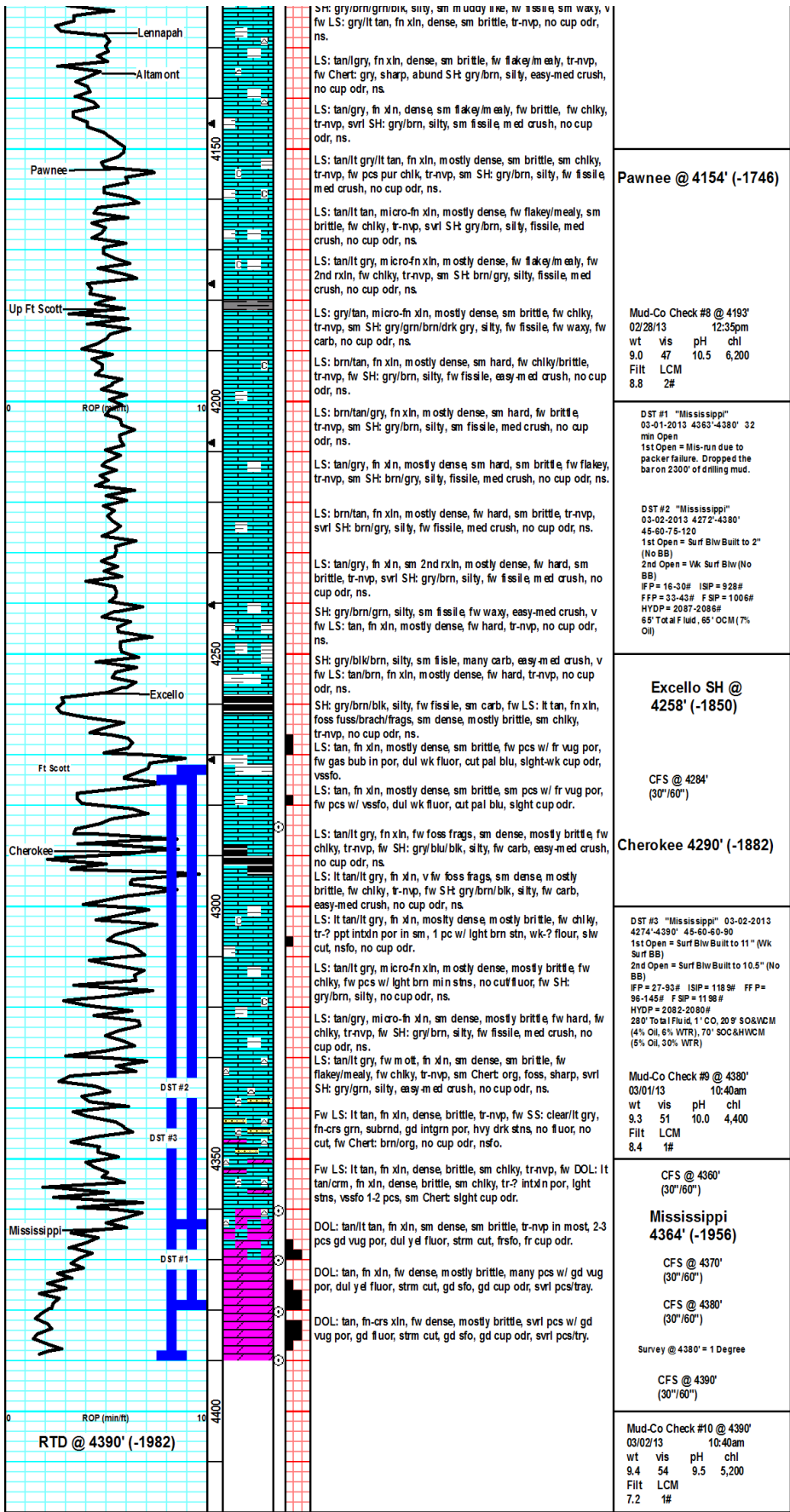
LS: lt gry/lt tan, fn xln, sm dense, sm brittle, fw flakey/mealy, many chiky, fw pcs w/ pr ppt intkn por, fw SH: gry/grn/brn, silty, fw fissile, no cup odr, ns

LS: tan/lt tan, fn xln, fw foss frags, mostly dense, sm brittle, sm 2nd rxln, fw chiky, tr-nvp, sm SH: gry/brn, silty, easy-med crush, no cup odr, ns

LS: tan/lt gry, fn xln, mostly dense, sm brittle, fw flakey/mealy, fw 2nd rxln, fw chiky, tr-nvp, fw SH: gry/brn, silty, fw fissile, no cup odr, ns

LS: tan/lt tan, fn xln, mostly dense, sm brittle, fw flakey/mealy, sm chiky, tr-nvp, sm SH: gry/brn, silty, med crush, no cup odr, ns

<p>Auto Driller Slipped for a few feet.</p>
<p>Mud-Co Check #7 @ 3888' 02/27/13 11:15am wt vis pH chl 8.9 51 10.5 7,700 Flit LCM 6.4 2#</p>
<p>Muncie Creek SH @ 3916' (-1508)</p>
<p>Samples are Shale may need to CFS to clean hole up.</p>
<p>Stark SH 3997' (-1589)</p>
<p>CFS @ 4013' (30"/60")</p> <p>Hushpuckney SH 4033' (-1625)</p>
<p>Base KC 4058' (-1650)</p> <p>Marmaton @ 4108' (-1700)</p>



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

March 27, 2013

Ronald N. Sinclair
Grand Mesa Operating Company
1700 N WATERFRONT PKWY BLDG 600
WICHITA, KS 67206-5514

Re: ACO1
API 15-135-25541-00-00
D-F 1-20
NW/4 Sec.20-17S-24W
Ness 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,
Ronald N. Sinclair