KOLAR Document ID: 1687282

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 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 # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Garet Dinkel
Purchaser: Superior Pipeline

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☐ Oil ☐ WSW ☐ SWD
☑ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

12/27/2022 Spud Date or Recompletion Date
01/09/2023 Date Reached TD
01/31/2023 Completion Date or Recompletion Date

API No.: 15-095-22350-00-00
Spot Description:
NE - SW - NW - NW Sec. 15 Twp. 28 S. R. 8 ☐ East ☑ West
4466 Feet from ☐ North / ☑ South Line of Section
4769 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: Kingman
Lease Name: MALONEY Well #: 1-15
Field Name: Unnamed
Producing Formation: Mississippian
Elevation: Ground: 1534 Kelly Bushing: 1545
Total Vertical Depth: 4460 Plug Back Total Depth: 4381
Amount of Surface Pipe Set and Cemented at: 221 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: 34000 ppm Fluid volume: 800 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Messenger Petroleum
Lease Name: Nicholas 1 License #: 4706
Quarter NE Sec. 20 Twp. 30 S. R. 8 ☐ East ☑ West
County: Kingman Permit #: D27434.0

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: 03/17/2023
☐ **Confidential Release Date:** 03/16/2025
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** David Befort **Date:** 03/20/2023

Page Two

Operator Name: Grand Mesa Operating Company Lease Name: MALONEY Well #: 1-15

Sec. 15 Twp. 28 S. R. 8 ☐ East ☑ West County: Kingman

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 *(Attach Additional Sheets)*	☑ Yes	☐ No	
Samples Sent to Geological Survey	☑ Yes	☐ No	
Cores Taken	☐ Yes	☑ No	
Electric Log Run	☑ Yes	☐ No	
Geologist Report / Mud Logs	☑ Yes	☐ No	

List All E. Logs Run: Attached

☑ 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	221	H325	200	N/A
Production	7.875	5.50	15.5	4436	200H-Long	200	N/A

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	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection: 03/08/2023

Producing Method: ☑ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	118	45		

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)*

PRODUCTION INTERVAL:

Top	Bottom
3948	3960

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	4328	4330	CIBP Cast Iron Bridge Plug	4270	
4	3948	3953			1/25/23 ProStim pumped 500gals 7.5% MCA & 40bbls 2% KCL Biocide
4	3948	3960			1/27/23 Prostim pumped 30bbls 2% KCL Biocide

TUBING RECORD: Size: 2.875 Set At: 3945 Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	MALONEY 1-15
Doc ID	1687282

All Electric Logs Run

DI Log
CD/Neu PE Log
Micro Log
Sonic Log
Dual Rec Cement Bnd Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	MALONEY 1-15
Doc ID	1687282

Tops

Name	Top	Datum
Onaga Sh	2117	-572
Topeka	2550	-1005
Calhoun Sh	2627	-1082
Queen Hill Sh	2812	-1267
Heebner	3055	-1510
Lansing	3825	-1740
Hushpuckney Sh	3677	-2132
Misissippian	3948	-2403
Gilmore City	4041	-2496
Kinderhook Sh	4115	-2570
Woodford Sh	4255	-2710
Viola	4281	-2736
Simpson Sand	4328	-2783
Arbuckle	4437	-2892
LTD	4460	0

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	MALONEY 1-15
Doc ID	1687282

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	221	H325	200	N/A
Production	7.875	5.50	15.5	4436	200H-Long	200	N/A

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:	**Maloney #1-15**
API:	**15-095-22350**
Location:	**NE SW NW NW Sec.15 T28S-R8W**
License Number:	**9855**
Region:	**Kansas**
Spud Date:	**12/27/2022**
Drilling Completed:	**1/9/2023**
Surface Coordinates:	**4466' FSL 4769' FEL**
	Lat: 37.615780 Lng: -98.188432 (NAD 1927)
Bottom Hole Coordinates:	**(Same)**
Ground Elevation (ft):	**1534**
K.B. Elevation (ft):	**1545**
Logged Interval (ft):	**1750** **To: 4460**
Total Depth (ft):	**4460**
Formation:	**Arbuckle**
Type of Drilling Fluid:	**Waterbased Chemical Mud**

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

OPERATOR

Company: Grand Mesa Operating Company
Address: 1700 North Waterfront Parkway
Building #600
Wichita, Kansas 67206

GEOLOGIST

Name: Garet Dinkel
Company: Grand Mesa Operating Company
Address: 1700 North Waterfront Parkway
Building #600
Wichita, Kansas 67206

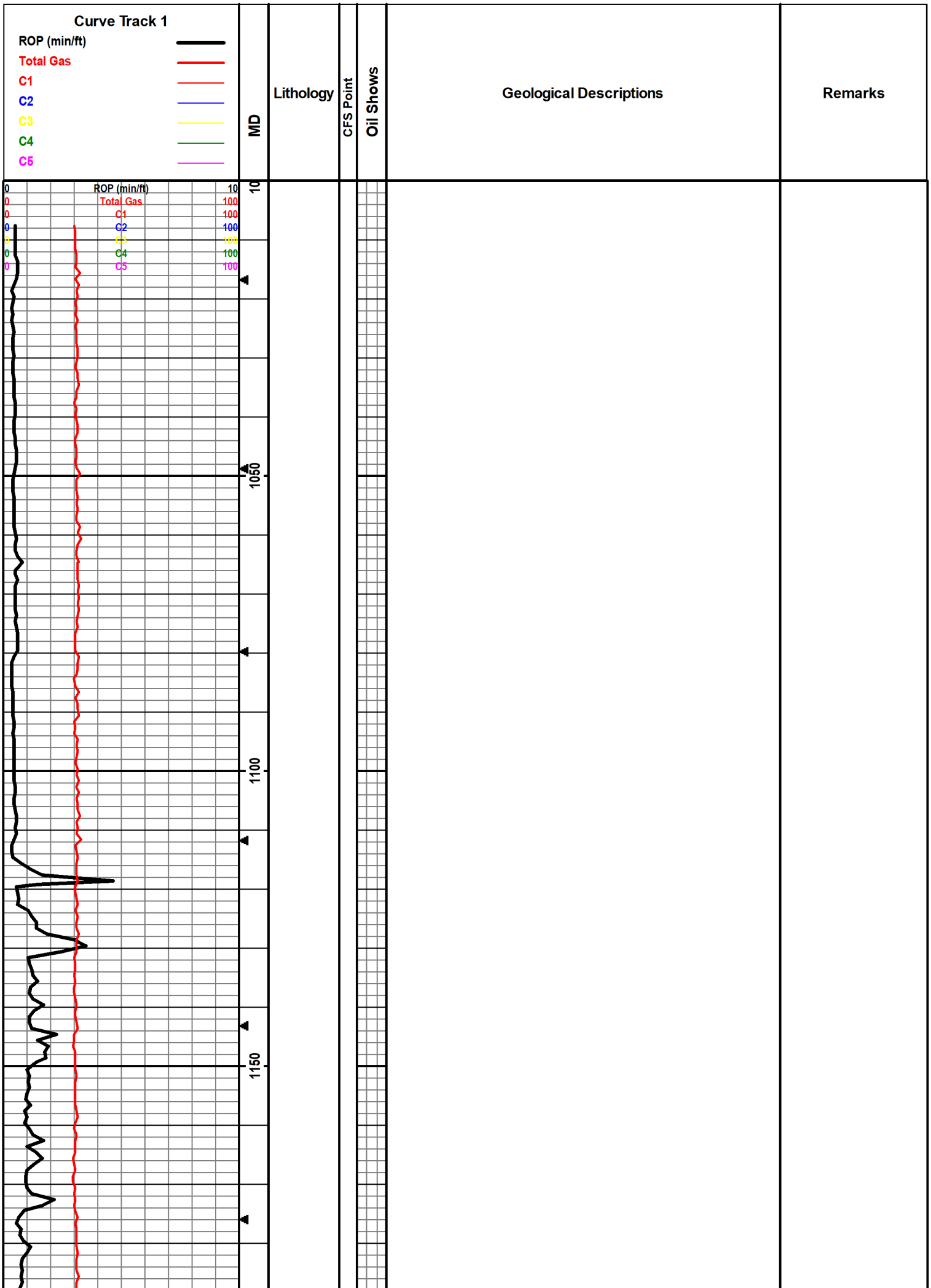
COMMENTS

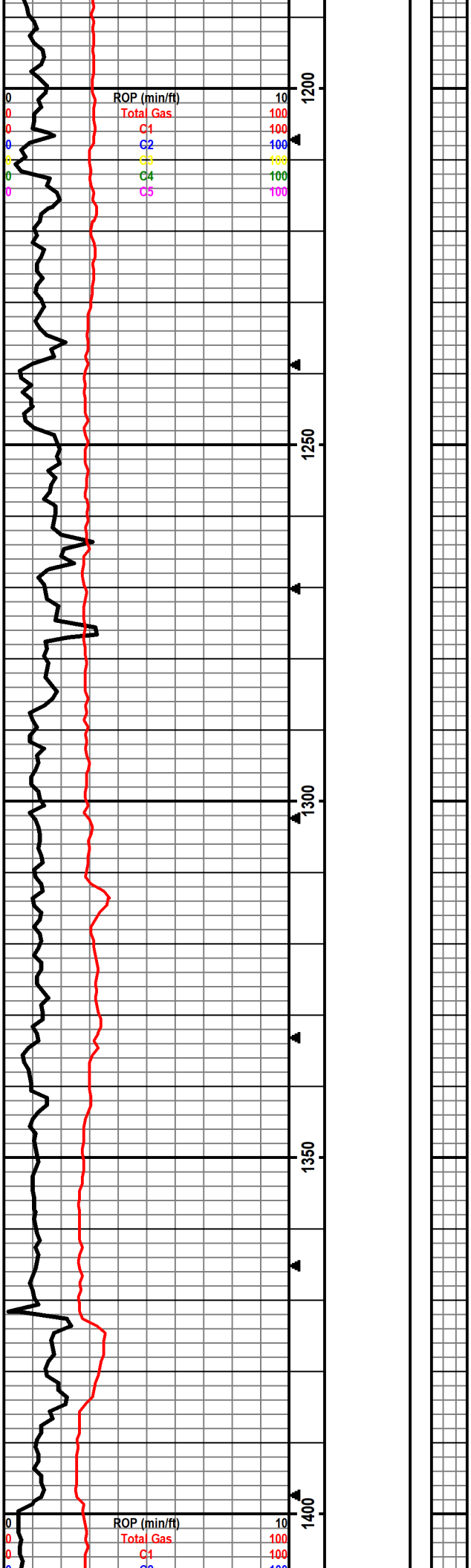
Due to the favorable thickness of Mississippian chert and supported DST results of DST #2 and #3, It was decided by all parties to run 5-1/2in. production casing to further test the Maloney #1-15.

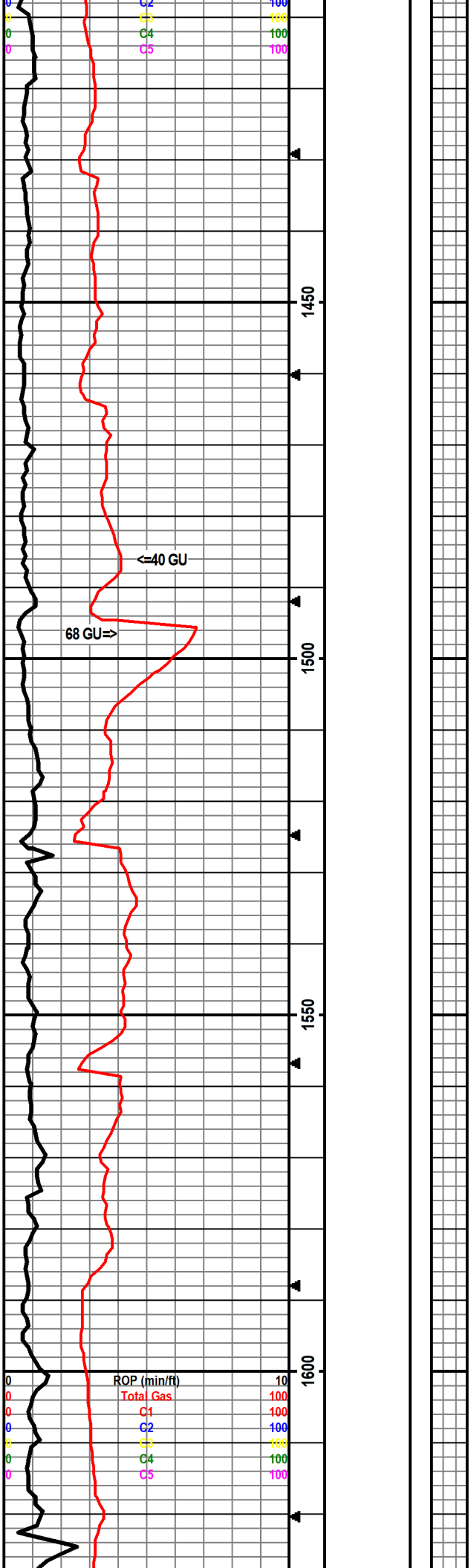
Respectfully Submitted,
Garet Dinkel

ROCK TYPES

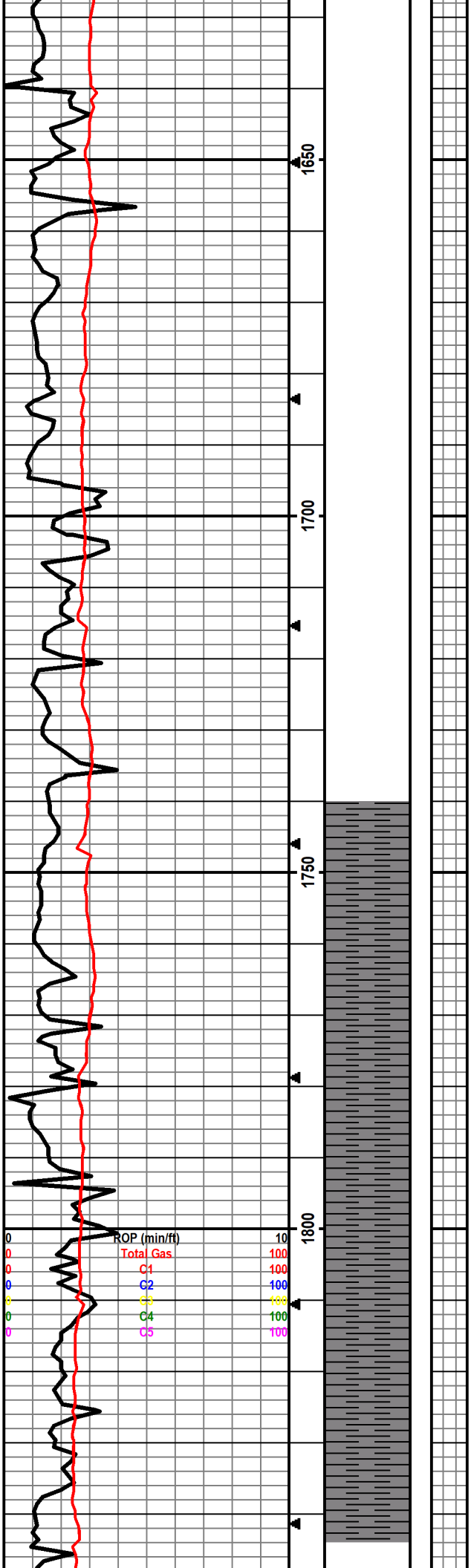
- Anhy
- Cht
- Coal
- Congl
- Dol
- Gyp
- Lmst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Sdy dolo
- Silty dolo
- Shy dolo
- Shaly ls


Curve Track 1
ROP (min/ft)
Total Gas
C1
C2
C3
C4
C5
MD
Lithology
CFS Point
Oil Shows
Geological Descriptions
Remarks
0
ROP (min/ft)
10
0
Total Gas
100
0
C1
100
0
C2
100
0
C3
100
0
C4
100
0
C5
100
1050
1100
1150


0
ROP (min/ft)
10
0
Total Gas
100
0
C1
100
0
C2
100
0
C3
100
0
C4
100
0
C5
100
1200
1250
1300
1350
1400
0
ROP (min/ft)
10
0
Total Gas
100
0
C1
100



*Gas Kick- 28 G.U. Over Background



Begin 10ft Samples at 1750ft

Sh-grn-gry, dense waxy, no vis por. NS. NO. 1750

Predom Sh-AA, Few Ls-crm, micro-xln, earthy, arg. no vis por. NS NO 1760

Sh- grn-gry, dense, waxy few scat pcs Anhy-wht, soft, NS NO 1770

Sh-grn-gry, dense waxy 1780

Predom Sh-AA, w/ LS-crm, micro-xln, dense, v. arg, earthy, no vis por, NS NO 1790

Sh-gry-gen dense waxy 1800

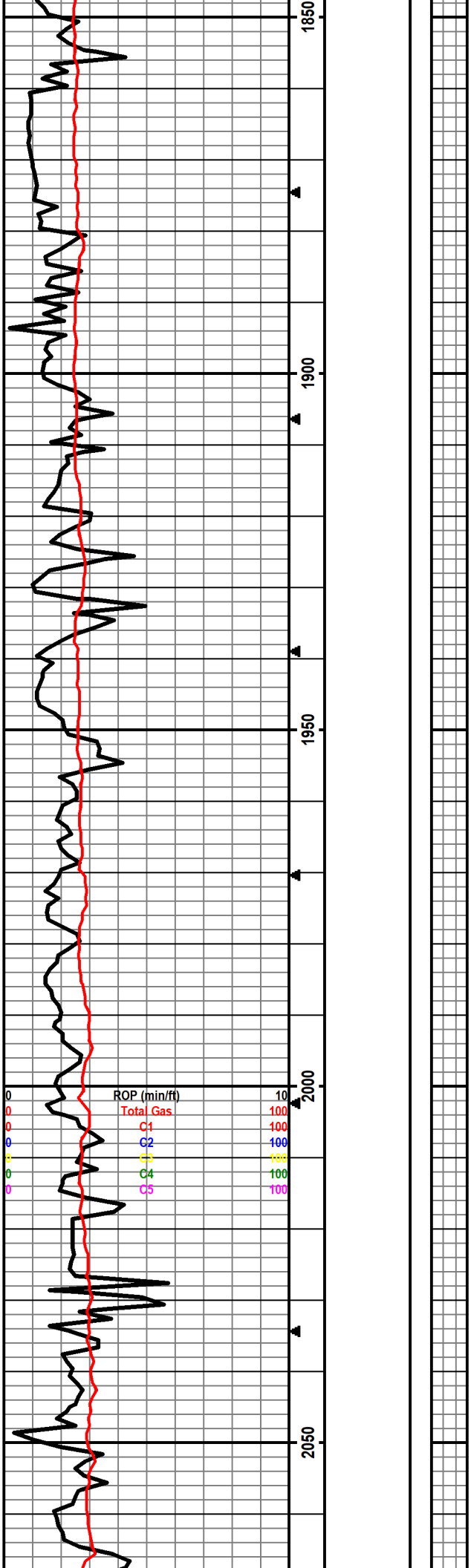
Sh-gry-grn, v. dense, waxy w/ flood LS- tan-brn, micro-xln, v.dense, arg w/red clay, NS NO 1810

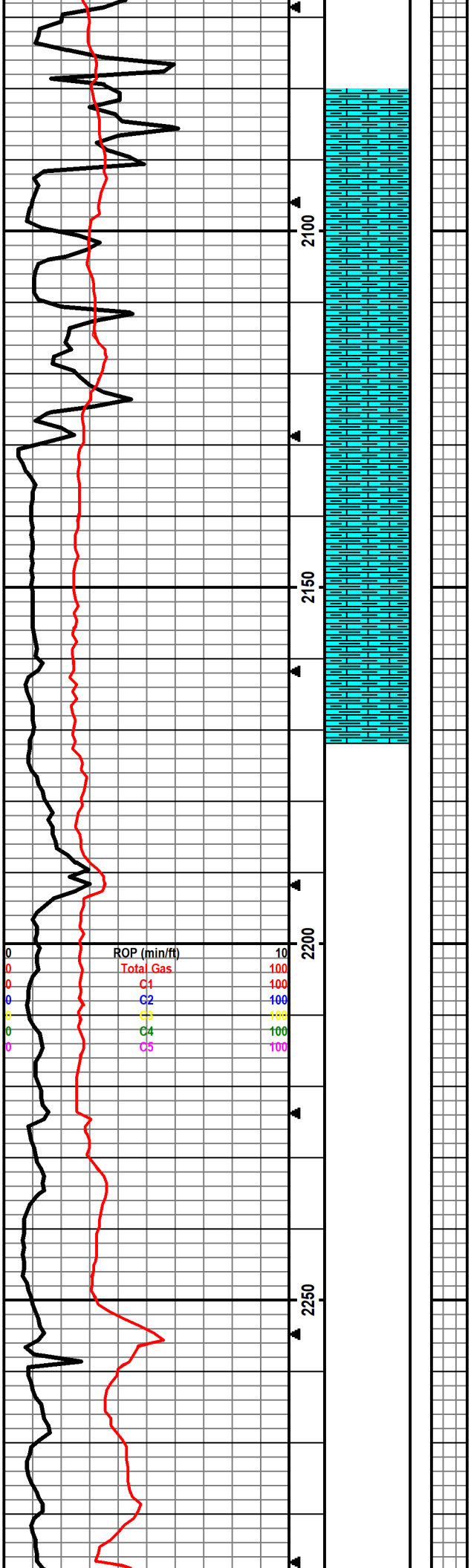
LS-crm-red mott mustard, micro-xln, dense, arg, earthy, sl. sandy, NS NO 1820

LS AA 1830

Sh-gry-blk, dense, waxy, no vis por. NS NO 1840

Sh- AA 1850


1850
1900
1950
2000
2050
0
ROP (min/ft)
10
0
Total Gas
100
0
C1
100
0
C2
100
0
C3
100
0
C4
100
0
C5
100



Begin 10ft Samples 2090ft.

Ls-tan-brn, micro-xln, v. dense, crin, no vis por., NS NS 2090

Ls crm-gry, mott wht, micro-xln, dense, earthy, arg. nov is por., NS NO 2100

Flood sh-grn-gry, dense globular, NS NO 2110

Ls-crm-gry, micro-xln, v.dense earthy, arg. no vis por., NS NO 2120

Ls- AA 2130

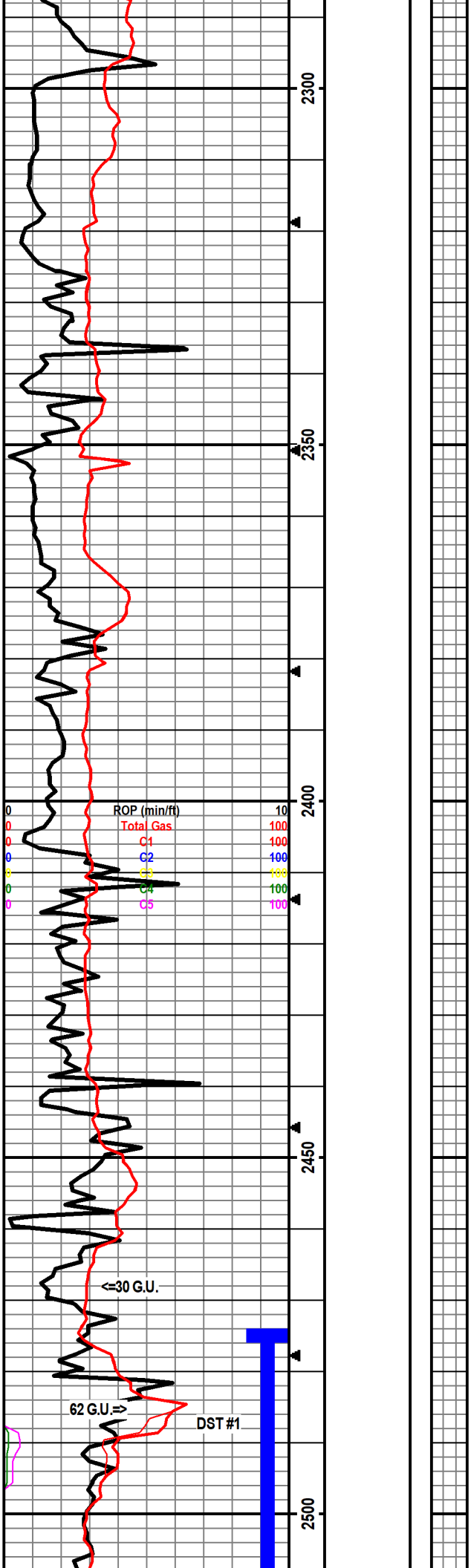
Ls-crm, micro-xln,v. dense, few foss (pelletal) no vis por., NS NO 2140

AA 2150

Flood Sh-wht, soft globular,2160

AA, few pcs LS-crm, micro-xln, dense, sandy, No vis por. NS NO 2170

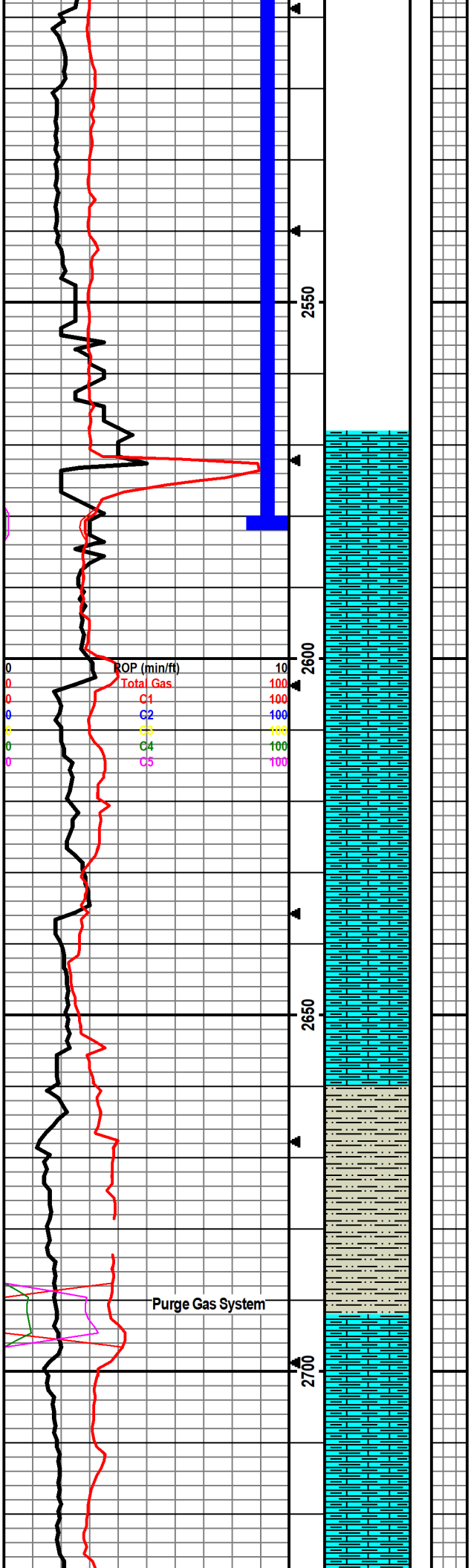
Sh-wht-soft gobluar, few gry-grn, silty, waxy, no vis por NS NO 2180



*Gas Kick- 32 G.U. Over Background

DST #1
2,475ft. - 2,583ft.
30-30-30-30

Rec: 5' Total
5ft. Mud



IFP: 72-72#
ISIP: 366#
FFP: 74-74#
FSIP: 339#
HP: 1342-1325#

Begin 20ft samples at 2580ft.

Ls-crm mott wht, mico-xln, dense, foss (pelletal-ool), earthy, arg., no vis por., NS NO 2580

Ls-tan-crm mott, wht. micro-xln, dense, earthy, few sl. sandy, no vis por., NS NO 2600

Ls-crm, mott wht, micro-xln, dense, arg., earthy, no vis por., NS NO 2620

Ls- crm, micro-xln, dense, sl spar, pelletal, no vis por., NS NO 2640

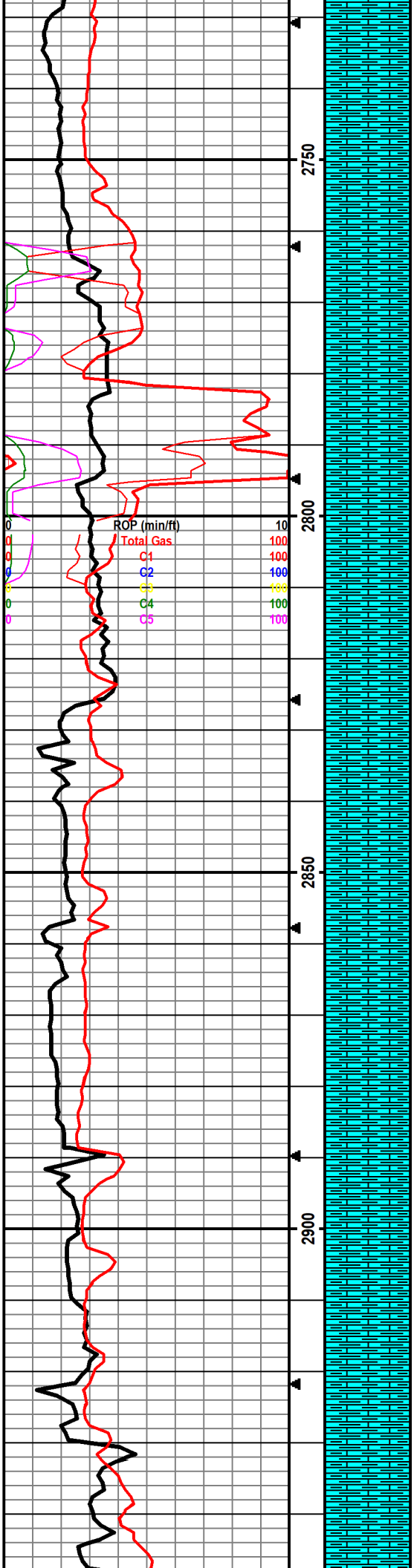
Predom LS- AA w/ few siltstn- gry, dense, no vis por., NS NO 2660

Siltstn-gry, dense waxy, few sl. pyritic., NS NO 2680

Siltstn- gry-grn, dense waxy, few sl. pyritic, NS NO 4700

LS-crm, micro-xln, dense, sl sandy, no vis por., NS NO 2720

Possum belly gate was changed causing mud level to rise high on gas extractor resulting in spike in background. No gas kick



LS-crm-brn, micro-xln, dense, pelletal, sl. sandy, w/ f. pp por., ns no 2740

LS- AA 2760

LS-crm, micro-xln, dense, foss (pelletal-fuss) no vis por., NS NO 2780

LS-wht-crm, mico-xln, dense, sl. chalky, v. few w/ sl pp. por., NS NO NO Flour,

Begin 10ft. Samples at 2800ft.

Ls-crm-brn, micro-xln, dense sl. art, w/ abun. chalk wht. globular, no vis por. NS NO NO Flour. 2810

Ls-crm-gry, micro-xln, sl. dense, sl. chalky, no vis por. NS NO 2820

Predom Ls- AA few dense, sl. cherty, no vis por., NS NO 2830

Ls-crm-tan, micro-xln, dense no vis por., NS NO 2840

Flood Siltstn-gry, dense waxy, few Ls-crm mott brn, v. soft, earhy, NO vis por., NS NO 2850

Ls-crm, mott brn, micro-xln, dense, arg, no vis por., NS NO 2860

LS AA 2870

Predom Ls crm, micro-xln, dense, sl. sparry, no vis por., w/ flood Sh-gry-blk, dense waxy,NS NO 2880

Flood Ls- crm mott brn, micro-xln, dense, earthy, arg. sl sparry in some, few w/ v. sl pp por, NS NO 2890

Ls crm, micro-xln, dense, sl. sparry, no vis por., NS NO 2900

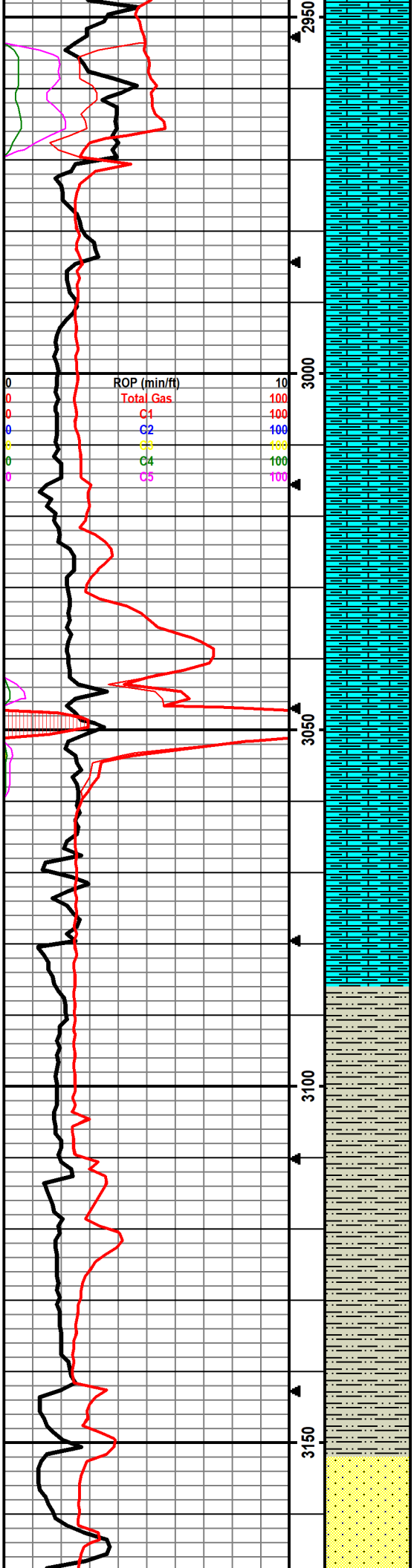
Ls- wht-crm, micro-xln dense, no vis por., NS NO 2910

LS-crm-tan mico-xln, dense, no vis por., NS no 2920

Predom LS AA, Few-sSiltstn-gry-blk, dense waxy, No vis por., NS NO 2930

Ls- crm-micro-xln, dense, sl. arg, no vis por., NS NO 2940

Ls- AA 2950



Ls-crm-tan, micro-xln, dense, sl. arg, no vis por., NS NO 2960

Ls AA 2970

Ls-crm-tan, micro-xkn, dense, sl sparry, arg, no vis por., NS NO 2980

Predom Ls-AA, w/ few sh- gry-blk dense waxy, no vis por., NS NO 2990

Flood Ls-crm-gry, micro-xln, dense, sl sparry, no vis por., NS NO 3000

Ls-crm, micro-xln, sl. dense, chalky, no vis por., NS NO 3010

Ls-crm-tan, micro-xln, dense, sl. spary, sl. chalky, no vis por., NS NO 3020

Ls- AA 3030

Ls- crm-wht, micro-xln, dense, sl chalky, no vis por., NS NO 3040

Ls-crm-tan, micro-xln, dense, few sl. sparry, no vis por., NS NO 3050

Heebner Shale 3,046ft (-1501)

Flood Sh-blk, dense carb, no vis por., NS NO 3060

Ls-tan, brn, micro-xln, dense sl. sandy w/ SH-blk, AA no vis por., NS NO 3070

Ls-tan-brn, micro-xln, dense, sl. sandy, sl. arg, no vis por., NS NO 3080

Ls-crm mott brn, micro-xln, dense, sl. spary, arg, no vis por., NS NO 3090

Flood Sh- blk, dene sl. carb, w/ silstn-gry-grn dense waxy, no vis por., NS NO 3100

Flood sh-gry-grn, dense waxy 3110

AA 3120

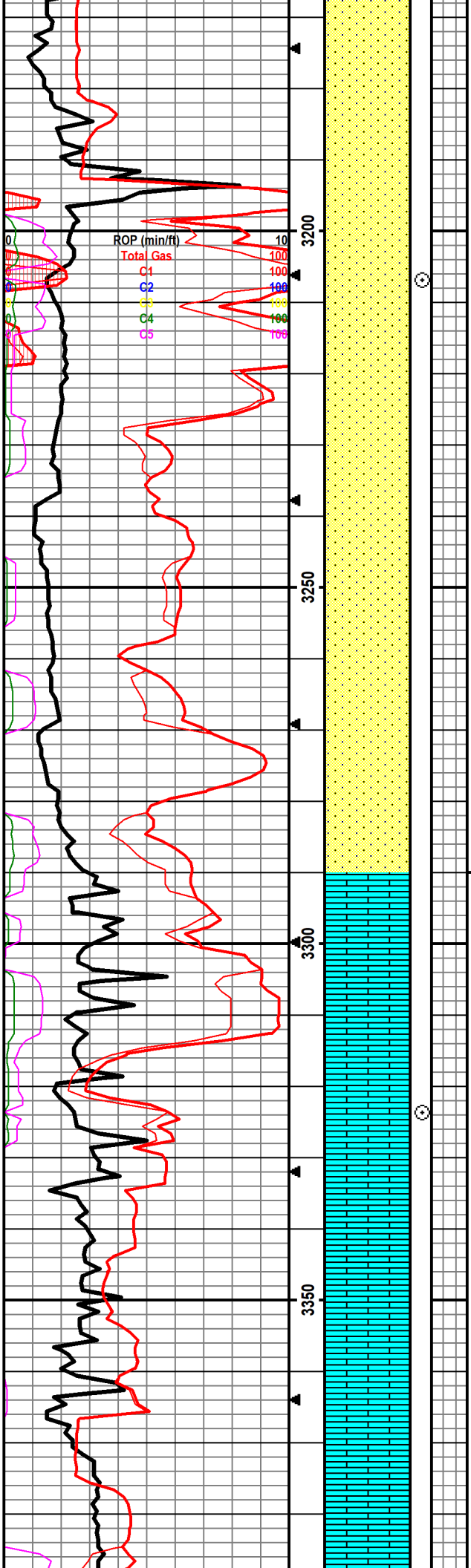
Sh-gry-grn, dense waxy, few silty soft, no vis por. NS NO 3130

Sh- AA 3140

Siltstn; gry-grn, soft globular, NS NO 3150

Predom Siltstn AA, Few clust SS-grn-trans, dense w. cmted, w. sorted, No vis por., NS NO 3160

Flood, SS-gry-grn, dense, w. cmted, w/sorted, pyricit in some, no vis por., NS NO 3170



SS AA 3180

SS-crm-gry, dense, w.cmtd, w.sorted, rnded, pyritic in some, no vis por. NS NO 3190

SS - AA NS NO 3200
SS-gry-grn, w. cmted, sorted, friable, no vis por. NS NO 3207 Stop

SS-gry-grn, w. cmted, sorted, subrnded, frisable, no vis por., NS NO NO Flour 3707 30 min 3220

CFS 3207ft Stop/30/60

SS- AA, abun. lithic frags, micacious, pyritic, NS NO NO flour 3707 60 min

SS-gry- grn, sl. friable, AA NS NO 3720

SS- AA 3730

SS- gry- grn, w. cmted, sorted, sub-rnded, dense, no vis por., micacious, pyritic, NS NO 3740

SS- AA 3750

SS- AA, few sl. dense friable, no vis por., NS NO 3760

AA -AA 3770

SS-gry-grn, w.cmted, sl dense, friable, w. sorted, w. rnded, micacious, pyritic, no vis por., NS NO 3780

SS- AA 3790

Lansing 3,290ft. (-1745)

Predom SS: AA Few Ls-crm, micro-xln, dense, sparry, no vis por., 3300 NS NO

Ls-crm-tan, micro-xln, dense, few pcs foss (ool) hvy re-xln spar, no vis 3310 por., NS NO

Ls-crm-tan, micro-xln, dense, sparry, no vis por., NS NO 3323 Stop

Ls- tan-brn, micro-xln, v.dense, foss (pelletal-ool) hvy re-xln spar., sl arg, no vis por., NS NO 3323 30min

CFS 3323ft. 30/60min

3323 60min

Ls- crm-brn, micro-xln v. dense, sparry, no vis por., NS NO 3340

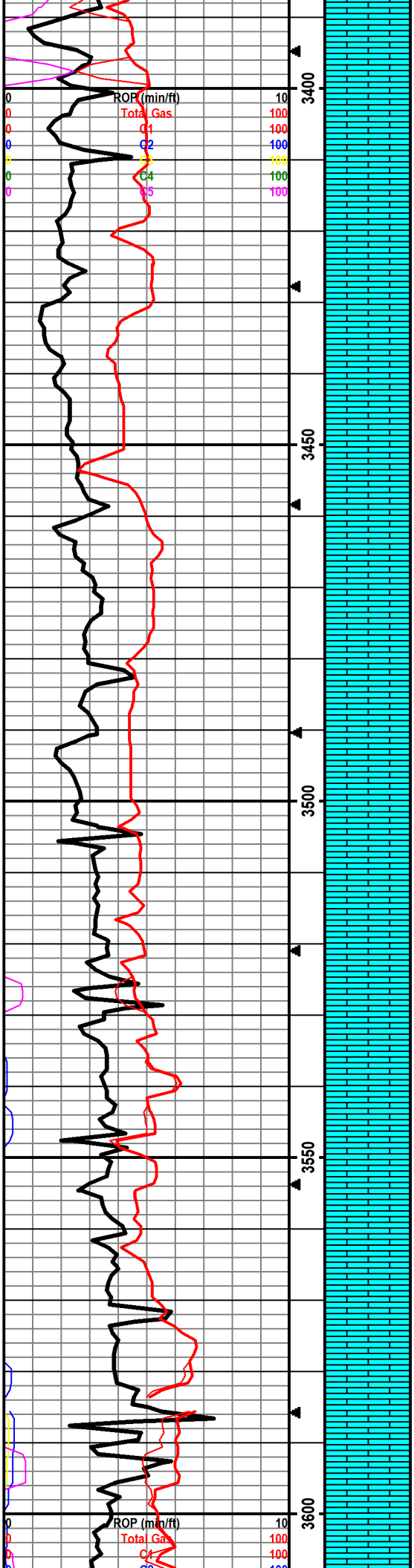
Predom Ls- crm, micro-xln dense, few soft sl. chalky, no vis por., NS NO 3350

Ls- crm, micro-xln, dense, few sl foss (ool) w/ hvy rexln spar. w/ Sh-gry blk dense waxy no vis por., NS NO 3360

Ls- crm, micro-xln dense, sl. sparry on edges w/ sl. inter-xln por. NS NO 3370

Ls crm-tan, micro-xln, dense, sl. chalky, no vis por., NS NO 3380

Ls-crm-gry, micro-xln, dense, no vis por., NS N O 3390



LS-crm-lt. brn, micro-xln, v. dense, sparry, no vis por., few sl. arg. NS NO 3400

Ls lt. brn, micro-xln, v. dense, sparry, no vis por. NS NO 3410

Ls brn mott crm, micro-xln, v. dense sparry, sl. chalky, no vis por., NS NO 3420

LS AA no vis por., NS NO 3430

Predom, Ls- crm-brn, micro-xln dense, few wht soft, sl. chalky, no vis por., NS NO 3440

Ls- brn, mott wht, micro-xln, v.dense, sparry, w/ Sh gry-blk, dense waxy, no vis por., NS NO 3450

AA no vis por., NS NO 3460

Ls-tan-brn, micro-xln, dense, abun chalk wht, globular, no vis por. NS NO-3470

Flood Ls- blk, dense, w/ Sh-dense waxy, no vis por., NS NO 3480

Predom Ls -AA few crm mott brn micro-xln dense, No vis por., NS NO 3490

Ls crm mott blk, micro-xln dense, no vis por. NS NO 3500

Ls-brn, micro-xln, dense, no vis por. NS NO 3510

Ls- crm mott brn, micro-xln, sl. dense, sl. chalky, no vis por., NS NO 3520

Ls- crm-brn, micro-xln, v. dense, sparry, no vis por., NS NO 3530

Ls-crm, micro-xln dense, sl. sparry few sh-gry-blk dense waxy, no vis por, NS NO 3540

Ls- crm, micro-xln, sl. dense, no vis por., NS NO 3550

Ls- crm-tan, micro-xln, dense, sparry, no vis por., NS NO 3560

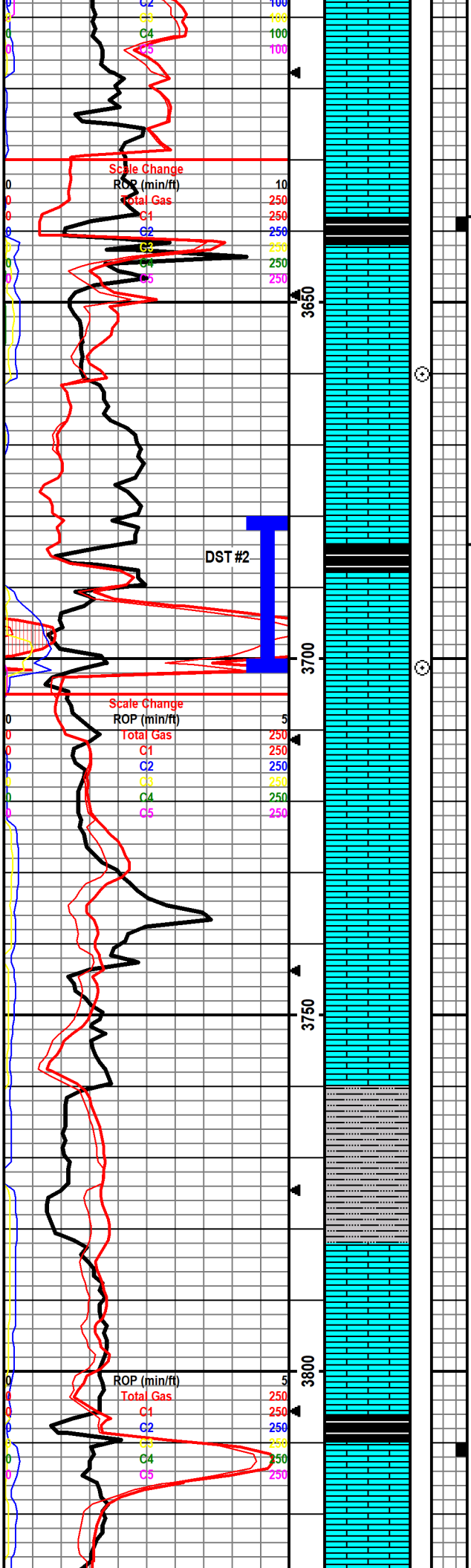
LS- crm, micro-xln v. dense, sl. sparry, w/ few pcs scat chert- gry fresh sharp. no vis por., NS NO 3570

Ls- crm, micro-xln, v. dense, sl. sparry, no vis por., NS NO 3580

LS crm, mico-xln, dense , no vis por., NS NO 3590

Ls crm-tan, mico-xln, v. dense no vis por., NS NO 3600

Ls-crm to brn, micro-xln, dense, no vis por., NS NO 3610



Ls- brn mott crm, micro-xln, dense, no vis por., NS NO 3620

3,638ft Kelly Swivel locked up. Unable to circulate, TOH to replace swivel. Back on bottom 3:53 AM. Take off drilling 4:53 A.M.

Ls- crm, micro-xln, v. dense, no vis por., NS NO 3630

Stark Shale 3,638ft. (-2093)

Flood Sh- blk, dense sl. carb, w/sl. show bubbles, w/ Ls-tan-brn micro-xln, v.dense, sl. pyritic, No vis por., NSFO, Sl. odor. 3650

Ls-tan-brn micro-xln, dense, few sl. pelletal, no vis por., NS NO No Flour 3660

LS-tan, micro-xln, v. dense, few sl. sparry, no vis por., NS NO, No Flour 3660 30min

CFS 3660ft
Stop/30/60

Ls-AA no vis por. NS NO No Flour 3660 60min

Ls- tan, micro-xln, v.dense, no vis por. 3670 NS NO

Ls-brn, micro-xln v.dense, no vis por., NS NO 33680

Ls- AA, no vis por., NS NO 3790

Hushpuckney Shale 3,684ft. (-2139)

Flood Sh- blk, dense, bittle, sl. show bubbles, 3700

Flood Ls-tan, micro-xln, sl. dense, v. foss (ool) w/ f-good inter-ool to ool castics por. even brn stain, sl. SFO, g. SFO on break, stng odor (pungent sulfery) 3% trey flour, bright green 3701 30min

CFS 3701ft
Stop/30/60

PDC in hole following DST #2

Ls- tan, micro-xln, sl. dense, v. foss (ool) AA, NSFO, barren, no flour, f. cup odor. 3730

DST #2
3,360ft. -3,701ft.
30-45-30-45

Rec: 820'Total 820ft. GW (5%G 95%W)

IFP: 114-360#
ISIP: 1151#
FFP: 389-588#
FSIP: 1149#
HP: 1840-1847#

Ls brn mott crm, micro-xln v.dense, no vis por., NS NO 3740

Ls-brn, micro-xln v. dense, sl. sparry, no vis por.NS NO 3750

Ls- AA no vis por., NS NO 3760

Predom Ls AA- 2 pcs sl pelletal, w/ mod inter-xln spar. w/ sl. inter-xln por. NS NO No flour3770

Flood Siltstn -gry-grn, brn, dense sl waxy no vis por., NS NO 3780

Predomo siltstn AA w/ Ls crm-grn micro-xln, sl dense no vis por., NS NO 3790

Siltstn-gry-grn, soft waxy, no vis por., NS NO 3800

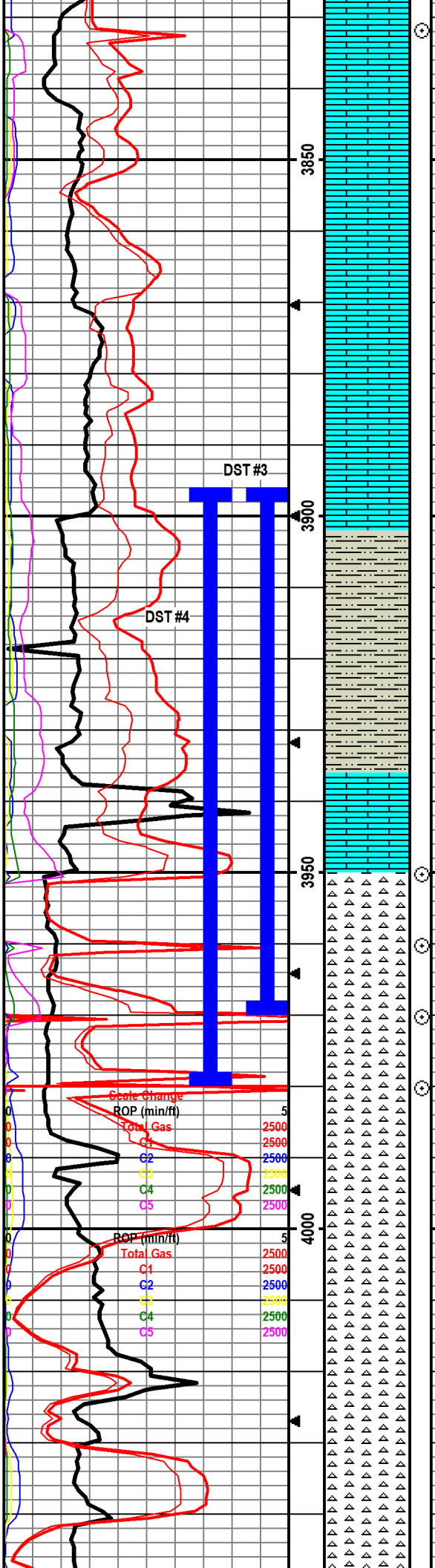
Ls- crm- tan, micro-xln, sl. dense no vis por., NS NO 3810

Ls- crm, micro-xln, sl dense, few brn, v.dense, sparry no vis por. NS NO 3820

Flood Sh-blk fissle, sl. carb, sl. gas bubbles, NS NO 3830

Ls crm mott wht, micro-xln dense, sl. chalky few pelletal, w/ hvy re-xln spar. no vis por., NS NO 3833 30min

CFS 3833
30/60min



Ls AA 3833 60min

Sh-blk, dense fissle, sl, carb, NS NO 3870

Ls-crm mott wht, micro-xln, sl. dense, arg. earthy, no vis por.s NS NO 3880

Predom Ls AA, few pcs Sh-bld dense sl. carb, no vis por NS NO 3890

Ls-tan-brn, micro-xln v.dense, sl. sparry, no vis por. SN NO 3900

3910

AA 3920

Predom Ls AA, w/ Sh, gry dense waxy no vis por.s NS NO 3930

Sh-gry-grn, mottled, maroon, dense, waxy, NS NO 3940

Sh gry-grn, mustard, marron, dense waxy NS NO 3950

Sh-gry mott grn, marroon, soft waxy, few Ls crm, micro-xln, pelletal, dense no vis por., NS NO 3950 30min

Sh- AA 3pcs chert, v.dense, weathered, w/vf. iner-xln por. spoted brn stain, rest Ls-crm brn, micro-xln NSFO NO 3950 60min

Mississippian 3,950ft. (-2405)

Flood chert 10%, wht fresh, few weathered w/ fine inter-xln por. spotty light brn stain NS. v. sl. odor 3960 30min

2% chert-wht, few weathered w/ fine inter-xln por w/ spotty light brn stain, w/ Ls-tan-brn, v.dense, pale green flour NS NO

5% chert-wht mostly weathered w/ fine inner-xln to sl. pp por. few sl vuggy, spotty light brn-blk stain, pale green flour,

10% chert- wht, 10% fresh sharp 50% mostly weathered w/ finer inner-xln por-pp. por spott brn stain, sl. SFO, few 40% v. wethered, hvy blk stain, g. vuggy por, G. SFO w/ gas bubbles, pale green flour. sl. odor. 4010

10 % chert- wht, 20% fresh sharp, 60% mostly weathered w/ fine inner-xln to pp. por, spotty brown stain, 10% v. weathered, vuggy, even brown stain, GSFO, gas bubbles, few barren, pale green flour no odor. 4020

10% chert - wht 80% fresh sharp, w/ inter-xln to sl. pp. por., NS NO 20% sl. weathered, w/ inter-xln to sl. pp por., sl. brn stain, NS NO NO Flour., 4030

10% chert - wht, 90% fresh sharp, no vis por, 10% fresh w/ sl pp-vuggy por., NS NO No flour 4040

Chert- wht fresh sharp, v. dense, no vis por. NS NO no flour. 4050

Chert- wht fresh shar,. v. dense, no vis por., NS NO no flour 4060

DST #3
3,896ft. -3,970ft.
45-45-75-90

Rec: 369'Total
180ft. WM
(30%W 70%M)
189ft. WM
(15%W 85%M)

IFP: 43-186#
ISIP: 1154#
FFP: 192-236#
FSIP: 1140#
HP: 2024-1958#

DST #4
3,892ft.-3,98070ft.
45-45-75-90

Rec: 680'Total
180ft. GWM
(20%G 40%W)
311ft. GWM
(15%G 25%W)
189 GM
(10%G 90%M)

IFP: 40-52#
ISIP: 441#
FFP: 81-80#
FSIP: 495#
HP: 1790-1711#

CFS 3950
Stop 30/60
CFS 3960
Stop/30/60

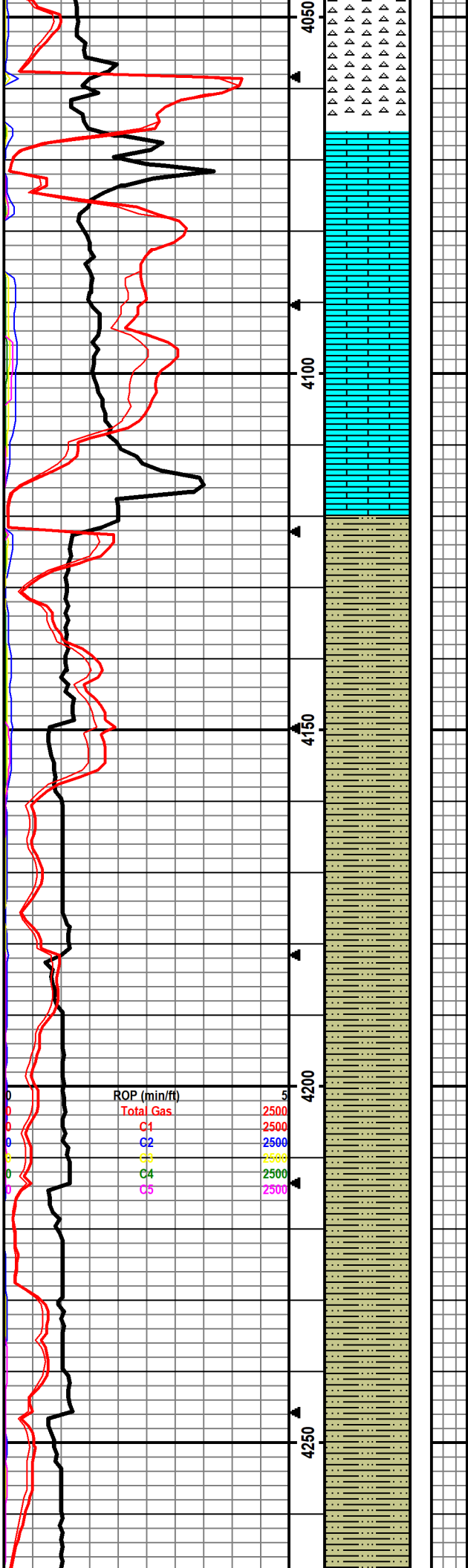
CFS 3970
Stop/30/60

CFS 3980
Stop/30/60

PDC in hole following DST #3
PDC in hole following DST #4

Gas Scale Change

3950-Down Sample Quality Poor. Abun. Sluffing Shale from unconformity and uphole.



Chert- wht, fresh, sharp, v. dense , no vis por., NS NO no flour 4070

Chert-wht-fresh, sharp, v. dense, no vis por., NS NO No Flour. 4080

Gilmore City 4,067ft. (-2522)

Predom 60% Chert AA, W/ LS 40% -crm-gry, tan, micro-xln v. dense, NS NO No flour 4090

Ls- crm-gry,, micro-xln, dense, no vis por, NS NO No flour 4100

Ls- crm mott grn, micro-xln dense, no vis por., NS NO 4110

Flood clean Ls (finally) brn mott crm, micro-xln, sl . dense no vis por., NS NO 4120

Sample Quality Imporved

Predom Ls- AA, few brn, v.dense, sl sparry, no vis por. NS NO 4130

Kinderhook Shale 4,122ft. (-2577)

Sh-gry, gry mott grn, brn, dense waxy, few sl. silty, no vis por. NS NO 4140

Sh- gry-gren, sl. dense, sl. waxy, no vis por., NS NO 4150

AA 4160

Sh-gry-grn, sl. dense, sl. waxy, few silty, dense, pyritic, NS NO 4170

Sh-gry-grn, sl dense sl waxy, silty, NS NO 4180

AA 4190

Sh- gry dense waxy, NS NO 4200

Sh- grn-gry, dense waxy, few silty, pyrticic NS NO 4210

Sh- grn-gry, dense waxy SN NO 4220

Sh-gry, dense waxy NS NO 4230

AA- 4240

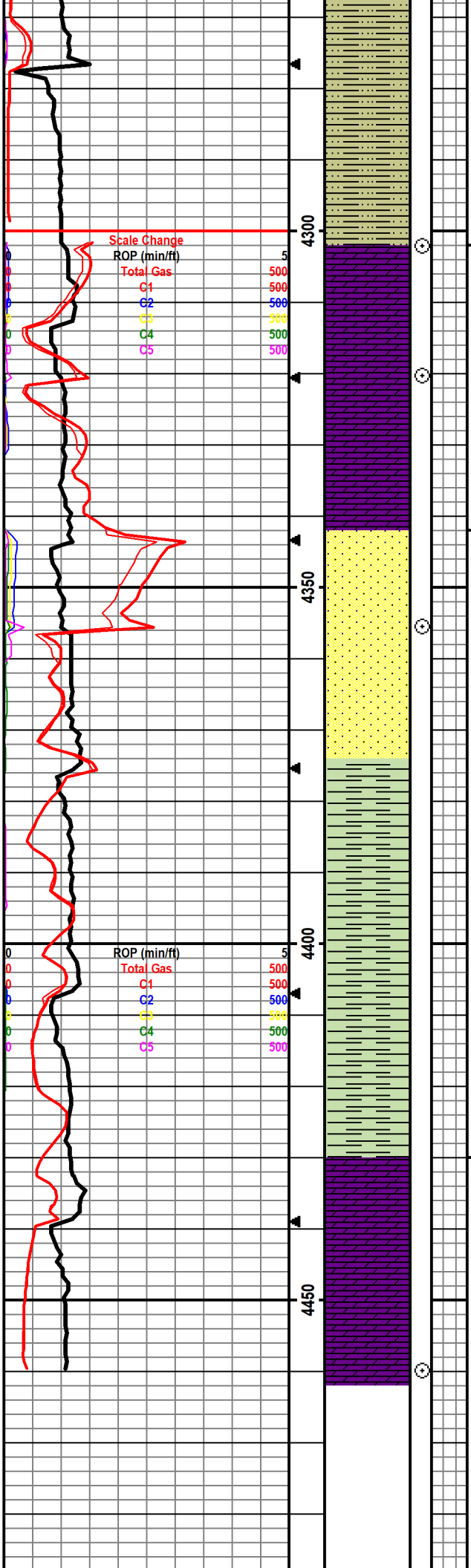
Sh- gry-grn, dense, sl waxy, few silty, pyritic, NS NO 4250

Sh- gry-grn dense, sl. waxy, NS NO4260

Sh- gry-grn, dense, sl. waxy, pyrtic, NS NO 4270

Sh- gry- gren dense sl waxy few silty NS NO 4280

Sh-gry-grn, dense waxy NS NO 4290



Sh-gry-grn, dense waxy NS NO 4290

Sh- gry-grn, dense waxy NS NO 4300

Predom Sh- AA, Few: brn, sl dense, waxy, sl. dense NS NO 4302 30min

Gas Scale Change

CFS 4302
30/60min

Viola 4,302ft. (-2757)

Predom Sh AA w/ few pcs Dolo-brn, dense, v. fine-xln, few surcrosic soft, no vis por., NS NO 4302 60min

Flood Dolo-brn, fine xln, sl. dense, surcrosic, sl. pyritic, no vis por. NS NO No flour 4320 30min

Dolo- brown, fine-xln, sl. dense, surcrosic, NS NO No Flour. 4320 60min

CFS 4320
30/60

Dolo -brown, med-xln, sl. dense surcrosic, f. inter-xln por., NS NO No flour. 4340

Dolo- brown, med-xln, sl dense surcrosic, few limy, dense, sl. chalky, no vis por.s NS NO - 4350

Simpson 4,344ft. (-2799)

SS-Trans-grn, w. cmted, sub-rnded, sorted, sl. dense, glac in some, No vis por., NS NO 4355 30min

SS-Trans-grn, w. cmted, sub-rnded, sorted, sl. dense, glac in some, No vis por., NS NO 4355 60min

CFS 4355
30/60min

SS-AA, few arg., glac, no vis por. NS NO no flour 4390

SS- trans-grn, brn, mod. cmted, sub-rnded, sorted, sl arg. soft, pyritic w/ f. inter-gran por. NS NO no flour w/ Sh-brn-blkm dense fissle, sl. carb, NS NO 4400

Sh- gry-grn dense waxy 4410

Flood Sh- gry-grn, few brn, mottled, dense waxy NS NO 4420

Sh- AA 4430

Sh- gry-grn, dense waxy, few silty-sandy, pyritic NS NO NO flour 4440

AA 4450

Arbuckle 4,430ft. (-2885)

Dolo - crm-brn, v. f-xln, dense, no vis por., NS NO 4460

Dolo- crm-brn, f-xln, sl. dense, surcrosic, no vis por.s NS NO 4460 30min

Dolo-crm-brn, f.-xln, sl. dense, no vi spor. NS NO 4460 60min

CFS 4460
30/60min

RTD 4,460ft. 8:25 A.M. 1/8/2023

LTD 4,490ft. 5:36 P.M 1/8/2023

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206

ATTN: Garet Dinkel

Maloney #1-15

15-28s-8W Kingman,KS

Start Date: 2022.12.31 @ 23:22:00
End Date: 2023.01.01 @ 07:19:47
Job Ticket #: 69271 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2023.01.09 @ 15:18:19

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69271 **DST#: 1**

Test Start: 2022.12.31 @ 23:22:00

GENERAL INFORMATION:

Formation: **Howard/Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:44:47
Time Test Ended: 07:19:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 2475.00 ft (KB) To 2583.00 ft (KB) (TVD)
Total Depth: 2620.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

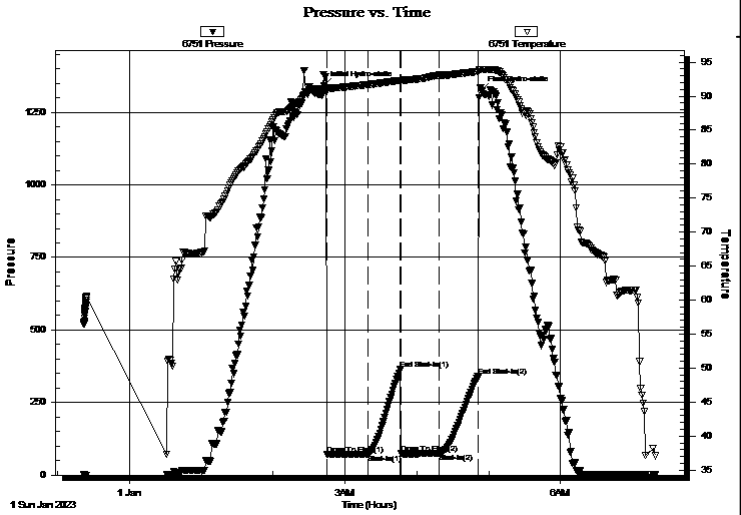
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Inside**

Press@RunDepth: 74.37 psig @ 2477.00 ft (KB)
Start Date: 2022.12.31 End Date: 2023.01.01
Start Time: 23:22:01 End Time: 07:19:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2023.01.01 @ 02:42:17
Time Off Btm: 2023.01.01 @ 04:53:47

TEST COMMENT: IF: 30 min., weak surface blow, 1 inch
ISI: 30 min., no blow back
FF: 30 min., weak surface blow, died 10 min.
FSI: 30 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1342.86	91.14	Initial Hydro-static
3	72.33	90.74	Open To Flow (1)
37	72.83	91.69	Shut-In(1)
64	366.01	92.30	End Shut-In(1)
65	74.05	92.28	Open To Flow (2)
96	74.37	93.07	Shut-In(2)
129	339.71	93.65	End Shut-In(2)
132	1325.36	93.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69271 **DST#: 1**

Test Start: 2022.12.31 @ 23:22:00

GENERAL INFORMATION:

Formation: **Howard/Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:44:47
Time Test Ended: 07:19:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 2475.00 ft (KB) To 2583.00 ft (KB) (TVD)
Total Depth: 2620.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

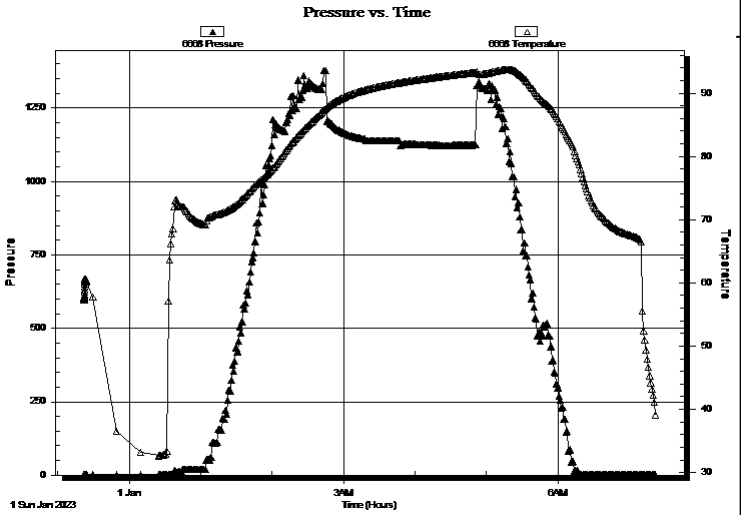
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6668 **Below (Straddle)**

Press@RunDepth: psig @ 2584.00 ft (KB)
Start Date: 2022.12.31 End Date: 2023.01.01
Start Time: 23:22:01 End Time: 07:22:02

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: 30 min., weak surface blow, 1 inch
ISI: 30 min., no blow back
FF: 30 min., weak surface blow, died 10 min.
FSI: 30 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69271 **DST#: 1**

Test Start: 2022.12.31 @ 23:22:00

Tool Information

Drill Pipe:	Length:	2285.00 ft	Diameter:	3.80	inches	Volume:	32.05	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	180.00 ft	Diameter:	2.25	inches	Volume:	0.89	bbl	
						Total Volume:	32.94	bbl	

Drill Pipe Above KB:	17.00 ft
Depth to Top Packer:	2475.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	145.00 ft
Tool Length:	172.00 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:	2000.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	50000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	50000.00 lb
Final	50000.00 lb

Tool Comments: Straddle good

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			2453.00		
Hydraulic tool	5.00			2458.00		
Jars	5.00			2463.00		
Safety Joint	3.00			2466.00		
Packer	5.00			2471.00	27.00	Bottom Of Top Packer
Packer	4.00			2475.00		
Stubb	1.00			2476.00		
Change Over Sub	1.00			2477.00		
Recorder	0.00	8672	Outside	2477.00		
Recorder	0.00	6751	Inside	2477.00		
Drill Pipe	95.00			2572.00		
Change Over Sub	1.00			2573.00		
Pickup sub perf	5.00			2578.00		
Blank Off Sub	1.00			2579.00		
Packer - Shale	4.00			2583.00		
Stubb	1.00			2584.00		
Recorder	0.00	6668	Below	2584.00		
Change Over Sub	1.00			2585.00		
Drill Pipe	31.00			2616.00		
Change Over Sub	1.00			2617.00		
Bullnose	3.00			2620.00	145.00	Bottom Packers & Anchor
Total Tool Length:	**172.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69271 **DST#: 1**

Test Start: 2022.12.31 @ 23:22:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	18.15 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	61000.00 ppm				
Filter Cake:	inches				

Recovery Information

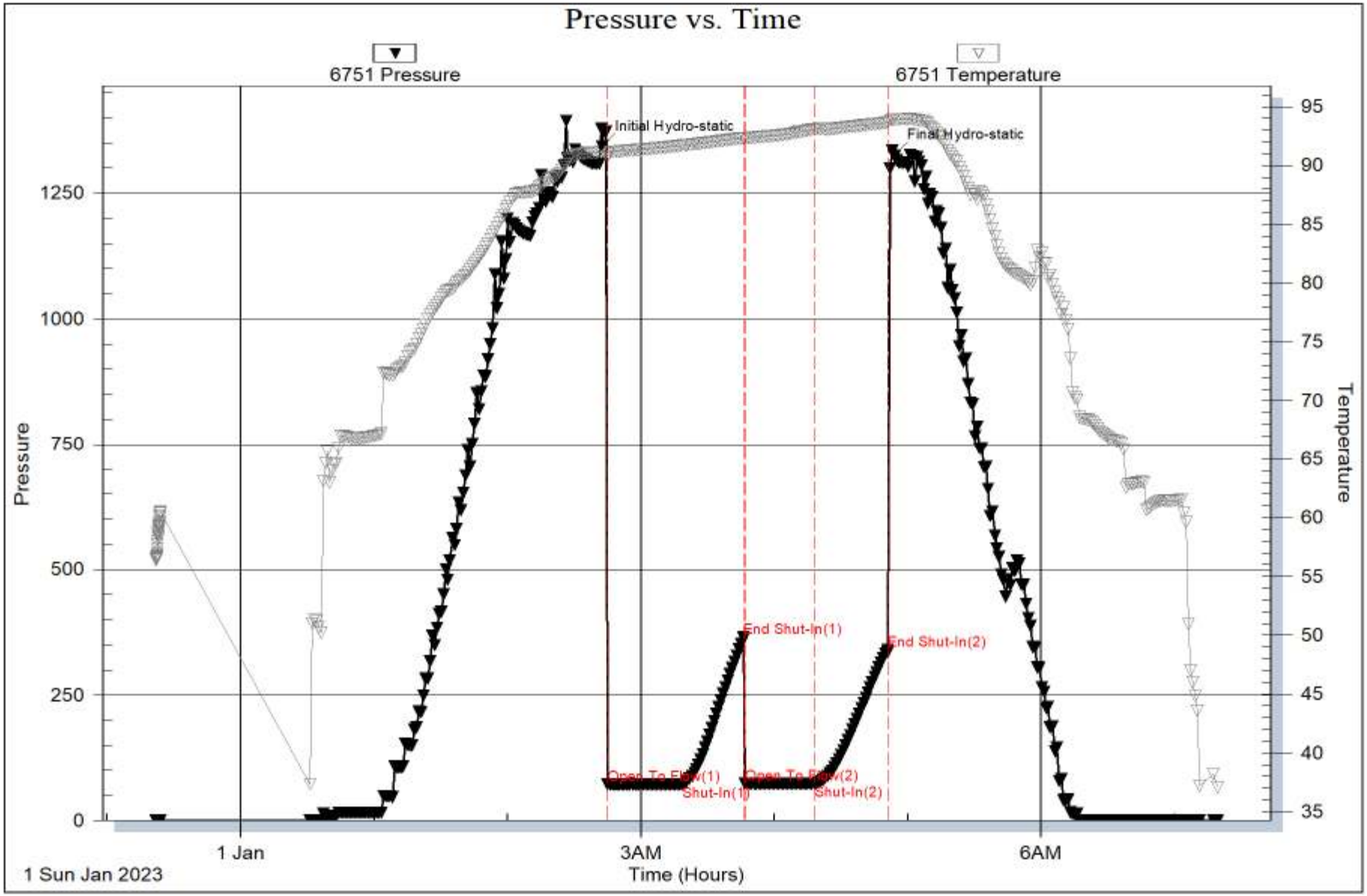
Recovery Table

Length ft	Description	Volume bbl
5.00	100%M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

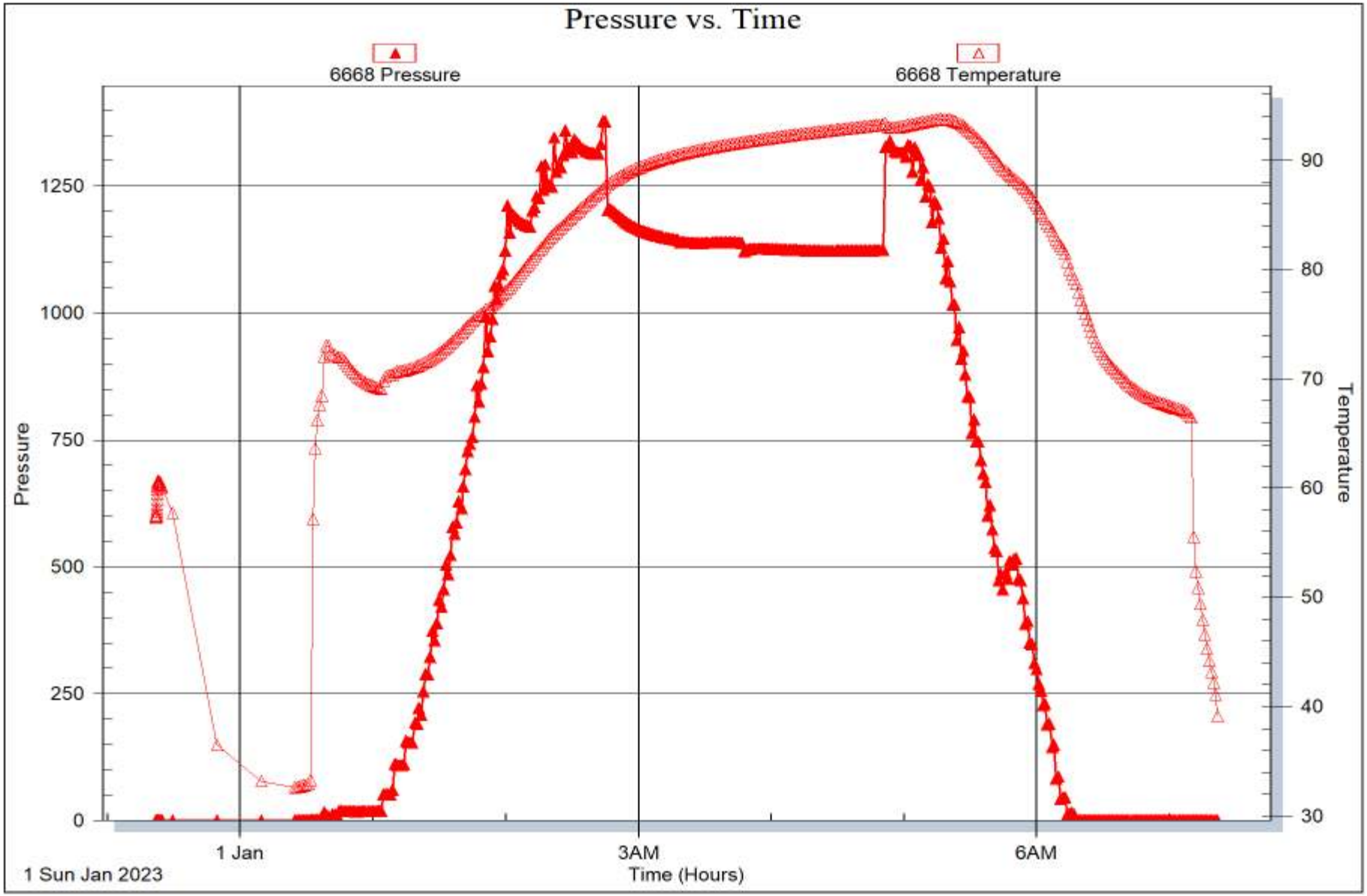
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6751 **Inside** Grand Mesa Operating Co. Maloney #1-15 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 69271 Printed: 2023.01.09 @ 15:18:20

Serial #: 6668 Below (Straddle) Mesa Operating Co. Maloney #1-15 DST Test Number: 1



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206

ATTN: Garet Dinkel

Maloney #1-15

15-28s-8W Kingman,KS

Start Date: 2023.01.04 @ 14:28:13
End Date: 2023.01.08 @ 19:11:35
Job Ticket #: 69272 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2023.01.09 @ 15:17:41

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69272 **DST#: 2**

Test Start: 2023.01.04 @ 14:28:13

GENERAL INFORMATION:

Formation: **Hertha**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:30
Time Test Ended: 19:11:35

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3680.00 ft (KB) To 3701.00 ft (KB) (TVD)
Total Depth: 3701.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

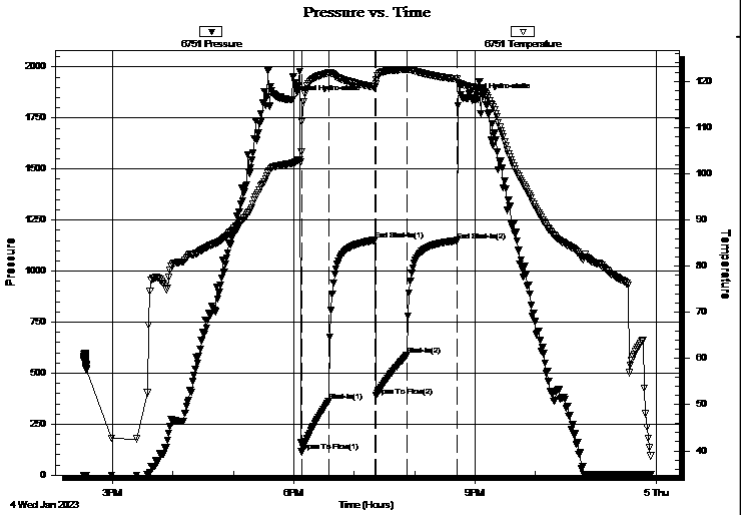
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: 588.85 psig @ 3683.00 ft (KB)
Start Date: 2023.01.04 End Date: 2023.01.08
Start Time: 14:31:14 End Time: 19:14:35

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2023.01.04 @ 17:57:30
Time Off Btm: 2023.01.04 @ 20:48:00

TEST COMMENT: IF: 30 min., BOB 1.5 min., strong building blow , 69 inches
ISI: 45 min., blow back 2 min., 1.1 inches
FF: 30 min., BOB 2 min., strong building blow , 85 inches
FSI: 45 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.40	102.25	Initial Hydro-static
11	114.74	104.71	Open To Flow (1)
38	360.79	121.85	Shut-In(1)
83	1151.69	118.80	End Shut-In(1)
84	388.84	119.46	Open To Flow (2)
115	588.85	122.61	Shut-In(2)
165	1149.57	120.50	End Shut-In(2)
171	1847.78	119.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
820.00	gassy w ater 5%G,95%W	9.86

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69272 **DST#: 2**

Test Start: 2023.01.04 @ 14:28:13

GENERAL INFORMATION:

Formation: **Hertha**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:30
Time Test Ended: 19:11:35

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3680.00 ft (KB) To 3701.00 ft (KB) (TVD)
Total Depth: 3701.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

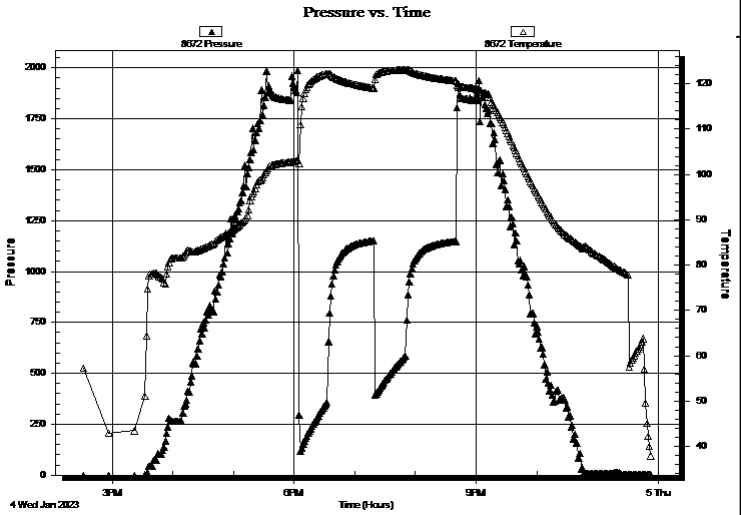
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8672

Press@RunDepth: psig @ ft (KB)
Start Date: 2023.01.04 End Date: 2023.01.08
Start Time: 14:31:52 End Time: 00:58:41

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: 30 min., BOB 1.5 min., strong building blow , 69 inches
ISI: 45 min., blow back 2 min., 1.1 inches
FF: 30 min., BOB 2 min., strong building blow , 85 inches
FSI: 45 min., no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
820.00	gassy w ater 5%G,95%W	9.86

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69272 **DST#: 2**

Test Start: 2023.01.04 @ 14:28:13

Tool Information

Drill Pipe:	Length:	3485.00 ft	Diameter:	3.80	inches	Volume:	48.89	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	180.00 ft	Diameter:	2.25	inches	Volume:	0.89	bbl	
						Total Volume:	49.78	bbl	

Drill Pipe Above KB:	15.00 ft
Depth to Top Packer:	3680.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	21.00 ft
Tool Length:	51.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		70000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	60000.00 lb
	Final	64000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3655.00		
Hydraulic tool	5.00			3660.00		
Isolator Sub	3.00			3663.00		
Jars	5.00			3668.00		
Safety Joint	3.00			3671.00		
Packer	5.00			3676.00	30.00	Bottom Of Top Packer
Packer	4.00			3680.00		
Stubb	1.00			3681.00		
Perforations	2.00			3683.00		
Recorder	0.00	8672	Inside	3683.00		
Recorder	0.00	6751	Outside	3683.00		
Pickup sub perf	5.00			3688.00		
Perforations	10.00			3698.00		
Bullnose	3.00			3701.00	21.00	Bottom Packers & Anchor
Total Tool Length:	**51.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69272 **DST#: 2**

Test Start: 2023.01.04 @ 14:28:13

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	40000 ppm
Viscosity:	61.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4500.00 ppm				
Filter Cake:	inches				

Recovery Information

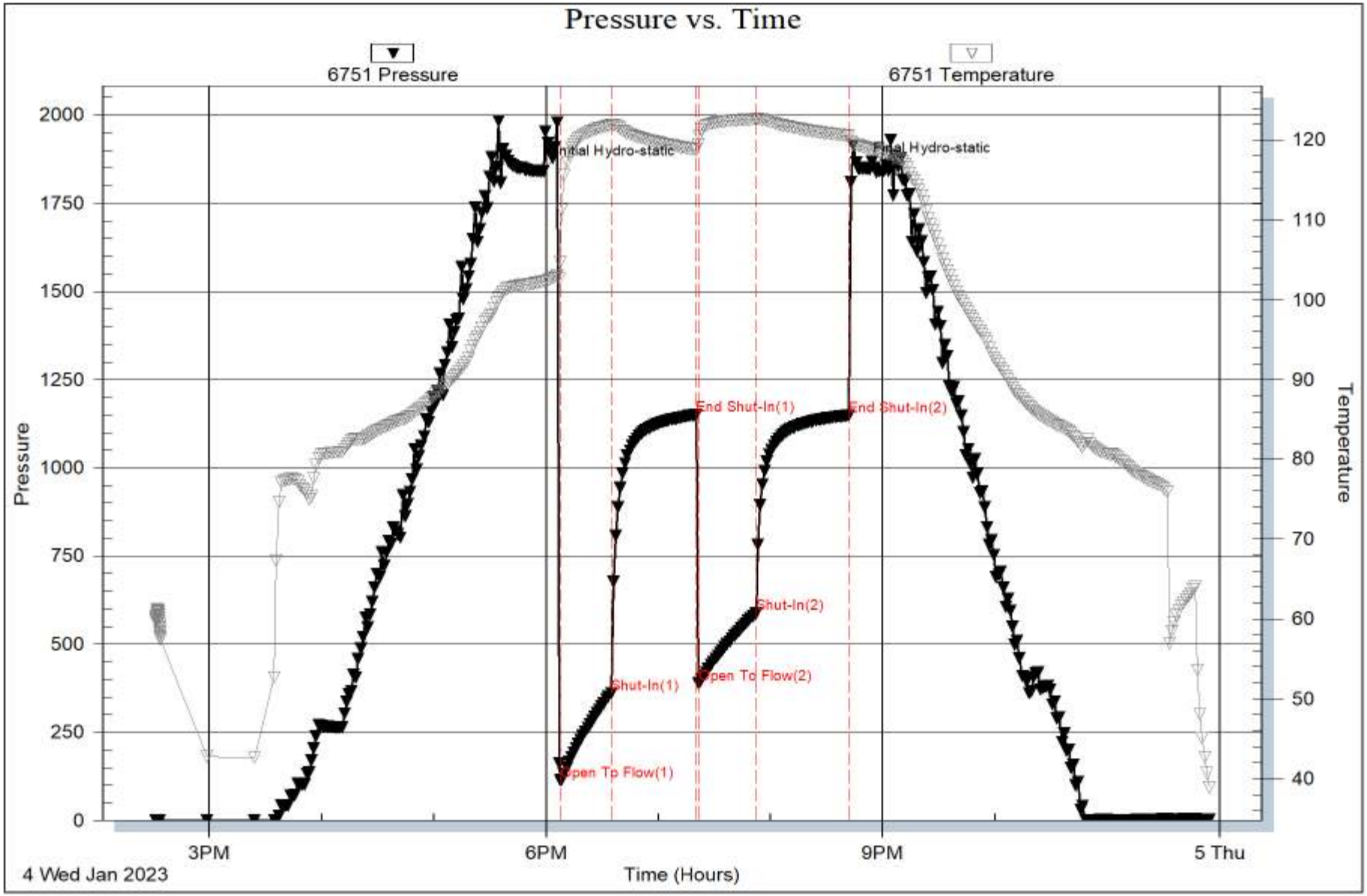
Recovery Table

Length ft	Description	Volume bbl
820.00	gassy w ater 5%G,95%W	9.863

Total Length: 820.00 ft Total Volume: 9.863 bbl

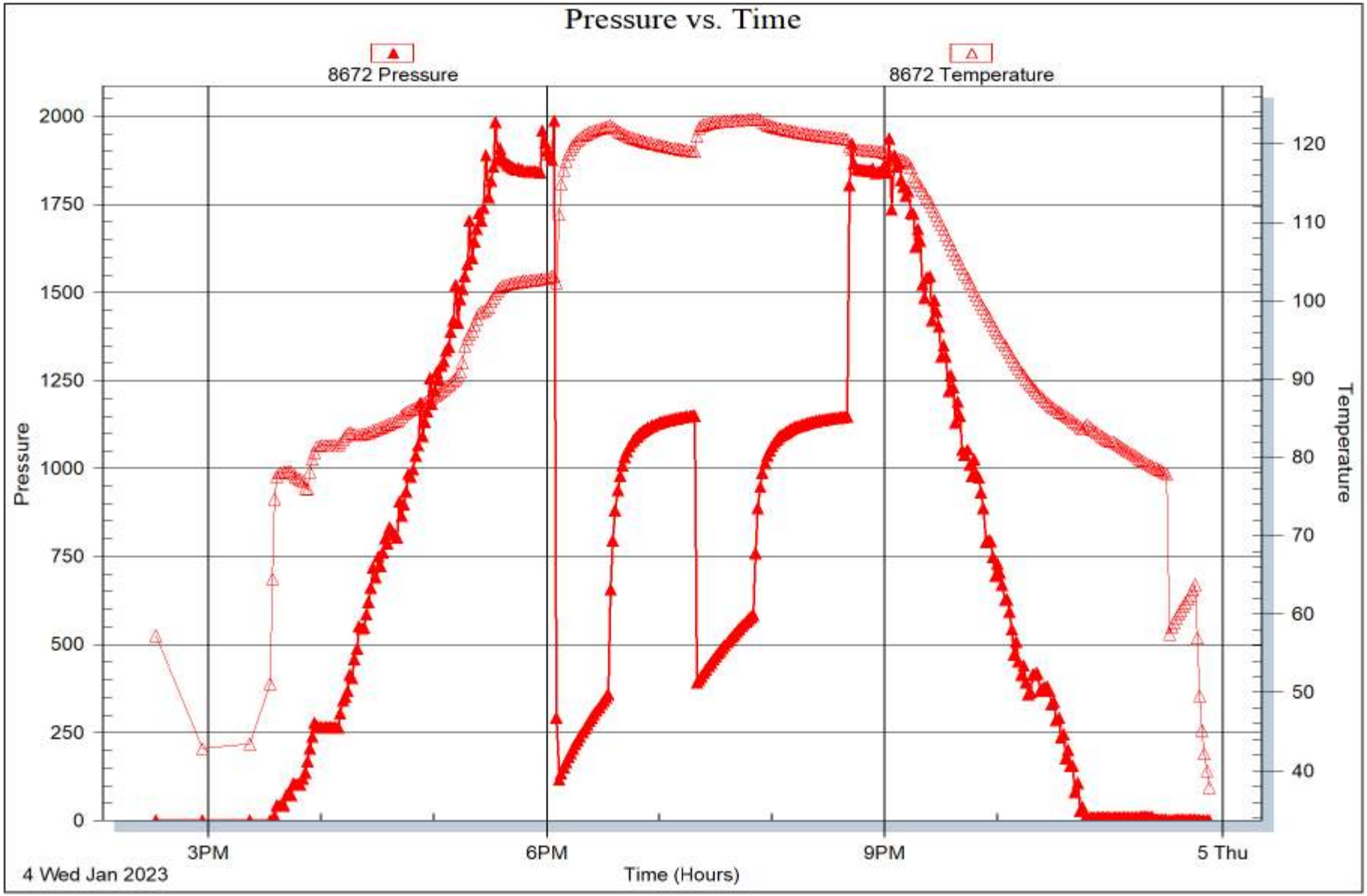
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW=.245@67F=40000ppm

Serial #: 6751 **Outside** Grand Mesa Operating Co. Maloney #1-15 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 69272 Printed: 2023.01.09 @ 15:17:41

Serial #: 8672 | Grand Mesa Operating Co. | Maloney #1-15 | DST Test Number: 2



Trilobite Testing, Inc | Ref. No: 69272 | Printed: 2023.01.09 @ 15:17:41

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206

ATTN: Garet Dinkel

Maloney #1-15

15-28s-8W Kingman,KS

Start Date: 2023.01.06 @ 02:41:00
End Date: 2023.01.11 @ 03:12:22
Job Ticket #: 69273 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2023.01.09 @ 15:17:14

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69273 **DST#: 3**

Test Start: 2023.01.06 @ 02:41:00

GENERAL INFORMATION:

Formation: **Miss.**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:18:07
Time Test Ended: 03:12:22

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3896.00 ft (KB) To 3970.00 ft (KB) (TVD)
Total Depth: 3970.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

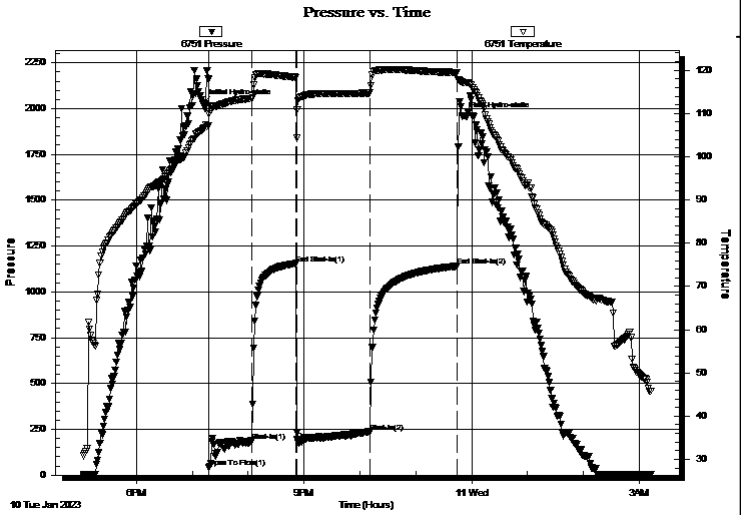
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: 236.08 psig @ 3897.00 ft (KB)
Start Date: 2023.01.10 End Date: 2023.01.11
Start Time: 17:03:23 End Time: 03:12:23

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2023.01.10 @ 19:11:22
Time Off Btm: 2023.01.10 @ 23:49:37

TEST COMMENT: IF: 45 min., BOB 2 min., GTS 10 min., strong steady blow
ISI: 45 min., no blow back
FF: 75 min., BOB GTS ASAO, strong steady blow
FSI: 90 min., blow back 3 min., 4.5 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2024.34	106.42	Initial Hydro-static
7	43.88	109.96	Open To Flow (1)
53	186.26	113.50	Shut-In(1)
100	1154.34	118.34	End Shut-In(1)
102	192.93	110.92	Open To Flow (2)
180	236.08	114.75	Shut-In(2)
273	1140.62	119.47	End Shut-In(2)
279	1958.49	117.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	30%W, 70%M	0.89
189.00	15%W, 85%M	2.65

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	44.00	393.95
Last Gas Rate	0.50	44.00	365.38
Max. Gas Rate	0.50	51.00	409.17

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69273 **DST#: 3**

Test Start: 2023.01.06 @ 02:41:00

Tool Information

Drill Pipe:	Length:	3705.00 ft	Diameter:	3.80	inches	Volume:	51.97	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	180.00 ft	Diameter:	2.25	inches	Volume:	0.89	bbl	
						Total Volume:	52.86	bbl	

Drill Pipe Above KB:	19.00 ft
Depth to Top Packer:	3896.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	74.00 ft
Tool Length:	104.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		85000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	64000.00 lb
	Final	64000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3871.00		
Hydraulic tool	5.00			3876.00		
Isolator Sub	3.00			3879.00		
Jars	5.00			3884.00		
Safety Joint	3.00			3887.00		
Packer	5.00			3892.00	30.00	Bottom Of Top Packer
Packer	4.00			3896.00		
Stubb	1.00			3897.00		
Recorder	0.00	8672	Inside	3897.00		
Recorder	0.00	6751	Outside	3897.00		
Pickup sub perf	5.00			3902.00		
Change Over Sub	1.00			3903.00		
Drill Pipe	63.00			3966.00		
Change Over Sub	1.00			3967.00		
Bullnose	3.00			3970.00	74.00	Bottom Packers & Anchor
Total Tool Length:	**104.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69273 **DST#: 3**

Test Start: 2023.01.06 @ 02:41:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	27000 ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7900.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	30%W, 70%M	0.885
189.00	15%W, 85%M	2.651

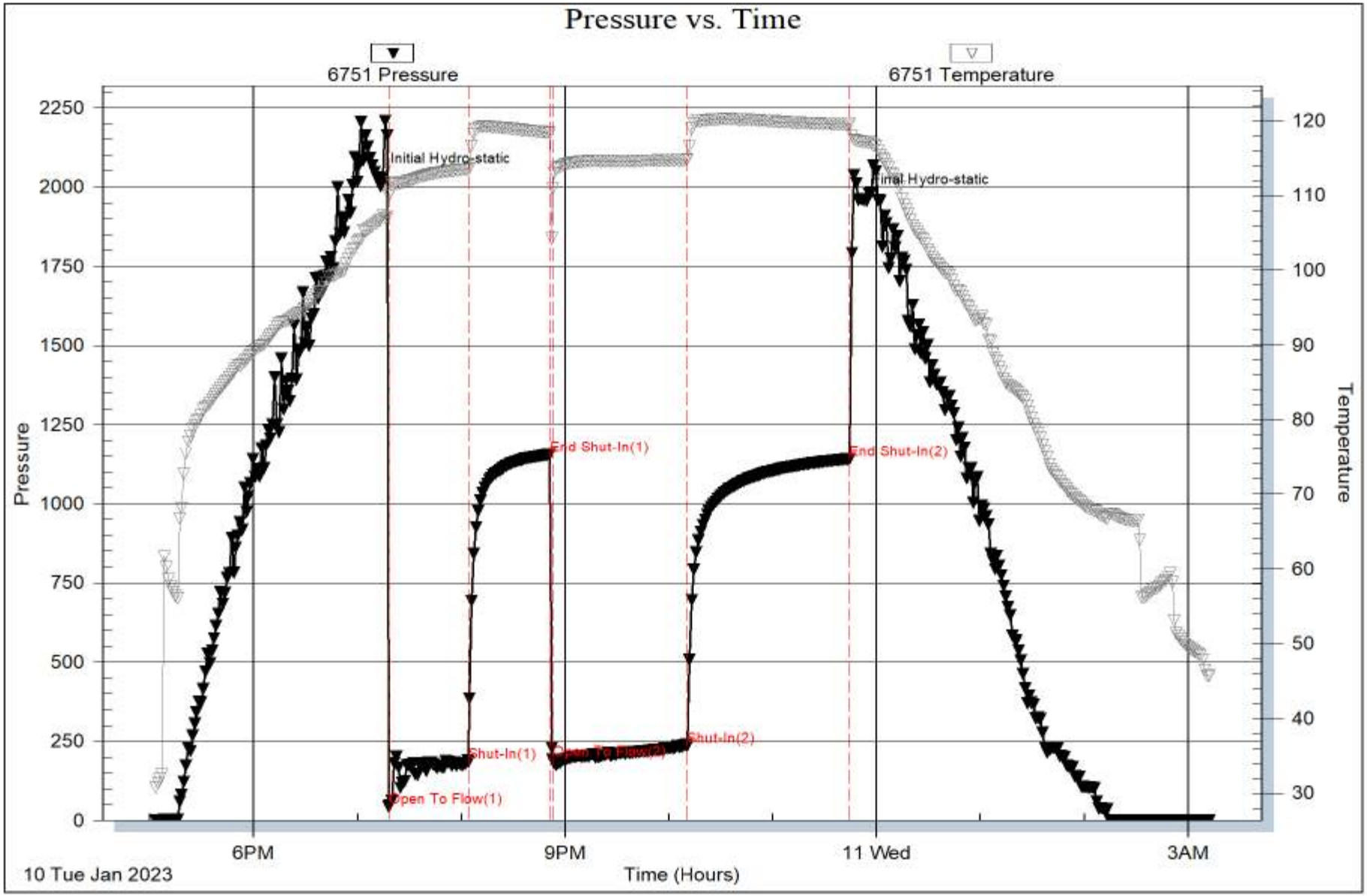
Total Length: 369.00 ft Total Volume: 3.536 bbl

Num Fluid Samples: 0 Num Gas Bombs: 1 Serial #:

Laboratory Name: Laboratory Location: Liberal, KS

Recovery Comments: RW=.303@57F=27000ppm

Serial #: 6751 **Outside** Grand Mesa Operating Co. Maloney #1-15 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 69273 Printed: 2023.01.09 @ 15:17:15

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206

ATTN: Garet Dinkel

Maloney #1-15

15-28s-8W Kingman,KS

Start Date: 2023.01.06 @ 23:30:00
End Date: 2023.01.07 @ 10:39:47
Job Ticket #: 69274 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2023.01.09 @ 15:12:27

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69274 **DST#: 4**

Test Start: 2023.01.06 @ 23:30:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:46:47
Time Test Ended: 10:39:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3892.00 ft (KB) To 3980.00 ft (KB) (TVD)
Total Depth: 3980.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

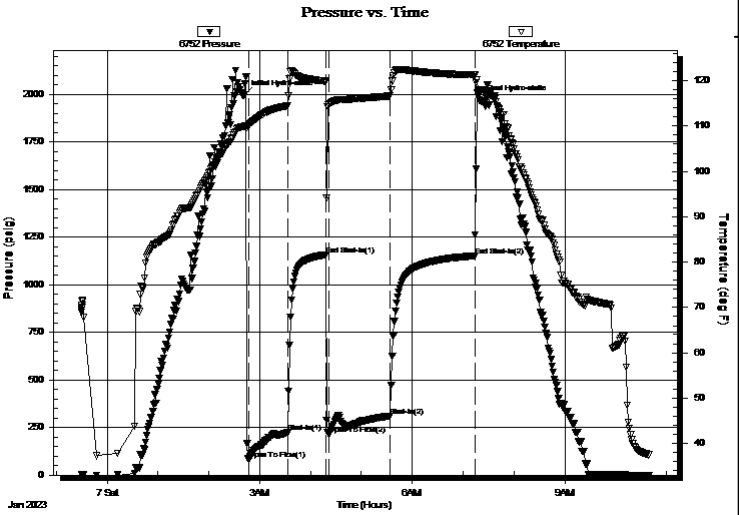
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 311.11 psig @ 3893.00 ft (KB)
Start Date: 2023.01.06 End Date: 2023.01.07
Start Time: 23:30:01 End Time: 10:39:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm: 2023.01.07 @ 02:42:17
Time Off Btm: 2023.01.07 @ 07:19:02

TEST COMMENT: IF: 45 min., BOB 30 sec., GTS 15 min., strong building blow
ISI: 45 min., no blow back
FF: 75 min., BOB GTS ASAO, strong steady blow
FSI: 90 min., blow back 30 sec., BOB 6 min., 122 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1999.20	109.95	Initial Hydro-static
5	83.21	109.89	Open To Flow (1)
52	225.14	114.49	Shut-In(1)
96	1156.97	119.85	End Shut-In(1)
99	215.21	114.66	Open To Flow (2)
172	311.11	116.65	Shut-In(2)
272	1152.32	121.23	End Shut-In(2)
277	1969.81	118.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	gassy w atery mud 20%G,40%W,40%M	0.89
311.00	gassy w atery mud 15%G,25%W,60%M	4.36
189.00	gassy mud 10%G,90%M	2.65

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	31.00	166.31
Last Gas Rate	0.63	17.00	311.64
Max. Gas Rate	0.50	122.00	853.38

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

1700 N Waterfront Pkwy
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69274 **DST#: 4**

Test Start: 2023.01.06 @ 23:30:00

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:46:47
Time Test Ended: 10:39:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Chris Hagman
Unit No: 69

Interval: 3892.00 ft (KB) To 3980.00 ft (KB) (TVD)
Total Depth: 3980.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

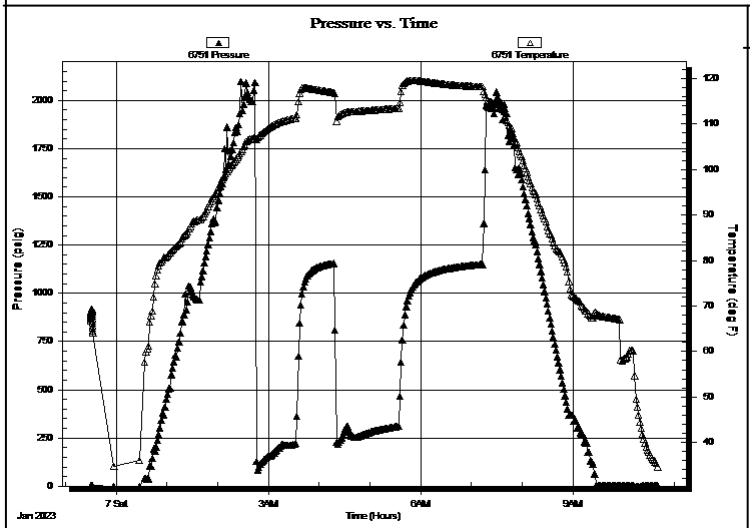
Reference Elevations: 1545.00 ft (KB)
1532.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: psig @ 3893.00 ft (KB)
Start Date: 2023.01.06 End Date: 2023.01.07
Start Time: 23:30:01 End Time: 10:39:47

Capacity: psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: 45 min., BOB 30 sec., GTS 15 min., strong building blow
ISI: 45 min., no blow back
FF: 75 min., BOB GTS ASAO, strong steady blow
FSI: 90 min., blow back 30 sec., BOB 6 min., 122 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
180.00	gassy w atery mud 20%G,40%W,40%M	0.89
311.00	gassy w atery mud 15%G,25%W,60%M	4.36
189.00	gassy mud 10%G,90%M	2.65

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	31.00	166.31
Last Gas Rate	0.63	17.00	311.64
Max. Gas Rate	0.50	122.00	853.38

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69274 **DST#: 4**

Test Start: 2023.01.06 @ 23:30:00

Tool Information

Drill Pipe:	Length:	3705.00 ft	Diameter:	3.80	inches	Volume:	51.97	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	180.00 ft	Diameter:	2.25	inches	Volume:	0.89	bbl	
						Total Volume:	52.86	bbl	

Drill Pipe Above KB:	23.00 ft
Depth to Top Packer:	3892.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	88.00 ft
Tool Length:	118.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		95000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	64000.00 lb
	Final	65000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3867.00		
Hydraulic tool	5.00			3872.00		
Isolator Sub	3.00			3875.00		
Jars	5.00			3880.00		
Safety Joint	3.00			3883.00		
Packer	5.00			3888.00	30.00	Bottom Of Top Packer
Packer	4.00			3892.00		
Stubb	1.00			3893.00		
Recorder	0.00	6752	Inside	3893.00		
Recorder	0.00	6751	Outside	3893.00		
Pickup sub perf	5.00			3898.00		
Perforations	14.00			3912.00		
Change Over Sub	1.00			3913.00		
Drill Pipe	63.00			3976.00		
Change Over Sub	1.00			3977.00		
Bullnose	3.00			3980.00	88.00	Bottom Packers & Anchor
Total Tool Length:	**118.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

1700 N Waterfront Pkw y
Bldg 600
Wichita KS 67206
ATTN: Garet Dinkel

15-28s-8W Kingman,KS

Maloney #1-15

Job Ticket: 69274 **DST#: 4**

Test Start: 2023.01.06 @ 23:30:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	32000 ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7900.00 ppm				
Filter Cake:	inches				

Recovery Information

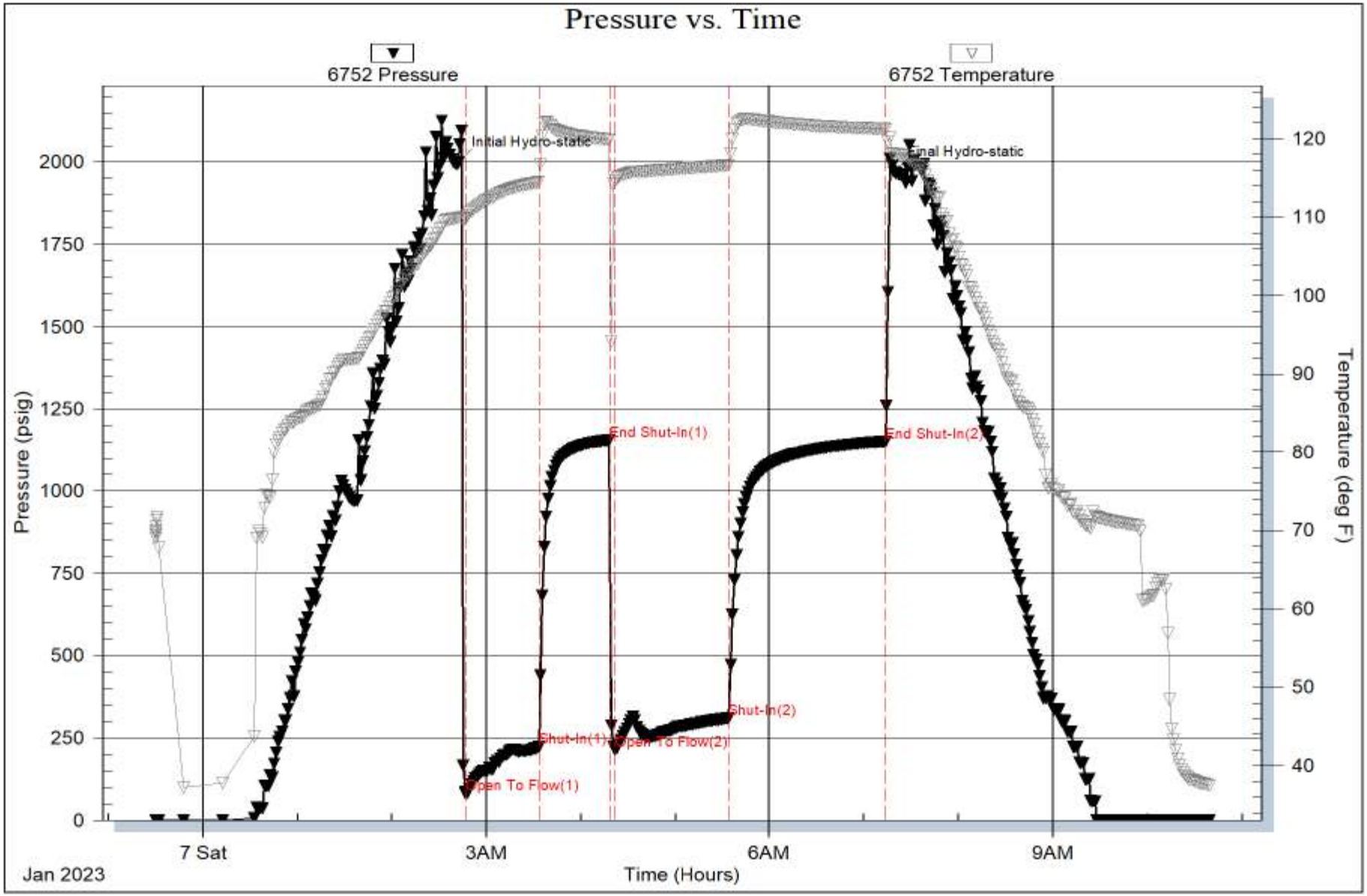
Recovery Table

Length ft	Description	Volume bbl
180.00	gassy w atery mud 20%G,40%W,40%M	0.885
311.00	gassy w atery mud 15%G,25%W,60%M	4.363
189.00	gassy mud 10%G,90%M	2.651

Total Length: 680.00 ft Total Volume: 7.899 bbl

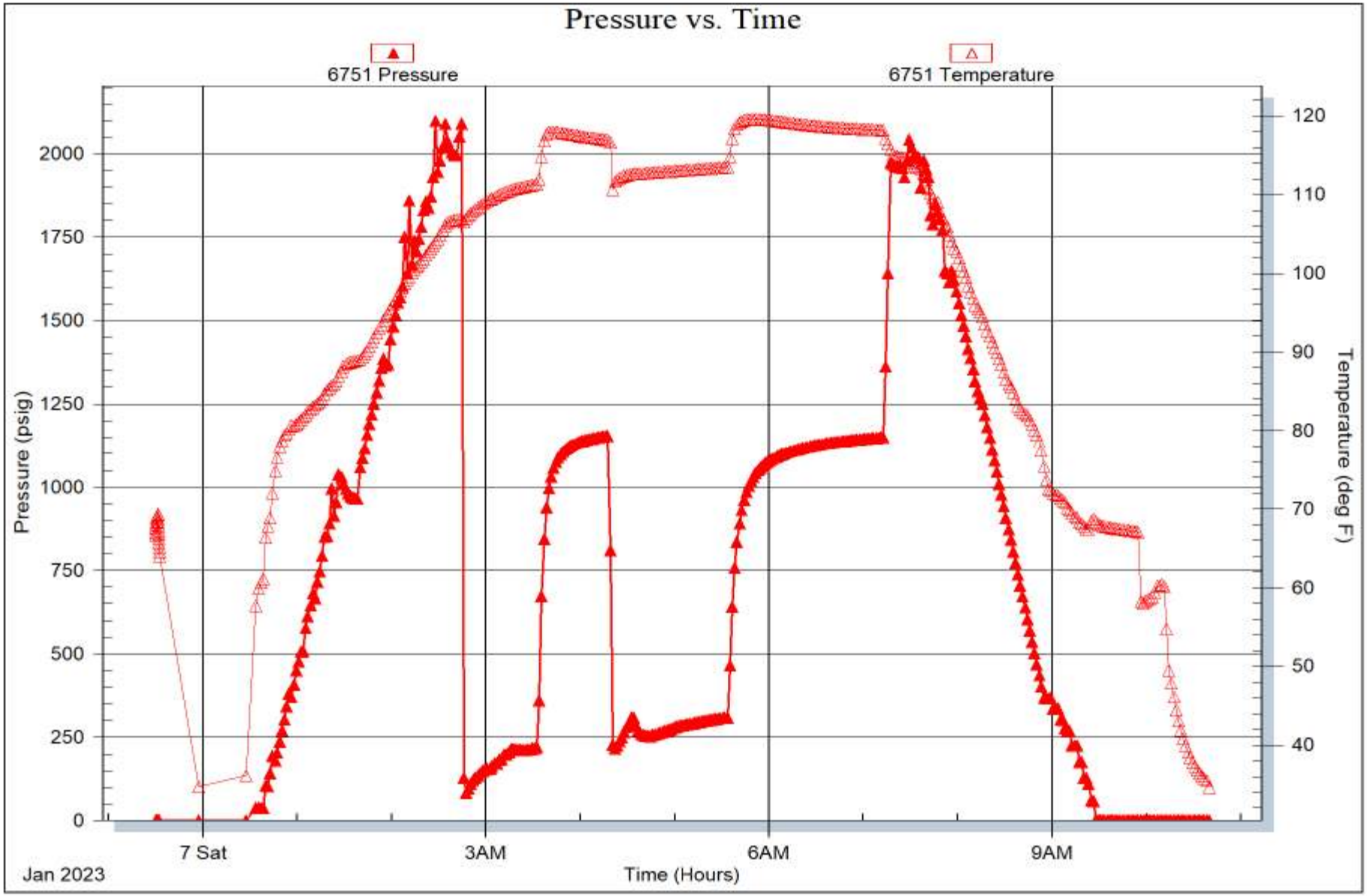
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW=.345@45F=32000ppm

Serial #: 6752 **Inside** Grand Mesa Operating Co. Maloney #1-15 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 69274 Printed: 2023.01.09 @ 15:12:27

Serial #: 6751 **Outside** Grand Mesa Operating Co. Maloney #1-15 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 69274 Printed: 2023.01.09 @ 15:12:27

TRILOBITE TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 69271

Well Name & No. Maloney 1-15 Test No. 1 Date 12-31-22
Company Grand Mesa Operating, CO Elevation 1545 KB 1532 GL
Address
Co. Rep / Geo. Garet Dinkel Rig Murfin #20
Location: Sec. 15 Twp 28 Rge. 8 Co. Kingman State KS

Interval Tested 2475-2583 Zone Tested Howard / Topeka
Anchor Length 108' Drill Pipe Run 2285 Mud Wt. 10.0
Top Packer Depth 2470 Drill Collars Run 180 Vis 57
Bottom Packer Depth 2475 Wt. Pipe Run N.A. WL 18.2
Total Depth 2620 Chlorides 61,000 ppm System LCM 2#

Blow Description IF: 30 min., weak surface blow, 1 inch
ISI: 30 min., no blow back
FF: 30 min., weak surface blow, died 10 min.
FSI: 30 min., no blow back

Rec 5	Feet of Mud	%gas	%oil	%water	100 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 93 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 1343	☒ Test Straddle (good)	T-On Location 2200	
(B) First Initial Flow 72	☒ Jars 300 1800	T-Started 2330	
(C) First Final Flow 73	☒ Safety Joint	T-Open 0250	
(D) Initial Shut-In 366	☐ Circ Sub	T-Pulled 0450	
(E) Second Initial Flow 74	☐ Hourly Standby	T-Out 0730	
(F) Second Final Flow 74	☒ Mileage 70rt 122.50	Comments 2322	
(G) Final Shut-In 340	☐ Sampler		
(H) Final Hydrostatic 1325	☒ Straddle 800	☒ EM Tool good	
	☒ Shale Packer X 1.0 250	☐ Ruined Shale Packer	
Initial Open 30	☐ Extra Packer	☐ Ruined Packer	
Initial Shut-In 30	☐ Extra Recorder	☐ Extra Copies	
Final Flow 30	☐ Day Standby	Sub Total 0	
Final Shut-In 30	☐ Accessibility	Total 3272.50	
	Sub Total 3272.50	MP/DST Disc't	

Approved By ____ Our Representative Chris Hagman

TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601

NO. 69272

Well Name & No. Maloney 1-15 Test No. 2 Date 1-4-2023
Company Grand Mesa Operating Elevation 1545 KB 1532 GL
Address
Co. Rep / Geo. Garet Dinkel Rig Murfin #20
Location: Sec. 15 Twp 28 Rge. 8 Co. Kingman State KS

Interval Tested 3680-3701 Zone Tested Hertha
Anchor Length 21' Drill Pipe Run 3485 Mud Wt. 9.8
Top Packer Depth 3675 Drill Collars Run 180 Vis 61
Bottom Packer Depth 3680 Wt. Pipe Run N.A. WL 7.2
Total Depth 3701 Chlorides 4,500 ppm System LCM 2#

Blow Description IF: 30 min., BOB 1.5 min., strong building blow, 85 inches
ISI: 45 min., Blow back 2 min., 1.1 inch
FF: 30 min., BOB 2 min, strong building blow, 69 inches
FSI: 45 min., No blow back

Rec 820	Feet of gassy water	5 %gas	%oil 95	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 820 BHT 121 Gravity ____ API RW .245 @ 67 °F Chlorides 40,000 ppm

(A) Initial Hydrostatic 1840	☒ Test conv. 1800	T-On Location 1400
(B) First Initial Flow 115	☒ Jars 300	T-Started 1530
(C) First Final Flow 361	☒ Safety Joint	T-Open
(D) Initial Shut-In 1152	☐ Circ Sub	T-Pulled
(E) Second Initial Flow 389	☐ Hourly Standby	T-Out
(F) Second Final Flow 586	☒ Mileage 70 122.50	Comments 1428
(G) Final Shut-In 1150	☐ Sampler	
(H) Final Hydrostatic 1848	☐ Straddle	☒ EM Tool good
	☐ Shale Packer	☐ Ruined Shale Packer
Initial Open 30	☐ Extra Packer	☐ Ruined Packer
Initial Shut-In 45	☐ Extra Recorder	☐ Extra Copies
Final Flow 30	☐ Day Standby	Sub Total 0
Final Shut-In 45	☐ Accessibility	Total 2222.50
	Sub Total 2222.50	MP/DST Disc't

Approved By Our Representative Chris Hagman

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 69273

Well Name & No. Maloney #15 Test No. 3 Date 1-6-23

Company Grand Mesa Oil Co. Elevation 1545 KB 1532 GL

Address

Co. Rep / Geo. Garet Dinkel Rig Murfin #20

Location: Sec. 15 Twp 28 Rge. 8 Co. Kingman State KS

Interval Tested 3896-3970 Zone Tested Miss

Anchor Length 74' Drill Pipe Run 3705 Mud Wt. 9.7

Top Packer Depth 3891 Drill Collars Run 180 Vis 56

Bottom Packer Depth 3896 Wt. Pipe Run N.A. WL 10.2

Total Depth 3970 Chlorides 7,900 ppm System LCM 2#

Blow Description IF: 45 min., BOB 2 min, GTS 10 min., strong steady blow
ISI 45 min., no blow back
FF: 75 min, BOB GTS ASAO, strong steady blow
FSI: 90 min, blow back 3 min., 4.5 inches

Rec	180	Feet of	watery mud	%gas	%oil	30	%water	70 %mud
Rec	189	Feet of	watery mud	%gas	%oil	15	%water	85 %mud
Rec		Feet of		%gas	%oil		%water	%mud
Rec		Feet of		%gas	%oil		%water	%mud
Rec		Feet of		%gas	%oil		%water	%mud
Rec		Feet of		%gas	%oil		%water	%mud

Rec Total 369 BHT 120 Gravity ____ API RW .303 @ 57 °F Chlorides 27,000 ppm

(A) Initial Hydrostatic	2024	☑ Test COW 1800	T-On Location 0100
(B) First Initial Flow	44	☒ Jars 300	T-Started 0330
(C) First Final Flow	186	☒ Safety Joint	T-Open 0610
(D) Initial Shut-In	1154	☐ Circ Sub	T-Pulled 1025
(E) Second Initial Flow	193	☐ Hourly Standby	T-Out 1400
(F) Second Final Flow	236	☒ Mileage 70 122.50	Comments 0241
(G) Final Shut-In	1141	☐ Sampler	
(H) Final Hydrostatic	1958	☐ Straddle	☒ EM Tool good
		☐ Shale Packer	☐ Ruined Shale Packer
Initial Open	45	☐ Extra Packer	☐ Ruined Packer
Initial Shut-In	45	☐ Extra Recorder	☐ Extra Copies
Final Flow	75	☐ Day Standby	Sub Total 0
Final Shut-In	90	☐ Accessibility	Total 2222.50
		Sub Total 2222.50	MP/DST Disc't

Approved By Our Representative Chris Hegwer

Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 statements or opinion concerning the results 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.

TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601

NO. 69274

Well Name & No. Maloney 1-15 Test No. 4 Date 1-6-23
Company Grand Mesa Oil Co. Elevation 1545 KB 1532 GL
Address
Co. Rep / Geo. Garret Dinkel Rig Murfin 20
Location: Sec. 15 Twp 28 Rge. 8 Co. Kingman State KS

Interval Tested 3892-3980 Zone Tested Miss.
Anchor Length 88 Ft. Drill Pipe Run 3705 Mud Wt. 9.7
Top Packer Depth 3887 Drill Collars Run 180 Vis 56
Bottom Packer Depth 3892 Wt. Pipe Run N.A. WL 10.2
Total Depth 3980 Chlorides 7900 ppm System LCM 2#

Blow Description IF: 45 min., BOB 30 sec., GTS 15 min., Strong building blow
ISI: 45 min., no blow back
FF: 75 min., BOB GTS ASAP, strong steady blow
FSI: 90 min., blow back 30 sec., BOB 6 min., 122 inches

Rec 180	Feet of gassy watery mud	20 %gas	%oil	40 %water	40 %mud
Rec 311	Feet of gassy watery mud	15 %gas	%oil	25 %water	60 %mud
Rec 189	Feet of gassy mud	10 %gas	%oil	%water	90 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 680 BHT 122 Gravity API RW .345 @ 45 °F Chlorides 32,000 ppm

(A) Initial Hydrostatic 2000	☒ Test conv. 1800	T-On Location 2200
(B) First Initial Flow 83	☒ Jars 300	T-Started 2345
(C) First Final Flow 225	☒ Safety Joint	T-Open 0250
(D) Initial Shut-In 1157	☐ Circ Sub	T-Pulled 0705
(E) Second Initial Flow 215	☐ Hourly Standby	T-Out 1030
(F) Second Final Flow 311	☒ Mileage x 70 122.50	Comments 2330
(G) Final Shut-In 1152	☐ Sampler	
(H) Final Hydrostatic 1970	☐ Straddle	☒ EM Tool good
	☐ Shale Packer	☐ Ruined Shale Packer
Initial Open 45	☐ Extra Packer	☐ Ruined Packer
Initial Shut-In 45	☐ Extra Recorder	☐ Extra Copies
Final Flow 75	☐ Day Standby	Sub Total 0
Final Shut-In 90	☐ Accessibility	Total 2222.50
	Sub Total 2222.50	MP/DST Disc't

Approved By Our Representative Chris Hogan

CEMENT TREATMENT REPORT

Customer:	GRAND MESA OPERATING CO	Well:	MALONEY 1-15	Ticket:	WP3810
City, State:	KINGMAN KS	County:	KINGMAN KS	Date:	1/9/2023
Field Rep:	JIM CROMBIE	S-T-R:	15-28S-08W	Service:	LONGSTRING

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	4460 ft
Casing Size:	5 1/2 in
Casing Depth:	4438 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	105.1 bbls

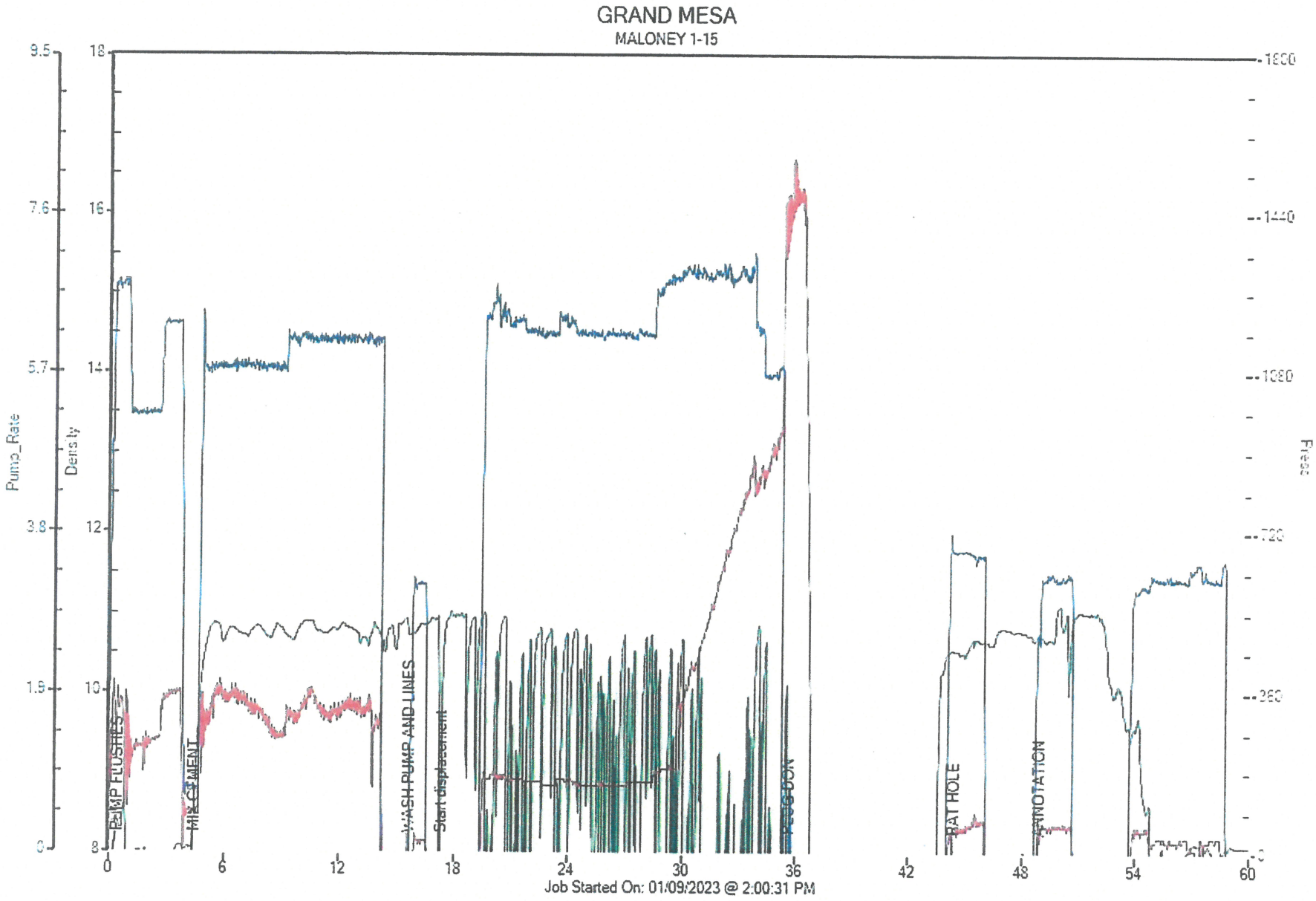
Calculated Slurry - Lead	
Blend:	H-LONG
Weight:	15.0 ppg
Water / Sx:	6.0 gal / sx
Yield:	1.42 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	51.0 bbls
Total Sacks:	200 sx

Calculated Slurry - Tail	
Blend:	H-PLUG
Weight:	13.78 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	12.0 bbls
Total Sacks:	50 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
6:50 AM			-	-	ON LOCATION
9:15 AM				-	RUN 5 1/2 15.5# CASING BASKET TOP OF #1 TURBOS ON 2,4,6,8,10,11,12 42.61' SHOE
11:45 AM				-	CASING ON BOTTOM
11:53 AM		1,100.0		-	HOOK TO CASING, SET PACKER SHOE WITH RIG
1:06 PM	6.7	370.0	12.0	12.0	PUMP 12 BBL MUDFLUSH
1:08 PM	6.3	350.0	10.0	22.0	PUMP 10 BBL KCL WATER
1:09 PM	5.7	280.0	51.0	73.0	MIX 200 SKS H-LONG
1:21 PM	4.0	25.0	4.0	77.0	WASH PUMP AND LINE
1:24 PM	6.0	150.0		77.0	START DISPLACEMENT
1:37 PM	6.7	500.0	70.0	147.0	LIFT PRESSURE
1:41 PM	4.0	800.0	100.0	247.0	SLOW RATE
1:42 PM		1,500.0	105.1	352.1	PLUG DOWN, RELEASED AND HELD
1:45 PM	2.0	25.0	7.0	359.1	MIX 30 SKS H-PLUG FOR RAT HOLE
1:50 PM	2.0	25.0	5.0	364.1	MIX 20 SKS H-PLUG FOR MOUSE HOLE
					CIRCULATION THROUGH JOB
				-	
				-	
				-	
				-	
				-	
				-	
				-	
				-	
				-	JOB COMPLETE, THANK YOU!
				-	MIKE MATTAL
				-	KEVAN & KENNY
				-	

	CREW	UNIT
Cementer:	MATTAL	912
Pump Operator:	LESLEY	176/522
Bulk #1:	JULIAN	182/534
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.8 bpm	466 psi	364 bbls


GRAND MESA
MALONEY 1-15
Pump_Rate
Density
Flow
9.5
7.6
5.7
3.8
1.9
0
18
16
14
12
10
8
1800
1440
1080
720
360
0
PUMP FLUSHES
MIX CEMENT
WASH PUMP AND LINES
Start displacement
PLUG DOWN
RAT HOLE
ROTATION
0
6
12
18
24
30
36
42
48
54
60
Job Started On: 01/09/2023 @ 2:00:31 PM

CEMENT TREATMENT REPORT

Customer:	Grand Mesa Operating Co	Well:	Maloney, #1-15	Ticket:	EP7028
City, State:		County:	Kingman, KS	Date:	12/27/2022
Field Rep:		S-T-R:	15-28-8	Service:	Surface

Downhole Information	
Hole Size:	12 1/4 in
Hole Depth:	225 ft
Casing Size:	8 5/8 in
Casing Depth:	221 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	A + 2%CC 0.5# Cello
Weight:	15.9 ppg
Water / Sx:	5.2 gal / sx
Yield:	1.18 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	200 sx

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

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	70
11:00 AM			-	-	On location, Rig had just finished drilling the rat hole
				-	Rig drilled 225FT of 12 1/4" hole
6:30 PM				-	Rig started to run 8 5/8" casing
7:30 PM				-	Rig Landed casing and broke circulation
7:45 PM				-	Set up equipment, held saftey meeting
8:00 PM	4.5	100.0		-	Established circulation with 15 BBL of water
	4.5	150.0	42.0	42.0	Mixed and pumped 200 SKS of Class A cement with 2% Cal, .5# Cello Flake - 42 bbl slurry
	4.5	200.0	13.0	55.0	Displaced cement with 13 BBL of water, good cement returns to surface, approx 10 sxs, shut in casing
					Washed up equipment, rig down
9:00 PM					Left location

	CREW	UNIT
Cementer:	Garrett S.	97
Pump Operator:	Nick B.	209
Bulk #1:	Trevor G.	189
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.5 bpm	150 psi	55 bbls

EXCEL WIRELINE

Service Order No.
4847

457 Yucca Lane • Pratt, Kansas 67124 • 620-388-5676 Date 1/23/2023

Company			Client Order#
Grand Mesa Operating Company			NW
Billing Address	**City**	**State**	**Zip**

Lease & Well #	Field Name	Legal Description (coordinates)
Maloney #1-15		15-28S-8W
County / **State**	**Casing Size**	**Casing Weight**
Kingman / Kansas	5 1/2	
Fluid Level (surface) / **Reading from**	**Customer T.D.**	**Excel Wireline T.D.**
/ 11' AGL		
Engineer / **Operator**	**Operator**	**Unit#**
N. Schmeidler / D. Wheatley		11

Product Code	Description	Qty	Unit Price	Depth From	Depth To	$ Amount
	TCP Service Charge					
	5 1/2 CIBP					
	Setting Charge @ 4270	4270	.25	4270		
	5 X 4 3.125" TCP	20		3948	3953	
	Standard Mechanical Firing Head					
	Debris Sub					
	Perforating Drop Bar					
	Gamma Ray Collar Log X 2	3830	M.o	0	3830	
	Logging Charge X 2	160		3830	3670	

Received the above service according to the terms and conditions specified below, which we have read and to which we hereby agree.

Customer _____

SUBTOTAL	
DISCOUNT	
SUBTOTAL	
TAX	
NET TOTAL	

General Terms and Conditions

(1) All accounts are to be paid within the terms fixed by Excel Wireline invoices and should these terms not be observed, interest at the rate of 1.5% per month will be charged from the date of such invoice. Interest, Attorney, Court, Filing and other fees will be added to accounts turned over to collections.
(2) Because of the uncertain conditions existing in a well which are beyond the control of Excel Wireline, it is understood by the customer that Excel Wireline cannot guarantee the results of their services and will not be held responsible for personal or property damage in the performance of their services.
(3) Should any of Excel Wireline instruments be lost or damaged in the performance of the operations requested, the customer agrees to make every reasonable effort to recover same, and to reimburse Excel Wireline for the value of the items which cannot be recovered or for the cost of repairing damage to items recovered.
(4) It is further understood and agreed that all depth measurements shall be supervised by the customer or its employees, and customer hereby certifies that the zones, as shot, were approved.
(5) The customer certifies that it has the full right and authority to order such work on such well, and that the well in which the work to be done by Excel Wireline is in proper and suitable condition for the performance of said work.
(6) No employee is authorized to alter the terms or conditions of this agreement.

Taylor Printing, Inc. • Pratt, Kansas

XCEL WIRELINE

Service Order No.
4964

457 Yucca Lane • Pratt, Kansas 67124 • 620-388-5676 Date 1-27-2023

Company: Grond Mesa Operating Company			Client Order#: NW
Billing Address	City	State	Zip
Lease & Well #: Maloney 1-15		Field Name	Legal Description (coordinates): Sec 15-28S-8W
County: Kingman	State: Kansas	Casing Size: 5.5	Casing Weight
Fluid Level (Surface)	Reading from: K.B 11'	Customer T.D.	Excel Wireline T.D.
Engineer: S. Schmidt	Operator: T. Brown	Operator	Unit#: 11

Product Code	Description	Qty	Unit Price	Depth From	Depth To	$ Amount
	Service Charge	1				
	Pack off	1				
	12x4 4" perf	48		3948	3960	

Received the above service according to the terms and conditions specified below, which we have read and to which we hereby agree.

Customer _____

SUBTOTAL	
DISCOUNT	
SUBTOTAL	
TAX	
NET TOTAL	

General Terms and Conditions

(1) All accounts are to be paid within the terms fixed by Excel Wireline invoices and should these terms not be observed, interest at the rate of 1.5% per month will be charged from the date of such invoice. Interest, Attorney, Court, Filing and other fees will be added to accounts turned over to collections.
(2) Because of the uncertain conditions existing in a well which are beyond the control of Excel Wireline, it is understood by the customer that Excel Wireline cannot guarantee the results of their services and will not be held responsible for personal or property damage in the performance of their services.
(3) Should any of Excel Wireline instruments be lost or damaged in the performance of the operations requested, the customer agrees to make every reasonable effort to recover same, and to reimburse Excel Wireline for the value of the items which cannot be recovered or for the cost of repairing damage to items recovered.
(4) It is further understood and agreed that all depth measurements shall be supervised by the customer or its employees, and customer hereby certifies that the zones, as shot, were approved.
(5) The customer certifies that it has the full right and authority to order such work on such well, and that the well in which the work to be done by Excel Wireline is in proper and suitable condition for the performance of said work.
(6) No employee is authorized to alter the terms or conditions of this agreement.

Taylor Printing, Inc. • Pratt, Kansas

ELI WIRELINE SERVICES

Please Remit To:
P.O. Box 549
Hays, KS 67601
Phone: (785) 628-6395
Fax: (785) 628-3651

FIELD TICKET No. - 7476

DATE 1/20/23

UNIT # 3362

INVOICE NO.	P.O. NO.	AFE NO.
CUSTOMER Grand Mesa Operating Co.	LEASE Maloney	WELL NO. 1-15
ADDRESS	FIELD STATE Ks.	COUNTY Kingman
	LOCATION 15-28s-8w	
CITY	CASING SIZE & WT. 5½"	TBG. SIZE
STATE ZIP	TYPE OF JOB GR CCL Bond Log & Perf	
ORDERED BY	TITLE	SERVICE SUPV.

PART NO.	DESCRIPTION	REV. CODE	QTY.	UNIT PRICE	AMOUNT
70-210-1000	Service Charge				
70-214-0700	GR CCL Bond Log				
	Depth Charge 0-4381				
70-212-0700	GR CCL Bond Log				
	Operations Charge 2750-4381				
75-805-0065	Perf 4" Slick				
	4328-30 8 shots				

CALLED OUT	ON LOCATION	COMPLETED		
____ Time	8:00 Time	11:30 Time	TOTAL SERVICE & MATERIALS	
____ Date	1/20/23 Date	1/20 Date	DISCOUNT	
			TAX	
*ACCIDENT REPORT MUST BE ATTACHED WHEN NOT SIGNED			TOTAL CHARGES	

WITH MY INITIALS, I CONFIRM THAT THE TIME SHOWN IN THE "HOURS" COLUMN, ACCURATELY REFLECTS MY COMPENSABLE TIME.

Employee Name (Print)	Hours	Initials
Gotschalk	9.25	
Fischer		

CUSTOMER AGREES to pay (the "Company") on a net 45 day basis from date of invoice to avoid loss of discount. Invoices older then 45 days are subject to loss of discount on ticket. If Customer disputes any item invoiced, Customer shall, within 20 days after receipt, notify the Company of the item(s) disputed, specifying the reason(s) therefor; payment of the disputed item(s) may be withheld until settlement of dispute, but payment of undisputed portion of invoice shall be made without delay. All payments shall be made at the address shown on the reverse side of this document. In the absence of a separate written contract, CUSTOMER REPRESENTATIVE REPRESENTS AND WARRANTS THAT HE/SHE IS AUTHORIZED TO ENTER INTO THIS AGREEMENT ON BEHALF OF CUSTOMER AND ACCEPTS ALL TERMS AND CONDITIONS AS PRINTED ON THE REVERSE SIDE OF THIS DOCUMENT (WHICH INCLUDES INDEMNITY LANGUAGE THAT ALLOCATES RISKS RELATED TO THE ABOVE DESCRIBED SERVICES). Pricing and extensions, if shown above, are subject to verification and correction at time of invoicing.

X Dan Gotschalk

X
CUSTOMER REPRESENTATIVE

White – Main Canary – Customer Pink – Field

Pro-Stim Chemicals LLC

Acidizing Report

Date 1-25-23

Customer Grand Mesa | Pro-Stim Chemical Yard Cunningham | Pro-Stim Number A-21

Well Name & Number Maloney | Formation

County Kingman | State KS | Interval

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

Job Pumped Via: Tubing ☒ Casing ☐ Annulus ☐ CTU ☐ Combination ☐ | Plug Depth | Packer Depth

Casing Size:	GRD	WT	Depth	Tubing Size:	Spot
Casing Vol.	Tbg Vol		Ann Vol	OH Vol	Total Displacement

500 7.5% MCA
5 gals RAS-10
40 bbls 2% KCL Biocide

Customer Representative Signature _____

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure Tubing	Pressure Casing	Observations
	Acid	3.0		3.0			Safety Meeting
							Prs Test to _____ psi
	Flush	1.5		12.0			Roll acid to bottom to spot
		.3		19.0	300		pressure / break
		.5		20.0	300		
		1.0		22.0	500		
		1.5		24.0	450		
		1.5		26.0	450		
		1.5		28.0	400		
		—		31.0	400		Tubing flushed, ISIP 400

Treatment Synopsis

Avg Inj Rate	Fluid BPM 1.5			Total Injected	H2O 19	Acid 12	Oil		
Treating Prs	Max 500	Final 400	Avg. 450	ISIP 400	5'SI VAC	10'SI	15'SI	20	25	30

AR-CU

Pro-Stim Chemicals, LLC

P.O. Box 430
Cheney KS, 67025

Invoice

Date	Invoice #
1/31/2023	232937

Bill To	Ship To
Grand Mesa Operating Co. 1700 N. Waterfront Pkwy - Bldg 600 Wichita, KS 67206-6614	

Unit #	Requested By	Terms	Service Date	Lease
A-25	JIM	Net 30	1/27/2023	

Quantity	Item Code	Description	Price Each	Amount
		LEASE: MALONEY		
30	KCL - 2%	BRLS - BIOCIDE / SCALE INHIBITOR	3.82	
4	TRUCK TIME	HOURS	125.00	
40	ACID TRUCK FUEL SURCHAR...	PER MILE	0.50	
		KILLED WELL		
		Sales Tax - KINGMAN CO.	8.00%	

Thank You! **Total**

A Finance Charge will be incurred on all past due balances at a rate of 2% monthly or an annual rate of 24%. In the event of non-payment, customer will pay all costs of collection, including reasonable attorney fees.

Phone #	E-mail
308.334.5181	prostim@hotmail.com