Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1147077

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 # 9855
Name: Grand Mesa Operating Company
Address 1: 1700 N WATERFRONT PKWY BLDG 600
Address 2:
City: WICHITA State: KS Zip: 67206 + 5514
Contact Person: Michael J. Reilly
Phone: (316) 265-3000
CONTRACTOR: License # 33793
Name: H2 Drilling LLC
Wellsite Geologist: Kent R. Matson/Steve Carl
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 #:

05/15/2013	05/25/2013	05/25/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-109-21177-00-00
Spot Description:
SE - NW - NE - SW Sec. 34 Twp. 13 S. R. 32 ☐ East ☑ West
2078 Feet from ☐ North / ☑ South Line of Section
1667 Feet from ☐ East / ☑ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Logan
Lease Name: E & E Well #: 2-34
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2906 Kelly Bushing: 2917
Total Vertical Depth: 4640 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 227 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: 14000 ppm Fluid volume: 880 bbls
Dewatering method used: Evaporated

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: 06/18/2013
☑ **Confidential Release Date:** 06/18/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 06/19/2013

1147077

Operator Name: Grand Mesa Operating Company Lease Name: E & E Well #: 2-34

Sec. 34 Twp. 13 S. R. 32 ☐ East ☑ West County: Logan

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

CPDCN Micro Log
AI Shallow Focused Elect Log
Micro Log

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	227	Common	165	3%CC, 2%Gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☑ Plug Back TD ☐ Plug Off Zone	0-4640	60/40 Pozmix	220	4%Gel; 1/4#sx Flocele
	-			

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 *(Amount and Kind of Material Used)*	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:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	E & E 2-34
Doc ID	1147077

Tops

Name	Top	Datum
Bs/Stone Corral	2430	+487
Heebner	3901	-984
Lansing	3941	-1024
Muncie Creek	4104	-1187
Stark	4184	-1267
Marmaton	4284	-1367
Little Osage	4415	-1498
Excello	4435	-1518
Mississippian	4574	-1657
LTD	4640	

ALLIED OIL & GAS SERVICES, LLC 060259

Federal Tax I.D. # 20-8661475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley, KS

DATE 5-16-13	SEC. 34	TWP. 13	RANGE 32	CALLED OUT	ON LOCATION 3:30am	JOB START 4:00am	JOB FINISH 4:30 am
LEASE E+E	WELL # 2-34		LOCATION Oakley 17S, 3/4W, North			COUNTY Logan	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR H2/2
TYPE OF JOB Surface
HOLE SIZE 12 1/2 T.D. 2281
CASING SIZE 8 5/8 DEPTH 222.24
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 13.58661

OWNER Same

CEMENT
AMOUNT ORDERED 165sks com 3%CC 2%gel

EQUIPMENT

PUMP TRUCK CEMENTER LaRue E. Wentz
423/281 HELPER Paul Beaver
BULK TRUCK
347 DRIVER Brandon Wilkinson
BULK TRUCK
DRIVER

REMARKS:
Mix 165 sks cement
Displace with water
Cement did circulate

Thank you!

COMMON	165sks	@ 17.90	2953.50
POZMIX		@	
GEL	3sks	@ 23.40	70.20
CHLORIDE	6sks	@ 64.00	384.00
ASC		@	
HANDLING	178.42 sks	@ 2.48	442.48
MILEAGE	8.14ton x 18 x 260		380.93
		TOTAL	4231.13

SERVICE

DEPTH OF JOB	2222.41'		
PUMP TRUCK CHARGE			1512.23
EXTRA FOOTAGE		@	
MILEAGE	M-P-U 18	@ 7.70	138.60
MANIFOLD	Head	@	225.00
	MPU 18	@ 4.40	79.20
		@	
		TOTAL	2005.03

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	TOTAL	

CHARGE TO: Grand Mesa
STREET
CITY STATE ZIP

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 6,236.18
DISCOUNT 1,309.59 IF PAID IN 30 DAYS
4,926.58 Net

PRINTED NAME Gary Axtell
SIGNATURE Mary Axtell

ALLIED OIL & GAS SERVICES, LLC 060304

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
5/25/13	34	13	32			10:00 PM	11:00 PM
LEASE E & E	WELL # 2-34		LOCATION Oakley 17S 3/4W N into			COUNTY Logan	STATE Ks.
OLD OR (NEW) (Circle one)							

CONTRACTOR H2 #2
TYPE OF JOB PTA
HOLE SIZE 7 7/8 T.D. 4640'
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 2420'
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 60.40
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT 30.85

OWNER Same

EQUIPMENT

PUMP TRUCK # 120 CEMENTER Darren Racette
HELPER Tyler Flipse
BULK TRUCK # 600 DRIVER David Scariano
BULK TRUCK # DRIVER

CEMENT

AMOUNT ORDERED 220 SKs 4/40 4% Gel 1/4# Flo seal
common

COMMON	132 SKs	@ $ 17.80	$ 2362.80
POZMIX	88 SKs	@ $ 9.35	$ 822.80
GEL	8 SKs	@ $ 23.40	$ 187.20
CHLORIDE		@	
ASC		@	
Floseal	55 #	@ $ 2.97	$ 163.35
HANDLING	236.39 CF X	@ $ 2.46	$ 586.00
MILEAGE	9.87 X 18 X	@ $ 2.60	$ 461.92
		TOTAL	$ 4582.07

REMARKS:

mix 25 SKs Cement 2420'
mix 100 SKs Cement 1350'
mix 40 SKs Cement 280'
mix 10 SKs Cement 40'

Plug Rathole 30 SKs Cement
Plug mousehole 15 SKs Cement

Thank You.

SERVICE

DEPTH OF JOB
PUMP TRUCK CHARGE $ 2483.59
EXTRA FOOTAGE @
MILEAGE 18 @ $ 7.70 $ 138.60
MANIFOLD @
LV mileage @ $ 4.40 $ 79.20
@
TOTAL $ 2701.39

CHARGE TO: Grand Mesa
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

1 Wooden Plug	@	$ 107.64
	@	
	@	
	@	
	@	
	TOTAL	$ 107.64

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 7,391.10
DISCOUNT 1,552.13 IF PAID IN 30 DAYS
5,838.96 Net.

PRINTED NAME STEVEN CRAIG

SIGNATURE Steven Craig

Diamond Testing

General information Report

General Information

Company Name	GRAND MESA OPERATING COMPANY		
Contact	MICHAEL J. REILLY		
Well Name	E&E #2-34	**Job Number**	T210
Unique Well ID	DST #1, LKC "L", 4220-4272	**Representative**	TIM VENTERS
Surface Location	SEC 34-13S-32W, LOGAN CO. KS.	**Well Operator**	GRAND MESA OPERATING COMPANY
Well License Number		**Report Date**	2013/05/22
Field	WILDCAT	**Prepared By**	TIM VENTERS
Well Type	Vertical		

Test Type	CONVENTIONAL		
Formation	DST #1, LKC "L", 4220-4272		
Well Fluid Type	01 Oil	**Start Test Time**	23:44:00
		Final Test Time	08:29:00
Start Test Date	2013/05/21		
Final Test Date	2013/05/22		
Gauge Name	8457		
Gauge Serial Number			

Test Results

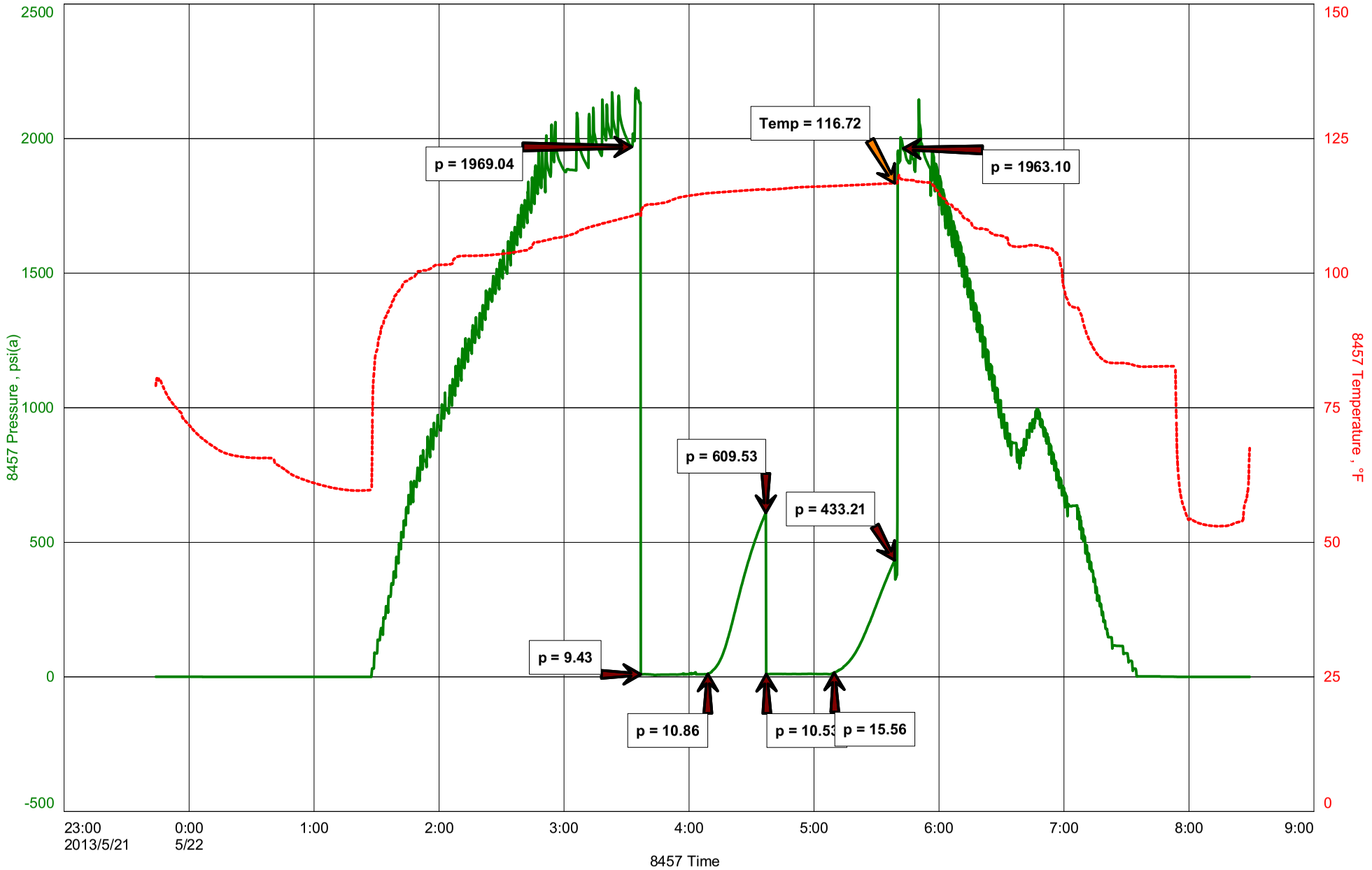
RECOVERED; 5' MW/TR. O, TRACE OIL, 100% MUD

TOOL SAMPLE: 1% OIL, 99% MUD

GRAND MESA OPERATING COMPANY
DST #1, LKC "L", 4220-4272
Start Test Date: 2013/05/21
Final Test Date: 2013/05/22

E&E #2-34
Formation: DST #1, LKC "L", 4220-4272
Pool: WILDCAT
Job Number: T210

E&E #2-34



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: E&E2-34DST1

TIME ON: 23:44 5-21-13
TIME OFF: 08:29 5-22-13

Company GRAND MESA OPERATING COMPANY Lease & Well No. E&E #2-34

Contractor H2 DRILLING, LLC RIG #2 Charge to GRAND MESA OPERATING COMPANY

Elevation 2917 KB Formation LKC "L" Effective Pay -- Ft. Ticket No. T210

Date 5-22-13 Sec. 34 Twp. 13 S Range 32 W County LOGAN State KANSAS

Test Approved By BOB SCHREIBER Diamond Representative TIM VENTERS

Formation Test No. 1 Interval Tested from 4220 ft. to 4272 ft. Total Depth 4272 ft.

Packer Depth 4215 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4220 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4206 ft. Recorder Number 8457 Cap. 10,000 P.S.I.

Bottom Recorder Depth (Outside) 4269 ft. Recorder Number 11030 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 57 Drill Collar Length 238 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 8.0 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in

Chlorides 5,000 P.P.M. Drill Pipe Length 3949 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 21 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 31' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 1/2 INCH. (NO B.B.)

2nd Open: VERY WEAK SURFACE BLOW THROUGHOUT PERIOD. (NO B.B.)

Recovered 5 ft. of MW/TR. O, TRACE OIL, 100% MUD

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Tool Sample: 1% OIL, 99% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 3:36 AM A.M. P.M. Time Started Off Bottom 5:38 AM A.M. P.M. Maximum Temperature 117 deg.

Initial Hydrostatic Pressure..... (A) 1969 P.S.I.

Initial Flow Period..... Minutes 30 (B) 9 P.S.I. to (C) 11 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 610 P.S.I.

Final Flow Period..... Minutes 30 (E) 11 P.S.I. to (F) 16 P.S.I.

Final Closed In Period..... Minutes 32 (G) 433 P.S.I.

Final Hydrostatic Pressure..... (H) 1963 P.S.I.

Diamond Testing

General information Report

General Information

Company Name	GRAND MESA OPERATING COMPANY		
Contact	RICHARD J. REILLY		
Well Name	E&E #2-34	**Job Number**	T211
Unique Well ID	DST #2, FT. SCOTT, 4380-4436	**Representative**	TIM VENTERS
Surface Location	SEC 34-13S-32W, LOGAN CO. KS.	**Well Operator**	GRAND MESA OPERATING COMPANY
Well License Number		**Report Date**	2013/05/23
Field	WILDCAT	**Prepared By**	TIM VENTERS
Well Type	Vertical		

Test Type	CONVENTIONAL		
Formation	DST #2, FT. SCOTT, 4380-4436		
Well Fluid Type	01 Oil	**Start Test Time**	10:01:00
		Final Test Time	17:15:00
Start Test Date	2013/05/23		
Final Test Date	2013/05/23		
Gauge Name	8457		
Gauge Serial Number			

Test Results

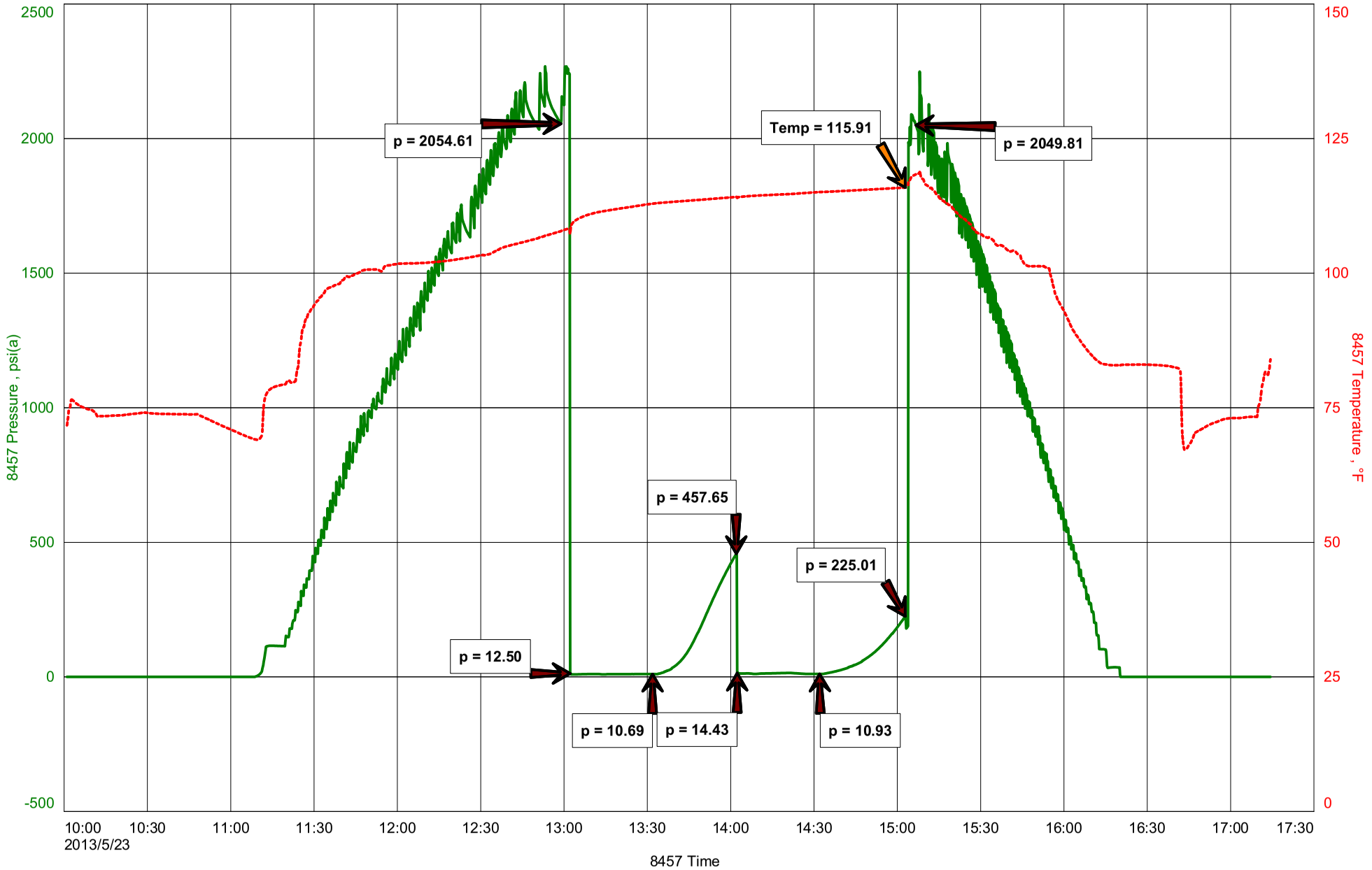
RECOVERED: 5' MW/SP. O, SPOTTY OIL 100% MUD

TOOL SAMPLE: SPOTTY OIL, 100% MUD

GRAND MESA OPERATING COMPANY
DST #2, FT. SCOTT, 4380-4436
Start Test Date: 2013/05/23
Final Test Date: 2013/05/23

E&E #2-34
Formation: DST #2, FT. SCOTT, 4380-4436
Pool: WILDCAT
Job Number: T211

E&E #2-34



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: E&E2-34DST2

TIME ON: 10:01
TIME OFF: 17:15

Company GRAND MESA OPERATING COMPANY Lease & Well No. E&E #2-34

Contractor H2 DRILLING, LLC RIG #2 Charge to GRAND MESA OPERATING COMPANY

Elevation 2917 KB Formation FT. SCOTT Effective Pay -- Ft. Ticket No. T211

Date 5-23-13 Sec. 34 Twp. 13 S Range 32 W County LOGAN State KANSAS

Test Approved By STEVE CARL Diamond Representative TIM VENTERS

Formation Test No. 2 Interval Tested from 4380 ft. to 4436 ft. Total Depth 4436 ft.

Packer Depth 4375 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4380 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4361 ft. Recorder Number 8457 Cap. 10,000 P.S.I.

Bottom Recorder Depth (Outside) 4433 ft. Recorder Number 11030 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 55 Drill Collar Length 238 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 8.0 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in

Chlorides 4,500 P.P.M. Drill Pipe Length 4109 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 24 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 32' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 1/4 INCH. (NO B.B.)

2nd Open: VERY WEAK SURFACE BLOW LASTING 10-15 MIN. (NO B.B.)

Recovered 5 ft. of MW/SP. O, SPOTTY OIL, 100% MUD

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Tool Sample: SPOTTY OIL, 100% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 1:01 PM A.M. P.M. Time Started Off Bottom 3:01 PM A.M. P.M. Maximum Temperature 116 deg.

Initial Hydrostatic Pressure ..... (A) 2055 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 13 P.S.I. to (C) 11 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 458 P.S.I.

Final Flow Period ..... Minutes 30 (E) 14 P.S.I. to (F) 11 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 225 P.S.I.

Final Hydrostatic Pressure ..... (H) 2050 P.S.I.

Diamond Testing

General information Report

General Information

Company Name	GRAND MESA OPERATING COMPANY		
Contact	RICHARD J. REILLY		
Well Name	E&E #2-34	**Job Number**	T212
Unique Well ID	DST #3, JOHNSON, 4485-4525	**Representative**	TIM VENTERS
Surface Location	SEC 34-13S-32W, LOGAN CO. KS.	**Well Operator**	GRAND MESA OPERATING COMPANY
Well License Number		**Report Date**	2013/05/24
Field	WILDCAT	**Prepared By**	TIM VENTERS
Well Type	Vertical		

Test Type	CONVENTIONAL		
Formation	DST #3, JOHNSON, 4485-4525		
Well Fluid Type	01 Oil	**Start Test Time**	06:58:00
		Final Test Time	15:25:00
Start Test Date	2013/05/24		
Final Test Date	2013/05/24		
Gauge Name	8457		
Gauge Serial Number			

Test Results

RECOVERED: 1' CO 100% OIL, GRAVITY: 25
60' O&WCM, 22% OIL, 18% WATER, 60% MUD
61' TOTAL FLUID

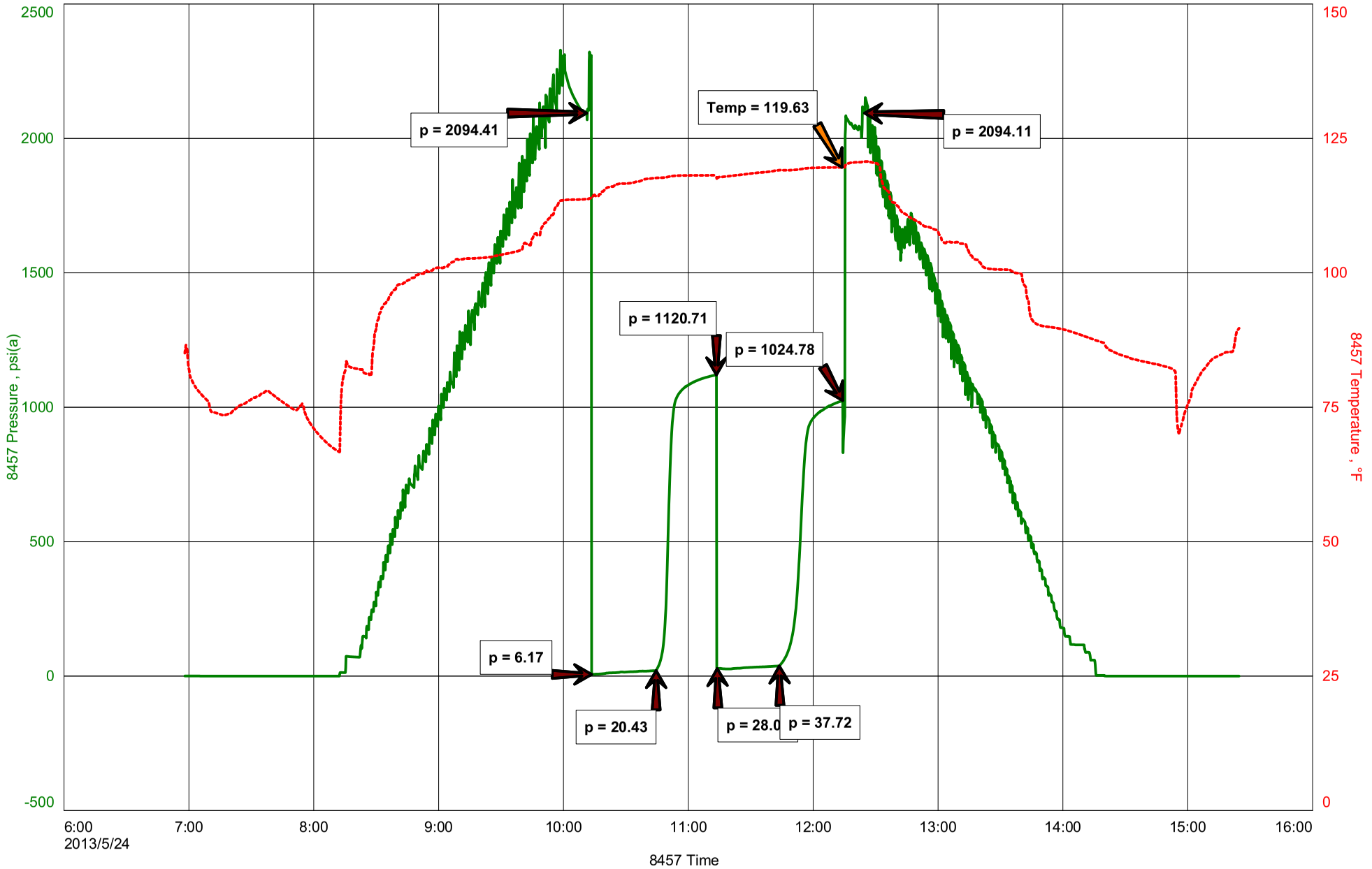
TOOL SAMPLE: 44% OIL, 12% WATER, 44% MUD

CHLORIDES: 30,000 ppm
PH: 7.0
RW: .28 @ 82 deg.

GRAND MESA OPERATING COMPANY
DST #3, JOHNSON, 4485-4525
Start Test Date: 2013/05/24
Final Test Date: 2013/05/24

E&E #2-34
Formation: DST #3, JOHNSON, 4485-4525
Pool: WILDCAT
Job Number: T212

E&E #2-34



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: E&E2-34DST3

TIME ON: 06:58
TIME OFF: 15:25

Company GRAND MESA OPERATING COMPANY Lease & Well No. E&E #2-34

Contractor H2 DRILLING, LLC RIG #2 Charge to GRAND MESA OPERATING COMPANY

Elevation 2917 KB Formation JOHNSON Effective Pay -- Ft. Ticket No. T212

Date 5-24-13 Sec. 34 Twp. 13 S Range 32 W County LOGAN State KANSAS

Test Approved By STEVE CARL Diamond Representative TIM VENTERS

Formation Test No. 3 Interval Tested from 4485 ft. to 4525 ft. Total Depth 4525 ft.

Packer Depth 4480 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4485 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4466 ft. Recorder Number 8457 Cap. 10,000 P.S.I.

Bottom Recorder Depth (Outside) 4522 ft. Recorder Number 11030 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 57 Drill Collar Length 238 ft. I.D. 2 1/4 in.

Weight 9.5 Water Loss 9.6 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in

Chlorides 5,000 P.P.M. Drill Pipe Length 4214 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 40 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 2 INCHES. (NO B.B.)

2nd Open: VERY WEAK SURFACE BLOW, BUILDING TO 3/4 INCH. (NO B.B.)

Recovered 1 ft. of CO 100% OIL, GRAVITY: 25

Recovered 60 ft. of O&WCM, 22% OIL, 18% WATER, 60% MUD

Recovered 61 ft. of TOTAL FLUID

Recovered ft. of

Recovered ft. of CHLORIDES: 30,000 ppm

Recovered ft. of PH: 7.0

Remarks: RW: .28 @ 82 deg.

Tool Sample: 44% OIL, 12% WATER, 44% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 10:13 AM A.M. P.M. Time Started Off Bottom 12:13 PM A.M. P.M. Maximum Temperature 120 deg.

Initial Hydrostatic Pressure..... (A) 2094 P.S.I.

Initial Flow Period..... Minutes 30 (B) 6 P.S.I. to (C) 20 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 1121 P.S.I.

Final Flow Period..... Minutes 30 (E) 28 P.S.I. to (F) 38 P.S.I.

Final Closed In Period..... Minutes 30 (G) 1025 P.S.I.

Final Hydrostatic Pressure..... (H) 2094 P.S.I.

GRAND MESA OPERATING COMPANY

(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:	E & E #2-34
Location:	2078'FSL, 1667' FWL, 34-13S-32W, Logan County, Kansas
License Number:	API: 15-109-21177
Region:	Wildcat
Spud Date:	5-15-2013
Drilling Completed:	5-25-2013
Surface Coordinates:	Lat: 38.8786452
	Long: -100.865586
Bottom Hole Coordinates:	Vertical hole
Ground Elevation (ft):	2906
K.B. Elevation (ft):	2917'
Logged Interval (ft):	surf To: RTD
Total Depth (ft):	4640
Formation:	Mississippian at RTD
Type of Drilling Fluid:	Chemical

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

GEOLOGIST

Name: Bob Schreiber 3600-4340, Steve Carl 4340-TD
Company:
Address:

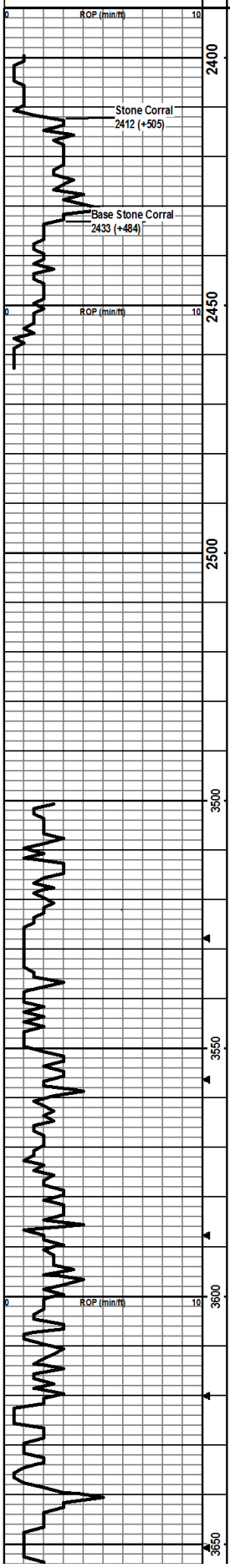
COMMENTS

Contractor: H-2 Rig #
Pusher: Randy Smith
Surface Casing: 8 5/8" set at 227' w/165sx
Production Casing: none
Mud by: MudCo
DST's by: Diamond Testing
Logs by: Weatherford (DIL, CN-CD, ML,SONIC)
RTD=4640'
LTD=4640'

FORMATION TOPS

FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum
Stone Corral	2412'	+505	2410	+507
B/Stone Corral	2433'	+484	2430'	+487
Heebner Shale	3906'	-989	3902'	-985
Lansing	3941'	-1024	3941'	-1024
Muncie Creek Shale	4104'	-1187	4104'	-1187
Stark Shale	4186'	-1269	4186'	-1269
BKC	4252'	-1335	4251'	-1334
Marmaton	4285'	-1368	4283'	-1366
Little Osage Shale	4415'	-1498	4414'	-1497
Johnson Zone	4511'	-1594	4508'	-1591
Mississippian	4575'	-1658	4575'	-1658
RTD	4640'	-1723		
LTD	4640'	-1723		

Curve Track 1 ROP (min/ft)	epth	Lithology	S Point	l Shows	Geological Descriptions	Remarks



Morning Report Depth/Activity

5/15/13:MIRU H2 rig #2, Spud 9:30 PM, ran 8 5/8" set @ 227' cmnt w/ 165 sxs, P.D. 4:45AM, Surv 1/2 deg @ 230'

5/16/13: Depth @ 230' waiting on cement

5/17/13: Drlg @ 1423'

5/18/13: Drlg @ 2550', Surv 3/4 deg @ 2208'

5/19/13: Drlg @ 3310', Displace 3402-3420'

5/2013: Drlg @ 3871', Surv 3/4 deg @ 3528'

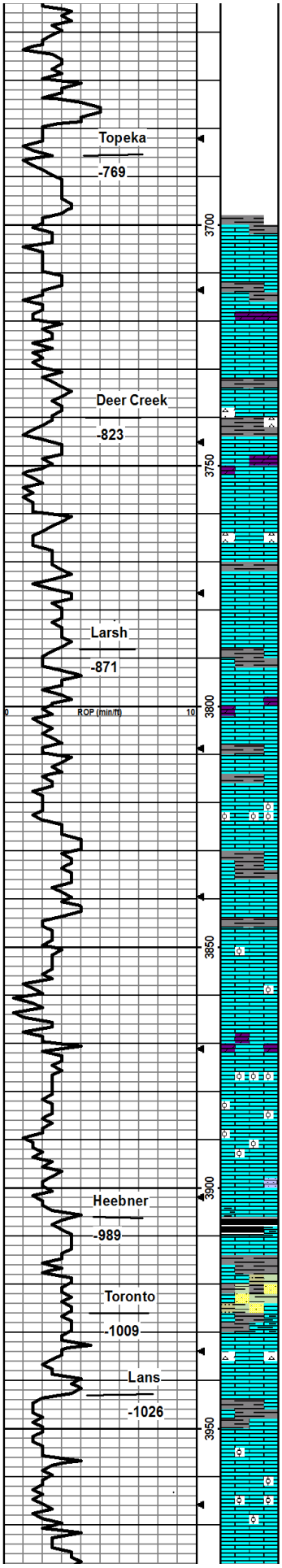
5/21/13: Drlg @ 4168'

5/22/13: DST#1, Hertha, @ 4272'

5/23/13: DST#2, Ft Scott, 4436'

5/24/13: DST#3, Johnson, 4525'

5/25/13: Logging/plugging, @ TD = 4640'



10ft Samples begin at 3700'

SH- gh- tr dkr gy, mod ind, blky

LS- crm , md hd- tr sftr, v/fn -fn xln, tr ool, sli foss ip, NS

DOL- crm - off wh, fn xln, hd, NS w/sme ls- crm - tn , md hd- hd, v/fn -fn xln, mod foss (frmn), sli ool, tr secxln, NS

LS- crm - lt br, m d hd-sftr ip, fn-v/fn ip xln, foss-sli ool ip, sli frny grd off wh, sftr, m od chlky, NS

LS- lt br-br ip, md hd- hd, v/fn xln, tr sli foss, NS w/sme sh- dkr gy, sli -mod ind, sli wxy, w/chrt- crm , sli fgh, wthrd, sli foss, NS

LS- crm - lt br, m d hd - tr hd, fn - v/fn xln, sli foss ip, tr ool, NS, w/ sme crm hd, fn xln, dol, NS

LS- lt br-crm , md hd- hd , fn v/fn xln, sli grny, fn ool, sli foss ip, tr mn flo, NS

LS- crm , md hd-tr hd, v/fn-fn xln, sli ool ip, grd sftr, off wh chlky NS, w/sme crm -tn sli foss, frsh chrt, NS

LS- crm -tnt br ip, md hd-tr sftr, fn xln, grny ip, fn ool ip, mod foss/ frgmnts, NS

SH- lt gy- lt gr, sli-mod ind, sli blky, tr sndy, tr fn xln pyr clstrs

LS- lt br-crm , md hd- hd i, v/fn-fn xln, sli foss ip, grd mod dol ip, NS

SH- gy- ltr gy, sli -mod ind, w/ss- lt gy, mod ind, fn grn, sli arg NS

LS- crm , md hd, fn xln, ool ip, sli foss, tr secxln, sli sparry, sli frct ip, sli mn flo, NS

LS- crm - lt tn, hd -md hd, fn xln, fn foss, tr ool, tr rnbw gs bbl, no odr NSO , w/sme sh- lt gy- lt gr, m od ind, dull ip

LS- crm - tnt br hd- md hd, fn - v/fn xln, sli foss ip, tr ool, grd sftr, off wh, mod chlky, NS

LS- crm - tnt tn, hd-md hd, fn xln, foss ip, ool ip, secxln ip, grd dol ip, NS w/sme chrt- crm - off wh, sli foss , NS

LS- crm , md hd, v/fn- fn xln, fn ool, tr foss, sli grny ip, grd sftr, chlky, NS

LS- LS- lt br-crm ip, md hd- tr hd, v/fn xln, mod foss ip, ool ip, NS

LS- crm - tnt br, m d hd- sftr, fn xln, ool, sli foss, tr sndy, grd sli-mod chlky ip, tr gas bbl, NSO w/ sme sh- lt gr, sftr,wxy

SH- blk, sli ind, sli fiss, sli carb

LS- lt br- tr br, hd- m d hd ip, fn xln, sli foss, tr ool, NS

SH- gy, mod ind, sli blky

SH- lt gr- lt gy, sli - mod ind, sli m ic, tr sndy ip

LS- crm - off wh, m d hd- hd ip, v/fn xln, sli ool, tr frct, NS

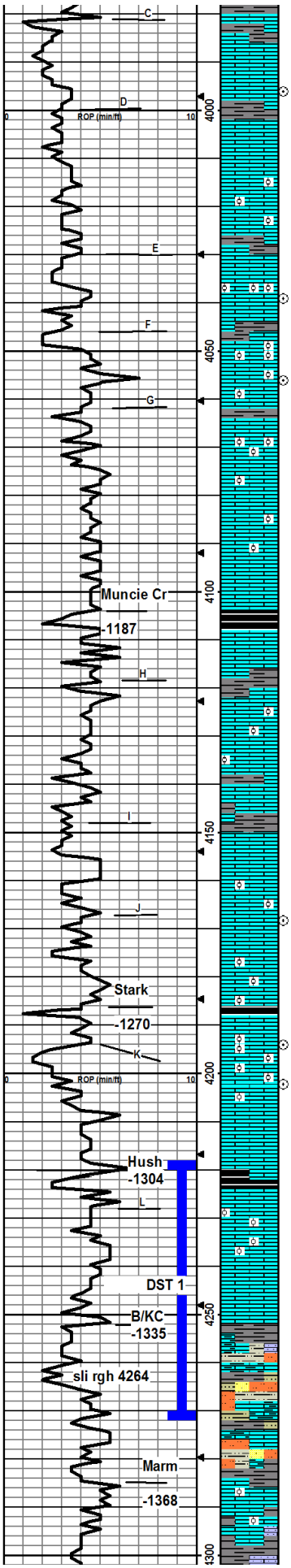
LS- crm , hd, fn- v/fn xln,chrty ip, grd sftr ip, fn xln, chlky, tr pr pp vug por, NS

SH- rsty/br- gy, mod ind, dull

LS- br- lt br, m d h- sftr ip, fn xln, mo- v/ool , sli grny, NS, grd crm , m d hd- sft, v/fn xln, sli ool, chlky, NS

LS-crm - m d hd- tr hd, fn - v/fn xln, tr secxln, tr foss, grd off wh, sli chlky, sftr, fn xln, ool ip, tr secxln, tr pr intrprtcl-sli oocst por,NS

LS-crm - tnt br, md hd, fn xln, ool ip, sli foss ip, tr frct ,NS



SH- dk gy-gy, mod ind , sli dull

LS- crm, md hd-tr sftr, fn- md ip xln, ool ip, sli foss, sli rgh ip, secxln ip, NS

LS- crm, md hd- tr hd, v/fn- fn xln, tr secxln, foss ip, sli frct, v/sli chlky, NS

LS- v/lt br- crm, md hd- tr hd, v/fn- fn xln, tr secxln, ool ip, sli foss, tr frct, grd more off wh, fn xln, sli chlky, sftr, tr vug por, NS

LS-crm- tnt br, m dh- hd- tr sftr, v/fn-fn xln, md secxln ip, foss ip, ool ip, NS w/sme chlky ,sftr, crm - off wh, LS NS

SH- gy- tr dkr gy, w/tnt gr ip, sli-mod ind

LS- crm - tnt br ip, md hd- tr hd, v/fn- fn xln, tr mod ool, sli foss ip, sme secxln ip, sli chlky ip, sftr, NS

Ls- crm - tnt br, md hd- tr hd- sftr ip, v/fn- fn xln, ool ip, sli foss ip, tr secxln, sli grny ip, no odr, NS

LS- crm-tr lt br, md hd- tr hd, v/fn xln, tr secxln, sli foss, tr ool, tr sli frcct, grd sli tr mod chlky, sftr, off wh ip, NS

LS- crm, md hd- hd, v/fn xln, sme ool, tr chlky NS

LS- crm - tr off wh, hd- md hd ip, v/fn xln, sli foss ip, tr ool grd sli- tr mod chlky ip, tr imbd pyr, NS

LS- crm - lt tn, hd, v/fn xln, fw pcs ool, tr sli foss NS

LS- crm - tnt br, hd, v/fn xln, tr foss, secxln ip, grd sli sftr, v/sli chlky ip, NS

SH- blk, mod ind, sli carb, sli wxy ip

LS- lt br-br ip, hs, v/fn xln, sli foss, tr frct, tr mn flo, no odr, NS

LS- crm tnt br, m d hd- hd- tr sftr, v/fn-tr fn xln, tr secxln, sli ool ip, tr frct, tr mn flo, ? 1 pc res stn, NSO no odr

LS- crm-tnt gy ip, hd- tr sftr, v/fn xln, sli foss ip, tr ool, secxln ip, tr subchlky, tr frct, tr pr intrprtcl por, NS

SH- gy- lt gr, mod ind, sli dull

LS- crm - tn ip, m d hd - hd ip, v/fn -fn xln, secxln ip, tr frct/secxln, tr foss, sme tt ool, grd off wh, slli chlky, s/sli brittle, NS

LS- br, hd, v/fn xln, sli foss, tr secxln, frct, NS, grd crm- off wh ip, md hd- tr sftr, v/fn xln, ool ip, ool & foss ip, frct ip, NS

LS- crm, md hd-hd, v/fn xln, tr frct, tr ool, sli foss ip, tr secxln, grd off wh, m d hd- sftr ip, chlky, ool ip, NS

MUD@ 4210'
WT:9.2
VIS:57
WL:8.0
PH:11.0
CHL:5000

LS- crm-tnt gy, m d hd- hd, v/fn-tr fn xln, foss ip, ool ip, tr frct, grd sli chlky ip, tr gas bbl, NSO, no odr

SH- blk, sli ind, sli wxy, sli fiss ip

LS- lt gy- br, hd, v/fn xln, sli ool, foss ip, tr frct, NS, w/sme sh- gy, sli -mod ind, sli wxy

LS- crm - off wh-tr mott gy, m d hd, fn xln, grny ip, ool, sli-tr mod chlky ip, 1 pc ? tr spotty stn, no odr, NSO

LS- crm - off wh ip, hd- tr sftr/ sli chlky ip, tr foss, frct ip, NS

DST 1) L zn
4220-4272'
30-30-30-30
1st) 1/2"blw TO
2nd)VWSB
Rec: 5' m/tr oil
IFP: 9-11#
FFP: 11-16#
SIP: 610-433#
HP: 1969-1963#

SH- blk, sli-mod ind, fiss ip, carb

LS- lt br--crm ip, m d hd- hd, v/fn xln, frct ip, ool ip, sli foss, tr pr - 1 pc fr sli oocst/vug por, (fw pcs grd mod chlky, 1 pc so sli dd oil), tr wk flo, wkr odr, vssfo, sso, sli dead-dead m d br oil , 1 pc fr-gd cut, tr prt sat, 3 pcs mstsat -sat, md -dkr br stn

LS- crm - lt br-tnt gy, md hd-hd, v/fn xln, sli foss ip, tr pr fosscst/vug por, tr sptty stn- part sat, vssfo

LS- crm, md hd-hd, fn -v/fn xln, tr foss, tr secxln, w/tr crm mott, orng chrt, tr stn NSO, w/2 pcs ls- tn-tnt orng/rst,foss, NS

LS- lt br- sli gy-mott ip, tr ool, tr pr oocst por, vssfo-sli dd oil ?abv

SH- lt gy -gy-lt gr-tr rsty, sli-mod ind, sli wxy- wthrd ip,

LS- lt gr- v/lt gy, m d hd, fn xln, sli slty ip, v/sli arg ip- tr mod arg, tr frct, NS

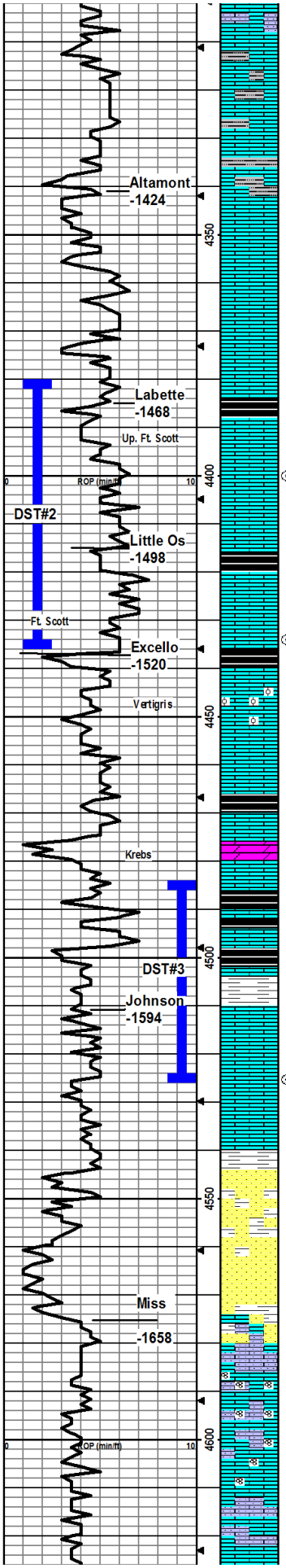
MUD@ 4272'
WT:9.2
VIS:51
WL:8.8
PH:11.0
CHL:5500

SH-gy-tnt olv gr, mod ind, sli wxy ip- dull

LS- crm, hd, sli ool, mod foss ip, tr imbd ls frag, tr secxln, tr-sme grd sftr, sli-mod chlky ip, NS

LS- crm - tn, hd, v/fn xln, fn secxln ip, sli foss, sli frct, NS

SH- lt gy-gy-tnt gr, mod ind, sli dull, grd to sme sh- lt gy, wxy sft



LS- crm - tnt gy-tn, md hd-hd, v/fn-fn ip xln, foss ip, tr mod secxln, grd v/sli chlky ip, v/fn grn sndy, NS

LS- lt gy- crm, hd-md hd, fn xln, grd (?abv) silty ss- lt gy-gy, srg ip, md hd

LS-lt tan, mostly fn xln, sm crs, foss, abund gry SH, abund SS-dirty gry, fn grn, no cup odr, ns.

LS-tan, fn - crs xln, sm uniform, sm foss, hard, dense w/nvp, abund gry SH as above, no cup odr, ns.

Steve Carl assumes wellsight responsibility at 4340

LS-tan, mostly fn xln, dense few pcs/tray crs xln, grainy, ool, foss-various, 2-3 pcs per tray w/gd int foss/vug por, pr-fr sho drk, thick fo, will not break out of por, fnt odr on break, no cup odr. sm dull edge fluor.

LS-crm/wht, fn xln, mostly uniform, sm foss, chalky, sm LS-tan, micro xln, dense hard, 1-2 pcs per tray w/trace por pp por, vssfo, drk, thick, will not break out, no cup odr.

LS and SH as above, no cup odr, 1 pc/tray w/vssfo as above

LS-gry/crm, mostly fn xln, mostly uniform, dense, few foss, sm chalky, abund CHERT-gry, opaque, 10-15 pcs/tray with pr-fr pp/int xln por, slt-fr sfo, fr cup odr, patchy dull yel fluor. Lots of blk carb SH in 4400 smpl. 30min smpl as above, incr chalk, decr sho, fr cup odr.

DST 2) Ft.Scott
4380-4436'
30-30-30-30
Rec: 5' OSM
IFP: 13-11#
FFP: 14-11#
SIP: 458-225#
BHT: 116degF

LS-tan-brn, crs xln, foss, dense, hard, nvp, no cup odr, ns.

LS-tan-brn, mostly fn xln, uniform, sm vcrs xln, foss, abund CHERT, all dense, nvp, no cup odr, ns.

SH-blk, carb, present in 4330smpl.

LS-lt brn, fn xln, vdense, hard, brittle, 1-2 pcs per tray with trc fr-gd vug por, slt sho lt fo along edges of vugs, wk yel fluor, no cup odr. 60min as above.

SH-blk, carb, flood in 4450 smpl, sm SH-gry/grn, silty, no cup odr, ns.

LS-mostly gry, fn xln, uniform, dense, hard, sm ool/pis, calcite filled int ool/foss por, brittle, nvp, sm CHERT-gry/brn, transl, sharp, fresh, no cup odr, ns.

LS-tan, fn xln, uniform, dense, hard, decr ool, rare foss-fus/brach, CHERT as above, no cup odr, ns.

SH-blk, carb, brittle. LS-mostly drk gry, med xln, foss/ool, dense, nvp, no cup odr, ns.

LS-tan, micro xln, hard, brittle, diff crush, 6-8 pcs per tray w/pr int foss por, trace vug por w/ssfo, DOLO-brn, vcrs xln, rare int xln por, ns, no cup odr, scat dul yel fluor.

LS-mostly lt tan, micro xln, dense, brittle, vhard, sm LS-lt tan, profus foss/ool w/pr int foss por, rare gd vug por, vs to sfo 8-10 pcs per tray, most will not break out of por, fnt cup odr, scat dul yel fluor. patchy med brn stn in drys, average 30% of surface stained, SH-blk, carb.

DST 3) Johnson
4485-4525'
30-30-30-30
Rec: 1' CO
60' OWCM
(22%O, 18% W)
IFP: 6-20#
FFP: 28-38#
SIP: 1121-1021#
BHT: 120degF

SH-med gry, silty. LS-as above, fnt cup odr.

LS-lt tan, mostly micro xln, uniform, dense, vhard, 12-15 pcs per tray w/pr-fr pp/vug por, fr sho drk fo, bleed o&g on break, gd cup odr, patchy to gd sat drk brn stn in drys, 30min-LS, as above, decr in sho, no cup odr, 60min-as above, quest cup odr.

LS-med tan, vfn xln, mostly uniform, dense, hard, rare foss, nvp, no cup odr, ns.

LS-mostly lt tan, med xln, foss in part, dense, nvp, no cup odr, ns.

SS-wht/lt gry, fn grn, well srtd, sub rnd, few glauc, fr int grn por, clean, calc, vig eff under 10% HCL, fairly well consolidated, not many loose grains, no fluor, no cut, no cup odr, ns.

SS- mostly as above, white to dirty gry, sm glauc, calcar, semi-friable to very hard, pr int gran por, no cup odr, no fluor, ns.

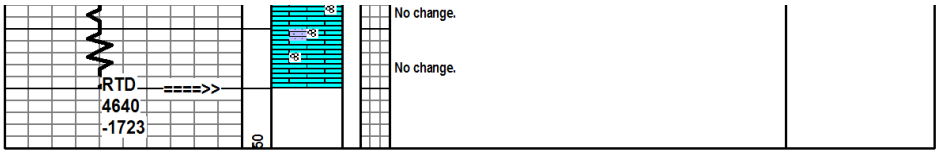
LS-wht, fn xln, uniform, v sandy, vig eff under 10% HCL, nvp, no cup odr, no fluor, ns, SH-bright olive/yellow, waxy.

LS-tan, micro xln, foss, v hard, dense, brittle, decr sandy as above, sm LS-lt tan, v grainy, ool/foss (forams?), no cup odr, ns.

LS- as above, no change.

LS-tan as above, influx wht CHALK, same mix of dense, micro xln LS, foss LS and sandy LS.

LS-crm/tan, mostly sandy as above, decr CHALK, decr LS-tan, no cup odr, no fluor, ns.


RTD
4640
-1723
====>>
50
No change.
No change.

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

Kansas
Corporation Commission

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

June 18, 2013

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

Re: ACO1
API 15-109-21177-00-00
E & E 2-34
SW/4 Sec.34-13S-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